The oracle of health and long life, or, Plain rules for the attainment and preservation of sound health and vigorous old age: with rational instructions for diet, regimen, &c.; and the treatment of dyspepsy or indigestion, deduced from personal experience, and the best authors on dietetics / by Medicus.

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## ORACLE

OF

# HEALTH AND LONG LIFE;

OR,

### PLAIN RULES

FOR THE

ATTAINMENT AND PRESERVATION

OF

### SOUND HEALTH AND VIGOROUS OLD AGE;

WITH

RATIONAL INSTRUCTIONS

FOR

DIET, REGIMEN, &c.

AND

The Treatment of Dyspepsy or Indigestion.

DEDUCED FROM PERSONAL EXPERIENCE, AND THE BEST AUTHORS ON DIETETICS.

"One page of personal experience is worth folios of theoretical fancies, or clinical cases.—KITCHINER.

# BY MEDICUS.

### LONDON:

PRINTED FOR SHERWOOD, GILBERT, & PIPER.
PATERNOSTER-ROW.

- M.DCCC, XXX.

<sup>&</sup>quot;The few scattered truths,—the rari nantes in gurgite vasto, which have resisted so many storms on the ocean of time, and which seem even to derive strength from the assaults which have shattered the fabrics of error, ought to be collected and preserved as the guides of life."—Arnott's Elements of Physics. In no art or science does the truth of this sagacious remark more forcibly apply, and in none does it require to be sooner put into execution, than in that of medicine.

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SURGEON IN ORDINARY TO THE KING,

&c. &c. &c.

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THE AUTHOR IN EARLY LIFE.

# CONTENTS.

	PAGE
Introduction	1
Principles of Diet and Regimen	9
Rules respecting the Number and Periods of Meals	25
Intervals of Meals	26
Proportional Quantity of Animal and	} 27
Vegetable Food	321
Quantity of Food to be taken at Meals	3 32
The Nature and Quality of Food	35
Rules respecting the Condiments and Seasonings of Food	
Nature and Qualities of Liquids or	} 46
Drinks	340
Proportional Quantity of Solid and	} 65
Liquid Food	300
Rules for Breakfast	67
Luncheon	73
Dinner	74
——— Dessert	82
——— Tea	85
Supper	95
Cookery	97
Air	101
Exercise	111
Tranquillity of Mind	130
Cleanliness	133
Clothing	
Sleep	139
Indigestion or Dyspepsy	
Some Additional Hints for the Attainment of Long Life	
Conclusion	200

### ADVERTISEMENT.

THE following pages are the result of the personal experience of the Author, founded on an intimate and extensive acquaintance with the Writers on Dietetics.

After having, during many of the best years of his life, consumed "the midnight oil" in the toils and hopes of the higher walk of a Sister Profession, and having served a pretty hard, and, he trusts, not dishonourable service, in "the vineyard of Literature," he found himself exposed to all the attacks of Dyspepsy, and the train of life-abridging symptoms attendant on "stomach ills." Probably a more than due proportion of "the ills that flesh is heir to," may have contributed to the sum of his mental and bodily sufferings. At length, calling to mind the truth of the trite, but good maxim, "A fool or a physician at forty," he determined not to be long in making his election. He accordingly reviewed his former course of life, amended what was amiss, and put himself under a rational course of Diet and Regimen. Convinced also, that much good and useful information was to be obtained in the various medical works on the subject, he carefully perused them, and has enriched and fortified his own

positions with their valuable contents. To those sources, practical as well as doctrinal, the present Book owes its origin; and to its directions its Author is indebted for the restoration of his health, and, probably, for the comfortable enjoyment of his existence. And as in his researches and inquiries in the attainment of this object, his love of Galen, Celsus, and Hippocrates, has superseded his reverence for Bracton, Coke, and Littleton,—as his first Essay in his new "vocation," he lays the following pages as an offering on the altar of Public Utility, hoping that they may prove of as much benefit to others as they have been to himself.

The tone of rebuke in which he has mentioned some of the doctrines and opinions of the great Leviathans of modern medicine, may perhaps be considered too caustic and uncourteous towards those gentlemen; but as the elucidation of truth, and the benefit of the anxious inquirer after health, was his object in discussing and disproving those doctrines and opinions, he trusts that those distinguished medical characters will not feel much displeased with his freedom. No one can entertain a higher respect for their talents and usefulness, than he does, and to their valuable writings he acknowledges the most unfeigned respect, and much obligation.

#### THE

# ORACLE OF HEALTH,

&c. &c.

#### INTRODUCTION.

Though a certain period of existence is, by the laws of Nature, prescribed to the life of man, yet daily experience proves, that that period may be either shortened or prolonged in a considerable degree, according as the truths relating to health and disease, and the principles of life and death, are understood and called into action. This knowledge, it has been well said, "should form an important part of general education; for no axiom is of more indisputable authority than this—that ignorance abridges life, and knowledge extends its duration."

By attending to just principles, says the admirable and philosophic author to whose luminous pages I am indebted for the above extract, "regarding the essence and wants of life, and by attending to observations made from experience, the circumstances under which this process may be hastened and shortened, or retarded and prolonged, can be discovered. Upon this are founded

those regulations which instruct the invalid in the best medical mode of treatment in the various and anomalous symptoms by The rules for the which he is afflicted. attainment and the preservation of health, include also the science or the knowledge of the means of extending life to the longest period allowed to mortals. The art of medicine in promoting health, must have relation to the peculiar state of the patient, and the dispositions of that peculiar habit. But the science of extending life is regulated by general principles, and it has been found occasionally, that the existence of certain complaints does not diminish the duration of the life of the individual. Who has not often heard of that wise remark by the vulgar-" I do not hold with doctors, for we must all die when our time comes." It is very true, our days are numbered, and so is the measure meted out to us of the proportion of wisdom and folly; and by which standard it will ever be found, that the number of our days will be increased on the one part, and as surely diminished on the other. Health and long life will be the reward of those who will be at the pains to obtain the knowledge of the causes upon which both depend. The theologist, indeed, who no doubt wishes to enjoy the good things in this world without losing his reversion in the next, and to whom godliness is at present great gain, may sneer at the attempt to procure health or long life, and ask if the quantity of health, and the duration of life, are not already determined by infinite wisdom to every human being? He may also add, "Can you, by thinking, add one cubit to your stature? Why, every hair of your head is numbered." All this is very true, but to every effect there must be an adequate cause. Nature, in her progress, disregards theological dogmas, but invariably follows her own laws. Those laws which regulate health and disease, are definite, and may be known to those who are determined on inquiry and research."—Manual for Invalids, p. 124.

But nothing in the economy of life is more virtually neglected than attention to health, and the acquisition of that knowledge which might conduce to ward off the accidents likely to lead to a premature termination of life. Few people imagine that any care or concern is necessary respecting it, till they find themselves attacked by disease or intimity, occasioned either by irregularity and abuse of life, or ignorance of the connective principles on which health and disease depend\*. But this study, by far too much

<sup>\*</sup> Probably, nothing has contributed more to the propagation of these mistaken notions, than the theoretical absurdities, and adverse and contradictory dietetic precepts, of medical practitioners. According to the oracular decisions of some of these sages, patients are taught to believe that they must subject themselves to the mortifications of hermits, and that the seeds of disease are lurking in every dish, and poison in every cup. The discrepancies of even men of acknowledged ability, on this subject, are really amusing. Cornaro

neglected in the present age, was duly appreciated by the ancients; and to its cultivation, in connection with the manly and severe education to which their youth were subjected, may be attributed the particular resistance to disease, and the astonishing disposition to longevity, for which they were distinguished. It is not to be disputed, that Nature alone has often done that for a patient, which a rigid adherence to regimen effects, without any restrictions. But it is equally certain, that numerous diseases arise from improper management of diet, and that by its judicious regulation, it may be rendered subservient to their cure. Notwithstanding all the high-sounding pretensions of "the progressive knowledge of the age," and "the rapid march of intellect," it is not yet generally known, that a short life is not the inevitable consequence of a weak constitution; for delicate and nervous people afford daily examples, that by minute and unremitting attention to food, regimen, exercise,

tells you to eat proper quantities of bread, and to drink wine in a moderate degree. Cadogan enjoins you to avoid bread, to eat raw meat, and to abstain from every kind of spirit. Fothergill orders you to refrain from butter. Falconer tells you that butter is necessary to keep the sinews and bones properly lubricated for their different vocations. But the caprice and vagaries of medical men on this subject are remarkable. It would not be a very difficult (though it must be admitted it would be a very ungracious and unprofitable) task, to enumerate, on medical authority, the proscription of all the eatables and drinkables with which Mr. Bull recreateth his palate. But my readers will no doubt exclaim, Ohe! jam satis.

&c., they have an equal chance of long life with those gifted with the best and strongest constitutions. Among a thousand proofs which might be adduced of this truth, Cornaro is a memorable example of the efficacy of rules. "Reduced," to employ the perspicuous language of Sir John Sinclair, "when he had entered the fortieth year of his age, to the very gates of death, and in a manner given up by his physicians, nothing but a regular system, strictly adhered to, could have saved him. His rules, to the extreme to which he carried them, are certainly but little calculated for general adoption. They have established, however, some important truths; in particular, that little sustenance, indeed so small as twelve ounces of solid, and sixteen ounces of liquid food, per day, is sufficient to preserve the health and existence of an old man, living in a retired and quiet manner, and not obliged to take much fatigue or exercise, and that by care, a tendency to passion, which is often so fatal to aged people, may be subdued \*."

<sup>\*</sup> This view of Cornaro's system of regimen, which, as Dr. Kitchiner observed, has been oftener quoted than understood, is remarkable for its good sense, and forcibly shows the folly of those who, supposing that all persons, in all circumstances, are similarly affected by similar agents, and equally benefited by like measures and quantities, limit all patients to an exact proportion of food, and thus tie them up to an absurd and a sickly system. These Esculapii of the age, in their zeal of dietetic regulation, forget that there are no two stomachs in a state of healthy digestion alike, and that there is a peculiarity in the constitution of mankind, which often renders abstract

But though it is necessary to the comfortable enjoyment of existence, and the

rules very uncertain and inapplicable in the practical purposes of life.

This is ingeniously illustrated by Dr. Granville, who, in a sort of professional episode, in his Travels to St. Petersburgh, observes, that "to lay down general rules for dietetics, to predict or threaten the same terrific catastrophe to every sinning gourmand, to explain, by the same unvaried cause, indigestion," every malanna which flesh is heir to, is absurd, even when such generalizations are confined to a large class of society in this country, without wandering abroad. One can no more find two stomachs than two noses alike. The whole secret lies in learning how the stomach of the patient has been educated, and according to that education to deal with it. This involves an individuality in the attention to be given to cases of "stomach complaints," which physicians would find too troublesome; yet without it, justice cannot be done to patients. It is sheer nonsense to talk of classing human stomachs, and civilized stomachs; stomachs of drunkards and stomachs of abstemious people; stomachs of aldermen and stomachs of Pythagoreans; stomachs of literary men, lawyers, physicians, and parsons; and stomachs of young collegians, sportsmen, dandies, under one and the same denomination and rule. Each has had its physical education, as peculiarly different from that of the rest, as that which the possessor has received in the nursery or at college, and each must be dealt with accordingly.

On this head, the observations of Dr. Paris, Treatise on Diet, p. 282, are so very much to the purpose, that I cannot refrain from introducing them to the notice of the reader:

"There is no subject connected with diet, which popular writers have raised into greater importance; and some medical practitioners have even deemed it necessary to direct that the quantity of food appropriated to each meal, should be accurately estimated by the balance. Mr. Abernethy says, that it would be well if the public would follow the advice of Mr. Addison, given in the Spectator, of reading the writings of L. Cornaro; who, having naturally a weak constitution, which he seemed to have ruined by intemperance, so that he was expected to die at the age of thirty-five, did at that period adopt a strict regimen, allowing himself only twelve quances of food daily." When I see the habits of Cornaro see

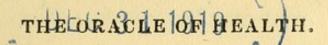
extension of life, that health should be studied by proper attention to diet and regimen; yet, as it has been truly said, it should be recollected, qui medicé vivit, miseré vivit; that there cannot be, as Mr. Wadd humorously says, a more pitiable person than one who exists per force of physic, flannel, and barley-water; who drops his wine; like Sanctorius weighs, with scrupulous accuracy, the quantity of his food; feels his pulse, examines his tongue, makes all his movements and meals by the stop-watch, and who measures out all his life and actions by the scales of scruples and drachms. In all stations and periods of life, it should never be forgotten, that fictitious alarms, and fastidious sensations, are destructive both of health of body and peace of mind.

incessantly introduced as an example of imitation, and as the standard of dietetic perfection, I am really inclined to ask with Feyjoo,—Did God create Lewis Cornaro to be a rule for all mankind in what they were to eat and drink? Nothing can be more absurd than to establish a rule of weight and measure on such occasions. Individuals differ from each other so widely in their capacities for food, that to attempt the construction of an universal standard, is little less absurd than the practice of the philosophical tailors of Laputa, who wrought by mathematical calculation, and entertained a supreme contempt for those humble and illiterate fashioners who went to work by measuring the person of their customer; but Gulliver tells us, that the worst clothes he ever wore, were those constructed on abstract principles."

This is ingenious reasoning on the part of the learned Doctor; and his illustration of the point he wishes to prove, by Monsieur Feyjoo's exposition of the folly of those people who are constantly adducing the practice and example of Cornaro, for "imitation, and the standard of dietetic perfection," is happy and effective, if he had not forgotten to state the authority from which he borrowed that illustration.

To abstract the preceding remarks: Health is not to be enjoyed without that considerate attention which is due to important objects. But it is one of the anomalies of the human understanding, that while men manifest the greatest anxiety in their other worldly affairs, and display no ordinary skill in their prosperous management, they should not deem that of sufficient consideration to take into their own keeping and direction, without which all their acquirements, their health, their power and honors, are worthless, and a mere mockery of enjoyment. The design of the following pages is to furnish this necessary knowledge, and present every one with a manual for the preservation and the enjoyment of his health.

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### PRINCIPLES OF DIET AND REGIMEN.

THE preservation of health, and the enjoyment of life, depend on the use of wholesome and frugal diet, personal cleanliness, good air, sufficient exercise, proper clothing, a judicious regulation of the temper, the cultivation of cheerful thoughts and habits, and the due economization of the powers of vitality. Or, in the emphatic quotation of a distinguished dietician, the great source of health and longevity is to be found in the following brief injunctions:

"Be temperate in diet, active in exercise, and above all, keep your mind tuned to tranquillity, by the doctrines delivered by our Lord and Saviour Jesus Christ, in his Sermon on the Mount. Read Matt. chap.

v. vi. and vii."

This, as the same witty and ingenious author observes, is the grand secret, the true panacea for increasing the enjoyment of life, and prolonging the term of its existence—the arcanum duplicatum for living all the days of one's life. Let all candidates then for sound health and a green old age, mark, learn, and inwardly digest it; for no person can reasonably expect to regain or preserve health, who is inattentive to those things which materially concern it.

A reflecting writer is of opinion, that the life of man would generally be extended to a hundred years, were it not for his ex-

cesses, and the adulteration of his food; and when we consider how many attain even a greater age, under every disadvantage, we must allow that there is probability in this opinion. When we observe, as an ingenious but anonymous writer on the recovery and preservation of health, observes, "the early disfigurement of the human form, the swollen or shrunk body, the bloated and self-caricatured face, with the signs of imbecility and decrepitude, which we continually see at an age when life should be in its fullest vigour; when, at every turn, we meet the doctor's carriage; in every street behold a rivalry of medical attraction, it is impossible not to feel a conviction, that something must be essentially wrong in our way of living." To explain the causes of these lamentable results, and to endeavour to suggest the best possible means of obviating their effects, is the purpose of the ensuing pages.

As the diet necessary and proper for the healthy sustentation of the human frame is of the first importance, I shall give it the precedency of the other topics proposed for

discussion.

The importance of diet, and its immediate and remote effects on the health and comfort "of every son and daughter of the great family of Adam," demand a much greater share of attention than they commonly meet with among manking. It has been well observed, that "the necessity of

attending to diet, although often insisted on by the physician, has not been felt by mankind with sufficient force to excite that inquiry and attention to the subject, so as to enable those who are not professionally students of medicine, to guard against, or to obviate, many diseases which a knowledge of the different qualities of food and drink will frequently enable us to do. This is, however, not perhaps the fault of the public, but of our teachers: mystery has too often stalked beside the professor; and where his knowledge has failed, this convenient personage has been often called in to his aid."

A knowledge of the proper kinds of food for the support of the human body in the best health, should, if possible, be acquired by every human being\*, since individual

<sup>\*</sup> The acquisition of this knowledge is of greater importance than is generally supposed; for it is not always safe to trust to the directions and recommendations of medical men in regard to diet and regimen. And of this opinion are many of the most skilful and enlightened physicians of the present day, as well as those who have already paid the debt of nature.

<sup>&</sup>quot;Nothing is more common," says Dr. Reid, in his Essay on Hypocondriasis, "than for an invalid to inquire of his physician, what dishes are proper for him, and what are not so. His doctor might almost as reasonably be required to tell him what was most agreeable to his palate, as what best agreed with his stomach."

<sup>&</sup>quot;Whether meat should be boiled or roasted, or dressed in any other plain way, and what sort of vegetables should be eaten with it," observes Dr. Heberden on Diet, "I never yet met with any person of common sense (except in an acute illness) whom I did not think much fitter to choose for himself, than I was to determine for him."

# health is necessarily an important object, and without which every other earthly good soon

These acknowledgments reflect honour on the candour and just feeling of the able men who made them; and are a sufficient answer to the idle notions of those weak people, who suppose that a physician can tell, by the appearance of your countenance, what you have been dining on; as also to the contemptible quackery and imposture of those who make pretensions to skill which they never possessed, or even were capable to comprehend. Men of this description should recollect, that all assumption of knowledge to which we cannot have any just pretensions is empirical, and, as Sir Astley Cooper says, in his Surgical Lectures, is resorted to "only by men lost to all sense of honour and probity." Manœuvres of so disreputable and dishonest a nature, though countenanced by routine and interest, which are too often in league to involve and render mysterious Nature's simple laws, gives sanction to the vulgar and erroneous notions, that the main effects of medicine consist in its mystery and imaginary powers, and that physic is merely "the art of amusing the patient, while Nature cures the disease;" or where this scepticism does not subsist in its full measure with regard to the efficacy of medicine, it cherishes a false and dangerous notion, that Nature is in general sufficiently powerful to rectify and cure functional disorders, with but very trifling or no intervention of art. But it must be admitted, that the adverse and contradictory opinions of medical men, even those of acknowledged talent and reputation, have contributed in a great degree to the propagation of these erroneous notions, and the belief that the rules and ordinances of medicine, are merely to be considered as old wives' fables.

These observations, it is conceived, are not gratuitous or unnecessary. For the opinions of the faculty respecting the nature and properties of food are conflicting and very contradictory; and this discrepancy is to be found among some of its most distinguished and able members. Boerhaave (De Dieta ad Longevitatem, Num. 1057) prefers, for prolonging life, dry and salted meat, also salted and old fish; and, in general, every thing that is dry, hard, and tenacious. And the learned Mandeville (Treatise on Hypocondriasis, p. 316) is diffuse in his praises of the invigorating qualities of stock fish! Even the great Bacon, who concentrated in his powerful mind the combined knowledge of all ages and profes-

ceases to be a blessing. Errors in diet, it has been sententiously and truly said, are the great source of disease. In most cases, at least, a due observance of diet and regimen will prevent the approach or attack of disease; and it may be said as generally, that a great variety of diseases may be removed without the assistance of medicine, merely by adopting a proper diet and regimen; and in this sense, may the expression, "Throw physic to the dogs," which the "Bard of Avon" puts in the mouth of his dramatic character, be considered as founded in good sense, and a correct knowledge of the alimentary art. "Amendment of diet," says a sagacious writer, "is the basis of recovery: medicine can perform only the office of an assistant to the cure. Medicine may relieve or suspend the majority of diseases; but it can never cure without the aid of regimen." Nor are these opinions unsupported by medical sanction. "I say it is horribly absurd, and I have no patience to hear and see what I do, to suppose that medicine can of itself cure a disease." And Mr. Abernethy, notwithstanding his noli

sions, both prospective and retrospective, who was not "of an age, but for all time," recommends flesh and fish rather powdered and salted, as more nutritive, than such as is fresh and hot. The best explication that can be given of these strange doctrines is, that the whims and caprices of the medical world are on a par with those of the rest of mankind. Dr. Kitchiner has done himself the highest honour by his candour, in referring his readers to Baglivi's Chapter de Idolis Medicorum, wherein is to be seen the weak side of medical men.

me tangere manner, is not singular in this opinion.—"It is a mistaken notion," Dr. Clutterbuck observes, "that medicines are capable of giving strength to the system; a power which no medicine possesses, for nothing but food can give strength to the body, and this of the plainest kind. But medicines in general destroy the appetite."

"Medicine, unassisted by food and diet," says that most practically useful and candid of medical writers, the late Dr. Kitchiner (Art of Invigorating Life), "affords but very trifling and temporary help." "Those," observes Mr. Wadd, in his humorous Comments on Corpulency, p. 137, "are the most healthy, who have Nature for their cook, necessity for their caterer, who have no other doctor than the sun and fresh air, and no other physic than temperance and exercise." Nor is the emphatic observation of the great Lord Coke on this subject unworthy of observation: He would often return solemn thanks to God, that he had never given his body to physic, his heart to cruelty, nor his hand to oppression. The opinions of many other eminent writers are to the same effect\*.

<sup>\*</sup> To the uninitiated in medical mysteries, these doctrines are probably new; but they are true; and their able and distinguished authors have conferred on themselves immortal honour, and are entitled to the lasting gratitude of mankind, by their candour and public spirit, in making them known beyond the pale of their profession. Many of "the sons of physic," whose money interest is rather to encourage disease than to prevent it, may regret that the healing art is by these declarations likely to become less mystical and complicated, by

But in our solicitude to preserve or recover health, we may carry our dietetic rules and regulations to an excess. It is in moderation that the safety and benefit of every rule consists. By too much strictness and particularity in the rules of diet and regimen, and too anxious an attention to their observance, those who are well may often injure their health, and those who are ill may often unwittingly add to their sufferings. Even the "faculty" itself has, in this respect, been in error. "Physicians\* appear," says Dr. Heberden on Diet, "to be

the simplification of remedies in the treatment of disease, and the curtailment of the list of medicines, with which fashion, routine and interest, have conspired to encumber the Materia Medica; but the writer of this note will consider it one of the most useful acts of his life, if he shall, by adding publicity to the admirable remarks in the text, have contributed to the introduction of Nature's simple rules into the healing art. It has been emphatically said, "Woe betide the hand that plucks the beard of hoary error;" but nothing ought to discourage us in the elucidation of truth. "Clear and round dealing is the honour of man's nature," and will in the end receive its due meed of praise, notwithstanding the love of "the marvellous and the mystical which is so universal in medical (as well as in other) matters."

"Opinionum commenta delet dies; naturæ judicia confirmat."

<sup>\* &</sup>quot;A fool or a physician at forty," says the author of Domestic Management, " is an adage containing more truth than is commonly believed. He who has not by that time learned to observe the causes of self-disorder, shews little signs of wisdom; and he who has carefully noted the things which create disorders in himself, must by his own experience possess such knowledge, that a physician, at a pop visit, ought not to pretend to." But there are some people who suppose that a physician can, by the expression of your countenance, tell you what you wish to dine upon.

too strict and particular in their rules of diet and regimen; too anxious attention to those rules hath often hurt those who were well, and added unnecessarily to the distresses of the sick." But all such anxiety, whether on the part of a person in health, or of a patient or his medical attendant, is absurd, and often mischievous. The common experience of mankind, and the particular feelings\* of each individual will, in

"The qualities of food," says Mr. Abernethy in his Surgical Observations, "should be adapted to the feelings of the stomach. In proof of this proposition, numerous instances might be mentioned, of apparently unfit substances agreeing with the stomach, being digested, and even quieting an irritable state of the stomach, merely because they were suitable to its feelings. Instances might also be mentioned, of changes in diet producing a tranquil and healthy state of stomach, in

cases where medicines had been tried in vain."

But though instinct is often a surer guide in the choice of food than any dietetic rules that can be contrived, yet regard should be paid to the suggestions of reason, when the desires of the appetite are in direct opposition to them. For the clear understanding of the subject, it seems necessary to make an observation or two; for we often suppose, merely because we relish food, that it must be proper for us; but in many diseased states of the stomach, no doctrine can be more erroneous.

When the stomach is in good health, the promptings of its sympathy with the palate are important, and ought to be at-

<sup>\*</sup> The desires of the appetite, or the suggestions of instinct, which are the calls of Nature, seldom err, and therefore should be diligently attended to, whether they point to stimulus, abstinence, warmth, coolness, sleep, &c. "Natural longing," (that is, such longings as are directed by the pure guidance of instinct), "has frequently," as Dr. Kitchiner observes, with his wonted regard for truth, "pointed out food by which acute diseases have been immediately cured, when the most consummate medical skill was at fault, and life at its lowest ebb."—(Art of Invigorating Life, p. 239).

general, teach every person what agrees best with his constitution. "A man's own observation," saith Lord Bacon on Regimen (a tolerably good authority in matters of food, as well as philosophy; for his powerful and creative mind, comprehending the combined knowledge of all ages and professions, applied its attention to things low as well as high), "what he finds good of, is the best physic to preserve health; and it is a safer conclusion to say, 'this agreeth not well with me, therefore I will not continue it;' than this, 'I find no offence of this, therefore I may use it;' for strength of nature in youth, passeth over many excesses, which are owing a man till his age."

Probably, the force of this wise advice may be rendered more striking by the fol-

tended to; but when disease is present, this sympathy often produces singular desires and inclinations for aliment. These desires and inclinations ought sometimes to be gratified, as the most beneficial results are to be obtained from the concession. See instances in the Edinburgh Medical Transactions. The ingenious author of the Mauual for Invalids informs us, that after having lost all hopes of recovering a patient in cholera morbus, by indulging the strange whim of eating half a pound of broiled rashers of bacon, the sickness and evacuation, which were dreadful, ceased, and the patient recovered. But while it may be prudent, and often indispensable, to indulge the inclination for any particular aliment at times, it should be recollected, that there are cases in which its gratification would be attended with considerable mischief; for it very often happens, that our sympathies prompt us to desire certain food, and even relish it, yet soon after its ingestion into the stomach, a variety of unpleasant symptoms arise, and frequently injurious consequences ensue.

lowing anecdote: It is related of the learned Dr. Mandeville, that being once asked by a nobleman (the then Earl of Macclesfield), whether a certain article of food was wholesome, he said, "Does your lordship like it?" Receiving an answer in the affirmative, he replied, "Does it agree with your lordship?" And being again affirmatively answered, he replied, "Why then it is wholesome." Dr. Kitchiner, with his usual ingenuity, has, in his Peptic Precepts, p. 234, presented his readers with a lively abstract of this dietetical conference. "The best answers to all inquiries about the wholesomes, are the following questions: "Do you like it?" "Does it agree with you?" "Then eat in moderation, and you cannot do very wrong." Every person should ask himself the same plain questions, and he will find, that scarcely any other rules or directions are necessary, except to abstain from a variety and a superabundance of food at his respective meals\*. "I beseech all persons," says that great physician Galen, in his Treatise on Health, "who shall read this work, not to degrade themselves to a level with the brutes, or the rabble, by gratifying their sloth, or by eat-

<sup>\*</sup> It is not eating, but digestion, that gives strength and nutriment to the body, and repairs its daily losses. Neither does the quantity of nourishment depend on the quantity of food; for superfluous food becomes excrement instead of aliment; and if it be not speedily evacuated, oppresses the system, and occasions disease.

ing and drinking promiscuously whatever pleases their palates, or by indulging their appetites of every kind\*. But, whether they understand physic or not, let them consult their reason, and observe what agrees, and what does not agree with them, that, like wise men, they may adhere to the use of such things as conduce to their health, and forbear every thing which, by their own experience, they find to do them hurt; and let them be assured, that, by a diligent observation and practice of this rule, they may enjoy a good share of health, and seldom stand in need of physic or physicians."

But, besides due regulation of diet, abstemiousness in its use is of the highest importance. "It would, no doubt," as Sir John Sinclair observes in his Code of Health, p. 209, and his observation is confirmed by the test of experience, "be advisable occasionally to abstain from food, or at least to reduce the usual quantity, as a means of preserving health, when persons living in the usual state of European society must

<sup>\*</sup> It has been well said, that man seems to think himself an omnivorous animal; that he is entitled to consume, waste, and destroy all the produce of the globe; but if penalty implies unlawfulness, surely this all-devouring claim, on the exercise of which so heavy a penalty is laid, cannot be established; a penalty which involves the racks and tortures of disease, and is consummated by untimely death! This wanton spoliation then, is not so venial an offence as sensuality would imagine, since it accumulates a sum of evil, at which contemplation is appalled.

often indulge more than is necessary. And Cheyne recommends, once a week, or a fortnight, or a month at farthest, either to live low, or maigre, as the French term it." Without, however, adopting any regular plan of fasting, it has been often found of service, when the stomach is disordered, or feels uneasy from repletion, to refrain from the next meal or two, rather than to take physic\*. Abstinence from food for a short

But while every person should be acquainted with the best and most efficacious methods of resisting or checking the ordinary causes of disease, and should know how to employ art, or apply the general principles of medical philosophy, so as to afford assistance to Nature in indisposition, when medical assistance cannot promptly or readily be obtained; yet, "at a time," as Mr. Brande says, "when domestic medicine is so prevalent, as at present," "when people tamper with what are termed preventive medicines, till, by endeavouring to prevent imaginary distempers, they die of real ones;" "it is important to point out the dangers arising from the uses, or rather abuses of the most simple remedies."

"Every medical practitioner must have repeatedly witnessed the serious, and sometimes fatal consequences, attendant on the imprudent use of the stronger medicines, which are so

<sup>\* &</sup>quot;If you make it (physic) too familiar," saith Lord Bacon, "it will have no extraordinary effect when sickness cometh. I commend rather some diet for certain seasons, than frequent use of physic, except it be grown into a custom; for those diets alter the body more, and trouble it less." But with his usual calm wisdom, he observes, in another passage of the same Essay, "if you fly physic in health altogether, it will be too strange for your body when you need it." The meaning of which last-quoted passage is, that a general state of health should not make us over confident and contemptuous of physic, lest, when we want it most, it should be too strange to us to produce any real good. This is no unseasonable hint to those who undervalue the effects of medicine, and trust too much to the strength of their constitutions in the lesser ailments of our nature.

period, restores the force of the digestive organs, by diminishing their exertions, and

extensively supplied for family consumption, particularly preparations of antimony, mercury, and opium; which, under a great variety of seducing forms and titles, are constantly employed." "By the injudicious use of calomel, emetic tartar, James's powders, &c.," says Dr. Cadogan on the Gout, "many a stomach has been torn into rags, so as never to be in a healthy state of digestion afterwards, or

capable of bearing common food."

But prejudicial and irremediable consequences are not only occasioned by the improper exhibition of the more drastic and powerful drugs, but irritating and destructive effects may be produced by even the simplest of medicines. The injudicious and immoderate use of even magnesia, has been attended with serious consequences. Mr. Brande mentions a case, in which from four to six pounds of insoluble magnesia were found in the colon of a deceased nobleman. The improper administration of vinegar, that common and efficacious remedy in certain cases, is well illustrated in the case of General Vitellis, whose skin it occasioned to hang loose about him. It was an observation of the learned Mead, which should always be in the recollection of every unpractised "domestic or amateur practitioner," that "preparations which have the power to act beneficially in the same ratio, necessarily do harm if unskilfully exhibited." Amongst the numerous popular errors respecting medicine, there is not a more universal and a more mischievous one, than the mistaken notion, that medicine is efficacious in proportion as it is violent and drastic in its operation; for though it is the main point towards the preservation of health, to keep up the activity of the intestinal canal, and that for want of due attention to this precaution, "millions have," as Dr. Kit-chiner observes, "died of medicable diseases, yet aperient medicine does enough, if it accelerates or increases the customary evacuations, and does too much, if it does more than excite one, or at most two, additional motions."

These false notions, and want of attention to the effects of medicine injudiciously administered, are often attended with lamentable consequences, and verify Mr. Wadd's humorous ejaculation: "Woe be to the family where there are amateur practitioners, and ladies erudite in domestic medicine; who understand the complicated machinery of the human frame by hearsay and intuition;" to whom a science which, after the

giving them rest and time to collect their energies in full force, so as to recover their proper and healthy tone. The facetious observation, "that a holiday should occasionally be given to the stomach," either by subjecting it to entire abstinence from food for a while, or by putting it on maigre diet, is founded in good sense, and the soundest knowledge of the constitution of the human frame. The old saying, that "He who eats till he is ill, must fast till he is well," should be diligently observed by every inveterate gastrophilist, whose omnivorous powers of stomach may seduce him to indulge its poluphagian propensities, until he is "fat and scant of breath."

Having premised these observations, I shall proceed to treat of the nature and various qualities of food; the number of meals best suited to the constitution, and the intervals at which they should be taken; the due proportional quantity of animal and vegetable matter necessary to the healthful sustentation of the human frame; and the quantity of food, animal and vegetable, that ought to be taken at each meal. And I shall close this division of my subject with some remarks on the nature and qualities of drinks, and a few practical hints respecting each of the ordinary, conventional meals

experience of ages, is to the most learned and skilful, "a conjectural art," is perfectly known and comprehended by mere talking about it.

generally in use in society. And in this discussion I shall be as brief as possible; for the effect of all instruction and advice depends on its conciseness; if it extends much beyond the form and construction of a maxim, it is read and forgotten; it seldom takes hold of the understanding and the memory, and becomes "part and parcel" of the hearer or reader's store of practical

knowledge and memoranda.

But before I enter on this discussion, it seems necessary to state, that the information contained in the following pages is not adapted merely for the use of the infirm, the delicate, the valetudinarian, the dyspeptic, or the convalescent, but will be found serviceable to the young, the robust, and those in perfect health; for though the range in regard to food, in which those who are in the vigour of health and youth may indulge with impunity, is great, it is limited; and whilst pastry, high-seasoned viands, and sauces, which are pernicious to the infirm and the dyspeptic, may occasion no apparent inconvenience to them\*; yet to those

<sup>\*</sup> It has been said, that no regimen can be contrived to suit every body; and it may be said with equal truth, that though every created substance possesses the basis of a nutriment for some order or other of animals, yet all varieties of food are not suited to all constitutions and habits. The labourer and the man of ease, the child and the adult, the sick and the healthy, draw nutriment from materials of very different qualities. "What is one man's meat," says the old proverb, "is another man's poison." So discrepant are the powers and qualities of the organs of digestion, not only in man,

sons of Hygeia, whose pulse throbs with vigour, and whose spirits and elasticity impel

but also in the inferior orders of the animal creation, that the stomachs of animals of different structures, have the peculiar and inexplicable power of selecting and secreting the nutritive parts of certain substances from those that are baneful. Hence, the reason "why many of the serpent tribe convert a wholesome nutriment into a venomous secretion;—why the spurge laurel, so noxious to man, and most quadrupeds, is voraciously devoured by several of the insect tribes;—why the common bitter extract called aloes, although useful and medicinal to the human species, is a deadly poison to dogs, wolves, &c.;—why the plant called water-fennel, or fine-leaved water-hemlock, which proves poisonous to the human race and the horse, is luxuriously, and with impunity, feasted on by the goat, the ox, and the quail;—while the horse, on the contrary, feeds with pleasure on the

monkshood, which the goat will not touch."

But the truth is, that we are yet in the dark respecting many of the operations of Nature, and of none more than those of the animal economy. What man alive can give any thing like an adequate and a philosophical reason for the menstrual power of the gastric juice; -of the conversion of aliment into blood, or the identification of the nutritive materials taken into the body, with the composition of the organs which they are destined to supply and repair; -and of the modus operandi of the various fluids secreted by the glands, or visci, denominated the liver, the pancreas, &c., as subservient to the process of digestion, chylification, and sanguification. Again, who can explain the fact of the blood being successively converted into saliva, gastric juice, bile, and a variety of other dissimilar fluids, by its mere transmission through a series of minute tubes. Indeed, the physiology of the process of the whole nervous system, and the functions of all the primary and vital organs of the animal economy, as sensation, respiration, generation, &c., are involved in mystery. Nor are we better acquainted with the functions of the brain in the process of thought, or the influence of the affections of the mind on the heart. Why the heart should possess the power of restoring its own energies, or why the blood is tinged red by its contact with the air in its passage through the cells of the lungs, "we are as ignorant of the reason" as we were when in the cradle." Of the physiology even of the

them in their career, heedless of the coming seasons, it is the duty of every writer on dietetics to say, that with all the energy which they feel, they may find wisdom in the regulation of the quality and the quantity of the food which they consume; and that large potations of fermented liquors, and the partaking of a variety of dishes, will, sooner or later, convince them that there are bounds, over which Nature herself will not with impunity permit them to step. Among the folly of old sayings, there is not one more conspicuous for its absurdity, or more mischievous in its consequences, than the often quoted and much misunderstood maxim-Sanis, sunt omnia sana.

### 1. The Number and Periods of Meals.

Regularity in the number of meals, and the periods at which they are taken, is of the first importance; on it much of the equable and pleasant enjoyment of health depends. Some medical writers have con-

healthful function of sleep, and the common sensations of hunger and thirst, we are entirely in the dark. And the uses of the viscus, denominated the spleen, are at present merely conjectural. In fact, our knowledge in many of the simplest operations of Nature is mere smattering and conjecture, every attempt to trace her steps in the simplicity of her operations having hitherto completely failed; and the only satisfactory answer that can be given (or ever will be given, until the mystic veil is removed, and "the sealed fountain of vitality laid open" to our eyes) to inquiries as to the causes of those mysterious though simple operations, is that given by the doctors to Voltaire's question as to the process of chylefaction—"Demandez-ce à ce Dieu qui nous donne la vie."

sidered one, others two, three, and even four meals necessary. But leaving these gentlemen to their dogmas and reveries, it may be laid down as an incontestible rule, that the number of meals should be regulated by the degrees of exhaustion and diurnal habits of life to which every individual is subject. In general, three frugal meals in the course of the day seem the most desirable, and the best adapted to the wants and constitution of the human frame, while at the same time they are the best suited to the digestive organs. In the adoption of this salutary rule of diet, Fashion, all powerful as she is on most occasions, has at length yielded to Reason.

### 2. The Periods and Intervals of Meals.

The periods at which meals should be taken, and the intervals that should elapse between them, deserve attention. The practice which leaves the great bulk of the day without a meal, and then crowds two or three together, is manifestly bad, as it leaves the body in a state of exhaustion and fatigue, which strongly tend to enfeeble the powers of digestion. To confirm and preserve health, whatever may be the number of meals taken, they should be taken at regular times and stated periods; and they should be regulated by the strength or debility of the stomach, and the quantity and quality of the food taken, or to be taken, at the preceding or following meal. The extremes of too long

fasting and too frequent repletion, should be carefully avoided; for the languor of inanition and the fever of repletion, are equally injurious to the healthy state of the stomach: the muscular fibres are debilitated by excess; a collapsed state of that organ occasions its loss of tone and energy, and superinduces constitutional weakness. And it should be remembered, that one meal should be duly digested before the ingestion of another into the stomach. Those who have weak stomachs will, as Dr. Darwin remarks, be able to digest more food, if they take their meals at regular hours, because they have both the stimulus of the aliment they take, and the periodical habit, to assist their digestion.

# 3. The Proportional Quantity of Animal and Vegetable Food.

Much diversity of opinion has subsisted among physiologists, respecting the proportional quantity of animal and vegetable matter necessary to the healthful sustentation of the human frame. But notwithstanding the authority of the names that have advocated each side of the question, it must be admitted, that no useful rule can be elicited from their superabundant writings and disputes on the subject. Leaving, therefore, the regions of conjecture and speculation to those who are fond of involving matters in clouds of mystery and dispute, which admit of no other solution than what

practical experience affords, it may be broadly said, that the best and the only sure guide in obtaining the desired knowledge of this subject, must be the circumstances of climate, season of the year, exercise, previous habits, age, and individual peculiarity of constitution. In hot climates, a vegetable diet may be carried to a great extent without injury; while in cold climates, an almost entire subsistence on animal food will not produce any very pernicious effects; as from the want of heat, a greater stimulus is required for the system, and also from the smaller degree of perspiration, and the little tendency to putrefaction which the fluids discover in such climates.

In our variable climate, the proportion of animal food may predominate, especially in cold weather; in which season the proportion of vegetable food should be small, and that chiefly of the farinaceous and least acescent kind. In summer, the inverted proportion seems the most rational. Great bodily exertion or exercise requires the superior nutritive power of animal matter; but a preponderance of vegetable diet is favourable to persons of sedentary and inactive habits\*. In the first stage of life,

<sup>\*</sup> The advantage of a vegetable diet to persons so disposed, is, that a considerable quantity of air is let loose by the dissolution of vegetable food, by which digestion is promoted. But in the use of vegetable food, great care should be taken that it be not carried to excess, especially in the case of plants or roots abounding with air, as cabbages, &c., lest the result be injurious, and sourness and acescency be superinduced.

animal food is not necessary; it would be prejudicial; but "during the period of growth, the nutritious quality of aliment is especially important; in manhood it is more appropriate; but in the middle period of life a strict attention is required to temperance; it is in this period that the greatest attention is required as to diet. Age requires food in small quantities, but it must be nutritious and soluble. At every period of life, and in every state of the body, the diet should be accommodated to the powers of the digestive organs. This (namely, the power of digestion) is considerably reduced in the advance of life, and the work allotted to it then should be proportionately small, and easy of execution."-Thackray on Diet and Digestion.

It is from attention to the proper proportion of animal and vegetable food, according to the seasons of the year, the corporeal exertion, the previous habits, age, or individual peculiarity of constitution, that regular and sound health can be expected. A too concentrated mass is as unwholesome as one that is too succulent, and which distends the stomach beyond its healthy tone. In the stomach, vegetable food has generally a tendency to acescency; animal food to putrefaction. Facility of solution is the peculiar quality of the one; the other requires a much longer time under the action of the digestive system. The combination of a vegetable and animal diet, is therefore the

most friendly to the constitution, and is the best adapted to preserve it in a perfect state of health and strength; for vegetables being, in some degree, of a sourish or an acescent nature, they counteract the putrescency of animal food\*. The benefits and propriety of the due admixture of these two species of food, and their distinct effects, are well pointed out by an able medical author,

\* The distinct qualities, per se, of each species of food are: Animal food excites by its stimulating qualities, and as it fills the vessels fuller of blood than vegetable food does, it increases our muscular strength; but then, as it urges the springs of life into constant and preternatural exertions, it weakens the vital energies, and hastens decay. Vegetable food, on the contrary, rather diminishes muscular strength, but enables the blood to act with greater force; and no doubt operates powerfully in counteracting contagion, as it preserves the juices in a sweet state.

It seems necessary to notice a popular error respecting the comparative digestibility of animal and vegetable food; an error not confined to the routine practitioner, but to be found in the best works on medical topics. It is said that vegetables are longer in digesting than is the case with animal food, and consequently require greater labour of the stomach and other digestive organs to reduce them to nourishment, and assimilate them to the nature of man. But this is one of those errors which are adopted without consideration, and owe their currency entirely to blind adherence to names and authority. To satisfy oneself of the fallacy of the opinion, one has only to observe, whether one is soonest hungry after a full meal of vegetable or animal food. The opinion also, of the superior nourishing power of animal food to that of vegetables, seems not to be perfectly correct. Those who make use of a vegetable diet have, in general, a manifest advantage in looks, strength, and spirits, over those who partake largely of animal food: they are remarkable for the firm, healthy plumpness of their muscles, and the transparency of their skins. This assertion is at variance with general opinion; but it is not unfounded, and has the sanction of Cheyne.

to whose valuable labours the medical profession and the public owe the highest obligation. "On the exclusive use of vegetable diet," says that sensible and classical writer, "declaimers have not taken into view, the various and new circumstances of situation in which man is placed. He is no longer the Child of Nature, nor the passive inhabitant of one genial spot, as when he was first formed. He is now a citizen of the world; exertion and toil are his constant attendants; and he requires a more ready and assimilated nourishment than vegetable food can convey .- A vegetable diet," continues the same accomplished physician, "is considered as having most influence on the powers of the mind, in preserving a delicacy of feeling, and an activity of judgment; but this state of body is equally the attendant of timidity, fluctuation, and doubt. On the contrary, the fumes of animal food are unfriendly and oppressive to thought and meditation; but it imparts vigour and firmness of purpose to the heart, and fits a man for the active scenes of life. It seems, therefore, that he who makes use of a mixed diet, will avoid all extremes, and while, by adopting such a regimen, he best consults his health, will have a mind which will display a firmness and capacity suited to every valuable purpose."

The beauty and truth of these quotations have excited the admiration of every judge of correct and elegant composition, and in more instances than one, they have been

interwoven into the language of the writers on dietetics of the present day, without any acknowledgment of the source to which they are indebted for the brilliant passages with which they have adorned their works.

#### 4. The Quantity of Food to be taken at Meals.

Neither can any general rule be given as to the quantity of food, animal and vegetable, that ought to be taken at each meal: all artificial standards of weight and measure on this subject must be delusive, and calculated to occasion injury. The appetite and the feelings are generally the best indicators of the necessary quantity of food which we require; and the safest guide to depend on in this respect, is the particular state of health of the individual, and the bodily exhaustion or repletion to which he is subject at the time of each repast. Let him partake of those things which he finds best agree with his feelings, and which do not derange his general health, and as soon as he feels himself satisfied and refreshed, desist\*,

<sup>\*</sup>The how much must be determined by the individual: those who can abstain at the first sensation of satiety, and can resist the demands of appetite, have made great progress in the art of curing most chronic indispositions, of regaining health, and preserving it. "Cornaro," says Mr. Wadd, in his usually pointed manner (Comments on Corpulency, p. 137), "had a merry saying that would not be credited in the city, 'that of all parts of a feast, that which one leaves does one the most good." This may be easily accomplished by resolution; for though the stomach, as Seneca says, is an insatiable creditor, it will always hear reason; we may do as we wish, if we will make our minds to do so: "Animus hominis," says an ancient sage, "quidquid sibi imperat, obtinet."

for Nature has established that sympathy between the taste and the stomach, that what disagrees with the one is seldom agreeable to the other. Besides, the more food is relished, the better it is masticated, and the gastric juice attacks it at a great number of points, and dissolves it more speedily and effectually, which is the source of all good digestion and nourishment. But in consulting your appetite, never be induced to partake of more than one kind of food, for a variety of dishes creates an artificial appetite, inducing one to eat more than is necessary; and as variety of food does not harmonize in the stomach, but requires different exertions of its muscular powers, it is not digested at the same time, and a greater labour is imposed on it than it possibly may be capable of bearing with impunity. Besides, excess of food distends the stomach, and debilitates its muscular and digestive fibres and powers, and consequently diminishes their energy, in the same manner as the muscular power of the bladder is paralyzed, if it be distended for some time with urine, beyond the period which Nature claims for its evacuation. But the exact quantity of food necessary for the support of nature, must be left to every person's reason and instinct\*; for from the diversity of organi-

<sup>\*</sup> The person who, after meals, complains of giddiness, heaviness, lassitude, uneasiness, distension of the belly, or great inclination to sleep, has exceeded the rules of prudence, and should be on his guard in future. In order to preserve

zation, and the idiosyncrasy or peculiarity of the constitution, it sometimes happens that an article of lower apparent powers will satisfy and best suit the appetite, than another of known higher powers; so unaccountable is the peculiarity of the constitution of men, though apparently all organized alike, and even of the same constitution at different times.

But attention is as necessary, that the quantity of food taken be not too small as well as that is not too large; for excessive abstinence\* tends to weaken and distress both mind and body as much as, or even more, than excessive feeding destroys the athletic standard of health. By too long fasting, or not taking a sufficient quantity of food, the coats of the stomach are left a prey to the acrimonious and corroding humour of the gastric juice, and the digestive faculties are continually disordered and fretted. It is therefore safer to exceed a little in quantity, than

both mind and body in full activity to taste the pleasure and advantages of food, it should be taken with prudence: we should never forget the salutary rule—that "to forbear is to enjoy." The truth of this maxim is immortalized in the words of the Roman satyrist:—"Voluptates commendat rarior usus."

<sup>\*</sup> As this subject is frequently misunderstood in our zeal of dietetic regulation, the remark of Dr. Clutterbuck is deserving of attention. "Abstinence," says that learned physician, in his Treatise on Inflammation, "is a relative term; for what is abstinence in one, may be excess to another. There are also certain diseases in which too much abstemiousness would be dangerous. Whenever persons are excessively nervous, they require a considerable supply of food, but it should not be given in large quantities at a time."

to fall short; for the damage of a more full diet is soon remedied, either by exercise or gentle evacuation; but the decay of strength, the natural consequence of too spare a diet, or too long abstinence, is not easily repaired. Thousands have perished, as an intelligent physician observes, by being inattentive to the calls of the stomach \*. As soon, therefore, as the stages of action in the stomach are passed through, and the sensation of hunger begins to be present, every person who values his health should take some necessary refection.

#### 5. The Nature and Qualities of Food.

For the due preservation and enjoyment of health, much discrimination is necessary in the choice of food, whether animal or vegetable. The folly of those writers who attempt to bring this important part of dietetic administration into disrepute, is as

<sup>\*</sup> The observation of Dr. Paris (Treatise on Diet, p. 72) on this subject, does not seem quite oracular. "If it be said that a deficient quantity of food is indicated by our feelings, and that an excess is carried off without inconvenience, I shall reply, that Nature rarely suffers from abstinence, but continually from repletion; that while in one case she limits her expenditure to meet the exigencies of her income, in the other, she is called on to exercise an injurious liberality to throw off the useless burthen. In the vigour of health and youth, this expenditure is not felt; but the period will assuredly arrive, when it must be paid with compound interest." In this sentence, it must be admitted that the Doctor has fallen into the error which, in an early part of his interesting volume, he imputes to another eminent and popular writer-that his doctrine is rather remarkable for "playfulness of style than soundness of argument."

egregious as their awkward attempts at humour are misplaced. To my knowledge, no person pays more scrupulous attention to the subject, and is a greater victim of misplaced anxiety about the "wholesomes," than one of those prodigious Solomons.

It may be taken as a general rule, that the flesh of the full grown animal is more digestible and nutritive than that of its young \*. Thus beef and mutton are of more easy digestion than veal or lamb; but, on the contrary, the flesh of the sucking pig is more wholesome than that of the larger animal. Of all meat, tender wedder, or wether mutton, is by far the most nutritious and digestible; but the fat of mutton having a tendency to coagulate, it is less easily assimilated in the stomach than the fat of most other animals. Beef is not of so easy digestion, but is equally, if not more nutritive. Bull beef is difficult of solution in the stomach; and cow beef is not so tender and nourishing as the flesh of the ox. Pork and bacon are a heavy and indigestible food,

<sup>\*</sup> The reason that the flesh of the full-grown animal is more digestive than that of its young, is on account of the viscidity of the flesh of young animals; for viscid food is of a clammy, glairy nature, like the white of an egg, and its nature is to adhere to the sides of the stomach, and by so doing, it throws the blood into so great quantities upon the brain, as to oppress it, and sometimes to occasion apoplexy. But though the flesh of young animals has this effect on the stomach, it is an indubitable fact, that the flesh of young animals is more laxative than that of those which are old, or have obtained their maturity. The contrary doctrine held by some medical writers, is refuted by every person's experience.

and fit only for such persons as lead an active or a laborious life; and even by them they should be used sparingly, as by their too frequent use, the bowels will be disordered, and eruptions on the skin occasioned. Fish is less nutritive than meat, and therefore is not adapted to form a diet by itself. But it is not so difficult of digestion, and is more quickly converted into chyle. It is also less stimulant than the flesh of animals, and it is said to be better adapted to weak and delicate habits. But the truth of this position may be well doubted; for as fish is generally allowed to linger and die in order to preserve it fresh for the market, from this cause, probably, is occasioned its disagreement with some stomachs. The usual condiments of high-seasoned sauces, render fish of all kinds more difficult of digestion than they would otherwise be: to render it a salutary food, vinegar and salt form the best additions.

Of this last-mentioned species of food, the cod, turbot, sole, whiting, flounder, and fresh herring, are the most nutritive, and the easiest of digestion; the salmon and the mackerel the most indigestible. Eels are nourishing, but difficult to digest. The turtle, or tortoise, when not injured by the refinements of cookery, is wholesome and nutritious. Oysters eaten in a raw state, with a slight addition of vinegar and pepper, may be considered strengthening, and not

unwholesome; but when stewed, they are highly indigestible: a quality belonging to the whole tribe of shell-fish. Muscles are of a viscid nature, and on that account they often seriously disorder the bowels. In general, salt-water fish are wholesomer than river fish.

Of birds, the woodcock, partridge, grouse, quail, lark, turkey, and the common fowl, are considered the most wholesome and digestible; and the goose, widgeon, teal, and the wild and tame duck, the most difficult of solution, and the most likely to disagree with the stomach. The pheasant is less digestible than the common fowl, and the pigeon furnishes food of a dry and heating In general, the flesh of birds is nature. lighter, drier, and more easily digested than that of animals; and as the blood produced from it is light and full of spirit, it is favourable to the exercises of the mind. But there is very little nourishment in poultry and most kinds of game in proportion to their bulk. Raw eggs are nutritive, and gently laxative; but if boiled hard they produce costiveness. To obviate this effect, they should be boiled no longer than is necessary (namely, three minutes) to coagulate the greater part of the white, or albumen, without depriving the yolk of its fluidity.

Game of all kinds is in general wholesome. But, as has just been said, venison is preferable to fawn. The flesh of the leveret, when roasted, is nutritive, and easily digested; and that of the tame rabbit is of a similar quality to the flesh of the fowl, and equally digestible. And, notwithstanding the common opinion to the contrary, the flesh of the wild rabbit is one of the lightest and most digestible foods in use—a quality that may be predicated of all wild animals used as food, in preference

to those that are cooped or shut up.

The other general rules respecting the salubrity of animal food, are-1. That it should be in season; for the same sort of food which is good at one period of the year, may be unwholesome at another. In this respect, the safest rule to be observed is, to use the meat of each class of animals when their natural nourishment is in the greatest plenty .- 2. Animal food, of which the fat and lean are mingled together, is the most digestible meat of any. And the flesh of animals which are lean, is more indigestible than that of fat animals, on account of the little fluid that is between the fibres of lean meat.—3. The flesh of animals which have been slaughtered while the blood was in a state of inflammation from over-driving, or, in the butchers' phrase, "killed on the drift," should be avoided, as unwholesome, and liable to putrefaction .- 4. Fresh meat it not so digestible as meat which has been kept for some time; for when the process of putrefaction has begun, the density or firmness of the fibres is relaxed, and their connection or tension loosened; and consequently the meat is more tender, palatable,

and juicy, and easier of digestion. But then it must be recollected, that meat in which the putrified process has begun, is not so nutritive as meat fresh killed, and a larger quantity of it is necessary to satisfy the appetite.—And, 5. Stale or tainted provisions of all kinds are highly dangerous; and fish out of season, that is, after spawn-

ing, is unwholesome.

The best corrector of animal food, and the safest of vegetable aliments, is bread; it is of incomparable use in the process of digestion; where much animal food is used, its consumption should be in proportion. But in the use of bread, care should be taken that it is at least one day old; for if too new, it easily swells when impregnated by the salivary and gastric juices, and its volume constantly increasing, causes a painful distension of the stomach, and diminution of its vital power. But as bread obtains the qualities I have just stated from its manufacture, rather than from the innate qualities of the article from which it is made, the potatoe may be considered as the lightest and most nutritious of vegetables used in their natural state. The mealy kind is of the easiest solution, and is to be preferred to the waxy (under which denomination the young, or new potatoe, is included), which is the most indigestible. Mashed and fried potatoes are not wholesome, as being of more difficult digestion than when this esculent is prepared by the simple process of boiling or roasting.

Of the different species and varieties of the colewort, the cauliflower, broccoli, and asparagus, are to be preferred, especially when young; but the last-mentioned is wholesome only when in an intermediate state between root and plant. The savoy and cabbage are wholesome and aperient, particularly the latter, when young, in the state of spring greens, and well boiled. The parsnip and turnip, if thoroughly boiled, are nutritive, and, being easily digested, are laxative. Carrots, and radishes of all kinds, though not unwholesome, are difficult of digestion, being voided in the fæces almost in the same state as they have been swallowed. Though spinach is aperient, it does not always agree with the stomach. Peas and beans, when young, are, though generally supposed to be of a contrary nature, wholesome and light food. The cod of the bean assists digestion. But among all the varieties of this vegetable, the French bean is the most wholesome. Dried peas, whether made into soup or pudding, are particularly indigestible. onion contains a considerable proportion of nutriment (indeed more so than most other articles of food within the same compass, notwithstanding the opinion of the learned Dr. Cullen to the contrary), and is highly stimulant to the stomach, and promotive of its natural secretions, especially where the temperament is phlegmatic. The leek, garlic, shallot, horse-radish, and mustard, possess the same qualities in the progress of

digestion, and assist in the solution of animal food. Of all salads, the water-cress is the most wholesome, and the cucumber the most unwholesome. But this commendation of the water-cress requires some qualification. Its beneficial qualities depend on the time of its ingestion into the stomach. The most salutary time for its consumption is at breakfast or tea, or at the intermediate refection taken between dinner and breakfast, where the dinner hour is late; if taken after dinner, as is the usual practice with all salads, it is apt to chill the stomach, and check the progress of digestion. Persons also of delicate stomachs should be sparing in its use, as it is liable to occasion flatulence, eructation, and heartburn, if taken in excess. The narcotic principle contained in the lettuce is obviated by the application of the condiments of vinegar and oil. Celery, especially when boiled, is nourishing and wholesome. But these two last-mentioned salads, as also endive and succory, should never be eaten but when they have been blanched, by which process they are deprived of their acrid properties. Radishes, as has been already said, are difficult of digestion, though when young they may be cooling and useful, if not eaten in large quantities, or at improper times, especially before going to bed. The young small leaves sprouting on their tops are more easily dissolved in the stomach, and are more beneficial than the radish itself. I say this from close and constant observation.

Mushrooms are nutritious, but being of a tough consistence, are not suited to delicate stomachs.

I shall treat of fruits under the head "DESSERT."

#### 6. The Condiments and Seasonings.

Having stated the nature and respective qualities of animal and vegetable food, it seems a consequence to say a few words of

the proper condiments or seasonings.

Among these, salt is of the greatest importance and effect; in fact, it may be considered as the natural stimulant of the digestive organs; for though condiments in general assist digestion, while used in moderation, and correct many injurious and noxious properties of the food ingested into the stomach, salt best assists digestion, facilitates the solubility of the food, and promotes perspiration and the intestinal secretions of the mouth and the stomach. It is also an antidote to the generation of worms and of other substances in the stostomach, by preserving its contents from putrescency. But it should be recollected, that though salt is possessed of these great and beneficial properties, and if taken in excess, that it carries its remedies with it by means of its aperient qualities; yet salted meat, on account of the texture of the fibre being rendered more rigid by the action of the salt, is less nutritious and digestible than the same kind of meat in a fresh state.

It should, however, be observed, that the indigestibility of salt provisions is chiefly occasioned by their being imperfectly cured, especially after putrefaction has begun. Meat salted shortly after, or as soon as killed, is a wholesome article of food; it is injurious only, when by long keeping, the putrescency of the meat prevails over the preserving power of the salt, and part of the salt becomes ammoniacal; in which state no proper or healthy supply of chyle can enter the circulation from the ingestion of food of this kind. Pepper, and all kinds of spices, being heating and highly stimulant, should be used in moderation. When used with greens and other vegetables, they correct their flatulent tendency, increase the action of the stomach, and bring on digestion before that fermentation takes place. which, in weak stomachs, would be attended with extrication of air. Cayenne is the most stimulating of peppers, but its stimulus being only temporary, it is supposed to be less hurtful than the other spices, the effects of which are more permanent, and when constantly and immoderately used, so blunt the papillary nerves of the tongue, that in a short time it loses all relish of wholesome food\*. Ginger, cinnamon, and clove, are

<sup>\*</sup> Another injurious consequence of the free use of strong spices is, that they accelerate the action of the bowels, and hurry the food through the alimentary canal too rapidly to allow the absorbents properly to perform their work, and the consequence is, that nutrition will be deficient, and flatulence,

salutary. But the nutmeg and mace are the least wholesome of all spices, as the essential oil which they contain possesses a narcotic nature. Mustard is of great use in expelling flatulence, and, like the horseradish, promotes perspiration, and obviates a putrescent tendency in the system\*. The spicy sweet herbs indigenous to this country, as thyme, sage, &c., are well calculated to impart energy to the digestive organs, while used in moderation; but if taken in excess, they have the same effect as the immoderate use of spices. Pickles, onions excepted, possess indigestible qualities. Vinegar and oil, though they impede digestibility when taken in large quantities, have, when they are used moderately as a seasoning to salads, a beneficial effect upon the stomach: the former has a grateful and salutary stimulus upon it, and corrects and counteracts the putrescency of animal food, while it is moderately antiseptic, and probably in that way an antiscorbutic; the

giddiness, head-ache, spasm, and bilious and nervous disorders, and the whole train of diseases incident to debility, will attack the body on the slightest cause.

<sup>\*</sup> It has been said, that mustard has a menstrual power over the gastric juice; but this quality, as well as many other of its supposed beneficial effects on the system, may well be doubted. All persons should be cautious of taking it in immoderate quantities; for though one of the mildest of the condiments in use, it is capable, in the form of sinapism, or a cataplasm, of vesicating even the sole of the foot, over which is spread the thickest epidermis on the whole surface of the body. Can, then, such a substance be always safe to a delicate stomach?

latter has the effect of checking the fermentation of vegetables, and consequently of obviating their flatulency.

## 7. The Nature and Qualities of Liquids or Drinks.

Though water is unquestionably the natural beverage of man, and never impairs or destroys the sensibility of the palate, as vinous and spirituous liquors do, yet, as it has been ingeniously said, in respect of his food, "as man is no longer the Child of Nature, but elicits his nourishment from the productions of every climate," so he has, in respect to his drink, made use of other beverages, as well of foreign as of home manufacture, as stimulants to his appetite; and the temperate use of those stimulants, particularly good wine, at seasonable hours, may be safely allowed, as conducive to health and digestion, and tending to quicken the action of the heart, stomach, and arteries, to rouse and facilitate the functions of the mind and of the body, and to enliven and invigorate the fancy and the imagination. But if taken in large quantities, or indulged immoderately, this "delightful poison," as the Persians appropriately termed it, destroys the tone and healthy functions of the stomach, induces emaciation and debility, occasions inflammation and obduration of the liver, lungs, &c., and lays the foundation for gout, palsy, consumption, dropsy, diabetes, and many other serious diseases. In

the words of the able author of the Manual for Invalids, p. 315, it may be said, that the art of distillation, as regards the production of wines and ardent spirits, has produced greater ravages on health, and given a greater empire to death, than the united

scourges of famine and the sword.

Wines, as Sir John Sinclair says in his valuable work, the Code of Health and Longevity, have been variously classed, according to the countries where they are produced, or the properties of which they are possessed; but on the whole, they may be divided into four kinds—the acid, the sweet, the mild, and the austere. And as they exhibit marked differences in their nature and qualities, so their effects, in a medical as well as a dietetic point of view, are liable to great variation.

The acid light wines of the Rhine and the Moselle, are the least heating, the most diuretic, and the best calculated for consumption in hot weather. As they are more refrigerant, and contain a less proportion of alcohol than any other wines, they are well adapted for fevers accompanied by a low pulse and great nervous exhaustion; and they are said to be of service in dimi-

nishing obesity.

The sweet wines, including many of those produced in Hungary, Spain, France, Italy, Greece, the Cape of Good Hope, &c., in their perfect state, and taken in moderation, may answer the purpose of agreeable and

useful cordials; but if improperly fermented, as their excess of saccharine retards their stimulant operation, they are exceedingly

apt to disorder the stomach.

The mild wines, such as Burgundy, Sherry, Claret, Madeira, and particularly the best wines produced in Champagne, are more cordial than the acid ones, and can be taken with safety in larger quantities than the sweet. Champagne, when it has attained its perfect maturity, (which it is seldom allowed to do; the apparent attributes of age being given it by the insertion of a portion of syrup, composed of sugar-candy and cream of tartar, for the purpose of forwarding its effervescence and promoting its sweetness), is a wholesome wine, on account of its diuretic qualities, and the shorter duration of its excitement in the human frame than is occasioned by the use of other wines. Hence its moderate use has been found occasionally to assist the cure of hypochondriacal affection, and other nervous diseases, where the application of an active and a diffusible stimulus was indicated. As the red wines of Burgundy possess much spirituosity and a powerful aroma, they will not admit of constant consumption; but their use is less innocuous than that of the heavier red wines of Spain and Portugal. Sherry recommends itself for its medicinal qualities, and almost total absence of acidity; while Madeira, though often slightly acidulous, is better adapted to dyspeptic habits and invalids.

But of all mild wines, it has been said that claret, on account of its gentle stypticity or astringency, and its containing the least extractive matter of any wine, is the safest and the least heating; but it is necessary to be observed, that claret now is so much mixed with Spanish wines, Cape, French cider, &c., as to have lost much of those grateful and salutary qualities for which it was once esteemed, and excites intoxication almost as readily as most other wines. Independent of the sophistication it receives from the English vender, it receives the benefit of the manufacturer's skill, under the title of travaux Anglais, which consists in adding to each hogshead of Bordeaux, three or four gallons of Alicant or Benecarlo, and half a gallon of stum wine \*.

<sup>\*</sup> But adulteration is not confined to claret. All kinds of wines are subject to the sophistications, not only of the vender, but also of the grower. The stronger wines of Spain, Portugal, and Sicily, are rendered marketable in this country by the addition of brandy (and in many instances by the introduction of very dangerous ingredients), and consequently contain a quantity of uncombined spirit unfriendly to health. By this process, it is calculated that every bottle of port wine contains, in general, one-third of proof spirit, or one-sixth of pure alcohol. But this is not the worst part of the operation of preparing or mending, or in the cant phrase of the trade, "doctoring them for the English market." Wine is often so adulterated with pernicious ingredients as to become a slow poison. And, no doubt, to this and the common and unprincipled adulterations of food, and the necessaries of life, is assignable the great number of sudden deaths that are constantly happening in and about the metropolis. The adulteration, it is true, is not sufficient to cause instant death, but it operates slowly and silently and imperceptibly, so as not to excite sufficient suspicion and inquiry respecting

D 50 3 1 THE ORACLE OF HEALTH.

The austere and astringent wines, such as port, when unadulterated, and not mixed with too large a proportion of brandy, are generous and stomachic, and serviceable in disorders of the alimentary canal, where gentle tonics are required. But as Dr. Henderson, in his learned work on the History of Ancient and Modern Wines, observes, the gallic acid renders them unfit for weak stomachs; and what astringent virtues they possess, are to be found in greater perfection in the wines of Alicant and Rota, which contain more tannin and less acid. Pure port, however, is, as Dr. Kitchiner well observes, preferable to all the neurotics that all the sons of Esculapius can administer. But as all austere and astringent wines are apt to occasion costiveness, a change to white wine is frequently advisable; for white wines are less astringent than the red, and

the cause. This is not an idle or a random remark; but one founded on much observation, and on very probable grounds. It is hoped that it will awaken public attention and inquiry respecting those nefarious transactions. But to return to the account of the wine adulteration, the common red wine is often made by tinging spoiled white wine with colouring matter; and in order to render it pungent, a variety of acrid vegetable preparations is employed; to which are added, among other ingredients, sugar of lead, and other preparations of that dangerous material. The ingredients employed in the adulteration of wines, spirits, provisions, medicines, &c., and the tests for detecting and ascertaining the adulterations and bad qualities of the necessaries of life, are to be found in a work of singular and authentic character, recently published, entitled "DISEASE AND DEATH IN THE POT AND THE BOTTLE." Its public-spirited and patriotic author has conferred a signal beneat on society by his disclosures.

as the extractive or astringent matter remains longer in the stomach than the liquid portion of the wine, they are less liable to disorder the bowels.

The quantity of wine proper to be taken must, as Sir John Sinclair observes, depend on various circumstances, as on the natural growth of the liquor; whether it is taken pure, or diluted with water; whether it is the sole kind of liquor taken at the time; or whether the object in view be to take it, as St. Paul advises, "for thy stomach's sake and thine own infirmities"—that is, as a medicine; or to drink it as a diluent for food; or to indulge in a social and exhilarating glass. But for whichever of these purposes wine is taken, an adherence to the use of one kind of wine is absolutely necessary, to ensure stability of health. The rich of every country and age, may attribute many of their indispositions solely to the monstrous abuse they have allowed themselves at table, of different wines possessing the most opposite qualities.

"As a tonic and stomachic medicine, three moderate sized glasses of good wine after dinner may be sufficient. As a diluent for solid food, probably double that quantity, or from half a pint to a pint with water, or toast and water, may be safely allowed. As a zest to social intercourse, from half a bottle to a bottle may be occasionally permitted to persons in perfect health; but it is not advisable to go frequently to the

utmost limit of even rational indulgence. But perhaps the best rule in general is, to take as much wine as habit or custom has made necessary to excite that degree of circulation in the system, without which one does not feel comfortable, and immediately that this object is obtained, to desist."-The custom of sitting for hours after dinner, and keeping the stomach in an incessant state of irritation, by sipping wine, is prejudicial to digestion, and fevering and enfeebling to the whole system .- (Kitchiner's Art of Invigorating Life, p. 176, and Elements of Domestic Economy, p. 16). Nor is the fashionable practice of hob-nobbing, or drinking wine during dinner, worthy of strict observance; for the wine acts so powerfully on the feelings of the stomach, that it tends considerably to dull the desire for solid food, by producing a sensation of restoration in that organ; and the system, instead of getting materials to repair and strengthen it, is merely stimulated during the action of the vinous spirit. The reason alleged in favour of this practice does not always hold good, and the error arises from want of not making a distinction between the nature of foods. It is true, that meagre food, as fish, &c. may require a stimulus, in order to encourage it to take the temperature of the stomach, and enable it to exert its powers, which is a requisite condition before the process of digestion can commence; and in this case, a glass or two of white wine may

be advantageously taken; but calefactive food requires no such stimulus; for the only necessary stimulus is that which is sufficient to carry on the circulation, and calefactive food has that stimulus inherent in it.

Malt liquors well brewed, that is, homebrewed, and taken in moderation, are a wholesome, strengthening, and refreshing beverage, and impart a grateful stimulus to the stomach, from the combination of the tonic power as well as the bitter principle derived from the hop, and the nourishment afforded by the saccharine and mucilaginous material of the malt. Where the diet is innutritive, they afford a stimulus to the stomach, which enables it to extract more nutriment than it would otherwise do from its meagre contents. In scorbutic complaints, they are a salutary beverage, and stomachs which are weak or impaired, may be greatly invigorated by a moderate use of strong and bitter malt liquor.

London porter, and the other "horrid compounds," commonly sold as brewers' beer, being impregnated with narcotic bitters, and other highly deleterious ingredients, should be rejected "as the worst material a man can drink\*." Nor is any kind of beer that is flat, stale †, weak, or

+ Stale or hard beer may be neutralized and rendered whole-

<sup>\*</sup> See the Section entitled "Beer and Ale," in "Disease and Death in the Pot and the Bottle," which contains a series of disclosures of the most appalling nature.

half or too much fermented, wholesome, as it will disorder the bowels, and is likely to engender calculous matter in the intestines. But beer, and all malt liquors, well brewed, that is, home-brewed, is, as I have already said, a preferable beverage at dinner, or supper, to wine. Could Fashion condescend to adopt it instead of the white wines which are introduced during dinner, many inconvenient sensations might be obviated, of which the custom of hob-nobbing may be considered the parent. Our "vinum Britannicum," or, as it has been significantly called, "liquid bread," possesses, besides the other advantages above stated, more invigorating qualities than any simple vinous spirit. To " the virtues of Sir John Barleycorn's Old English Cordials," and the "Inspiration of Roast Beef," the hardihood of the English character is principally indebted.

Ale is a salubrious liquor to those whose diet is not very nutritive, as it affords much nutritious matter, from the highly concentrated extract which is left in the stomach after the removal of its watery part. But as it is heavier than porter, it is not fit for weak stomachs, and should be taken only in small quantities by the valetudinarian, the studious, or the sedentary. To be salutary, it should be well fermented and new, and used in moderation. Boniface's certificate of its good qualities, that those who employ it in their diet, "eat, drink, and live on

it," has seduced many a disciple to indulge

in it to excess, to his own undoing.

Table-beer, when soft and mild, and moderately hopped, and well fermented, is, on account of its invigorating bitter, friendly to the constitution, and is considered as a preservative against the gravel and other calculous concretions. When good, it is the best dilueut, after toast and water, that can be taken at dinner or supper; but when stale or hard, it is apt to produce the colic and bowel complaints. But neither does this, nor any kind of malt liquor, promote digestion. The prevalent erroneous notion on this subject, is refuted by the uniform evidence of experience. So far from producing this supposed effect, the narcotic principle which enters into the composition of malt liquors, especially porter and ale, operates in inducing a sluggishness of the veins, which prevents them from transmitting the blood from the different organs with the same quickness as it is propelled into them by the arteries; and hence congestion of blood sometimes takes place in them, or what is worse, a determination of blood to the head. It is on the first of these accounts, that great beer-drinkers are addicted to sleep after dinner. For the second cause mentioned, all persons who have a tendency to head-ache, apoplexy, or other affections of the head, should abstain from malt liquors of all kinds.

Cider, though a cooling liquor, is not

always a safe beverage; I mean the cider of the shops; for it frequently occasions the colic, a complaint expressively termed in the summer season, "the Devonshire colic," from its frequent occurrence in that and other cider countries, on account of the cider being impregnated with the lead with which the cisterns are lined. But as this is the fault of the manufacturer, and not of the liquor itself, it, as well as perry, when well fermented, and of a proper age, is not an unwholesome liquor. So home-made wines, when free from adulteration, of a proper age, and properly prepared, are, notwithstanding all the reprobation they have received from different writers, salutary, and in many cases superior to most foreign wines \*.

The habitual or immoderate use of ardent spirits is attended with the most destructive effects †. When used they should be taken sparingly, diluted with water, and tempered with some acid fruit and sugar. And as spirit and water do not easily combine, and much of the force of the former is blunted by intimate incorporation with the latter, the mixture should be made some time before it

<sup>\*</sup> On this subject, every person wishing to preserve his health, will do well to consult "The Private Gentleman's Wine and Spirit Cellar Directory;" in which work the most accurate, complete, and practical directions, are given for the manufacture of British wines, of any work extant.

<sup>+</sup> By accurate experiments made by Pegler (see Beddoes's Hygeia, vol. ii. p. 26) on horses, spirits were proved to be as injurious as various poisons tried at the same time. The results have been the same in experiments on dogs.

is used. But though the effects of ardent spirits are deleterious when indulged in to excess, yet when they are taken in small quantities, and on proper occasions, they are a powerful cordial; they then strengthen the stomach and assist the digestion. With many people, especially dyspeptics in advanced life, and persons of cold and nervous temperament, when used temperately and diluted, they agree better than wine does. And where animal food is used in large quantities, spirituous liquors become necessary to obviate, in some degree, the septic tendency of such a mode of living. They are also of considerable service in preventing the bad effects of a moist and cold atmosphere, of pestilential vapours, and of unhealthy occupations, or where the body has become exposed for a long time to wet weather, more especially if it be combined with cold. But their habitual or immoderate use, as has just been said, is attended with the most pernicious effects. Among other calamitous results, they contract the stomach, and the passage from the stomach into the intestines. They narrow the air vessels, even to a third of their former size. Besides doing other great and irreparable injury to the interior of the system, they produce ossifications of the tendons and arteries. They also induce convulsions, apoplexy, palsy, brain-fever, dropsy, gout, stone and gravel, head-ache, indigestion, inflammations, epilepsy or falling sickness,

erysipelas or St. Antony's fire, and a trainof other calamitous diseases: in fact, they paralyze the nervous system and the heart's action; and the tremulous hand, the palsied limbs, the bloated and inflamed countenance, and the faltering tongue, superinduced by their immoderate use, indicate that premature death lays claim to his

deluded and self-destroying victim.

Of all the varieties of spirituous liquors, French brandy is the most bracing and stomachic\*; and gin the most diuretic and sudorific.—Rum, though generally esteemed as the most wholesome of ardent spirits, has, on account of the gross essential oil with which it is impregnated, and which is particularly injurious to the stomach, rather a contrary effect.—And the same remark is applicable to whisky; for though it is a light spirit, and contains but little essential oil, and in general agrees with the stomach, (for which reason it probably received the late Dr. Kitchiner's warm approbation); yet

<sup>\*</sup> When brandy was first invented, Dr. Henderson informs us, on the authority of Beckman, in his History of Inventions, and Canonherius de admirandis vini virtutibus, that it was called burnt wine, and principally used as an antiseptic and a restorative medicine; and the most extravagant panegyrics were bestowed on its virtues. It was described as a sovereign remedy in almost all disorders of the human frame; it was commended for its efficacy in comforting the memory, and strengthening the reasoning powers; it was extolled, in short, as the elixir of life, and an infallible preservative of youth and beauty. How little it merited such praises, the experience of later times, adds the Doctor, has too fully demonstrated.

it contains certain ingredients which are peculiarly detrimental to the stomach.-As arrack is heating, it of course is pernicious. -Punch, notwithstanding the violent philippics and anathemas that have been denounced against it, is certainly more wholesome than when the liquor is merely mingled with water; as grog, toddy, or any other mixture of spirits and water, especially where the acid does not disagree with the stomach: its injurious effects arise either from its being taken in excess, or in too warm a state, whereby the tone of the stomach is weakened, and the solvent powers of the gastric juice lessened. It is folly to suppose, as is generally the case, that by the combination of the materials of which it is composed, its unwholesomeness is occasioned; the effect produced is quite the reverse; for by the combination the pernicious effects of the liquor are in a great measure neutralized; as it is an established fact, that vegetable acids (of which kind the lemonis) counteract the acridity of the liquor, as well as the putrid tendency of the animal humours of the body. The addition of the sugar also has the effect of blunting the acrimony of the liquor, and preventing its acting injuriously on the mucous membrane of the stomach.—As the fashionable and fascinating cordial of dram-drinkers, ycleped noyeau, contains a portion of prussic acid, which is one of the most deleterious poisons, it cannot be taken in any very considerable quantity without danger.

But among all the diluents used by man, water, as has been before said, is his best and most natural beverage, and the most effectual dissolvent of his food: it supports the tone of the stomach without exhausting its vigour, and furnishes the most simple and the most suitable supply to the secretory vessels, and the general humidity of the body. Where pure spring water is not agreeable to the palate, or does not accord with the bowels, toast and water is a friendly and nourishing drink, as it contains a portion of farinaceous matter. But the common method of toasting the bread, namely, burning it till all its nutriment is destroyed, and then pouring boiling water upon it, renders it unpalatable. You might as well pour boiling water upon a piece of charred wood as bread too much burned. The proper way of making this wholesome and nourishing drink is, to brown and crisp the bread well, and then put it into a jug of filtered cold spring water, covering the top of the vessel with a plate or saucer. A roll of fresh cut thin lemonpeel, or dried orange-peel, infused with the bread, affords a grateful flavour. In a few hours you will have a pleasant and cooling drink. Dr. Hancock's experiment in favour of this beverage (Febrifugium Magnum, p.18), is decisive of its salutary and beneficial qualities. He found that five or six dishes of toast and water, well made, with or without sugar, were more refreshing, and sooner took off any fatigue or uneasiness, than any strong wine, strong ale, small beer, warmed coffee,

or tea (for he tried them all), or any other liquor with which he was acquainted. Persons to whose palate this drink is not agreeable, or whose constitution requires more warmth than it will impart, may mingle a fourth part of wine, or a small glass of

brandy, with a pint of the liquor.

But to stomachs sufficiently strong, or which require much nutriment, and persons of an active habit, cow's milk, diluted with about one half pure water, either warm or cold, or mixed with water-gruel, limewater, or any of the distilled aromatic waters, or with a decoction of hartshorn-shavings, or of animal substances, as chicken or veal broth, is nutritious and strengthening. Where these ingredients are not at hand, a little brown sugar or magnesia introduced into it, will also prevent its inducing costiveness.

To the healthy and active, milk affords more strength and support than is generally supposed; and the reason is obvious; for it contains a large portion of animal matter, which coagulates in the stomach, and thereby affords it a considerable proportion of solid or animal aliment. And this is no new suggestion. Among other intelligent writers on animal economy, that commonsense observer of the affairs and wants of life, Mr. Cobbett, has mentioned the benefit which would result to the working and labouring classes of society, were they to substitute this wholesome and nourishing

drink for the narcotic and deleterious preparations which they swallow out of the vats of the brewer and the tubs of the publican, which they drink for sooth to strengthen them and quench their thirst\*. But were they to know of what materials porter is made, they would soon be satisfied that it has quite contrary effects to those which it is commonly and erroneously supposed to possess+.--Butter-milk and whey are also nutritive, cooling drinks, and particularly useful in consumptive habits. The last-mentioned has an aperient and a diuretic quality. But curds are oppressive to the stomach, and occasion obstructions and inflammations in the bowels.

Of the qualities and effects of the two beverages (viz. porter and milk), I can speak, from having made trials. From my youth upwards I have been fond of walking, and have found great benefit from the

† For an account of the ingredients made use of in the manufacture of porter, see that curious and authentic work, "Disease and Death in the Pot and the Bottle."

<sup>\*</sup> For both these supposed qualities of porter, or brewer's beer, there is no foundation: instead of being nourishing and strengthening, it is, in general, injurious to the system; and instead of quenching thirst, it excites it. Nor is the "wishy-washy stuff," sold under the denomination of "intermediate beer," or, according to its more general misnomer, "home-brewed beer," of a less deleterious nature. It is true, that it does not occasion thirst, as porter does; and for a very good reason, that the intermediate, or, as he generally nicknames himself, "the home-beer brewer," is more parsimonious in his use of the pernicious adulterating drugs, than is the case with his worthy compeer, the porter brewer.

exercise. In my walks (and they have not been very short, as from inclination, I generally, during my undergraduateship at Cambridge, walked the distance between that University and my revered parents' residence in London, on the commencement and termination of the vacations), I found that two or three pints of milk helped to carry me much more comfortably to my journey's end, than twice the same quantity of porter or ale. By means of the one I reached my destination unexhausted and in spirits; by the other I was rendered weary, drooping, and glad to retire to rest. Of course, it is almost unnecessary to state, that milk is not adapted for persons advanced in years, particularly when their stomachs are weak, or for the corpulent, hypochondriacs, or persons suffering from head-aches.

Another beverage, to the beneficial effects of which I can testify, both from experience and observation, is that made with treacle and water, and rendered slightly acid with cream of tartar. The treacle is put into boiling water, and when the mixture is cool, a small quantity of cream of tartar is added, according to the palate. By making use of this mixture, and observing an abstemious diet, instead of public-house beer (or even intermediate beer, which is equally deleterious), an intimate friend of mine, now in his seventy-fourth year, is enjoying a vigorous and a comfortable old age, and is

master of a stronger and more healthy constitution than many men who are not half his age. His flow of animal spirits, even tenor of health, and activity both of mind and body, are not surpassed by any man in the best and most desirable period of life. He informs me, that by the time he had reached fifty years of age, he was enfeebled both in mind and body, by free and luxurious living. The indelicate intemperance of a companion at a supper party convened at one of the inns in Highgate, created his disgust, and determined him to alter his course of life. From that time, to the moment I am writing this account, he has lived a temperate and regular course of life, and has met his reward—a healthy and sound state of body. His constant reply to his friends, who complain to him of one kind of illness and the other, is-" Live temperately; take sufficient exercise; and you will be as healthy and contented as I am." Let every one try the experiment, and I will stake my reputation as a medical prophet, that he will not find himself disappointed; besides having the satisfaction of saving in his pocket that money which must be thrown away on physic and nostrums in counteracting the dilapidatory effects of too much devotion to gastrophilism, and the fascination of the festive board. To those devotees of good living, who, by indulging appetite beyond the bounds of moderation, people the abode of death with apoplectic subjects and podagric toes—in whose eyes "the march of cookery" is of greater importance than "the march of intellect," and the burden of whose canticle and pious ejaculation is, "Magna est ars coquinaria et prævalebit,"—it may not be a work of supererogation to suggest, "if they have an eye to the main chance," that

"Health is a jewel rare, which, when we buy, Physicians value it accordingly."

# 8. The Proportional Quantity of Solid and Liquid Food.

The proper proportions of solid and liquid food necessary for the preservation of health, have also been the subject of as eager contest, and as much contradiction among medical writers, as the proper proportional quantities of animal and vegetable matter. To extract any safe and useful rule for our guidance in this particular, is as difficult as in many other of the disputes that have taken place among medical men. We must therefore in this, as in many other matters of medical inquiry, have recourse to the dictates of common sense and observation.

According to the discharges of the human body, when in a state of health, it appears that the proportion of liquid to solid food, is as two to one; and this seems to be the medium rate of the two foods which should be taken into the body. But it is evident, that this proportion must be varied according to the state of exhaustion and labour of

the individual, as also to the climate, and

season of the year.

Too large a quantity of fluid distends the vessels, and thereby weakens the activity of the digestive powers, and carries off the finer parts of the chyle by water, or perspiration; on the other hand, too small a proportion does not sufficiently dilute the food, so as to preserve the blood in a state of fluidity. But the danger is less when the quantity of fluid is too small, than when it is too large. For a smaller quantity of fluid will pass, where a larger cannot, but not contrariwise. Many persons suppose, as Sir John Sinclair observes, that it is of little consequence what quantities of fluid they take, believing that it is easily digested; but this is a mistake; for wine and other strong drinks are as hard to digest, and require nearly as much labour of the concoctive powers, as solid and strong food itself. Nay, it is proper to observe, that such liquors, by their heat and activity, hurry the food unconcocted into the habit of the body, and by that means lay a foundation for fevers, colics, gouts, and several chronical distempers.

Another salutary rule for the regulation of the use and quantity of drink, is to be drawn from the season of the year, the nature and quantity of the food, and the degree of exhaustion to which we are subject. And it should be recollected, that all diluents taken with food, except broths, soups,

and liquids mixed with nourishing substances, as also tea, coffee, chocolate, &c. should be taken in a cold state; for tepid or warm liquors taken in large quantities, weaken the action of the stomach, and impair the digestion; besides, they hurry the food into the intestines without being properly dissolved, and consequently deprive the body of its necessary nourishment; that nutriment which was intended for the glands of supply and chylification, is carried off by

the glands of exuvia or waste.

Having given some general rules respecting the nature and importance of diet-the necessity of regular and stated periods for the ingestion of food-the due proportion of animal and vegetable matter, and the quantity of food which ought to be taken at each meal—the nature and qualities of animal and vegetable food-the proper seasonings or condiments—the nature and qualities of drinks, and the proportional quantity of food and drink-a few directions for the right ordering of the usual meals which are taken in the present state of society, viz. Breakfast, Luncheon, Dinner, the Dessert, Tea, and Supper, will close this division of the subject.

# Breakfast.

The most proper time for breakfast is about an hour after having arisen from bed; and as want of appetite at this meal is often occasioned by the relaxing influence of a

warm bed, the propriety of restoring the reaction of the stomach by fresh air and exercise before we sit down to our morning repast, is apparent. All persons, therefore, so affected, should employ the intermediate time, if the weather will permit, in a gentle walk; for even exercise, when accompanied with fatigue or over-exertion, has a direct influence on the nerves of the stomach, and by producing a general debility in their action, occasions a corresponding state of collapse in those organs. This observation requires the particular attention of those who have read Mr. Abernethy's book, and are believing disciples of all his doctrines. His directions that patients should "actively. exercise themselves in the open air till they feel a slight degree of fatigue," have been properly criticised, and their mischievous tendency refuted, by Dr. Paris, in his Treatise on Diet, p. 377.

On your reaching home, breakfast should be ready. In the solidity\* or spareness of this meal, you must be governed by the

<sup>\*</sup> The solidity of this meal should be regulated, even by persons in perfect health, by the labour or exercise to be taken, and by the time of dining. When the powers of digestion are strong, or the pursuits of life require the dinner to be taken late, a boiled fresh egg, or a slice of the lean part of cold beef or mutton, may be added to the bread and liquids taken, in order to support the powers of the stomach, or the degrees of exhaustion to which they may be exposed. The same diet may even be allowed to persons of delicate habits, the aged, and the dyspeptic, if they do not find it too oppressive, or to disagree with them.

state of your health and appetite. By persons in high health, and the young and robust, who take much muscular exercise, almost any sort of food may be taken, and they may vary it at their pleasure, and almost with impunity; for the stimulus of muscular exertion being almost omnipotent as a promoter of health, and of the powers of digestion, they can assimilate food difficult of digestion, and composed of varied and heterogeneous substances, into a healthy serum, and discharge the superfluous quantities; but by persons whose habits are more fixed, and who have arrived at the meridian of life, or by the dyspeptic, the infirm, or the valetudinarian, no such latitude can be taken without manifest inconvenience or danger. For them, tea, coffee, or milk and water, or prepared as mentioned at page 61, with slightly buttered bread (or, what is still more wholesome and nourishing, bread slightly toasted, and not buttered hot), at least one day old, may be the regimen for this meal. If home-made bread can be obtained, it is more nutritious, and easier of digestion, than baker's bread. Brown bread, properly made, and not too coarse and clammy, is occasionally of great service at this meal. I have known the most beneficial effects produced by its use, and the most inveterate costiveness removed. My old friend mentioned at page 63, can give testimony to its virtues.

By the delicate and the dyspeptic, new.

bread and hot buttered rolls should be carefully abstained from; as the oily part of the butter is separated by the heat of the liquid taken, and remaining in the stomach, produces the sensations of heart-burn and other distressing symptoms. Buttered toast also should never be eaten by them; for the butter becoming fried or empyreumatic in the process, is converted into an acrid or even caustic fluid, which disorders the stomach, renders digestion difficult, and excites rancid eructations.

Where the usual liquids of milk, tea, or coffee, occasion acidity in the stomach, thin water-gruel or barley-water will be found a useful substitute. Tea also, made by infusing the thinnest cortical part of dried or undried lemon or Seville orange-peel in cold water for a couple of hours, and drank with a sufficient quantity of capillaire or sugarcandy, or with milk and sugar, may be taken advantageously by nervous or dyspeptic persons. To those who prefer a milk diet for their morning's repast, if they find the milk disagree with their stomach, or that it occasions costiveness, they should mix a little brown sugar with it, or boil it with oatmeal, chicken or veal broth, or barleywater. And where these are not at hand, warmed milk, with a tea-spoonful of rum, and a little sugar and nutmeg, make a very nourishing breakfast. Ginger tea may also be taken as a variety. Grapes used with bread, constitute an excellent breakfast for

persons of dyspeptic habits, and often supersede the use of aperient medicine. But in no case should a dry breakfast be made, or one without the usual diluting liquids, as the body requires renovation from the loss of the fluids which it has sustained by per-

spiration during sleep.

Much idle nonsense has been said and written both by medical and non-medical writers, about "buttered bread." One gentleman tells you, that its use ought to be renounced, as the bane and destruction of health; while another, with equal sapience, recommends his readers to put separate pieces of butter, nicely shaped and rounded, into their mouths, and swallow them before they venture to let a scrap of bread follow. Having taken due care, according to this sage counsellor's sagacious directions, that each piece of bread courteously courses its preceding lump of butter, you may believe that you are laying the foundation for a safe and sound state of health; for in his creed, the co-existent bites of the bread and butter would be a violation of all the laws of dietetical propriety. But leaving nonsense of so ridiculous a nature for the amusement of those who can befool their senses, and who wish to play the same game with those of others, we may safely use butter, provided we use it moderately. For, generally speaking, it may be confidently said, that butter spread lightly upon bread, is nutritious; it is its immoderate use that has a

contrary effect; as then the saliva is prevented from mixing with the food, so as to lubricate the passages through which it has to pass. Butter, when perfectly fresh, or slightly salted, and free from rancidity, so far from being detrimental to health, has rather a contrary tendency; and this must be evident to every person who observes the oleaginous qualities which exist in most of the productions of nature.

This commendation of butter must, however, be received with some caution; for though butter, sugar, and salt, are the best and most wholesome sauces that can be taken with food, yet their salutary effects, as well as those of all the articles of diet, consist in the moderation of their use; and in the case of butter, its salutary effects depend in some measure on the modification of its use. For, according to Dr. Paris, among all the inventions of cookery, melted butter, whether applied to meat, fowl, or fish, is the most injurious and unwholesome. This condemnation (as is the case of some other of the Doctor's invectives against culinary preparations) is, however, too general; for with boiled vegetables and fish, melted butter, not of too thick a consistence, is not unwholesome, provided the party using it is not subject to indigestion or bilious affection. Had the Doctor applied his objections to fried butter, he would have been correct, for the reason stated at page 70, ante. The unwholesomeness of melted

butter is chiefly occasioned by the flour used in its composition, which produces a fermentation in the stomach.

## Luncheon.

The custom of intermediate meals, or, as they are termed, luncheons, can be allowed only to those whose avocations, or protracted hour of dinner, and activity of exercise, require some supplementary refection to support the powers of the stomach during the long interval which their employments may require to occur between the conventional periods of repast. The popular error, that "a little and often," in the use of food, is friendly to health, is of mischievous consequence, and tends strongly to superinduce indigestion or dyspepsy; for the natural process of digestion being disturbed, the muscular fibres of the stomach are debilitated, and consequently its healthy action is prevented. To those, therefore, whose degrees of exhaustion, or diurnal habits of life, do not require any intermediate supply between the intervals of meals, luncheons, particularly of a solid kind, are not only unnecessary, but are injurious, as superinducing all the consequences of frequent eating. Where the habits or station of life will not allow of dining in the middle of the day, a little soup with toasted bread, or a biscuit with a glass of water or white wine, or in the fruit season, some fruit, with a piece of stale bread, taken about one

o'clock, is judicious; for where the stomach is left long empty, flatulence, or a languor of inanition, is induced from the collapsed state of the system, and the gastric juice acts on the coats of the stomach, and possibly on the nerves, and destroys their tone. Where no adequate nourishment can be readily obtained, by well chewing or masticating a crust of bread or a bit of biscuit, or letting a strong peppermint or ginger lozenge dissolve in the mouth when the first symptom of flatulence is felt, will pacify the stomach, and counteract the effects of inanition. Even chewing a bit of orange or lemon-peel, will check the gnawing of the stomach, as it is called, and is very nourishing. Should there be an inclination to drink, a wine glass of pure water, taken at the same time, will often have great effect, though it may at first stimulate the appetite.

## Dinner.

The proper period for dinner is the middle of the day, about one o'clock, or at farthest between one and two, when the principal solid meal should be taken. Where luncheons are used, of course the dinner hour may be more protracted.

The practice of taking soups at the commencement of this meal seems injudicious, as the stomach is thereby distended with a liquid which occupies the room which might have been more profitably taken possession of by a solid diet. Besides, the seasoning

condiments with which this fashionable introductory preparation is filled, not to mention the hot state in which it is conveyed into the stomach, render its use improper at this period of the dinner. It also, as is the case with all hot fluids, neutralizes the gastric juice, and relaxes the muscular fibres of the stomach, so as to disable them from reducing the food to that pultaceous consistence which is necessary to convert it into chyle. It moreover defrauds the stomach of that secretion of the saliva or fluid, which the mastication of solid food carries down with it into the stomach, and by whose means the comminution of the food is materially facilitated in its passage onwardly. But where, for the sake of conforming to this introductory preparation at fashionable entertainments, we do not wish to appear singular, its injurious effects may be corrected by soaking toast or stale bread in it, and it will then prove nutritious, and enable the stomach to act upon it without losing its tone.

If you wish to enjoy health, make your meal off one dish. "From want of submission to this salutary rule of temperance, as many men," says Dr. Kitchiner, in his emphatical manner (Peptic Precepts, p. 231), "dig the grave with their teeth, as with the tankard. Drunkenness is deplorably destructive; but her demurer sister, Gluttony, destroys a hundred to her one." A variety of ill-assorted food impedes digestion, and

occasions a commotion in the stomach, very unfriendly to health\*, for only one sort of food can be digested at a time†. "A stomach filled with a plurality of dishes," Dr. Paris jocosely but truly says, "vies in the nature of its miscellaneous and pernicious contents, with the ingredients of Macbeth's cauldron:" in plainer language, its contents cannot harmonize or assimilate.

"It is your superfluous second courses," as Dr. Kitchiner observes (Art of Invigorating Life, p. 196), "and ridiculous variety of wines, liqueurs, ices, desserts, &c. (which are served up more to pamper the pride of the host, than to gratify the appetite of the guest), that overcome the stomach, paralyze digestion, and seduce 'children of larger growth' to sacrifice the health and comfort of several days, for the baby pleasure of

<sup>\*</sup> The ill consequences arising from a variety of food depend, however, on its being of different kinds or species: a food of the same kind, as beef, mutton, fowl, &c. dressed in a variety of ways, has not so pernicious a tendency. And of this opinion was the celebrated Dr. Cullen, who, in his Materia Medica, p. 105, observes, that he never perceived any inconvenience, or difficulty of assimilation, arising from the same species of food dressed in a variety of ways, provided only a moderate quantity was taken.

<sup>†</sup> Different sorts of animal food require different periods to digest them: for instance, white fish, from four to five hours; poultry, six hours; whereas beef, mutton, veal, and other butchers' meat, require about seven hours to be retained in the stomach before digestion is completed. According to the generality of medical writers, vegetables require a longer time before the process of digestion is completed; but I apprehend that I have sufficiently refuted this assumption in note to page 30.

tickling their tongues with champagne, custards, trifles, &c." And which, as the same learned Dietician, when speaking, in his Elements of Domestic Economy, of the injurious effects on the constitution produced by French cookery, and made, or high-seasoned dishes of all kinds, says, are no farther necessary than "to pamper satiated appetite, and feed the eyes of superannuated epicures."

Sated with Nature's boons, what thousands seek
With dishes tortur'd from their native taste,
And mad variety, to spur beyond
Its wiser will, the jaded appetite. ART OF HEALTH.

It has been well said, that to dress food for the stomach is easy enough-great art and expence are only requisite to irritate the palate when the stomach is satisfied. how destructive of health is such an improvident use of Nature's bounty! For it should be recollected by all persons desirous of preserving their health, that many substances, though naturally possessed of salubrious qualities, are, by the refinements and fantastic combinations of cookery, rendered unwholesome. By compounding several incongruous ingredients to produce a poignant sauce, or rich soup, the cook frequently forms compositions that are almost poisonous. Of the truth of this remark, any person acquainted with the properties and affinities of chymistry may readily satisfy himself, by referring to the farrago of unwholesome and incongruous receipts and

directions with which the cookery books, both fashionable and unfashionable, in cir-

culation, abound \*.

But where a participation in variety of food cannot be well avoided, as at set entertainments, the ill-effects arising from its difficulty of assimilation, may, perhaps, as Sir John Sinclair suggests (Code of Health and Longevity), be in some degree obviated, by not hurrying each division of dishes too soon upon the table, as well as from it; but by allowing an interval for conversation, in order to give the stomach an opportunity to digest its contents partially, before a fresh labour be imposed on it.

The custom in use among some people, of taking drams before dinner, for the purpose, as they allege, of whetting the appetite, is highly pernicious, and has quite a contrary tendency to that designed, as it relaxes the stomach, and consequently enfeebles it for the operations it has to perform †. And for this reason the practice of taking brandy or liqueurs with goose, pig, &c. seems objectionable. Nor is the fashion of "hob-nobbing," or taking wine during

<sup>\*</sup> To every one to whom the merits of that volume of orthodoxy, the Cook's Oracle, is known, it is unnecessary to state, that it is not included in this censure.

<sup>†</sup> Where this practice is made use of from any defect in the digestive organs, and with the intent of exerting the powers of the stomach, so as to stimulate the circulation, it is much more advisable to take a glass or two of white wine, or a tumbler of strong well-brewed ale; or a healthful impetus may be given to the system by a well-seasoned soup.

dinner, deserving of imitation, for the reasons stated at page 52, ante. The use of soda-water during this meal is also reprehensible, as unnecessarily distending the stomach, and thus counteracting its muscular contractions when they are necessary to be brought into action, and preserved in their full vigour. To say the least of all these vulgar errors in diet, in swilling unnecessary liquors, they check the progress of digestion, and paralyze the powers of the stomach. But coffee may be safely and advantageously taken after dinner, as it accelerates the operations of the stomach, and assists digestion, provided it does not exceed a small cup or two, and be taken without sugar or milk.

With respect to pies and puddings, so strange a prejudice is entertained in their favour, that in the opinion of many persons they are, as Dr. Paris observes in his useful work on Diet, supposed to possess a balsamic virtue, or some property by which the digestion of other aliment is expedited. But this is one of the erroneous opinions which are prevalent among mankind respecting the nature and properties of food; for their general effect is quite the contrary, especially when baked, or consisting of batter. Their virtue and effects chiefly depend on their being a substitution for less stimulant food. When made with fruit, their aperient and cooling effects are to be assigned to their contents, not to their

encrustations or peculiar qualities. The most digestible puddings are those made with bread or biscuit, and boiled flour. Rice puddings baked, or not too much boiled, are a wholesome and nutritious aliment, especially if mixed with other food, and not taken in too large quantities. digestion of rice may be materially facilitated by the addition of a little nutmeg or allspice. Suet and plum puddings are the most indigestible; and the hard dumplings usually given to children at school, are almost as indissoluble in the stomach as leather or earthenware: were they swallowed by grown persons of delicate and indigestive habits of body, they would be likely to remain in their stomachs to the end of their days. The thinner crust of which pies and puddings are made, is, it is so much the more wholesome.

As cheese is one of the least digestible of our aliments, being made of the coarsest and most viscid part of the milk, it is calculated only for the use of those who have great and constant exercise. Hence persons of a delicate organization, and invalids, as well as the studious and sedentary, ought carefully to abstain from its use. When eaten new, for instance, cream cheese, it is apt to produce rancid eructations, and impair the digestive organs; when old, or of a rich quality, it has a remarkable tendency to taint the breath even of the healthy. When toasted, its tenacity of texture is increased, and consequently it is more hostile

In this state, it has a strong tendency to coagulate in the stomach, and when this happens, there are cases on record, in which it has resisted the operation of the most active medicines. These observations are in opposition to the generally received notions respecting cheese; for there is not, as Dr. Kitchiner observes, a more vulgar error in diet, than the often quoted saying, that

"Cheese is a surly elf,
Dissolving all things but itself;"

but they are true. A small quantity, however, of sound old cheese, may not do injury, if taken after dinner; but it neither assists the digestion of food, nor produces any additional nutriment, as is commonly supposed\*. Blanc-mange partakes of the nature of cheese, and is nearly as indigestible; as is cream, or any preparation of milk, eaten with apple pies or strawberries,

<sup>\*</sup> Notwithstanding this is the general effect of cheese, there are cases in which it may be taken, and compose even an entire meal, with decided advantage. I can state, from my own knowledge, that a gentleman who had been subject to a depraved state of digestion for the space of a year, and of course liable at times to considerable fecal accumulation from scanty alvine evacuation, was relieved by dining one day entirely on cheese and new bread—a fare he was compelled to put up with, not being able to procure any other in the neighbourhood in which he chanced to feel an appetite for his dinner. From no small experience I am able to assert, that the use of food, of a diametrically different nature to what one has been accustomed, will produce beneficial results in cases of dyspepsy and fecal accumulation, especially the last-mentioned affection.

as it is apt to turn rancid on the stomach, and if wine be taken afterwards, to ferment and coagulate.

#### The Dessert.

Of all the ingredients of which that part or appendix of the dinner, which is termed the dessert, is composed, none are more pernicious than "the pasticcios of the pastry-cook, and the complex combinations of the confectioner." "All pastry," adds Dr. Paris (Treatise on Diet, p. 247), in his striking manner, "is an abomination: I verily believe, that one half, at least, of the cases of indigestion which occur after dinner parties, may be traced to this cause." The Doctor is not an incorrect judge in these matters. and it must be admitted, that there is sufficient ground for his reprobation of this addendum to the dinner paraphernalia. Large quantities of fruit taken also after dinner in the form of dessert, are far from contributing to health, as they are likely to chill the stomach, and check the progress of digestion. The most proper period for these gifts of Nature, is, as has been already said, two or three hours before dinner, and about an hour before retiring to rest. It is, however, necessary to remark, that though the observance of this rule is necessary for persons subject to indigestion, and young people full of blood, as the taking of fruit before dinner may abate too keen an appetite for animal food; yet a small quantity of fruit

may be taken with advantage after dinner, especially where much animal food has been consumed. Where fruit is eaten before dinner, unless it is taken in great moderation, bread should accompany its consumption. When ripe, and taken in moderation, fruit is useful to people advanced in years; but they should not indulge in it too

freely, lest indigestion supervene.

It may be necessary to say a few words relative to the respective properties of fruit: -the orange, strawberry, raspberry, and currant, are esteemed the most conducive to health; indeed this is the property of all the small seeded sorts of fruit. Next to these the peach, apricot, and apple, are preferred. Pears and mulberries are wholesome when ripe. Stone fruits, though easily dissolved in the stomach, are more liable to fermentation than any other; and as they produce a copious acid, they are liable to irritate the intestines. The plum and cherry are of an indigestible nature; their green or unripe parts, as is the case with all the varieties of the same species, are highly pernicious: it is fortunate when they act as a purgative. The husks or skins of grapes and gooseberries should not be swallowed, as they are absolutely indigestible, being voided in the same state as they are swallowed. The seeds of grapes, and the pips of all fruit, should also not be eaten. Figs are wholesome and laxative, both crude and in a preserved state. The melon, which

possesses properties almost equally deleterious with the cucumber, should always be eaten with a plentiful addition of salt and pepper. The pine-apple, though admired for its grateful taste and fragrant odour, should be sparingly used. Nuts, filberts, and chestnuts, should also be used cautiously, if not wholly abstained from; when eaten, they should always be accompanied with salt, to assist their digestion in the stomach. When taken even in small quantities, they oppress the breathing, and, on account of their viscidity and glutinous quality, are liable to produce bowel complaints; but in large quantities, they have been often known to lodge in the stomach, and be incapable of being removed from it by any medicine, and of consequence to have put a speedy end to life. The viscidity of the chestnut may, however, be destroyed by roasting it. Walnuts, when eaten fresh, and in moderation, are palatable and nutritious. "Dried fruits," says Dr. Paris, in his book on Diet, "are by no means so useful and safe as is generally imagined; the quantity of sugar which enters into their composition, disposes them to fermentation." But this is by no means correct, as a general position; for sugar, in general, renders fruit more nutritive, and often corrects its acidity and tendency to ferment. Dried or preserved figs are the most nourishing of dried fruits, though, at the same time, particularly injurious to the teeth. In the use of ices, great moderation

should be observed; too immoderate an ingestion of them is likely to induce an inflammation of the stomach.

#### Tea.

The proper intervals at which meals should be taken, are, as has been already said, of the greatest importance for the due preservation of health. To no meal does this remark apply with more force and effect, than that which has not inappropriately been termed "the meal of friendship and neigh-

bourly relationship."

The proper and most salutary time for taking tea or coffee as a meal, is about four or five hours after dinner. By the ingestion of those liquids into the stomach at that period, the ulterior stages of the digestion of the dinner's ingredients are greatly assisted; while they promote the insensible perspiration, and afford a grateful stimulus to the stomach after its labours in the concoction and preparation of the heavy load it received at the afternoon's repast. Thus you see that this meal is not a supernumerary one, as is generally supposed, but one of absolute necessity, according to the present modes of living\*. If there are persons

<sup>\*</sup> This view of its benefit is a sufficient answer to the silly and unfounded objections made by the inexperienced writers of certain recent little publications, whose ignorance of the topics which they have presumed to discuss, is as lamentable as the consequences of their idle and mischievous opinions are likely to be dangerous to those who may be weak and deluded enough to hazard their health and comfort to their experiments and ridiculous directions.

who do not make use of it, they supply its beneficial effects by other diluents, or more

unhealthy potations.

The spoken and written opinions concerning the properties of tea, are almost as remarkable for their contradiction and nonsense, as I have before stated has been the case with respect to butter. Some of the "faculty of physic," and other erudite gentlemen, who "strive at a gnat, but swallow a camel," have condemned the tea-leaf as one of the most pernicious articles of consumption-as the source of nervous diseases and complaints of debility-as a "narcotic draught," "a poison," with a string of other epithets and appellatives; while other equally "sapient seers," as well of "the physical tribe," as certain "philosophes," who, in the true spirit of modern philosophical refinement, make a point either of condemning or over "bepraising" whatever has received the stamp and sanction of public approbation and utility, have lauded and extolled it as the primest blessing of life, as a medicine, a restorative, a panacea, &c. Were the conflicting opinions of the two hostile parties collected, and arranged side by side, it would afford an edifying example of the folly of writing or speaking on subjects which we do not understand, and have become the supporters or impugners of, from hearsay, or on dubious or interested authority.

The most sensible writer on the properties of tea, and almost the only one who has sup-

plied his readers with useful information on the subject, is Mr. Thackray. That gentleman, in his Treatise on Diet and Regimen, while speaking of the unfounded prejudices against tea, says, "Experience will scarcely warrant our attaching to it a high degree of evil agency, at least in the common way, and in the ordinary extent in which it is taken. I know not what the citizen could advantageously substitute for it. It appears well calculated to obviate the effects which arise from the excess of food, and the inordinate stimulus of spirituous potations. Black tea, drunk in moderation, produces, in most persons, effects rather useful than prejudicial; it evidently gives a mild impulse to the circulation, and excites a general moisture on the skin. Most of the high-flavoured teas excite the nervous system; and when taken in large quantities, or at an improper time, produce great disorder. The green tea seems to have most of the narcotic property, its sedative effects on the heart being sometimes alarming." The relative perniciousness of black and green tea has been a question often debated, but no very satisfactory rule can be extracted from the conflicting opinions on the subject. The general opinion is, that black tea is the most wholesome; but this opinion is not to be entirely depended on; for with many constitutions, green tea agrees best: indeed I know some elderly people, who inform me that they have for a long series of years drunk the green variety,

and find it agree best with them. Idiosyncracy of constitution is, therefore, to be attended to in the use of the variety of this plant, as well as of other articles of diet. As I have said before, and the remark cannot be too often repeated, attention to what agrees and what disagrees with us, is one of the best methods of ascertaining the beneficial or prejudicial effects of any article of diet.

The narcotic effects of green tea, compared with black, appear from an experiment made with a drachm of the concentrated extract of the former, which being given to a moderate sized dog of the spaniel breed, destroyed the poor creature in a few minutes. But as the learned Reviewer (London Review, No. 1.) by whom the above experiment is mentioned, very properly observes, it is not to be implied, that a substance itself must be poisonous, because the concentrated extract of it is so; yet there is a well-grounded suspicion, that delicate and highly sensitive constitutions may feel the effects of the poisonous qualities of green tea, however mixed and diluted.

The principal rule to be recollected respecting the use of this article is, that it should be taken in moderation, not too strong or warm, and with a sufficient quantity of milk and sugar, and solid nourishment. The hysterical and hypochondriacal affections of females are frequently assignable to the strong hot slops which the

fair sex are constantly taking in the shape of tea. For too much hot water, whatever ingredient may have been infused in it, is prejudicial as a constant aliment, as it debilitates the stomach, neutralizes its juices, occasions imperfect digestion, and lays the foundation of many diseases which undermine and destroy the constitution. To the ingestion of hot tea, and in too copious a quantity, the palpitation of the heart, and the sympathising action of the brain, in the form of plethoric head-ache, to which great tea-drinkers are subject, owe their origin; for the hot liquid occasions an over secretion of the blood and an over action of that fluid. Persons afflicted with these complaints, should restrict themselves to a single cup of tea at each meal, of not a higher temperature than blood warm, and should counteract its tendency by a sufficient quantity of solid food.

The opinions of the properties of coffee have, as the learned author of "The Manual for Invalids," p. 151, observes, "been almost as various as the colours of the rainbow;" it has had the fortune to be decried and bepraised with as much vehemence, and as much senselessness, as its frequent accompaniment at the tea-table—tea. Some practitioners have accused it, among other bad qualities, of occasioning indigestion; while others, with equal truth and propriety, have considered it almost as the universal panacea of life. But we must not trust to those gen-

tlemen; we must take our own experience for our guide. An opposite opinion or two of able medical writers, will also assist us in

forming a correct notion.

Dr. Moseley observed, that "the extraordinary influence which coffee imparts to the stomach, is strongly exemplified by the immediate effect produced on taking it when the stomach is overloaded with food, or nauseated with surfeit, or debilitated by intemperance. The great use of coffee in France, is supposed to have abated the prevalency of the gravel. In the French colonies (where coffee is more used than with the English), not only the gravel, but the gout,-those inveterate tormentors of the human race,-are scarcely known. It may be taken at all times, by all persons, men or women, who are troubled with disease arising from want of exercise, unwholesome food, weak fibres, or obstructed perspiration." But an acute writer on this subject seems to have taken a more correct and philosophical view of the beneficial and injurious properties of this valuable berry. "Coffee drinkers," says he, "sometimes suffer serious disorders of the stomach or the head, -as indigestion, nervous irritability, head-ache, or palsy. It is true, that the proportion of the evil which results from the coffee, cannot be accurately compared with that which results from the study, nor does the ardent student care to inquire. He knows that strong coffee assists his intellect; he is not the servant of his stomach, nor will he consult his likings at the expence of a more noble organ. Here he is in error; he forgets the sympathy between the stomach and the brain; but ere long, he will be taught it in a way not the most agreeable, either to his intellectual powers or his corporeal feelings. Fretting of the stomach, and consequent irritability of nerve and temper, will soon be as troublesome and as impertinent visitors, and equally derange his ideas, and break the chain of thought."

From these two ingenious disquisitions, the attentive reader may extract a useful and a safe rule. Dr. Moseley's observations tend to shew that coffee is able to produce great and beneficial effects on the constitution; those of his able opponent also prove, that those beneficial effects may be destroyed by its immoderate use. To obtain the desired effects, therefore, from it, we must use it moderately, otherwise it will relax the animal fibre, as is the case of all stimuli too frequently and improperly repeated. Twice or thrice, or oftener a week, according to the age, constitution, or other peculiarities and habits of the party, may be found of great service, as strengthening the tone of the stomach, dispelling wind, assisting digestion, and aiding the operation of the pores. To the phlegmatic and the sedentary, a cup of coffee one or two hours after a meal, or which is still better, one hour before, will promote digestion. But to the

plethoric, and persons subject to spasmodic affections, and those advanced in life, whose fibres are dry and irritable, its use is frequently injurious. To the hot state in which it, as also tea, is usually drunk, the frequent attacks of apoplexy, so much more common than was the case before its introduction into use, are probably, in some measure, to be attributed. When taken to assist digestion, it should not be mixed with any thing but a little moist sugar or

sugar-candy.

I have been particular in the refutation of the commonly received notions respecting tea and coffee, as, independent of the benefits to be derived from them as articles of consumption, their use may be justified on account of the bitter juice or infusion which they impart to the water, thereby correcting its impurity. Tea should not be allowed to stand too long after it is made, otherwise a greater portion of its narcotic qualities is extracted, and its flavour and invigorating effects affected. Infusion is the preferable manner of making coffee; by decoction its aroma is dissipated.

Chocolate, on account of the oil it contains, and the aromatics used in its preparation, particularly the vanilla, which disposes it to produce nervous affection, is oppressive and cloving to the stomach, being difficult of assimilation. If not made too thick, and used but occasionally, it is not, however, an inputritious or unwholesome drink. Its principal use is in cases of emaciation and consumption: to the corpulent, the young, the sedentary, and those of a sanguine habit, or inclined to affections of the liver, it is too nutritious, causing constipation, and other injurious results. Nor can I promise even the consumptive and emaciated, that benefits will be likely to result to them from its use, similar to those mentioned in the Harleian Manuscripts to have occurred to one of Dr. Munday's patients. The Doctor, in one of his oracular moods, informs us, "that he knew a person in a desperate consumption, who took a great fancy for chocolate; and his wife, out of complaisance, often drank it with him; the consequence was, that the husband recovered, and the wife had three sons at a birth!"-Cocoa is merely a weak chocolate, and generally considered more wholesome and nourishing; but this is one of the mistakes of medical dietetics; for it consists of only the husky part of the cocoa-nut, mixed with a little of the nut, and some dross and dust. With either of these beverages, lean meat and dry bread are to be preferred to the usual concomitants, buttered toast or muffins.

But adverse and contradictory opinions are not confined to tea and coffee; the notions of "the sons of physic" respecting sugar, are as conflicting; some maintaining that it has an astringent, others, a cathartic effect. But it is idle to notice

the reveries of the combatants. In its use, the best guide is, for every person to consult his own feelings, and attend to its effects on his constitution. In its simple form, it is more friendly to the constitution than is generally supposed; though, when in combination with other articles, as confectionary, conserves, preserved fruits, comfits, jellies, and such preparations, the same objection often lies against it as has been mentioned in the case of salted meat. Many people consume large quantities of it, and with benefit to their health; while others find it create an acidity in the stomach. Let every one, therefore, use it as he finds it to agree with his constitution: a rule more deserving of observance than medical direction. Mr. Thackray says, "sugar seems to be the first support of vegetable life, and it is well known to be the principal food of all young animals," the mother's milk being strongly saturated with it. Independent of its other beneficial qualities, it yields more chyle than any other constituent of plants. But the late Dr. Willis indulged a very different opinion: he maintained that the scorbutic complaints to which the English are peculiarly subject, and half of their other maladies, are caused by its use! This doctrine may be considered no bad illustration of the reveries of even eminent medical men respecting articles of diet.

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# Supper.

This meal has almost become a supernumerary one in fashionable life; and in this solitary instance, Fashion has shown her

good sense \*.

As the powers of the stomach are always actively employed in the digestion of its contents, full or hearty suppers, or even meat or strong drinks, are unfavourable to quiet and salutary rest; they occasion a turbid distention of the stomach, which impedes respiration, and produces a distressing and feverish feeling. Besides, when the body is in an incumbent posture, and the stomach distended with aliments, they are apt to press on the great blood-vessels, whereby too much blood may be thrown on the brain; a consequence likely to superinduce plethoric head-ache and apoplexy. Dr. Kitchiner's oblique recommendation of solid suppers to those to whom habit has made them indispensable, must therefore be received with caution. To those who cannot, according to the same ingenious gentleman's humorous expression, " put on their night-caps without first bribing their stomachs to good behaviour," I must pre-

<sup>\*</sup> Should any lover of the meal in which "the feast of reason and the flow of soul" are more characteristic than is the case of any other of the conventional repasts, adduce the authority of Hippocrates, Celsus, and Galen, in favour of suppers, he should recollect that the fathers of medicine conformed rather to the custom of their age, than to any fixed opinion of its wholesomeness or unwholesomeness.

scribe in the words of Dr. Paris: "An egg lightly boiled, and a piece of dry toast, with a small quantity of white wine negus," says that sensible physician, in his work on Diet, p. 281, "will often secure a tranquil night, which would otherwise be passed with restlessness." Or to persons so disposed, Dr. Kitchiner's prescription of a biscuit, or a sandwich, or a bit of fowl, and a glass of beer or wine, or toast and water, may be safely allowed.

Ripe fruit, also, when in season, particularly the small-stoned, as currants, raspberries, or strawberries, eaten with a little stale bread, is salutary, as it cools and corrects the heats and crudities of former indigestion. Good beef tea, with a piece of slightly toasted bread, is neither an unpalatable nor an unwholesome supper. And the same may be predicated of roasted po-

tatoes, with plenty of butter and salt.

Many people are of opinion, that a supper of water-gruel is wholesome; and in this opinion they are not incorrect, provided it is not taken too frequently, and is properly made, that is, mixed with molasses or milk, or boiled with a few currants, and not too thick. Dr. Franklin, in his Life, written by himself, adduces as a proof of its salutary effects, the case of an old Roman Catholic lady, who having disposed of all her property for charitable uses, lived entirely on water-gruel, and never experienced sickness, or any injurious con-

sequences from that mode of diet. It has probably been owing to oblique commendations like this, that water-gruel has attained its great estimation. But it is proper to observe, that it, and all pottages, taken too frequently, are heating, and have a tendency to turn sour on the stomach. The habitual use also of this species of food, operates in a way that few persons are aware of: it produces eruptions on the skin, nearly resembling the itch; as is well known to those who have had occasion to observe the poor in Ireland and Scotland, where the diet of the lower order of society chiefly consists of oatmeal, in some shape or other. Had the author of the " Cook's Oracle," and " The Art of Invigorating Life," been conusant of this circumstance, he would have been more guarded in his praises of his favourite "solid liquid"-water gruel.

# Cookery.

Cookery is of two kinds, simple and refined, or compound. The object of the first is either to destroy some deleterious property, or to render food palatable and nutritious; that of the second is to stimulate appetite, and please the palate by fantastic and unwholesome compositions.

The general modes of cookery in use are, 1. Roasting; 2. Boiling; 3. Stewing; 4. Broiling; 5. Frying; and 6. Baking.

By roasting, a greater quantity of nutritious matter is retained in meat than by

any other process of cookery, except that of broiling. The perfection of this process consists in doing the meat neither too slowly nor too rapidly; by the first method it is withered; by the second, burned or scorched; and by either, rendered innutritive and indigestible. Dr. Cadogan, in his Dissertation on the Gout, says, that over-roasted meat is unfriendly to health; while Dr. Falconer, in his observations on the same work, maintains, that meat little done is the most soluble; but without taking part with either of the learned gentlemen, it may be safely said, that meat should be neither over nor under-done. By over-dressing meat, as its fluids are expelled by the heat, and the fibres compelled to approach closer to each other, it is rendered indigestible; by its being under-dressed, it runs quickly into putrefaction: the perfection of roasting consists in the medium between over-dressing and under-dressing-namely, in the meat being well done, when it will eat short and agreeable, and be in its most nutritive state.

The flesh of old and full-grown animals is not unwholesome if eaten rather under-done; but young and viscid food, as veal, lamb, pig, chicken, &c. should be thoroughly roasted, or it will disagree with the stomach, and probably occasion sickness. Such food is also more wholesome and nutritious, and more easily digested, when roasted than when boiled.

Boiling renders meat more digestible than

roasting it does; but deprives it of more of its nutritive qualities than that process, as the gelatine is partly extracted in the water. If meat is boiled too long or too fast, it will become hard and indigestible; besides, all its nutritious qualities are lost or dissipated in the water. Meat boiled in hard water, is more tender and juicy than when soft water is used; while vegetables, on the contrary, are rendered harder and less digestible when boiled in hard water. Boiling is the best process of dressing vegetables, as they are thereby rendered more soluble in the stomach, and are deprived of a considerable quantity of fixed air.

By stewing, meat is rendered more tender than by any other process of cooking; but as more of its soluble parts are extracted than is the case with the other processes, the only good aliment that it affords is the soup; for though the meat is rendered sapid,

it is hard and innutritive.

By broiling meat, more of its nutritive qualities are retained than by any other process; for the evaporation or exhalation of the juices of the meat is prevented by the sudden hardening or browning of the surface. For imparting strength, it is therefore the best mode of dressing animal food, as it is rendered thereby more nutritious, and easier of digestion, than by any other preparation.

Frying is the most objectionable mode of dressing any species of food, as it is rendered highly empyreumatic by the heat being applied through the medium of burning oil or fat, and thereby becoming hardly miscible with the fluids of the stomach, is

apt to disorder that organ\*.

Baked meats, if well done, are not unwholesome for occasional use; but from the retention of their oils, occasioned by the confined space in which they are dressed, they are not so digestible and nutritious as roasted food is. On this account, those who are subject to dyspepsy or biliousness, when they partake of this species of food, should assist the powers of the stomach by the additional stimulus of spices and aromatics; and they should abstain from its gravy, as it is highly empyreumatic. If by this restraint, the meat should not be sufficiently savoury, by pouring boiling water

<sup>\*</sup> Among the best rules that I have seen for the wholesome and economical dressing of food, are those contained in a little work, entitled "THE FEMALE SERVANTS' ADVISER, OR THE SERVICE INSTRUCTOR," recently given to the public by an esteemed friend. It is with considerable satisfaction I avail myself of giving all the publicity in my power to that well-meant little book, and to add, in the words of the publishers, my "belief, that a more useful and a better-intentioned work has seldom issued from the press, or one calculated to do greater and more effectual good, as it embraces the interests and welfare of the great family of mankind-Masters and Servants." And it is only my regret, that the limits of the present work will not allow me to make any farther extract from the judicious address of the publishers to the Master and Mistresses of the Empire, than merely to add, "that by its directions, servants will be enabled to perform the various occupations of service in an efficient and a satisfactory manner, and be informed of the methods of occasioning large savings in the management and use of their employers" property and provisions."

over it in the plate, a wholesome and sapid

gravy may be readily obtained.

With respect to the disputes relative to the comparative nutriment afforded by under-done or over-done meat, the observation of Dr. Kitchiner (Art of Invigorating Life, p. 27), seems the best reply: "That meat which is under-done, contains more nutriment than that which is over-done, is true enough; -that which is not done at all, contains a great deal more; -but in the ratio that it is raw, so it is difficult of digestion, as Spallanzani has proved by actual and satisfactory experiments." "Our food," adds the same ingenious dietitian, "must be done by the cook or our stomach; if we impose the drudgery on the latter, its valuable energies, which ought to be employed in the work of digesting, are wasted in the work of cooking, which the spit or the stewpan can do much better:" a doctrine and phraseology which Dr. Paris has closely adopted, in his useful work on "Diet," in the following words: "The spit and the stewpan spare the stomach the drudgery of loosening the texture and softening the fibres of food."

## Air.

For the clearer understanding of this subject, it seems proper to explain the nature and chymical properties of air. And this explanation is the more necessary; for in the regimen of health, good air claims a pri-

mary consideration, and a knowledge of its peculiar qualities, and its specific and particular effect on the structure of the animal economy, is of the highest importance, as it becomes a component part of the living principle by which the organs of the body are nourished; and it has not only an influence on the health, and gives tone and effect to the nerves and the perceptions of the body and the mind, particularly to the functions of the brain and the heart, but is also conducive to longevity. " Few are alive to the great good or evil influence of this astonishing agent of Nature, which conceals within its bosom the germ of life of every animated being."

Atmospheric air chiefly consists of two gases, one called oxygen, or pure or vital air\*; the other, azote or nitrogen; the first is a trifle more than a fifth of the whole volume, and is friendly to life; the second nearly four-fifths, and is unfriendly to life, being absolutely poisonous. Besides these two component parts, which form about forty-nine fiftieth parts of respirable air, it contains a small quantity of fixed air, or carbonic acid gas. Modern chymistry has also discovered a variety of other gases or factitious airs held in solution in the atmos-

<sup>\*</sup> Oxygen is so called, from its being the basis of all acids. Azote derives its name from its fatal effects to animal life; and nitrogen from its being the basis of nitrous acid. Carbonic acid gas is so termed from the circumstance of its being obtained chiefly from charcoal.

phere; as the effluvia arising from the decomposition of animal and vegetable matter, or which escape from the bodies and clothes of persons labouring under certain infectious diseases, the infectious miasms of marshes, exhalations arising from water, from the earth, and from different minerals, saline particles, carbonaceous matter, and products from combustion. But of course the proportions of these factitious airs must have a reference to different situations, as the air of the country will be more pure than that of a crowded city, and the like.

These gaseous fluids escaping in an aeriform state, are in general unfriendly to life, and a fruitful source of mischief; for their noxious principles getting united with the blood through the air-cells of the lungs, destroy the healthful functions of the brain

and heart.

But air is not only prejudicial to health from its noxious qualities, but it is also unfit for the healthy purposes of nature, if it be too pure, that is, too highly oxygenated. The refutation of this common error respecting the properties of air, cannot be too well recollected, as many persons labouring under pulmonary diseases, spitting of blood, &c. have accelerated their deaths, by choosing places for their residence of too high an elevation. It is the proper combination and proportion of the aeriform fluids which constitute that state of the atmosphere, which fits the air for the purposes of

preserving life and health: perfectly pure air is as unfit for the purpose, as that which

is of a different quality.

The evil effects produced by the inspiration of impure or confined air, are many and frightful; for when, from any cause, air is suffered to become foul and noxious, it weakens the springs of life, and generates malignant and contagious diseases, and from being the first support of life, becomes, by stagnation, so putrid as to have all the effects of poison. Hence appears the necessity of exposing our bodies daily to the operation of the external air, and of renewing the air of our dwellings, by keeping open the doors and windows during the warm part of every fine day. And it should be remembered, that breathing the pure air of the country\*, in daily short country walks,

The proportion of annual deaths in large cities, in moderately sized towns, and in the country, Dr. Price, in his Re-

versionary Payments, vol. i. p. 296, rates as follows:

<sup>\*</sup>The insalubrious atmosphere of large cities has almost become proverbial; the "pericula mille sævæ urbis," have been the theme of ancient as well as modern reprobation; and it must be admitted, that the mortality which occurs in the large capitals of Europe, as well as of the other quarters of the globe, afford sufficient reason for their having been denounced "the graves of the human species,"—"the sepulchres of the dead and the hospitals of the living: at least it is certain, that living in large cities is found greatly to shorten the average duration of human life, as well as to tend strongly to the deterioration of its healthful state. In Constantinople, Grand Cairo, Vienna, Berlin, London, and Paris, it is invariably found, that not only the healthful state, but the average duration of human life, is greatly reduced from what it is in the surrounding parts of the country.

-is more beneficial than spending whole days, and even weeks together in the country, and then returning into the corrupt atmosphere of the town, according to the fashionable mode of taking annual trips to watering-places\*.

2. In moderately sized towns, from 1-25th to 1-28th.

This statement must, however, be understood with some exceptions; as moderate towns may be so ill situated, as to increase the proportions of deaths, and the proportion in great towns may sometimes be decreased by a sudden increase

of healthy inhabitants in the prime of life.

But there is no country in Europe where the probability of life, in all its stages, from its commencement to the utmost possible verge of its duration, is greater, or where, in other words, the average proportion of mortality is so small as in England. In that country, the proportion of deaths to the population, is nearly one-third less than in France. Comparing the statistical tables of the two capitals, the average mortality of London is about one-fifth less than that of Paris, and but a small fraction more than that of the whole of France: it is considerably less than the average of those Mediterranean shores, which are especially, according to fashionable misapprehensions, frequented by invalids for the sake of health. According to the accurate statistical tables now extended to the greater part of Europe, it appears that the proportion of deaths is a full third greater than in England; and that even in Switzerland and Sweden, though the difference is less, it is still in favour of our own country.

\*This remark, however, must be received with modification; for nothing tends more at times to renovate the constitution, than a temporary retirement to the country. The glad innocence of Nature, and the beauties of scenery, have a wonderful influence in superinducing that equanimity and peace of mind that are conducive to health. But how few of those who "make a religion of their money-getting and town habits, know how to enjoy the beauties and kindliness of Nature, and pay a true homage to the Supreme Being, by

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enjoying his creation."

<sup>1.</sup> In great towns, from 1-19th or 1-20th to 1-23rd or 1-24th.

<sup>3.</sup> In the country, from 1-35th or 1-40th to 1-50th or 1-60th.

No season of the day possesses the invigorating quality of early morning air, and is so well adapted to the expansion of the lungs, and the oxygenation of the blood, and life never feels such a return of fresh and young feeling upon it, as in early rising of a fine morning. But besides the advantages to be derived to health and worldly advancement, and the tonic power which early morning air has on the functions of the brain and the heart, it should be recollected, that no time is spent so stupidly as that which inconsiderate people pass in a morning between sleeping and waking. The sooner that you leave your bed, the seldomer you will be confined to it, for early rising is one of the first maxims of health. If you would be well then-if, as a popular author says, you would have your heart dancing gladly like the April breeze, and your blood flowing like an April brook-up with the lark, "the merry lark," as Shakspeare calls it, which is the "ploughman's clock," to warn him of the dawn; up and breakfast on the morning air, fresh with the odour of budding flowers, and all the fragrance of the maiden spring; up from your nerve-destroying bed, and from the foul air pent within your close-drawn curtains. There is something in the morning air, that while it defies the penetration of philosophers to explain, adds brightness to the blood, freshness to the lips, and vigour to the whole frame. Whoever, then, is found in bed after six o'clock, from

May-day to Michaelmas, cannot expect to be free from some ailment or other, dependent on relaxed nerves, and stuffed lungs, disordered bile, or impaired digestion .-"What a luxury do the sons of Sloth lose!" says Hervey, in his Reflections on a Flower Garden. "Little, ah little, is the sluggard sensible how great a pleasure he foregoes for the poorest of all animal gratifications. Is it the surmise of imagination, or do the skies really redden with shame, to see so many supinely stretched on their drowsy pilows? Shall man be lost in luxurious ease? Shall man waste those precious hours in idle slumbers, while the vigorous sun is up, and going on his Maker's errand? While all the feathered choir are praising the Creator, and paying their homage in harmony?" Yet wonderful it is, that this drowsy indulgence is persisted in by thousands, till their nerves are stewed and unstrung, and feebleness and disease have become their inseparable companions for life.

Early rising, says Trusler, in one of his useful publications, "makes a long day: it is not only a very useful and praiseworthy habit, but a wholesome and healthy one, particularly in the country. That refreshing morning breeze which we are so sensible of, and charmed with, is owing to the vital air which herbage throws out soon after sunrise; and is the spring and principle of life. This will repay any one for rising early.

"Pleasures untasted by luxurious wealth,
Await his steps who rises with the dawn;
His soul exalted, and his sense refined,
Enraptur'd sees creation, wond'rous plan,
And learns the native dignity of man."

But air is not necessary to man only during the day; but even in a quiescent state at night, the privation of salubrious air will produce in him disease. A bed-room should therefore be well ventilated. To this end, when the air is dry, it should be freely admitted during the day; for the animalization which air acquires by being respired during sleep, or in crowded apartments, contains properties highly hostile to human existence; it being demonstrated by experiment, that the same air cannot safely enter the lungs more than four times. This circumstance should point out to every one who values his health, the necessity of frequently renewing the air he breathes; for in every stage of life, the breath imparts, in exchange for the principle of animalization which it exhales from the surrounding atmosphere, a substance, which, if it be suffered to accumulate, is very unfriendly to life.

The best temperature of a bed-room is, as nearly as possible, that of the apartment from which one retires. Fires of all kind (if on account of illness or cold weather any have been lighted), should be carefully extinguished some time previous to retiring to rest, on account of the danger arising from the mephitic or carbonic acid gas, which developes itself from fire, whether of wood

or coal. If your state of health requires your bed to be warmed, be sure that you do not allow it to be done with charcoal, nor even coals, until they have been burned to a cinder; and direct a little salt to be thrown into the warming-pan, and suffered to be burned for a minute or two before the pan is put into the bed. Exclude all flowers, and shrubs of all kinds, as they emit an air during the night highly prejudicial to health\*.

I have alluded to the consequences of the animalization of air in confined apartments. The want of fresh air is often felt in the crowded circles of gaiety and dissipation, owing to the excessive heat and ill ventilation of the apartments in which they are

<sup>\*</sup> This is a property belonging to the whole vegetable world. and is one of the wise provisions of Nature for the preservation of animal and vegetable life, by the operation of her simple and unvarying laws. Were it not for this simple contrivance (the principles of which was "reserved by Providence for the persecuted Joseph Priestley to explain to an admiring world!") the purity of the whole body of the air would be soon destroyed by the constant consumption and decomposition occasioned by animal life and fire. But Nature is wonderful and provident in all her operations; by her laws, vegetation seems designed as a counterpoise to respiration. Animals give out to the atmosphere a substance which vegetables absorb; and vegetables, by the absorption, fit the air for the use of animals; so that, on the whole, in the various changes of Nature, there is a perfect balancing of actions preserving the atmospheric mass in a uniform state, constantly fit for its admirable purposes. It seems that pure air is converted by respiration into fixed air, or carbonic acid gas: while in vegetation, it is probable that the fixed air is decomposed, and the carbonaceous principle absorbed; or possibly the vegetable may absorb the whole of the fixed air, and give a part of it out pure air.

held; and many have found their health seriously affected by the corrupt air which they have inhaled in such places\*. Nor are balls, routs, and crowded assemblies of the kind, the only places where the air loses its vital principle in a considerable degree; the air of the theatres is of a more deadly description: in those places the increase or generation of mephitic air, or highly concentrated carbonic acid gas, or fixed air, is much greater than in any of the crowded fashionable assemblies of the metropolis; and by the addition of the obnoxious perspiration and bad breaths of the audience, with the exhalation of the numerous gas lights, it often strongly partakes of the nature of carburetted hydrogen gas, which is a deadly poison, and frequently produces, when taken in any quantity into the air cells

<sup>\*</sup> Those who are not sufficiently acquainted with the nature and properties of mephitic, or highly concentrated carbonic acid gas, may probably be enabled to form a conception of its deadly nature, when they know that flame is occasioned by the consumption of oxygen gas, or that part of the air which sustains life; they, therefore, may easily judge, that in the proportion the quantity of light or fire is in any apartment, in that proportion the air must have lost its properties, which are designed for the important function of sustaining animal life. But though carbonic acid gas, when taken in any great quantity into the air cells of the lungs, produces calamitous results, and often instant death, yet it is con-stantly taken into the stomach in fermented fluids, such as Champagne, cider, Burton ale, soda, and a variety of other fluids, with impunity, and, in some instances, with considerable tonic effect. But the distinction of its salutary, or insalutary effects, lies in respect of its proportions, whether little or much.

of the lungs, the most baneful effects, by its exhalation in our theatres.

All hasty transitions of air are also injurious to health, and have often been attended with fatal consequences. The difference in frosty weather, between the open air and the temperature of a heated room, is often from fifty to sixty degrees; at any season of the year there is a difference of many degrees. And yet how few deem any precaution necessary! And with the few who take precaution, how inadequate their provision is for the occasion! They heap fold over fold on the surface of the body, while they leave the delicate structure of the lungs to the atmospherical transition of an over-heated ball-room or theatre, to the freezing midnight blast! How easily might all the danger they incur be obviated, by folding a comforter, or where such an ar ticle is not at hand, a large cotton handkerchief, about the lower part of the face, so as to detain a portion of the caloric or warm air expired from the lungs, and thereby communicate a degree of warmth to the current of air rushing into the lungs at each inspiration. By a simple precaution of this kind, a frigid nocturnal atmosphere may, in a great degree, be modified.

## Exercise.

In the right ordering and application of exercise and temperance, consist the whole arcana of health and longevity, or, in the

words of Lord Bacon, "Nature is cherished, and yet taught mysteries." Where they are judiciously called into action, more benefit is to be derived than from the effect of all the articles of the Materia Medica; for exercise conduces to throw off all superfluities in the system, while temperance prevents their accumulation; the first dissipates a growing distemper, the second starves it. In fact, it is only through the medium of exercise or labour, that the circulation of the blood and the fluids can be properly carried on, the secretion of the different humours facilitated, and the rejection of those which must compromise life, if allowed to remain within the frame, produced; and no art can rival, or ever come up to Nature, in this most salutary of all her operations. That sprightly vigour and alacrity of health, which we feel and enjoy in an active course of life; that zest in appetite and refreshment in eating, which sated luxury seeks in vain from art—are wholly owing to new blood, made every day from fresh food, prepared and distributed by the joint action of all parts of the body, which action is principally promoted by means of exercise.

"Think not, ye candidates for health,
That aught can give the wish'd for prize,
(Or pill, or potion, pow'r, or wealth),
But temperance and exercise."

But if one is to be preferred to the other, exercise should take the lead: it increases

the bodily strength, strengthens the digestive powers, promotes the free circulation of the blood and other fluids through the capillary vessels, invigorates the faculties of the mind, and expels and dissipates the superfluous and acrid humours which, when retained in the blood, occasion the gout, rheumatism, dropsy, palsy, consumption, liver complaints, and other glandular obstructions, besides a variety of other diseases. Indeed, so beneficial are the effects of exercise to the human frame, that, while it establishes or maintains the equilibrium in all its parts, and kindles in some degree the spark of human heat, a body preserved in health, by due exercise in the open air, is not so susceptible of disease or sickness as one in an inert state; or, if attacked, it is more easily restored to health. And it is not improbable, were we to take more abundant and regular exercise than is taken in general, that the larger part of the usual catalogue of diseases to which human nature is subject, might be prevented; and cordials, bracers, and strengtheners, and the long list of the other palliatives of medicine, would be almost useless and unknown. Among the ancient physicians (and they were not novices in the art of healing), corporeal exercise\*, combined with temperance, was

<sup>\*</sup> I cannot resist the temptation of enriching my pages with the following beautiful and emphatic illustration of the necessity of exercise to the human frame, by the learned and accomplished author of "The Manual for Invalids."

deemed of the first efficacy in the cure of disease and the preservation of health\*. Plato had so high an opinion of exercise, that he said it was a cure even for a wounded conscience. Nor is this opinion without foundation. Every day's experience produces instances of persons insensible to the pangs and remorse of a wounded conscience, either through the medium of intoxication, or the bustle of active life †.

<sup>&</sup>quot;The whole solar system is an illustration of this truth: the earth and all the planets keep their constant motions—the air is tossed by the winds—the waters are ebbing or flowing, no doubt to the preservation of their healthy state; affording us a useful lesson of the advantages of activity."—Page 190.

<sup>\*</sup> From a conviction of its benefits, Celsus informs us, that he had almost entirely renounced the prescription of internal medicines; and Pliny assures us (lib. vii. c. 37), that Asclepiades publicly declared, that he was content to pass for a mountebank, if ever attacked by illness, while he took regular exercise, or if his death was caused by any thing but

old age or accident.

<sup>+</sup> The necessity of labour or exercise, to promote the regular and complete circulation of the blood, is evident from this circumstance; that the strength of the heart and arteries alone, in a sedentary course of life, is by no means sufficient to keep up and perpetuate, with due efficacy, the circulation throughout the smaller blood-vessels. The assistance and joint force of all the muscles of the body, acting at proper intervals, are essential for that purpose. Without this extraordinary occasional aid, which can only be effected by labour or exercise, the smaller vessels are, in process of time, choked; and the delicate springs of our frail machines lose their activity, and become enervated. It is not impossible, that by great care, the body might be brought to such a tone, the fluids made so bland, that no miasms could corrupt them. Among domestic, pampered animals, contagion is common; but naturalists give no account of epidemic diseases among the wild inhabitants of the woods, the air, or the waters.

But though "motion is the tenure of life," yet it is not every kind of exercise, nor every degree of it, that is fit for every constitution, and proper for all times. In its use and regulation, the particular circumstances of habit, age, constitution, and disease, as also the various modifications which the air presents in its temperature, its dryness, or its humidity, must be attended to. And in the manner of taking it, the following particulars are necessary to be observed: 1. Its nature or kind;—2. The time proper for it;—and, 3. Its quantity or duration.

1. The Nature or Kind of Exercise.—The nature or kinds of exercise may be divided into such as are active or passive. Walking, riding on horseback, swimming, fencing, and the usual gymnastic exercises, are the most common and prominent among the active kind; while riding in a carriage, friction, swinging, and sailing, are the most general

of the passive kinds of exercise.

For the sake of brevity, I shall confine my remarks to walking, riding, and friction.

Among the various exercises conducive to health, walking, or ambulation in the open air, is the most perfect and salutary, as well as the most natural in which the human frame can be employed; for more of the muscles of the body are brought into action by it, than by any other kind of exercise, and consequently the circulation is more universally excited; besides, it is in the power of every person, and can be adapted

in degree and duration, to the various circumstances and modes of life. By its means, both the body and mind are enlivened: the first obtains a greater tone of vigour, and is sustained in a more uniform temperature; the second, a greater serenity than can be obtained by any other method of exercise. By perseverance also in this species of exercise, not only is disease prevented, but the cure of very obstinate distempers, and the most troublesome complaints, have been materially facilitated. It also often supersedes the necessity of aperient medicine, and cures disease without its aid. the state of the weather is an obstruction to this kind of exercise, it may be taken, as Mr. Abernethy observes (Surgical Observations, p. 93), in a chamber with the window thrown open, by actively walking backwards and forwards, as sailers do on ship-board. Or if the room should be too small for the purpose, by going up and down the stairs of a house, about a dozen times quickly, will be found sufficient for calling the body into action and strengthening the lungs. Mr. Addison's prescription of a man's "fighting with his shadow," namely, exercise by the use of the dumb-bells, is not ineffectual. Even the simple process of raising the arms, the body leaning forward on the points of the feet, and letting them sink alternately, bringing the weight of the body on the heels, is not an inefficient mode of exercise, as every muscle is brought into action, and every organ must experience the influence of the motion. And where the party is too feeble to take any active exercise, the rocking movement given to the chair in which he sits, by placing two flat pieces of wood under two of the feet of the chair, diagonally opposite to each other, is not a disadvantageous substitution for active exercise. The same contrivance may be resorted to with the feet of a bedstead, when invalids cannot be raised from them.

But besides these domestic exercises, for the purpose of re-animating the strength of the organs, and increasing the vigour of the vital system, the pastime of shuttlecock and battledore, performed in a room ventilated by an open sash, is a salutary mode of exercising the body, when the weather will not admit of being out in the open air\*. The exercise of the lungs and voice+, by

† To elderly people, not asthmatic, the exercise of the lungs is of more importance in the extension and preservation of life, than is generally supposed; for the due action of the lungs is indispensable for maintaining the circulation of the blood in a healthy state; and it is to a decay of that organ, and the consequent gradual cessation of the circulation, that

every mascle is brought into action, and

the death of old people is frequently occasioned.

<sup>\*</sup> The exercise of the shuttlecock is admirably adapted for, and peculiarly beneficial to females and children; for besides the diversion which it occasions to the mind, it agreeably exercises and invigorates the whole human frame, and calls into exertion all the muscles of the limbs and of the trunk of the body, by the various attitudes the players are perpetually putting themselves in; of course it creates a graceful pliancy in the joints and muscles, accelerates the circulation of the blood, and propels to the cutaneous pores, all the fluids designed by Nature to pass off this way.

reading aloud, singing, or reciting, and the action of laughing, are salutary, and contribute much to influence the state of the digestive organs; and when there is not leisure or opportunity for other exercises, they form a useful substitute, as they have a tendency to communicate slight movements to the pectoral and abdominal regions.

But, neither ought these, or any other exercise, to be used immediately after repletion or fatigue; and inattention to this rule has proved fatal to many, as distracting the

strength necessary to digestion.

Where the abdominal viscera require to be much agitated, riding on horseback seems preferable to walking: so beneficial are its results in such and similar cases, in the opinion of Sydenham, that he has said, that the person who was acquainted with so certain a remedy for the cure of the gout as the constant custom of riding, and would keep it a secret, must in a very short time amass great riches. To persons in a weak state, or those whose spirits are broken down with grief or mental disorders, and the hypochondriac, it is of great and inestimable efficacy. Like sailing, and outside carriageexercise, it affords much benefit, from the various changes of the air through which we so quickly pass. The amble is the best pace for the weak and infirm; the trot for the strong and healthy. But in enjoying this exercise, invalids should take great care to keep the feet and legs from getting chilled

and cold. And it should be recollected, that riding is not suited to persons having any local affection, either inflammatory or otherwise.

Next to this desirable species of exercise, "riding on a long stick" has been highly commended—"equitare in arundine longa," as the learned Scriblerus hath it; and this practice, though apparently partaking too much of the amusements of the nursery, hath occasionally done wonders. It was from the conviction of the efficacy of exercise, that Socrates and Agesilaus did not consider it beneath their dignity to ride a stick with their children.

To those who are debarred from taking the necessary exercise for health, or who have not sufficient leisure or opportunity for that purpose, as also the nervous, the debilitated, the hypochondriac, the dyspeptic, and the valetudinarian, daily friction of the body, especially of the stomach, the abdomen, the back-bone, and the arms and legs, is of the most essential service for invigorating the system. Besides supplying the place of active exercise, when accompanied with the effusion of cold water, it braces and strengthens the nerves and fibres, opens the pores, resolves stagnating humours, promotes circulation and perspiration, and is frequently found an excellent remedy in rheumatisms, gout, obstructions, weakness in the joints, paralytic affections, &c. Colds,

head-aches, sore throats, deafness, weak eyes, &c. are also prevented by subjecting the head, throat, and behind the ears, to the effects of friction and cold water. Friction may be performed by the naked hand, the flesh-brush, a sponge, a piece of flannel, or a coarse towel. In the case of dyspepsy, or where the lower or abdominal viscera are affected, very salutary effects may be obtained by rubbing for a few minutes the stomach and abdomen with the hand, in a gentle and circular motion, every morning before getting up. Where the whole body is subjected to friction, you should begin with the arms, hands, feet, legs, and thighs; and then proceed to the shoulders, back, and breast; the head should be rubbed the last of all. The operation should be continued till the parts begin to grow red and warm. For the purpose of producing this effect in the shortest time, a coarse towel seems preferable; besides, it removes the acrid matter about the pores of the skin better than the flesh-brush or the sponge.

The benefits produced on the human frame and constitution by the means of friction, have been admirably shewn by Admiral Henry, of Rovelden in Kent, who at the age of ninety-one was, by unceasing attention to his diet and mode of life, and by his ingenious contrivances of operating on the skin and muscles by means of friction, in the full activity and spirit of middle age,

and in complete possession of his mental faculties. By means of friction produced by the application of bone instruments adapted to the different members and parts of the body, he cured himself of rheumatism, a tendency to gout, the tic doloureux, the cramp, and other disorders, and removed a cataract in his left eye. The principle on which he acted, and which he at length verified by his success, was, first, that as the chief cause of disease in the human frame is deficiency of circulation, therefore the best means of correcting a tendency to disease, is to prevent the nerves and tendons from falling asleep, or getting fixed; and for this purpose they should be kept quite loose, by instruments worked among them; and, secondly, that by keeping the blood-vessels, nerves, and tendons, in constant action, the blood is rendered pure, passing quickly through the blood-vessels, leaving no fur behind it, and thus, that ossification, which so frequently terminates the existence, may be prevented. The form of the instruments employed by the Admiral, and his mode of using them, are detailed with great particularity in a pamphlet published by Sir John Sinclair about ten years ago; and the same account is to be found in the Appendix to the last edition of the Code of Health and Longevity.

2. The Time proper for Exercise.—With regard to the most proper season of the day

for exercise, there can be little doubt that the morning air is the most refreshing and invigorating. A gentle walk also between seven and eight in a summer's evening, is very salutary. But where the peculiar circumstances of life will not allow of recreation at those times, a walk in the middle of the day is to be preferred; which is also the time when all exercise should be taken in the winter season of the year. Invalids, and those of delicate constitutions, should proportion their exercise according to their strength, and take rest during its continuance; but to the robust and the healthy, nothing is more conducive to bodily health, than long walks in winter, when the air is pure and bracing, and the cold excites quickness of motion.

Exercise, as Dr. Franklin observes (Essay on the Art of Procuring Pleasant Dreams), should precede meals, not immediately follow them; the first promotes, the latter, unless moderate, obstructs digestion. But it should be recollected, that immediate exercise, either before or after meals, is injudicious, as likely to be attended with injurious consequences; if taken before meals, especially if the body be heated, or in a state of perspiration, the digestive powers are enfeebled, and the stomach thrown into a state of exhaustion; if after, the process of digestion is impeded, or at least retarded, by propelling those fluids to the surface of the

body, which are designed to promote the solution of the food in the stomach. In the first case, food should be forborne from till the spirits are settled and the body cool; in the second, exercise should be delayed till

the fever of digestion is over.

Neither should we come to meals burthened with care or business; for owing to the sympathy between the brain and the stomach, the whole nervous system will be affected, and through its medium the functions of the stomach will be disturbed and impeded, and often rendered powerless and paralytic. So immediate are the consequences experienced from an unexpected shock given by the tumultuous agitation of the brain to the nervous system, by the communication of good or bad news, that disease is often either removed or superinduced. There are few of us who cannot testify as to the effects of the receipt of unpleasant intelligence at the hour of repast.

3. The Quantity or Duration of Exercise.—
It may be said generally, that exercise of too violent a nature, and a total want of it, are attended with equal disadvantages; for if the one superinduces all the disadvantages of inaction, the other is equally injurious, by rendering the circulation unequal and tumultuous, and weakening the nervous system and the springs of life. Violent and long-continued exercise should therefore be cautiously avoided by all persons, but par-

For all violent action largely consumes the vital power, and occasions a great accumulation of the blood through the brain and lungs, which may be productive of immediate death. Nor can persons leading a sedentary life, compensate for the want of regular exercise by a hard ride or walk once or twice a week; for the nerves of such people being unaccustomed to bear a great degree of agitation, are overstrained and relaxed by it, and the circulation of the fluids which, in such cases, is in general slow and languid, will be thrown into disorder. And for the same reason, those

<sup>\*</sup> Many a fair female, as Sir John Sinclair observes, has been cut off, by carrying to excess the seductive amusement of dancing, from the fatigue with which it is accompanied. When carried to excess, or performed in heated rooms, and under a confined and vitiated atmosphere, if the consequences are not suddenly fatal, yet the seeds of dissolution are silently and imperceptibly implanted in the system, and eventually appear in the form of consumption of the lungs and inflammatory disorders. And even where the results of this fashionable recreation are not so calamitous, the votaries of the ballroom purchase its pleasures at the expence of much suffering, as a sick head-ache is at least often produced by dancing, when indulged to a fatiguing excess. But though the joys of the ball-room are often attended with calamitous consequences, yet the employment of dancing may, if properly regulated, be attended with considerable advantage to health. The ingenious author of "The Manual for Invalids," informs us, "that a physician of great eminence in his day, but now numbered with the dead, has frequently declared his conviction, that many chronic affections of some of the abdominal viscera have been removed, after the patients had been saturated in vain with medicines of various descriptions, and that he could attribute their removal to no other cause so probable as the exercise of dancing.

whose circumstances debar them from a sufficiently nourishing diet, should abstain from over-exertion or unnecessary exercise. All sudden transitions from a state of rest to violent action, is extremely injudicious, particularly in hot weather. Exercise should also be always begun and finished gradually. The Poet of Health gives the following judicious directions on this subject:

"Begin with gentle toils, and as your nerves Grow firm, to hardier, by just steps aspire: The prudent, even in every moderate walk, At first but saunter, and by slow degrees Increase their pace."

But though exercise ought not to be carried to excess, yet, to have its full effect, it should be continued till an agreeable lassitude is felt, and a sensible degree of perspiration promoted. If carried further, instead of strengthening, it weakens the body, and may be productive of injurious consequences, by filling the lungs with heated blood, rupturing the small blood-vessels, and superinducing inflammatory disease. When the body gets dull and sluggish, exercise, even carried beyond the borders of fatigue, is, however, at times beneficial; the effects are evident from the pleasant and comfortable sensation that is felt for several days after.

After exercise, care should be taken to get cool gradually, or the hazard is incurred of catching cold. Should a perspiration have been promoted, the head and the whole body should be well rubbed with a coarse towel,

and if necessary, the linen should be changed. And as a sudden change of temperature, by suppressing perspiration, is attended with injurious consequences, we should not venture to expose the body to a current of air, or rest or remain out of doors in a cool or exposed place; but if we cannot immediately retire to a warm apartment to shift ourselves, we should continue moving about until the perspiration subsides. Neither ought the thirst generally felt, either during or after violent or great exercise, to be satisfied by drinking cold liquors; for the principal heat of the body being brought to the surface, the inward parts feel too sensibly the chill of any cold application, suddenly brought in contact with them, and often dangerous consequences ensue\*. If you cannot wait till you are cool, some warm or tepid (almost blood warm) liquors may be taken; or a mouthful of bread with a little salt, to gain time till the blood and the liquor to be drunk have acquired an equal temperature; for when the body is heated, diluents made too hot are highly improper. When no other diluent is at hand but cold liquors or water, the mouth should be merely

<sup>\*</sup> For the same reason, the drinking of hot liquors in cold weather, when the body is in a chilled state, is equally dangerous. Dram-drinking, or taking warm liquors, to keep out the cold, as it is termed, is also equally injudicious; for when the first application has ceased, we become doubly susceptible of every impression, and liable to the diseases induced by cold, as pulmonary consumption, rheumatism, catarrh, diarrhæa, dysentery, &c.

washed with them, and then they should

be spit out.

The benefits resulting from exercise do not, however, wholly depend on air and motion; to produce the restorative effect wished for, the combination of mental amusement, or some object of interest in view, is requisite. In our exercises of ambulation, it is very desirable to have a certain object or spot by which the exertion is to be bounded; as to call at the house of a friend, to see some delightful prospect, or the like. It has been well said, that to ride or walk merely for health, without any other ulterior object for exertion, is by no means so salutary as to have in view a visit to a sick friend or a desolate family; or to console a friend whom some dire calamity has overwhelmed; or to plant even the lowly cabbage in our garden, with the hope of seeing it grow, and ultimately cutting it, and seeing it served up on our table, to participate in it with our friends or family.

"Know, then, whatever cheerful and serene Supports the mind, supports the body too. Hence the most vital movement mortals feel, Is Hope."

ART OF HEALTH.

It was from a knowledge of the powerful effects of the conjoint influence of exercise with an object of interest in view, that Hippocrates, or as others say, his preceptor, Herodicus, enjoined his patients to walk from Athens to Megara, which were situated about twenty-five miles apart, and to return

home on foot as soon as they touched the

walls of that city.

But the celebrated Sydenham displayed, as Dr. Paris observes (Treatise on Diet, p. 408), more wisdom and address, in calling into action the power and effects of gymnastic medicine in his scheme, which had an object of more interest in view, than that of the ancient physician, who sent his patients on their travels without any other object than merely touching the walls of Megara—when he acknowledged to a patient whom he had long attended with little or no advantage, that he was not able to render him any further service; adding at the same time, that he might expect benefit by an application to a Dr. Robertson, at Inverness. Encouraged by the communication, his patient set off in search of this wonderful Scotch doctor; but on his arrival at Inverness, not being able to find the object of his search, he immediately returned back to London, and hurried to Sydenham to reproach him for trifling with him. "Well," replied Sydenham, "are you better in health?" "Yes; I am now perfectly well; but no thanks to you." " No!" rejoined Sydenham, "but you may thank Dr. Robertson for curing you. I wished to send you a journey with some object of interest in view; I knew it would be of service to you; in going, you had Dr. Robertson and his wonderful cures in contemplation; and in returning, you were equally engaged in thinking of scolding me."

Nor were the Egyptian doctors less skilful in calling in the aid of collateral objects, to give effect to the powers of medicine. "An intelligent French author (says Mr. Wadd, Comments on Corpulency, p. 78) mentions, that a thousand years before the Christian era, the Egyptians had two temples dedicated to Saturn, which they wisely placed at the extremities of the kingdom, for the benefit of hypochondriacal patients. Those temples were the Bath and Brighton of the East; and at those places the iron restraints of diet, and the doctor, were made palatable by recreative amusements, and the diseased mind was diverted from itself by agreeable images and melodious sounds. In those days they were aware of the advantage of mixing music with medicine. What would be the effect of a bottle of spa-water drunk in secrecy and silence? They were aware also of the great importance of exercise, and sent their patients to the distant temples: 'Non propter salubritatem aquarum, sed propter longinquam peregrinationem."

The author of this work has had an excellent opportunity of seeing the great and beneficial advantages to be derived from gymnastic medicine. One of the sons of a person by whom this work was to have been printed (if his folly had not even exceeded his knavery and ingratitude), when first seen by the writer of this notice, was a feeble, sickly lad, and subject to continual fits. The father was then overseer at the office of

one of the London Morning Journals, and of course was obliged to give his daily attendance in London. I recommended the father to let his son accompany him every morning to the office, and keep him constantly employed in a standing position, in reading the proofs to him. The result was, that the lad, in less than eighteen months, was restored to health, and is now a strong and hearty young man; much more so than any one of his brothers. I have prescribed the same plan for the son of a printer whom I now employ, and who is similarly affected, and do not despair of complete success, provided the young man will scrupulously follow the instructions. The rules of Nature for the recovery and preservation of health, are few and simple; while those of Art are numerous and perplexed.

## Tranquillity of Mind.

"Optandum ut sit mens sana in corpore sano," saith the Roman Satyrist, which maxim may be paraphrased in the words of another poet:

"Tis the great art of life to manage well The restless mind."

These maxims are most strictly true. It is of the highest importance to health to preserve the tranquillity of the mind, and not to sink under the disappointments of life, or give way to the turbulence of the passions; for nothing hurts more the nervous sys-

tem, and particularly the digestive powers, than the influence of the various mental affections, such as grief, fear, anxiety, disappointment, anger, despair, rage, or any other violent passion, whether sudden, or attended by long and painful sensations. When they become vehement and immoderate, they disorder the body in various ways; chiefly by accelerating or retarding the perspiration, and, in the words of the poet,

" — the most important health,
That of the mind, destroy." ART OF HEALTH.

It is obvious, that the passions were given us for wise and useful purposes; but they must be kept under complete subjection, otherwise they are of pernicious influence, and really become physical evils. From their influence on the system, a large proportion of the diseases to which human nature is subject originate, and many of its most dreadful disorders are occasioned. They increase the malignity of disease, change its natural course, and aggravate it by a thousand incidental circumstances. In epidemical disorders, they increase the susceptibility of receiving contagion.

But while the indulgence of the passions injures the health, both of the body and the mind, in various ways, a calm, contented, cheerful disposition, cannot fail of being a great source of health. Looking at the favourable sides of things causeth, as Father Paul saith, "our little to prosper;" and independent of the other advantages afforded by

equanimity of temper, "a cheerful tone of mind," as Lord Bacon says, "helps digestion more than is imagined." It was the saying of Dr. Sydenham, that the arrival of a Merry Andrew in a town, was of more benefit to the health of the inhabitants, than that of twenty asses loaded with medicines. "A merry heart," saith Solomon, "doeth good like a medicine, but a broken spirit drieth the bones." The stimulus of the joyous and exciting passions, in suspending the symptoms of diseases purely nervous, is often almost miraculous, and frequently of the most beneficial influence in organic changes which

have absolutely taken place.

For the due preservation and enjoyment of health, "see," says Mr. Leigh Hunt, in his clever periodical, The Indicator, No. 5, "fair play between Cares and Pastimes-increase all your natural and healthy enjoymentscultivate your afternoon fire-side, the society of your friends, the company of agreeable children, music, theatres, amusing books, an urbane and a generous gallantry. Knowledge, sympathy, imagination, are all divining rods with which the cultivated mind discovers treasure, and heightens and enlivens its happiness. He who thinks any innocent pastime foolish, has yet either to grow wise, or is past it. In the one case, his notion of being childish, is itself a childish notion. In the other, his importance is of so feeble and hollow a cast, that it durst not move for fear of tumbling to

pieces." This is doctrine agreeable to reason, and has received the sanction of the best and wisestmen. Neither Scipio Lælius, nor the Grand Pontiff Scævola, thought it beneath their dignity to make ducks and drakes by the water side, for their amusement.

## Cleanliness.

Cleanliness in person and apparel, is not only becoming in our intercourse with society, and necessary for supporting the dignity of human nature, but is highly conducive to health. How refreshed, how cheerful and agreeable, does one feel on being shaved, washed, and dressed; especially when those offices have been long neglected. For cleanliness not only removes the filth and sordes which adhere to the skin, but likewise promotes the perspiration, braces the body, and enlivens the spirits.

"Even from the body's purity—the mind Receives a secret sympathetic aid." THOMSON.

The skin is one of the most important organs of the body, as through its medium the greater part of the impurities of the body is discharged. If, therefore, the sordes, or matter thrown out by prespiration, be suffered to accumulate on its surface, not only a variety of cutaneous diseases are engendered, but should a suspension or stoppage of the pores take place by the obstruction of the perspiration, the consequence is, that the digestive organs will be burthened and deranged.

For all parts and members of the body are sympathetically connected together, and dependent the one part on the rest; but none of the bodily sympathies are more extensive than that which subsists between the stomach and the skin. A remarkable degree of reciprocity of sympathy also subsists between the skin and the alimentary canal, the lungs, the liver, and the kidneys; and therefore, whenever the functions of the skin are impeded or obstructed by the suspension or stoppage of the perspiration, or the accumulation of sordes, a general derangement of the system takes place; for obstructed perspiration is one of the principal sources of disease; indeed, few disorders attack us when that function goes on properly. This shews the important necessity of keeping the pores or cutaneous vessels open and unobstructed, by frequent ablutions. Even washing the feet, tends greatly to preserve health: for the sweat and dirt with which those parts of the body are frequently covered, cannot fail to obstruct perspiration. Cleanliness in this respect would often prevent colds and fevers. And were people careful to bathe their feet and hands in warm water at night, after being exposed to cold or wet through the day, they would seldom experience any of the fatal effects which often proceed from those causes.

The continual discharge from our bodies by perspiration, renders frequent changes of apparel necessary. Change of apparel greatly promotes the secretion from the skin, so necessary for health. When that matter, which ought to be carried off by perspiration, is either retained in the body, or reabsorbed and soured by dirty clothes, it is apt to occasion fevers, and other diseases of a malignant nature. It, therefore, does not seem advisable to wear the same woollen clothes constantly, or for a length of time: they should be left off occasionally, and exposed to a current of dry air; and they should also receive the same purification when they are kept in close chests or drawers.

## Clothing.

The design of clothing is to contribute to the health and comfort of the body, by preventing the changes of the atmosphere from affecting the system, and by counteracting, on the one hand, the pernicious influence of cold and moisture; and on the other, that of too hot an atmosphere\*. Its essential requisites are, that it be soft and pliable, so as not to obstruct the free and easy motion of the joints, or occasion inconvenience by its weight or tightness; adequate to protect the body from the external influence of the atmosphere, and preserve it in that degree of temperature which is most agreeable, as

<sup>\*</sup> Clothing possesses no warmth in itself, but merely prevents the heat of the body from being carried off by the air, and other surrounding bodies, faster than it can be supplied by the process of respiration.

well as best adapted to the exercise of the different functions and motions compatible with a state of health; and that it does not produce any detrimental effects, so as to occasion any unnecessary degree of perspiration, or absorb the vapours of the atmosphere. Clothes of a light colour, have the least attraction for heat; those of a black, the greatest; the first-mentioned is, therefore, most proper in hot, the last in cold weather.

But besides these general properties of commodious and comfortable clothing, it should be suited to the climate, the season of the year, the period of life, the constitution, and the habits and mode of life. Thus, a person who is engaged in a sedentary employment, will always require more clothing than one who is actively engaged in manual, or other labour requiring considerable muscular exertion. Neither do children. or persons in the prime of life, require clothing in the day, or covering in the night, of so warm a nature as persons advanced in years; because the constitution of their blood is more equal and vigorous, and of course the generation of heat in the body is quicker, and of greater extent, than is the case in old age.

One of the safest rules in the regulation of dress, is to adjust it to the vicissitudes or fluctuation of the season\*; and this rule

<sup>\*</sup> The best and most salutary rules for the adjustment of dress according to the change of the season, are given by Dr. Kitchiner, with his usual brevity and effect: "Leave off your

should be carefully attended to by the valetudinarian, the delicate, the infirm, and the old. Neither should its salutary effects be disregarded by the young, and those in the enjoyment of perfect health; for though strong and robust persons may, with impunity, endure many changes of temperature without any change in dress, yet they should not be too slightly clothed; and all changes of their dress should be made with extreme caution.

But while clothing should not be too light, or too small in quantity, neither should it be too heavy or too much in quantity. The effects are equally mischievous. By over-clothing, too much perspiration is drawn out of the body, by which the frame is greatly weakened, and coldness and deadness of the extremities are occasioned.

Dress is often injurious in consequence of its being made fashionable, in compliance with the modes and customs of the times; frequently occasioning innumerable maladies, either by compressing the intestines, stopping the access and retreat of the blood

winter clothes late in the spring; put them on early in the autumn. Wear your winter clothes during the first half dozen warm days. You will get some fine perspirations, which are highly salutary in removing obstructions in the cutaneous pores, &c. Not putting on winter garments soon enough, or leaving them off too soon, will often excite a violent disorder in the lungs, bowels, &c. and exasperate any existing constitutional complaint." This is safer advice than trusting to almanacks respecting the temperature of the weather, and has the sanction of experience, and the best medical authorities.

to and from the head, or from circulating through the veins, or compressing the upper upon the lower viscera, and the like. Thus the intestines are injured, and obstructions, and a multiplicity of disorders of the kidneys and bowels are occasioned, by tight waistbands to breeches or trousers, riding-belts, stiff and tight stays, &c. By tight stocks, cravats, hats, shirt-collars, and necklaces, giddiness, stupor, plethoric head-ache, and apoplexy, are often superinduced. And bracelets, rings, elastic bands, tight buttoning, tight wristbands, garters, narrow sleeves, &c. are the cause of the suspension of the circulation of the blood, weakness, numbness, &c. in the parts and members subject to their operation. By the vertical pressure occasioned by tight braces, the superior viscera are deprived of their freedom, and ruptures often occasioned. Tight boots and shoes are highly absurd and injurious, as the circulation is thereby stopped in the feet, and the noxious matter which ought to be perspired at those great emunctories, is driven back into the circulation, or at least, part of it is re-absorbed, instead of being encouraged.

Another practice equally pernicious to health, is, as Mr. Stewart, the celebrated walking traveller, observes, that of going about all the morning part of the day, the men muffled up in great coats, and the women with furs and cloaks, while in the evening they sit down to dinner imperfectly clothed, and the women often nearly half

naked; yet in that chilly state they load the stomach with food, without recollecting that the process of digestion cannot commence until the circulation is sufficient to stimulate the stomach to exert its powers; and that the consequences of chilly repletion are equally injurious with those attending the ingestion of cold food into the stomach when in a tepid state; for in both cases, the food must take the temperature of the stomach before digestion can commence; and consequently unnecessary labour must be imposed on that organ, and the nutriment cannot be properly extracted from the food which is necessary for the proper support of life.

## Sleep.

"Care-charming Sleep, thou easer of all woes, Brother to Death." BEAUMONT and FLETCHER'S Tragedy of VALENTINIAN.

"Blessings," exclaimed Sancho, "on him that first invented sleep! It wraps a man round like a cloak." Every son and daughter of the family of Adam must join in the exclamation of the honest Squire, and admit that those are certainly the most delicious moments of our existence, when the sensation of consciousness is disengaged from the mind, and the mysterious spirit has gone to take its airy rounds. "Deprive a man," said an ancient philosopher, "of sleep and hope, and he becomes the most wretched of animate beings."

This is a great physical and moral truth;

for no function of the body is more indispensable for the preservation of life and health than sleep; by its means, Nature collects and restores that vital vigour and freshness to the body and mind, which they had lost by various exciting and exhausting causes during the hours of activity and exercise, and promotes and diffuses with more equal energy and effect, those classes of motions which are more immediately necessary to life—as respiration, perspiration, the circulation of the blood, and those connected with digestion and nutrition, than take place

during our waking hours.

No arguments are requisite to prove the necessity of sleep; nor will it answer any practical or useful purpose, to enumerate, or attempt to reconcile the various and fanciful speculations relative to the causes of sleep: experience tells us, in a language not to be misunderstood, that "the chief nourisher in life's feast"--" tired Nature's sweet restorer, balmy Sleep," cannot safely be dispensed with for any considerable length of time. When its accustomed visits are not paid, or when paid, are not attended to, the whole frame is thrown into disorder; the appetite ceases, the strength fails, the spirits become dejected, and the whole body is reduced to a state of exhaustion and misery; in fact, a prostration and dissolution of all the animal and vital powers seem likely to ensue. And it may be added, that nothing gives the countenance the early appearance

of age, more than the want of healthy and

refreshing sleep.

But while too great exertion or prolonged action enervates both body and mind, exhausts and unhinges all the organs, and lays the train for a host of destructive evils, excess of sleep, or prolonged inaction, is equally to be guarded against; it deadens and enervates the body, and occasions a concentration of the vital powers on the brain or the stomach. On the due equalization, therefore, of sleep and activity, the preservation of health and strength depends; and regularity in the hours of rising and retiring to rest, mainly contribute to this preservation. The common abuses on those points, necessarily induce numerous indispositions, and often serious diseases.

The causes or circumstances which principally contribute to sleep, are, good air, labour or exercise, wholesome diet, and regular habits and hours. The more artificial means, and consequently the last to be adopted, are medicine, sedatives, or soporifics, the application of cold or heat, &c.

When sleep does not follow as a natural consequence of the active employment or exercise of the day, it may always be inferred, that some derangement in the machinery of the constitution has taken place. Our first duty, therefore, is, to endeavour to correct this derangement; but as this desirable purpose is not to be accomplished by a sudden effort, our next care is to con-

ciliate the benign influence of "all-healing sleep;" for "when the pulse is almost paralyzed by anxiety, half an hour's repose will cheer the circulation, restore tranquillity to the perturbed spirit, and dissipate those clouds of ennui, which sometimes threaten to eclipse the brightest minds and the best of hearts."

Various practices have been recommended for promoting sleep. Walking up and down the parlour or bed-room before retiring, is one of the specifics: after supper walk a mile, is an excellent rule, and may be practised in the house as well as in the open air. Washing the mouth, and rubbing the gums and teeth with a brush before going to bed, is a wholesome practice, and has a tendency to promote sleep. Friction, or rubbing the body, arms, legs, soles of the feet, &c. with the hard flesh-brush, or a coarse towel, besides promoting the insensible perspiration, is not one of the most ineffectual sedatives to repose. When the natural rest is much disturbed, or is difficult to be elicited, the legs and feet may be immersed in a narrow tub filled with water as high as the knees, and let the heat of the water be gradually increased, until a mild and gentle perspiration is felt over the frame, when the legs, &c. should be quickly and thoroughly dried, and a pair of worsted stockings drawn on, but not to their full extent. This remedy should be but occasionally adopted, on account of its debilitating effects. Agreeable

and lively conversation, and listening to music, reading, &c. are often good preparatives for repose. Gently titillating the soles of the feet, will frequently procure sleep. Indeed, where the soles of the feet are cold, no disposition to sleep can be induced, on account of their affinity with the brain, until their natural warmth is restored. But the best means of superinducing this purpose, is to rub the feet with a hard brush, or a coarse towel, for some minutes before going to bed, which will be found a more effectual method of preventing the sense of coldness, and of conciliating sleep, than the immediate application of bottles filled with warm water, or any thing else actually hot, as recommended by Lord Bacon, in his Natural History, and generally adapted in domestic practice. It is scarcely necessary to add, that in order to enjoy sound and refreshing sleep, every object that may excite unpleasant ideas or violent emotions in the mind, should, for some time before going to bed, be most sedulously avoided.

"If none of these practices will procure sleep, then try the effect of conning over some task that in childhood was apt to create it, or of the counting from one to five hundred, or a thousand, or reciting any long passage from any ancient or modern author. By these means the attention is diverted from uneasy thoughts, and you are overtaken by sleep in the midst of your efforts.—Sir John Sinclair's Code of Health and Longevity, p. 330.

There are likewise many other methods more or less adapted to induce sleep. For instance, reading aloud, in a slow monotonous manner; and the gentle noise produced by vessels full of water, so arranged that it may fall, drop by drop, into a sonorous vessel. A continued sound, indeed, if uniform and moderate, is well suited to absorb the attention, without fatiguing it, and gives a wonderful inclination to slumber. The murmurings of a stream, the vibrations of a pendulum, or the tones of soft gentle music, or a long uninteresting recital, are often productive of similar results. But it is frequently in vain that every means are resorted to, to induce the balmy influence of repose -it evades, like a fleeting vision, the feverish body, or the busy mind:

> "And in the calmest and the stillest night, With all appliances and means to boot, Denies it."

In this case, if you find yourself restless from feverish heat, a parched state of body, or any other cause, or should you be awakened by any accident, and cannot easily get to sleep again, then put into practice Dr. Franklin's rules; viz. get out of bed, beat up and turn the pillow, shake the bed-clothes well and repeatedly, with at least twenty shakes, then throw the bed open, and leave it to cool; in the mean time take some turns about the room, till the skin has discharged its perspirable matter, and become

sufficiently cool\*; then return to your bed, and you will soon fall asleep, and your sleep will be sweet and pleasant. If the room be cold, or the season of the year be winter time, both stockings and a dressing-gown should be put on while you are out of bed. But if you are too indolent to get out of bed, lift your bed-clothes with one arm and leg, so as to draw in a good deal of fresh air, and by letting them fall, force it out again. This method of pumping the bed, repeated about twenty times, will so clear the bedclothes of the perspirable matter which they have imbibed, as to enable you to procure easy and healthy sleep again.-These prescriptions of the Doctor (who was scarcely at a loss for any useful contrivance, though in this instance, he is indebted for the hint to Fuller's Medicina Gymnastica), I have put into practice, and have found them very beneficial.

There are various other artificial means of procuring sleep, such as opiates, soporifics, &c.; but they should be cautiously and spar-

<sup>\* &</sup>quot;The torpifying effects of cold, have a powerful effect in producing sleep: thus, one of the greatest dangers that have attended those who have ascended the Andes, and other lofty mountains, has arisen from the almost irresistible propensity to sleep which has invaded them at a certain elevation—for sleep, under these circumstances, leads unto death. To give a familiar instance, the throwing off a superfluous blanket, or coverlid, frequently converts restlessness into repose, in individuals of a nervous temperament; and should not this succeed, the removal of the whole of the covering for a short time, is almost an infallible means, as I have frequently experienced personally."—Morrison's Medicine No Mystery.

ingly employed, as they cannot be used for any length of time without constitutional inconvenience, and even danger, as apoplexy, and the different kinds of paralysis. Air, exercise, wholesome diet, and regular habits, will best ensure it in its natural form; for, as the Bard of Avon says,

"Can snore upon the straw, when resty sloth Finds the down pillow hard."

Sleep is repelled and interrupted by a variety of circumstances, as noise, light, sleeping in a new apartment, having slept during the day, or just before going to bed, repelled perspiration, from too great a weight of bed-clothes, mental disquietude or exertion, the night-mare, deficiency of muscular exertion, drinking tea, coffee, or any thin or weak liquor, immediately before going to bed, &c. But the more common causes of disturbed and restless sleep, frightful dreams, &c. and which are often mistakenly ascribed to the vapours, and other unfounded causes, arise either from the defective state, or the derangement, of the functions of the digestive organs, or are occasioned by the use of heavy suppers, malt and other fermented liquors before our retiring to rest; in which last-mentioned case, no rest can be obtained until the first stage of digestion has been performed, and the stomach relieved from its crudities \*.

<sup>\* &</sup>quot;In a great proportion of the sudden deaths which are continually happening," says the learned author of The Manual

Though digestion is favoured by a state of repose, and increased energy is given to the circulation by the concoction of the food being allowed to proceed uninterruptedly, yet the habit or custom of indulging in diurnal sleep, or taking a nap, as it is called, after dinner, should be avoided by every one in good health, and not aged, or who is of a plethoric habit of body; for when a person is in a recumbent posture, and the stomach is distended with food or aliments, it is apt to press on the great blood-vessels, by which too much blood is thrown on the brain, and thus plethoric head-ache or apoplexy is sometimes occasioned. This observation seems necessary for the purpose of putting the readers of the "Art of Invigorating Life" on their guard against the seductive advice of its ingenious author, relative to the restorative influence of the recumbent posture, and "the half hour's," or "forty winks' horizontal refreshment" after dinner, which he so earnestly recommends, in the garb of the exotic phraseology of the "siesta," and "semisiesta." To those acquainted with the pe-

for Invalids, "two-thirds at least are found dead in their bed in the morning. In those cases the victim is prevented from relating a detail of the sufferings, or his opinion of their cause; but a large proportion of cases of gout, asthma, hæmorrhoids, apoplexy, and many other diseases, may be fairly attributed to late and hearty suppers; for they happen very often among that class of persons who give themselves this indulgence." This remark is deserving of serious attention by the lovers of good cheer at unseasonable hours.

culiarities and habits of that amiable man, and humorous writer, there can be but little doubt that his valuable life was in some measure sacrificed to his doctrine on this head. When habit, however, has rendered the custom of napping after dinner almost natural, or where Nature, from extraordinary fatigue or want of rest during the preceding night, requires some refreshment, an afternoon nap may be indulged in, provided that it is taken in a sitting posture, with the body inclining towards the back of the chair, and a little turned to the left side, with the feet raised by means of a stool about four or five inches from the ground. Care also should be taken, that all the ligatures of the clothes, which are likely to prevent the circulation of the blood, be removed, and the body should be well covered, by putting on a great coat, or some external covering, in order to defend it against catching cold, and prevent it from becoming chilled, and the circulation checked.

The same indulgence may also be safely taken by the infirm, the delicate, the sickly, the care-worn, or those whose bodies are enfeebled or enervated by the relaxing influence of the weather, provided it is not carried to excess, and is not likely to break or interrupt their rest during the night. And persons advanced in years may advantageously sleep a little after dinner, that the heat of their bodies, which is weak and feeble, being internally concentrated, may

enable them to perform their digestion the better.

It has been said, that "the most complete and healthy sleep that can be taken in the day, is in summer time, out in a field." It must, however, be recollected, that though the sensation of slumbering on the grass or hay is exceedingly exquisite, yet it, as well as falling asleep on a garden-bench, and the like, may be attended with injurious consequences. Neither should we ever suffer ourselves to fall asleep, or when tired, "take a foretaste of repose, a relishing snatch of slumber," before we go to bed, lest it should diminish the chance of getting repose for a

considerable part of the night.

The distressing interruption of the circulation of the blood, which is called nightmare, or incubus (the heaviest punisher of repletion), is occasioned by indigestion, from eating heavy meat suppers, or when one has dined out, from alteration in the beer and wine to which one has been accustomed, or the highly-seasoned viands, and sauces, and stimulating spices employed on such occasions. The affection generally occurs when persons lie on their backs, or have their heads too low; though Dr. Kitchiner says he has been as subject to it when he has lain on either the right or left side, and when he has taken only a liquid, or very light supper. But this arose from the peculiarity of that estimable gentleman's constitution. Both Drs. Clarke and Kitchiner agree, that the many and sudden deaths which have happened in the night to people in their beds, have often arisen from the night-mare, and ignorance of the proper manner of treating the disorder. And in this opinion, the learned author of *The Manual for Invalids* coincides. See note, p. 146 ante.

The remedy prescribed by Dr. Kitchiner, is to take a couple of glasses of white wine, or half a glass of brandy, in a wine-glass of peppermint-water; and if the paroxysm returns in the course of the night, to put fifty drops of sal volatile in half a tumbler of hot water; or to take a wine-glass of peppermint-water, and half that quantity of tincture of rhubarb, or a tea-spoonful of Epsom salts. And he says, that he has sometimes met with immediate relief from drinking a tumbler of water as hot as he could swallow it. Mr. Waller, in his Essay on the Nightmare, recommends carbonate of soda to be taken in the beer drunk at dinner. And Dr. Darwin suggests, that the patient should sleep on a hard bed, with the head raised; for by the hardness of the bed, he will be apt to turn himself more frequently, and will not be liable to sleep too profoundly, or lie too long in one posture. By attention to these directions, those who are subject to this distressing sensation will find much relief.

It is not easy to lay down rules for the best time of going to bed, as it must be necessarily varied according to the particular circumstances of life in which we are placed; it may, however, be said generally, that sleep is best before midnight, and "Nature herself, with her darkness and chilling dews, informs us so." The great point is regularity of hours, and not running counter to the laws of Nature, by keeping up the tension of the nerves and fibres, when, from the natural constitution of our bodies, they should be relaxed.

Dreams often arise from a disturbed state of the bodily or mental functions; but their most usual source is from indigestion:

"All dreams, as in old Galen I have read,
Are from repletion and complexion bred,
From rising fumes of indigested food,
And noxious humours that infest the blood."
DRYDEN'S COCK AND THE FOX, from CHAUCER.

Horrific and fantastic dreams, indicate symptoms that either the body or mind is affected: hence the necessity of attending to the general health, and of keeping the mind quiet. Pleasant and cheerful dreams are often attendant on good health, and are merely the waking fancy of the dreamer.

The quantity of sleep necessary for the due accumulation of the exhausted energies of the body, is as variable as the habits, tempers, and dispositions of man; one measure will not suit all men; some require considerably more rest than others; different ages and constitutions demand different measures of sleep: neither will the same measure suffice even the same person at one

time as at another; nor can one rule be prescribed for the various seasons of the year. When we are sick, or weakened by illness, we require more of the restorative process of rest than when we are in perfect health; and the case is similar when the spirits and strength are exhausted by extraordinary or unusual exertion or labour, as when we are in the enjoyment of the equal tenor of life. Our best directress in this respect is Nature, and the proper equalization of our exertion and inaction, so as to avoid the debilitating and injurious effects of too much or too little sleep. The seducing luxury of "t'other doze," of the sensualist and the votary of fashion, and the plausible and almost rational argument of the fine way "of spending a sensible and impartial half hour," of the studious and the speculative, are equally inadmissible in a code of dietetics, and must be universally acknowledged to be great shorteners of life, at least they are never found in company with longevity.

Our sensations determine for us, almost involuntarily, the most easy posture of the body during sleep; but from our anatomical structure, the most healthy position will be commonly found on the right side, changing the posture when you wake from your first sleep to the left side, always recollecting to stretch yourself in the bed, to render the circulation of the blood freer. Never sleep on your back, as that posture is likely to occasion the night-mare, apoplexy, &c. The

opposite posture, namely, the prone one, or on the stomach, is also attended with no less injurious consequences. To prevent injury to the teeth, and the exhaustion of the moisture of the body, the mouth should be kept shut during sleep. If no other inconvenience should be occasioned by sleeping with the mouth open, the suppression of those natural secretions which are necessary for its lubrication, is the consequence.

## Indigestion, or Dyspepsy.

Dyspepsy, or indigestion, is occasioned by some functional or organic derangement of the corporal glands of supply, by which one or more of the several processes whereby food is decomposed and converted into blood, and rendered analogous, in its transmutation, to the composition of the organs that it is destined to supply and repair.

This ailment or affection, which, in the fashionable phrase of the day, is usually but mistakenly termed biliary derangement, is met with in every country, in every class of society, and in every season of the year. As Dr. Kitchiner sententiously observes (Peptic Precepts, p. 185), there is not one constitution in a thousand so happily constructed, or constantly in such a perfect adjustment, that the operations of the abdominal viscera (on which every other movement depends) proceed with healthful regularity.

Dyspepsy is a symptom of a great variety

of diseases; indeed, it is generally an attendant on almost all diseases of debility; and to it may be ascribed the rise of a great part of the diseases which shorten the span of human existence. It is also a primary disease of the stomach itself. Its symptoms are numerous, and of a very decided character; but if properly attended to, are not of very difficult remedy. This remedy chiefly consists in diet and regimen, for there is no drug capable of giving tone to a weakened stomach; and in its regulation we must be governed by our own common sense and experience: physic can do but little for us; and the dogmas of physicians respecting that diet and regimen which are the best calculated to accomplish this purpose, are almost wholly useless; for as Cornaro says, "if we have ourselves a great deal of trouble to find out what food and wine agree with our stomach, how much more difficult must that be for another."

But before the principles of dietetics, by which indigestion may be prevented or relieved, can be understood, and profitably called into use, a knowledge of the complicated and elaborate machinery engaged in the transmutation of food into blood, and the various processes by which Nature extracts a nutriment fluid from the various materials ingested into the body, for its support, and the renovation of the portions of matter which it is constantly losing, must be obtained. This will be my object now to

elucidate; and in furnishing the reader with this necessary information, I shall endeavour to avoid the example of an ingenious and a deservedly popular writer on dietetics, whose use of prodigiously grand and etymological terms, has tended rather to scare and confound, than to inform and satisfy the understanding of his readers. My endeavour will be to give a clear and a concise anatomical view of the digestive organs, and their functions, in a brief and popular manner, divested of technicalities, and all love of display of the marvellous or the mystical. And for this purpose, I shall first mention the organs employed in the process of digestion.

The organs principally employed in this mysterious process, are the teeth, the salivary glands, the stomach, the liver, the pancreas, and the spleen. The functions performed in this office by those organs, in conjunction with some others which I shall presently mention, are the processes of the prehension of food or aliment, its mastication, deglutition, and chymification, with the ulterior processes of chylification, secretion, absorption, sanguification, nutrition, and defæcation. These processes are as

follow:

As soon as the food is taken into the mouth, it is first broken and ground down by the teeth, being at the same time moistened and mingled with the fluid supplied by the salivary glands, for the purpose of assisting its deglutition. The mass being

thus formed into a kind of paste, passes into the stomach to digest or be decomposed.

When the stomach has received the food, it lies towards the left extremity, while every part of it is presented in turn, to the inner coat of that organ. If the matter is bland and natural, it passes, and no sensation is experienced. But if crude and indigested matter be presented, opposition is offered to its passage, and a contention is begun, which happily terminates in the food being thrown back again to the left extremity of the stomach, to be submitted to a more perfect operation of the digestive powers seated there. For the promotion of this digestion or decomposition of the food, the combined operation of the muscular fibres of the stomach, which form one of its coats, and of the fluid reserved for its use in the vascular cells of another of its coats, and known by the name of the gastric juice, are called into action. But the principal and most powerful agent in effecting this process, is the gastric juice, which is a viscous and ropy substance, like saliva, and in appearance bears to it a great analogy. This powerful solvent and animalizing fluid, while it suspends and corrects the putrescency of the alimentary mass, penetrates it in every direction, alters its inward composition, and forms it into a pulpy mass, of the consistence of thick soup, called chyme. It is then propelled through the lower orifice of that organ (the pylorus, or valve at the bottom,

granting the chymified portion a free passage, while it resists the egress of the crude part) into the large intestine (or second stomach, as it is popularly called), called the duodenum, where it meets with the bile, and the pancreatic and splenetic juices. By the joint action of those juices, particularly the bile, it is separated into a white milky substance, called chyle, and into the fæces, or excrement. The food having thus received the first impress, or stamp of life, and been converted, by a series of decompositions and separations, into a fluid, capable of identifying itself with the organs of nutrition, the chyle is taken up, or absorbed, by numerous fine tubes or vessels, called lacteals, which carry it, together with variable proportions of lymph, secreted from vessels termed the lymphatics, to a main pipe, called the thoracic duct. This pipe ascends towards the throat, and emptying the chyle into the jugular vein, its contents are mingled with the blood, and carried to the heart, in order to renovate the stream of life. Thus the food ingested into the body, having been digested, animalized, and assimilated to the nature of the blood for which it was designed, applies itself to the organs of nutrition, and identifies itself with them, in order to supply the loss of those constituent parts or particles which the animal machine is continually sustaining from decay, the exercise of its different functions, and a variety of causes which are incessantly impairing

or dilapidating it\*. The fæces, or excrementitious matter, is of course avoided by means of the intestines. This matter or mass is impelled forward, in a very tortuous course, through the intestines into the colon, or large or hollow intestine, by the peristaltic or contractile motion of the alimentary canal, which motion is a combination of those mechanical powers of that intestine, denominated the vermicular, the annular, and the semirotatory motions; the design of the two first of which is to knead or churn the fecal mass contained in the intestines, and the third to impel it forward. From the colon it discharges itself into the rectum (or the last portion of the large intestines, terminating in the anus), where, accumulating into a considerable mass, it distends its parietes, or sides, until a sensation of uneasiness announces that Nature requires relief by the evacuation or expulsion of the contents of the bowels. This is

<sup>\*</sup> It is said, that the animal body is continually undergoing decomposition and renovation, so that every particle of it is totally and repeatedly obliterated in the progress of life; its morbid particles being constantly displaced, while what are healthful are substituted in their room. This change is more rapid in infancy and youth, than in manhood and old age, when the body assumes a remarkable degree of consistence and fixity. If any proof of this perpetual decomposition and renovation of living animal matter were wanting, it is supplied by the experiment made with madder, which, when mixed with the food of animals, reddens their bones; but the suspension of the use of the root for a time, will easily remove or obliterate the diffused red colour which had been given to the bones.

the course of the digestion of food, which is a paramount function in the animal economy, as tending to the production and regeneration of the blood, the great source of vitality; and in the accomplishment of this important object, the various parts of the animal structure engaged in the process, present a beautiful picture of nice but simple arrangement, all conducing, with the most perfect exactness and sympathy, to the renovation and depuration of the body, in order to the preservation and continuance of animal life.

For a long time it was supposed, that both the solid and liquid food passed through the pylorus into the duodenum, and were absorbed together with the chyle, and rejected with the excrement; but from some curious physiological researches of Sir Everard Home, there is reason for concluding that a considerable portion of the liquid which is taken into the stomach, is copiously and rapidly removed by absorbent vessels belonging principally to the left position of the stomach, and that during digestion, there is an imperfect division of the stomach into two cavities, by the contraction of the muscular fibres about the centre. That the liquids so absorbed, very soon reach the kidneys, and pass off by urine, is amply confirmed by the observations of the most casual observer; but by what means those liquids arrive at the kidneys, is one of those hidden processes which physiological investigation has hitherto been unable to unveil. Dr. Paris is of opinion (Pharmacologia, vol. i. p. 127), that the vena portæ (or great vein situated at the entrance of the liver), is one of the passages by which liquids enter the circulation, and is the channel by which certain medicinal bodies find their way into the blood. And it must be allowed that this supposition receives considerable support from M. Majendie's experiment on a dog, to which was given a quantity of diluted alcohol during the digestion of his food; but when the chyle was extracted from the animal, no trace of the spirit was exhibited; but the blood exhaled a strong odour of it, and by distillation

yielded a sensible quantity.

The time at which digestion performs its various stages, is different in different constitutions, and depends on the nature and volume of the food, and the strength or vital energy of the constitution. Some people have naturally a powerful and an active organization, a certain predisposition of organic structure conducive to the attainment and preservation of health; while others have a peculiar delicacy of temperament and constitution, which renders them particularly liable to be affected by internal as well as external agents. Of course this vast difference of structure and constitution in mankind, must occasion a great disparity in the operation of the functions of the digestive organs; and on this account, the process of digestion varies in its completion from three to eight hours, according to the idiosyncrasy of the constitution; but its usual course is six hours. The best sign that it is completed,

is the return of appetite.

As has been already said, the digestion of food varies according to its nature: animal food is more quickly dissolved than vegetable\*; for the process of animalization of the vegetable must first be performed, before the mass is suited to form chyle. So the oily or fat parts, the tendons and cartilages of meat, are longer before they become soluble or acted on by the gastric juice. And some kinds of food pass through the bowels without being changed at all; as nuts, and kernels of fruit, dried grapes, the husks of fruit, the skins of fish and stone-fruit, the pods of beans and peas, carrots, waxy or soapy potatoes, the whites of eggs, the rind of farinaceous substances, as grain, seeds, &c. unless previously broken by mastication, or otherwise. White and black puddings, fried eggs and bacon, &c. are only partly dissolved.

As my design is to be brief, and to bring a chain of facts into the smallest possible compass, so as to arrest and inform the attention, I shall close this division of my subject by mentioning the causes and symptoms of dyspepsy, and the simplest and most

<sup>\*</sup> This is the general doctrine of physiologists; but, I apprehend, its truth and reality are greatly invalidated by the reasons stated in the note to page 30, ante.

rational method of counteracting its operation, and preserving the stomach and di-

gestive organs in a healthy state.

1. Causes.—The general causes of indigestion are, 1. The immoderate use of stimulants, as wine, spirits, &c., and the too free use of purgative medicines; 2. Overindulgence in the pleasures of the table; and, 3. The taking of liquids in excess, or too warm. Also among the common causes of dyspeptic complaints, are excessive sensibility, and over-exertion or anxiety of mind. No sensation of the animal economy is better understood, than that the passions of the mind, grief, anxiety, fear, and rage, affect and have a direct influence on the nervous system, and through that medium, on the stomach. Whenever the functions of the brain are disturbed, or the mind is under a state of depression from any cause, either real or imaginary, the muscular powers of the body, particularly those of the stomach, immediately, by sympathy, partake of the impression, and a corresponding detraction from all the bodily energies is the consequence. In fact, the influence of this organ on the laws of the animal economy, is great and immediate; the healthy action of the stomach, the liver, and of the whole glandular and nervous structure, depends on its vigorous and healthful function, and, by immediate sympathy, participates in its derangement or disturbance. The truth of this law of Nature, namely, the omnipotent power

of the brain over the glandular and nervous system, and the wonderful sympathy\* that exists between that organ and the principal glands of the body, is apparent to the most common observer, from the circumstance, as Dr. Paris observes, "that a person receiving intelligence at the hour of repast, is incapable of eating a morsel, whatever may have been his appetite before such communication." The Poet of Nature was well aware of this effect:

"Read o'er this, And after, this; and then to breakfast With what appetite you may."

The great and powerful effect of the disturbed function of the brain on the liver, is evident from the general failure of that viscus in the secretion of the bile in maniacal cases.

2. Symptoms.—The symptoms of dyspepsy are extremely diversified. One of the first marks of vitiated digestion, is lowness of spirits, or a peculiar languor and lassitude, that sickens at exertion; this is followed by want of rest, or disordered sleep, and the sufferer awakes in the morning with a sense of weariness and fatigue, instead of being refreshed. These primary and leading symptoms are generally attended by one or more

<sup>\*</sup> This sympathetic feeling is promoted by the agency of the nerves, which derive their common origin and source from the brain, and are expanded over the mucous membrane of the body, in the form of minute white threads: they are, in fact, the organs of sensation and sympathy between the component parts of the animal machine.

of the following secondary sensations: deficiency or loss of appetite, heartburn, palpitation of the heart, a disagreeable taste in the mouth, especially on first waking, acid or fetid eructations, a sense of fulness or distention of the stomach, offensive breath, costiveness, or an irregular state of the bowels, with a morbid appearance of the evacuations, giddiness and head-ache, sometimes referred to the fore, but more commonly to the back part of the head. Abernethy states foulness of the tongue as a symptom of indigestion; but it is necessary to observe, that though the tongue is generally referred to as affording evidence of the state of the stomach, that that criterion is not always to be depended on; for it frequently happens, that the tongue is perfectly clean, while the stomach is incontestably disordered. The true character of the tongue, in a disordered state of the stomach, is to be ascertained from its being furred and moist: dryness and a chapped appearance, are referable to the state of the constitution, rather than to any particular derangement of the stomach.

3. Treatment.—The treatment of indigestion is simple and clear; it is not of that complex and difficult nature as is generally supposed. The whole arcana consists in attention to the due regulation of the primary organs; the healthy action and functions of the stomach and bowels, with the auxiliary aid of diet and exercise. As Dr.

Gregory observes, it is not in the power of drugs to fulfil the great object of treatment, that of giving tone to the weakened stomach of a dyspeptic patient. "It should," as he properly adds, "be recollected, that almost any drug will injure digestion in a healthy state; we should learn, therefore, to be sparing of medicine when the stomach is weakened by disease." A proper attention to diet, air, exercise, and mental tranquillity, will be found more decidedly beneficial in restoring a healthy condition of the organs of digestion, than the combined influence of the useless farrago of medical recipes, and the complex machinery of all the architects of health, who are ever swerving from the path of nature and common sense into the regions of mystery and experiment.

In every form of this complaint, attention to diet is particularly indispensable; for though the health of the body, as well as that of the mind, is dependant on circumstances which are regarded as innoxious by the multitude, the art of alimentation, or the judicious ordering and changing of the materia alimentaria, has a greater medicinal influence over the disorders of the stomach, when that organ is deranged or irritable, than is generally supposed. And it should also be always borne in mind by every person subject to dyspeptic affection, that it is of the first importance seriously to attend to the early symptoms of the complaint, and to take immediate precautions, before the

constitution gives way; for disordered functions seldom exist for any length of time without producing some organic disease, either of the liver, the spleen, the kidneys,

the pancreas, or the stomach.

Before the subject of the treatment of dyspepsy is concluded, it seems proper to make a few observations respecting the rash and imprudent use of purgatives, resorted to by many persons for the removal of this complaint; an error which has, unhappily, received considerable sanction from Lord Bacon's doctrine, "Nil tam ad sanitatem, et longi-vitatem conducit, quam crebræ et domesticæ purgationes;" that is, nothing contributes so much to health and long life, as frequent and domestic purgations. With many, this doctrine has obtained so great authority, that the use of purgatives has become so established a habit, that a motion is never procured without the intervention of art. But this practice is erroneous; for though aperient medicines may sometimes relieve unpleasant sensations, they do not in general produce even this effect: all active purges rather increase the disorder; for an exciting cause of disease is constantly applied to remove those obstructions which might more safely and effectually be remedied by a deobstruent diet, as sufficient liquid food, ripe fruits, particularly grapes, oranges, currants, strawberries, raspberries, mulberries, honey, figs, raisins, tamarinds, &c. and salt, butter, and sugar, and proper exercise in a

pure air. These simple and pleasant remedies, in conjunction with a judicious abstinence (that is, such a use of proper food as will merely entertain the stomach until it recovers its energy), will be found the easiest, the cheapest, and the best cures for all the disorders which arise from indigestion; as they operate without exciting that inordinate action and debilitating depletion which are the consequence of drastic medicines impro-

perly and unseasonably taken.

On this important subject, the remarks of Mr. Abernethy are deserving of particular attention: "Since popular medicine," says that gentleman, "gave such a rage for drastics, under the name of antibilious pills, now so numerous and so unscientifically compounded, from that time diseases of the rectum seem chiefly to have taken their origin; for they are at least fourfold within these thirty years. Nature intended that this part should be kept in a certain degree distended by its contents; and where these are thrown off too frequently, and that by a strong action producing irritation, this natural distention not only is not allowed to take place, but from the irritation, an unnatural contraction of the fibres of the gut is induced; which, by the frequent repetition of such irritation, gradually thicken and harden, so as to occasion disease by this thickening and contracting of the cavity in whole or in part. Once in twenty-four hours is sufficient for the purposes of health, and

thus contraction will be prevented on the one hand, and irritation on the other. The rectum is to be considered as the natural water-closet of the system, which does not require to be too often or unnecessarily emptied; and if proper regard is paid to this idea, we shall not hear so often of strictures of the rectum, or the use of bougies for their removal. The best bougie is the contents

of the part."

These remarks are founded on the basis of sound sense and an exact knowledge of the constitution of the human frame, and are deserving the serious attention of those persons who are needlessly uneasy about the action of their bowels. By such persons the advice of Dr. Kitchiner should not be disregarded: that if their general health is good, and they have neither head-ache, nor any other deranged sensations, as a disagreeable taste in the mouth, eructations, want of appetite, flatulence, pains, or the feeling of distention in the stomach and bowels, head-ache, vertigo, restlessness, languor, peevishness, &c. whether they have two motions in one day, or one motion in two days, is not of much consequence; for in the early periods of life, and in the case of persons of strong constitutions and of an active temperament, costiveness is generally a concomitant of health; and in such cases, if constipation is managed with care, it is the fundamental basis of health and long life. The healthiness of the alvine evacuation or

exoneration, consists rather in its solidity

than its frequency.

But a regular diurnal evacuation or exoneration of the bowels, is desirable, and indeed necessary, after we have attained the meridian of life; since the detention of the fæces then proves highly irritating to those organs. Not attending to the necessary calls of Nature in the discharge of the alvine secretions, or checking or suppressing the accustomed evacuations, though it may not occasion any immediate injury, is often the cause of numerous complaints in after life, which derange and disorganize the system. A periodical habit of inviting the salutary secretions of Nature, is of the highest importance to the preservation of health, and has great influence over the process of digestion. Mr. Locke's suggestion, in his Thoughts concerning Education, to solicit Nature after our morning's repast, is the most certain method of superinducing an habitual sensation.

But the regularity of the natural evacuations is not the only object to be attended to; their freedom is as intimately connected with health; for either the irregularity or the suppression, intimate some organic derangement of the animal machine. When constipation is suffered to exist too long, besides deranging all the operations and faculties of the mind and body, and occasioning obstinate head-aches, it often is the cause of brain attacks and apoplexy; for when the stomach is so much weakened by derangement, that it no longer, by its sympathetic action, supports the brain, and enables it, by the due and healthy supply of the great instrument of vitality—the blood —to perform its functions, the noblest gift of Heaven—the mind—becomes impaired, and its powers are often so paralyzed as to produce, without warning or notice, uno ictu, the utter extinction of life!

## Some Additional Hints for the Attainment of Long Life.

Notwithstanding the irrevocable decree of Nature, that the whole animate creation shall have its term of existence succeeded by death and annihilation, man has, in all ages, exercised his ingenuity in devising means of prolonging his existence, and of retarding the approach of death. The animal, the vegetable, and the mineral kingdoms, have been ransacked to discover means to retard this terrible moment, and error and ignorance have contributed their share to promote the delusion. Among numerous other extravagant vagaries, the infusion of the blood of young and healthy children into the veins of the aged, has been recommended; and instances are not wanting, in which the blood of young animals has been injected into the veins, for the illusive purpose of restoring the party to the freshness and strength of youth. Even Boerhaave and Galen recommend the suction of the breath of the young

and healthy, for the rejuvenization of age and wrinkles; and this practice is not seldom resorted to in the present day by ignorant nurses, with their tender charge! But the light of reason, and the dictates of experience, have at length dispelled those delusions; and man is convinced,-though "the stream of human life affords no haven for anchorage; but that the rapid current carries away him that would rashly struggle against its course, as well as him who abandons himself to its billows;"-that a longer or a shorter period of existence on this earth, is in a great measure dependant on himselfon his habits, his passions, and the good or bad use which he makes of life, and its precious faculties. By such judicious management, though each revolving year may make some little but gradual inroad on our constitutions, and deprive us of some of our pleasures and enjoyments, yet death will only take place by gradual decay, or by unforeseen casualties, which no precautions can guard against. Experience proves, and it is a comforting reflection for the delicate, the nervous, and the invalid, that it is not essential to longevity, that a person should be in the enjoyment of perfect and uninterrupted health; for medical annals afford instances, where the delicate and infirm have been subject to functional affections, and yet, by a judicious regulation of the vital powers, have attained to extreme age, in spite of the most formidable physical disa-

bility. Instances are not rare, says Dr. Kitchiner (Art of Invigorating Life, p. 123), which prove that long life is not necessarily connected with high health; "by a regular observance of a few salutary precepts, a delicate constitution will last as long, and will afford its proprietor as many amusements, as a strong body whose weak mind takes but little care of it." Both Aristotle and Plato inform us, that Herodicus the philosopher, though of a feeble and consumptive habit, lived upwards of a century, by economising the powers of vitality, and living scrupulously abstinent. Galen, also, who was born with an infirm constitution, and afflicted in his youth with many and severe illnesses, attained, by the same means, the great age of 140 years, and never laboured under any distemper from the time of his adopting (which was in the twentyeighth year of his age) a regular plan, except occasionally a slight feverish complaint, for a single day, owing to the fatigue which attending the sick necessarily brought upon him. Cornaro is also, as Sir John Sinclair observes, "another memorable example of the efficacy of rules. Reduced, when he had entered the fortieth year of his age, to the very gates of death, and in a manner given up by his physicians, nothing but a regular system, strictly adhered to, could have saved him."-"It was likewise by attention to rules," as the same judicious author says, "that the celebrated (and he

might have well added, the eloquent and well-intentioned) John Wesley, notwithstanding a delicate constitution, protracted his existence to near ninety years, and was enabled, during that long period, to go through much personal and mental labour." Nor are these the only examples that can be adduced of the happy results of order, temperance, and

regular living.

Having premised these observations, it may be said briefly, that the circumstances conducive to long life, are, a proper attention to diet, the due regulation of the stomach and the alimentary canal, the enjoy ment of good air, sufficient exercise, an equable temper, and instructed and cheerful thoughts: these will conduce to a patient and gradual helping of the bodily health, and the extremest extension of the span of existence which Nature has prescribed to the perishable frame of man, better than all the nostrums that all the sons of physic will be ever able to devise. But as much of the information referable to these heads, has been given in the preceding pages, it is necessary only to mention here, that which has immediate relation to persons advanced in life. These particulars will be stated in the following order:

1. Attention to Diet.—Though bons vivants may cite the old age of Anacreon and Solomon, who were both addicted to the pleasures of the table, and yet attained a good old age, all those who wish to preserve their

health, and attain long life, should recollect, that the only sure way to come at those blessings, is by a strict observance of the rules of temperance. And it should not be forgotten, that nothing has greater effect on life and its duration, than the proper choice of food, according to the rules prescribed in the early part of this work; for as it has been well observed, the domestic ordering of the materia alimentaria is as important a matter of administration as that of the materia medica. Food, properly and judiciously taken, has a medicinal influence on the body, often greater and more lasting in its effects than any medicine can accomplish.

But some modification or relaxation of these rules of restraint and abstemiousness must be made in the case of invalids past the meridian of life, and of those whose digestive faculties are feeble; a little indulgence must occasionally be granted them, in order to keep the powers of their stomachs in tolerable order; at times a savoury sauce, seasoned soup, jellies, nourishing broth, or a restorative ragout, are necessary to excite the circulation of the system to proceed with healthful vigour and regularity. And as Dr. Kitchiner observes, "those who have long lived luxuriously must be sufficiently nourished, and regularly supplied with food that is nutritive."-"Spice and wine," adds the same facetious and sagacious dietician, " are as needful to the bon vivant who is of a certain standing in the school of good

living, as its mother's milk is to the newborn babe." Another rule to be attended to is, that those whose digestive faculties are feeble, or stomachs cold, should never eat cold food: before the process of digestion can commence in persons so affected, an arti-

ficial warmth must be produced.

But in proportion as the powers of the stomach decline with the powers of life in general, so ought we to diminish the quantity of our food. "One of the most effectual methods," says Cheyne, "which a wise man can pursue, in order to obtain the blessing of what I call a green old age, is to begin, at least at the age of tifty, to lessen his daily sustenance of meat and drink, both in quantity and quality, but especially the first. I have, in my Essay on Regimen, demonstrated, that about this time the great crisis or climacteric in life generally happens in both sexes. Then it is, that the blood and the juices of the most healthy and strong, begin to cool, to thicken, to become vapid, and to be obstructed in the capillaries and lymphatics; many of which vessels, by such obstructions, coalesce, and become cartilaginous; the perspiration is lessened; all the several secretions are rendered less perfect; all the solids grow stiff and hard, and lose their elasticity; and the circulation is gradually reduced into a narrower compass, approaching still nearer and nearer to the trunks of the blood-vessels, or their first branches.

"At this time it is, that an observant wise man will discover that his vigour is past meridian, and begins to decline; and this discovery will dictate to him a necessity of taking such measures as may render the progress of old age as slow as his nature will admit of; and such as may contribute to the continuance of his ease and happiness, and the preservation of his senses and his faculties, in all the perfection that can reasonably

be hoped for.

"But I am persuaded that this desirable end cannot, by human means, be attained without a gradual diminution of one's meat and drink, and this both in quantity and quality, especially in the first; and this is a rule that must be practised by every person who is turned of fifty, and is desirous of living to seventy or eighty. It must be strictly and uniformly pursued, and he must resolve to be deaf to the calls of craving appetites, which at this time of life are usually so depraved by prejudice, example, and excess, that their judgment is false, and their dictates destructive, when they point out the quality, or direct the quantity of his food.

"If proper, light, and wholesome food, such as is easily digested, be taken in the smallest quantities that can prevent the anxiety of hunger\*, the kindly chyle drawn

<sup>\*</sup> This judicious advice exhibits an admirable contrast with Mr. Abernethy's advice to his patients; namely, that "by

from it will keep the whole mass of the blood cool, thin, and sweet, longer and better than any other method of diet, which, in my judgment, art can suggest. Now, in order to render this regimen easy and familiar to the patient, he should enter upon it at the age of fifty, at least before he is sixty, that the change from higher feeding may not be attended with fainting, or too great lowness."

But temperance, and regard to its nature and quality, are not only necessary in respect to food, but the same precautions are to be observed by persons advanced in years, relative to drink. If, however, there is any period when wine conduces to the benefit of the system, it is that of old age; and this appears evident from the proportionate greater number of vigorous and healthy octogenarians who are found in those countries where wine forms a common article of daily fare; for good wine, moderately taken, affords in such cases not only a stimulus, but it presents a mild and beneficial tonic to the stomach. This benefit, however, is not to be derived from spirituous liquors, as is often erroneously supposed by old persons who are subject to indigestion or flatulence; an error occasioned from the apparent strength which the constitution seems for a while to derive from the use of the delusive

adopting an abstinent plan of diet, with respect to the quantity of our food, even to a degree that produces a sensation of want in the system, we do that which is most likely to create appetite, and increase the powers of digestion!"

stimulus, but which eventually exhausts the stomach and intestines, and reduces the sufferer to a state of weakness almost incurable. Sudden debility and slow disorders, whose treatment require that Nature should be powerfully urged, as also dispositions of an habitually sluggish temperament, may, it is true, be dispelled and kept up by brisk and artificial stimulants; but, with these exceptions, the use of spirituous liquors is

not only dangerous, but often fatal.

2. The due Regulation of the Stomach and the Alimentary Canal.—Of all the maxims that have been handed down to us from antiquity, none is more remarkable for its good sense, and its exact knowledge of the laws and constitution of human nature, than the assertion of Pliny: that much of our moral liberty depends on a well-regulated stomach -" Magna pars libertatis est bene moratus venter." On the state of this important viscus, which, in Lord Bacon's phrase, is " the father of the family," depends that of every organ and function of the system. As the centre of sympathy, it holds so great influence over the animal functions and organization of the body, that every part of the human frame suffers when it is out of order; and this common sympathy is not only entertained by the primary organ, but extends to every portion and member of the body; so that, to make use of the vivid and forcible language of the author of Peptic Precepts, "if the most minute fibre of the human frame be hurt, intelligence of the injury instantaneously arrives; and the stomach is disturbed in proportion to the importance of the member, and the degree in which it is offended." These brief remarks prove, better than whole pages of dissertation, the necessity of care and attention in the regulation of the alvine evacuations; and, as has been already said, this purpose is to be attained more by the simple rules of diet and regimen, than by the operations of

drugs and purgatives.

This desirable state (the free action of the bowels) is to be attained by the means stated in the foregoing pages of this work; and the best criteria to ascertain whether the organs of repletion and depletion have performed their due functions, are the state or consistence, and the colour of the fæces, which vary in all the shades, from perfect black to perfect white. The signs of a healthy digestion are, that the fæces are of a due consistence. between the two extremes of hardness and softness; or, in the language of professional etiquette, "oportet sanorum sedes esse figuratas;" and they should be of the colour of macerated rhubarb; any declension from this healthy and natural colour, indicates some functional disorganisation \*.

<sup>\*</sup> It may not be without its use to notice the contradictory doctrines of two deservedly eminent physicians.

<sup>&</sup>quot;I am anxious," says Dr. Paris, "to urge upon every practitioner the absolute necessity of inspecting the fæculent discharges. No one can successfully conduct the treatment of a

As the freedom, as well as the regularity of all the natural evacuations, is closely connected with health, it is, therefore, highly necessary to watch over their course, especially at a time of life when the organs of Nature act with tardiness, and their feeble play is easily deranged. The retention of the natural discharges should then be particularly guarded against, especially that of the urine; for at that time of life, the bladder being liable to become sluggish, and

severe dyspeptic complaint, unless he submits to the performance of such a duty. All the great physicians of antiquity relied on such a source of information for their guidance. Hippocrates carried the practice to such an extent, as to have acquired from some of the wits of his age the appellation of  $\sigma\kappa\alpha\tau o\phi\alpha\gamma o\varsigma$ , as Aristophanes had before named Esculapius. Some modern practitioners have, from the same scrupulous attention, been obnoxious to a similar charge; but I trust that no physician will be induced to swerve from the performance of a paramount duty by such intimidation."

"The examination of the urine," adds the same able physician, "is also a matter of considerable importance. Its appearance will not only assist us in forming a judgment respecting the seat of the dyspeptic disease; but, if carefully watched from day to day, will point out the beneficial changes which a plan of diet and medicine may produce. It will also instruct us in the species of food which best agrees with the patient; for slight errors of diet, although imperceptible in other respects, are generally announced by obvious changes in

the urinary deposites."

On the first mentioned of these topics, it is to be regretted that so able and erudite a person as Dr. Clutterbuck, should have expressed the following opinion: "The stools are scrutinized with a degree of minuteness that is quite ridiculous, not to say disgusting; and standards have been established for their colour, consistence, quantity, &c. Now, nine times out of ten, the changes observed in the evacuations are the effect, and not the cause of disease, and they rarely suggest the proper mode of treatment."

but slightly sensible to the urinary stimulus, gives but little indication of a disposition to expel the urine, and by a slightly forced distention, it may lose all its powers, and thus lay the foundation of much misery and suffering; frequently of palsy in that region, and often of diseases fatal in their termination. Persons advanced in life, therefore, should twice or thrice a day attempt the expulsion of this fluid, whether they feel any desire to pass it or not; and they should always take care to avoid the last drop. No false delicacy should induce any person, whether young or old, male or female, to retain the expulsion of the urine beyond the calls of Nature. Years of misery and suffering have too frequently followed a foolish bashfulness in this respect; in some cases, all power of ejecting this secretion of Nature has been lost, and in many instances the consequence has been the loss of life itself. The justly celebrated Danish astronomer, Tycho Brahé, lost his valuable life through this mistaken notion of delicacy. Being present with one of the Austrian Emperors in his carriage, and not presuming, in submission to that most tyrannical of all tyrannies -etiquette, to alight to obey the calls of Nature in this respect, he died from retention of urine. It was probably from experience of the unpleasant results of this false delicacy, that the Emperor Claudian issued a decree, permitting persons subject to windy affection, to dispense with good breeding

when compelled by imperious necessity. The passage of the wind upwards or downwards always affords relief; but its forced

retention occasions fatal accidents.

But besides attention to the calls of Nature in the expulsion of the urine, it is no less important to attend to the position of the body in the act of its avoidance. The standing or kneeling position are the only ones to which recourse should be had. The position of lying on the side, or back, which some persons make use of while in bed, is objectionable, as in those positions all the mucus of the bladder cannot fairly pass out with the water, and consequently it is liable to form the nucleus of calculi, as the uric acid generates crystals in its mass.

On the proper regulation of the other natural evacuations, namely, perspiration, and the nasal and salivary excretions, the health and comfortable existence of people advanced in life more depend than is popularly

supposed.

The important evacuation of perspiration is connected with the most essential phenomena of life, and to its existence the aged are more indebted for the blessings of health, in proportion as its course is more regular, than is generally supposed. But as the texture of the skin, as life advances, becomes closer and more shrivelled, and consequently less able to admit of exudation through its pores, perspiration should be encouraged at that time of life. For this purpose, elderly

people should keep themselves warm, take a moderate quantity of wine, use gentle exercise, and frequently change their linen. The occasional use of the warm bath, and immediate friction on leaving it, are of the most salutary effect in restoring this highly essential function. And as exudation by the pores is most abundant during the night, from the greater uniformity of the surrounding atmosphere, and the more regular warmth to which the body is then subjected, and also more beneficial, as the noxious particles and vitiated humours alone are then expelled; persons advanced in life should particularly encourage perspiration during the time of repose. But though this salutary excretion has the most decided and beneficial effects while kept within the bounds of moderation, great care must be taken that it is not carried to excess; for too copious or frequent excretion causes exhaustion, and consequent debility, which often superinduce fatal effects.

Another of the salutary excretions which old people should encourage, is the expulsion of the nasal mucus. This is one of the wise provisions of Nature, to supply the defective exudation by the pores, to which that period of life is subject. And for the purpose of favouring or augmenting this secretion, can the use of snuff be justified. The only other cases in which this powder can be safely taken, are those of pains in the head, eyes, and ears; and in those cases,

while taken in moderation, and free from adulteration, it is useful to lymphatic and phlegmatic temperaments, by reason of the favourable impression it causes on the nervous papillæ of the olfactory membrane. But to persons who have ulcerations or polypi in the cavities of the nose, or who are subject to nasal bleedings, its habitual use is highly dangerous, and often occasions those affections. It not uncommonly depraves the appetite, and, in a high degree, injures the organs of digestion. And, notwithstanding the popular error that it prevents apoplexy, it is very dangerous to persons having a tendency to that affection, or a determination of the blood to the brain; it often augments the evil. And the same effect is occasioned by smoking tobacco.

As many persons, both old and young, find great enjoyment in smoking tobacco, and persevere in the habit, from a belief that it is conducive to health, it is necessary to observe, that this is a mistaken notion. The assertion will, no doubt, be received with much scepticism by many, more especially as smoke has now (from the unhappy alteration of the times, occasioned by excessive taxation) become the solace of every hungry mouth, and is as indispensable a requisite as roast beef used to be in England in better times. But the fact is, that tobacco, especially when habitually used, is, in general, injurious to the constitution; for it not only weakens the faculty of the sight, by withdrawing the humours from the eyes, but injures the digestion, by the waste or vitiation of the saliva, which is one of the elements of good digestion, and one of the strongest sources of hunger and digestion. But though such are the effects of an intemperate use of this weed, it does not appear that its temperate use is unfriendly to the constitution, or an obstacle to longevity: in cold and moist situations, to the phlegmatic, the fat, catarrhal subjects, and asthmatic persons who expectorate badly, it is

often of great benefit.

The quantity of defluction which old people evacuate by the mouth, in the form of mucous saliva, is also the consequence of their defective perspiration; and is highly useful, by ridding the throat of matter which, if allowed to accumulate, might choke its passage, and endanger life. It is also as unpleasant as hurtful to them, to swallow this glutinous matter instead of rejecting it; inasmuch as it would plaster the interior surface of the stomach with a tenacious and viscous coat, which would essentially injure its digestive action. This remark seems necessary, to remove the popular error, arising from ignorance of the structure of the human frame, that the mucous saliva returns by a different passage into the intestines than that by which it was expelled.

3. The Enjoyment of Good Air and sufficient Exercise.—In no period of human existence is attention to good air of higher importance, than in the decline of life; and the necessity of this attention arises from the greater animalization of the humours which circulate in the vessels of old people, and their great tendency to putrefaction. This proves the necessity of their breathing a pure, varied, dry, and slightly warm atmosphere. For this reason, the old should, for their health's sake, attend carefully to "the different thermometric, hygrometric, barometric, and electric states of the weather," which have all, more or less, an influence on their frame. Cold air \* is always

<sup>\*</sup> Among the numerous errors prevalent among mankind, none is more dangerous and unfounded, than that respecting the influence and consequences of cold and frost. According to accepted opinion, "a bracing cold," and "a clear frost," are considered the greatest promoters of health and vigour; while the mildness of the weather, in the winter season, is generally supposed to be productive of putrid diseases, and other causes of mortality. But the prejudices usually entertained on this subject, are entirely contrary to experience, and are refuted by the events of two successive winters, namely, those in the years 1795 and 1796, one of which was the coldest, and the other the warmest, of which any regular account has ever been kept in this country. In the winter of 1795, namely, in five weeks between the 31st of December, 1794, and the 3rd of February, 1795, the whole number of burials in the bills of mortality, amounted to 2823; while in an equal period of five weeks, between the 30th of December, 1795, and the 2nd of February, 1796, the whole mortality was only 1471. And the same conclusion may be universally drawn from a careful examination of the weekly bills of mortality for many years. In severe winters, fevers, asthmas, consumptions, scurvy, &c. are considerably more prevalent than in mild ones; and every medical man can bear testimony, that his business among all ranks of people, never fails to increase with the frost, and to decrease with its disappearance. For, as Dr. Heberden observes, "if there be any whose lungs are tender; any whose constitution has been im-

injurious to those advanced in life, as well as to those enjoying its other various stages; for in winter the blood is much disposed to inflammation, by the insensible perspiration being checked, and the circulation impeded; and to these effects the constitutions of old persons are peculiarly predisposed. For this reason, therefore, they suffer more during autumn, winter, and spring, than in the summer season of the year, which generally brings them relief and cessation from the complaints to which they are incident. But, as Dr. Kitchiner observes, with his usual sagacity, "the chilling effect of the atmosphere is not to be judged of by the thermometer; we feel as much cold when there is much wind, and the thermometer at 45°, as we do when the air is still, and the thermometer at 35°. Nor are the indications of the thermometer to be depended on; for we are much more sensible of the variations of the temperature of some points of the scale, than we are at others; i. e. a fall from

paired either by age, by intemperance, or by disease; he will be very liable to have all his complaints increased, and all his infirmities aggravated, by such a season. Nor must the young and active think themselves quite secure, or fancy their health will be confirmed by imprudently exposing themselves. In a country where the prevailing complaints, among all orders of people, are colds, coughs, consumptions, and rheumatisms, no prudent man can surely suppose, that unnecessary exposure to an inclement sky; that priding oneself on going without any additional clothing in the severest winter; that inuring oneself to be hardy, at a time that demands our cherishing the firmest constitution, lest it suffer; that braving the winds, and challenging the rudest efforts of the season,—can ever be useful."

At the two former points we are alike driven to seek for artificial warmth; but between 48° and 68°, we experience the important difference between the want and no want of fire. The difference is arithmetically the same; but very different when measured by our sensations." The best explanation of this curious fact is, that the standard temperature of the human body is the same both in summer and in winter, in cold as in warm climates, notwithstanding the temperature of the air differs materially in different seasons and in different situations.

Warmth then is very necessary to old age; for as the natural heat of the body is feeble and inactive at that period of life, it requires to be reanimated and increased, in order to put into action its vital powers. And for this purpose, the most effective agents are the sun's warmth, the fire-side, good clothing, and the advantages of air and exercise. But in the enjoyment of the enlivening and animating effects produced by a good fire, aged people should be cautious not to place their feet upon the fender (a habit some persons are fond of indulging in), lest ulcers should form; the cure of which they will find very difficult, if not, in general, impossible.

But though exercising in good fresh air daily, in the middle part of the day, is of the first importance to the healthy and placid enjoyment of life, yet when the atmosphere happens to be cold and damp, persons ad-

vanced in life should exercise within doors, in the manner prescribed at page 116, ante. Equal precautions are necessary in the case of strong winds and changes of weather. The cold morning and night air is to be avoided by old persons, and those of a delicate habit. But should they, by any pressing circumstance, be obliged to go abroad in unfavourable weather, or the latter part of the evening, every precaution possible should be taken to obviate the effects of cold, and the middle of the day should always be chosen in such cases: they should remember, while out in the air, to keep in constant action; for the grand counteracter of cold, is motion. Perhaps in cases of such emergency, Dr. Kitchiner's advice of a pocket-pistol, charged with a couple of glasses of white wine, or veritable eau de vie, or a strong peppermint or ginger lozenge, is not improvident policy; for the night-air often scarcely leaves animal heat enough in old persons to keep their blood from freezing in their veins. And in order to set the circulation a-going, the same ingenious gentleman's suggestion, of taking before you start, what coachmen call an inside lining, or an overture of a tea-spoonful of warm broth, or a small glass of wine mixed with an equal quantity of hot water, and accompanying the libation with a crust of bread, is worth attending to.

To the co-operation of good air and sufficient exercise in the comfortable and healthy

enjoyment of existence in the after periods of life, the selection of residence is of no trifling import. It may be said generally, that a residence in a gravelly soil, where the air is pure, mildly dry, and highly oxygenated, and in the neighbourhood of growing trees and shrubs, is most conducive to the extension of life. But yet it must be recollected, that though purity of air is highly desirable to the healthy sustentation of life at all its periods, yet persons advanced in years, who have long been accustomed to the air of a crowded city, do not always derive benefit from retiring to country situations. In such cases, therefore, where any inconvenience is perceived from change of air and situation, as near a conformity as possible to what we have been long accustomed, should be the rule of our conduct. "Use," says Montaigne, "is a second nature, whose caprices we must respect more than we are aware of." And the opinion of a no less correct observer of Nature has told us, that "nothing is a greater enemy to feeble life, than laying aside old habits, or leaving a climate or place to which one has been long accustomed: the irritation occasioned by such changes is highly prejudicial. Even pernicious habits, insalubrious air, &c. must be abandoned with great caution. Injurious violence must not be done to the feelings." And in support of these judicious directions, he has the authority of the father of medicine.

\*\* Pliant Nature more or less demands
As custom forms her; and all sudden change
She hates of habit, even from bad to good.

If faults in life—or new emergencies
From habits urge you, by long time confirm'd,
Slow must the change arrive, and stage by stage,
Slow as the stealing progress of the year."

ART OF PRESERVING HEALTH.

4. Clothing and Cleanliness.—The essential point in old age respecting clothes, is, that they should be warm and of sufficient quantity: woven cloths, and such as are soft, easy, and flexible, are best suited for this purpose, as they prevent the escape of the animal heat, which the chilling effect of cold weather steals away faster from the body than the enfeebled powers of age can supply for its comfortable enjoyment. The shape should be such as not to cramp the muscular action, nor the play of the organs. quantity and nature must depend on the temperature of the weather, and the feeling of the party. That great philosopher and good man, Mr. Boyle, had cloaks accommodated to different seasons and changes of the weather. In no case should winter clothing be left off until the summer season is advanced; and it should be again resumed long before the return of cold weather.

"What purity of the heart is to the mind," says Epictetus, "such is cleanliness to the body." But it must be admitted, that old persons are too often negligent of this necessary safeguard of their health; they are not aware that by clearing the surface of the

skin from the excretions which are constantly exuding from it, they are materially assisting the healthy functions of the various organs of the body.

A respected friend suggested to me, the propriety of closing this division of my little volume, with an account of the plans and practices of those persons who occupy the most conspicuous places in the calendar of longevity. At first I approved of the suggestion, and prepared for putting it into execution; but, on reconsideration, I am convinced that it would be perfectly useless, and partake of the character of a trumpery publication which has been recently foisted, with the most audacious want of a sense of either literary or moral honesty, upon the public, professing to give the account of persons remarkable for their longevity, under the title of "An Account of Persons remarkable for their Health and Longevity," by a Practitioner at Croydon; -but the contents of which contemptible collection of barefaced pilferings, in whose patching and stringing together, the scissars and the paste-brush have been the sole instruments employed, are to be obtained for sixty-nine times less cost than the almost useless matter can be obtained from the pages of the works from which the paltry plagiarist has committed his unprincipled and useless depredations. The inutility of such accounts must be evi-

dent from the following concise statement of some of the opinions and practices of those who have been conspicuous for the attainment of long life. Can it be expected that those candidates who feel ambitious of troubling the historian of longevity to enrol. their names in his list, will be desirous to live with old Jenkins on "coarse and sour food;"-or that, with Wood, the Miller of Billericay, they should be "great enemies to bread, milk, butter, and salt," or "doubt the wholesomeness of eggs, and every thing relishing;"-or with M'Alpine, "go to bed with the sun and rise with the lark;"-or with the said miller, they should feel themselves indisposed if they remained in bed "after one o'clock in the morning;"- or with Cornaro and Sanctorius, should be busily employed at every meal in scrupulously weighing their meat and drink, and ascertaining in a nicely-poised balance, whether their bodies have received a few scruples too much augmentation from their diet? Follies of this description may amuse and occupy those who are yet, in understanding, only " children of larger growth;" but with men, and those who exert a little of that muchneglected commodity, common sense, they only serve to show the folly of following customs or practices merely for their singularity. Nor can the fuss and nonsense to be found in many publications respecting the "natural marks of longevity," and "the infallible criterions of long life," afford any

better edification. It is not all mankind that can expect to be gifted by Nature as old Parr was, who is described by one who had seen him:

> "From head to heel, his body had all over A quick-set, thick-set, nat'ral hairy cover."

Nor is the notion of long life being the peculiar property of any particular country, a whit more reasonable; for experience proves, that both health and longevity are, like the element which we breathe, common to all men, all nations and climates, under the sun. Instead of these "idlenesses," it may be a more useful inquiry to ascertain the means by which the generality of men attain those blessings, and bring their constitutions to that state of soundness and vigour as may secure them, in a great measure, from the ordinary maladies which afflict humanity. And these will be found to be (and such were the only nostrums of which all long livers were masters) temperance, exercise, and a calm, contented, cheerful disposition; or, as the pious nonagenarian Wesley says, "evenness of temper." A constant serenity, sustained by a well-grounded faith and hope, or cheerfulness, arising from a good conscience, is the most healthful of all the affections of the mind, and powerfully contributes to the welfare of the body. And, as Sir John Mason has correctly said, "it will appear, after a wide and an accurate survey of this chequered scene, that seriousness is the greatest wisdom, temperance the best

physic, and a good conscience the best estate: it will appear how eminently efficacious genuine piety is, in yielding joy and support under disappointments, vexations, and sorrows; in calming wild passions, soothing the agitated spirits, fortifying against the fears of death, inspiring an everlasting and well-grounded hope; in guarding against all excesses and irregularities, and so promoting materially, enjoyment, health, and longevity."

To persons also in search of health, and desirous of warding off the infirmities of old age, the advice of the Cardinal de Salis, Archbishop of Seville, who died in 1785, at the advanced age of 110 years, is deserving of the most sacred observance: To be old when they are young, in order to find themselves young when they are old\*. By adopting this judicious and salutary rule,

ruined constitutions, is the following:

<sup>\*</sup> The best commentary extant on this sagacious maxim on

<sup>&</sup>quot;You know well, that to save is to gain: to save sixpence a week, is to gain 26s. a year; and if you will apply the maxim to the body, to save a certain measure of health and strength every day, is to gain 365 such measures a year. To spend, on the other hand, is to lose; and if you spend your health and strength prodigally and recklessly, you may be certain that old age will come upon you before you have reached even the noon of manhood, and nothing that Nature or Art can do, will bring back your constitution to its nominal age. To reckon a person's age by the years he has lived, is wrong, probably wrong in ninety cases out of a hundred; for a youth of eighteen or twenty may, in one little year, have his constitution brought to the standard of thirty or forty; and a man in the prime of manhood may reduce his constitution, by improper conduct, to all the imbecility of age."

they will become in health "sound and hearty;" sing with "a loud pipe and clear voice;" and preserve their "memory and senses to the last," like Cornaro, whose Treatise on Long Life, notwithstanding all its prosings, tautology, and incongruities, is the most important document on record in favour of abstemiousness and "holy sobriety," and the artificial extension of existence: in fact, he has proved that a regulated diet and easy conscience are the only true and necessary medicine; and in this light every word of his book is worthy of observation, and will enable all who are in search of sound health and "a vigorous active heart," and are desirous of dropping into the grave without pain or anguish, by the mere decay of Nature, to obtain the object of their pursuit.

But while Cornaro's book is entitled to the greatest attention, we must be careful to be able to select, and act in, what is useful;—his instructions cannot be observed in all their severity; to follow the whole of them, would in many cases be destructive of health

and life.

The great secret of Cornaro's "Method of attaining a long and healthful Life," was cheerfulness, good humour, and equanimity of temper, in conjunction with active and exercising habits; though, what is strange enough, the author does not seem to have known his own secret—(and, what is equally strange, after all the fuss and stir that is

now-a-days made about the vast improvement in medical science, it is still unknown to the whole medical tribe, famous as well as not famous, as I shall presently show); —but ascribes to his measured diet what was plainly the result of his cheerful and unruffled disposition of mind, which could not wholly arise from his abstemious diet, though it may have been partly promoted

by it.

"I will give an account," says the happy, cheerful, garrulous old man, "of my recreations, and the relish which I find at this stage of life, in order to convince the public, that the state which I have now attained is by no means death, but real life; such a life as by many is deemed happy, since it abounds with all the felicity which can be enjoyed in this world." He then goes on to state, that he is "gay, pleasant, and goodhumoured,"-"free from every perturbation of mind, and every disagreeable thought."-He contrives to spend every hour of his life "with the greatest delight and pleasure,"-"conversing with men valuable for their good sense and manners, their acquaintance with letters, and every other good quality."-He then tells us, that he takes "journeys backwards and forwards to contemplate the situation and beauties of places;" and thus, he adds, that he is free "from the perturbations of the mind, and the infirmities of the body, which rack such a number of young men, and as many old, destitute of strength

and health, and every other blessing."—
"Whence it appears, that the life I lead is cheerful, and not gloomy."—From his own showing, therefore, Cornaro's secret was cheerfulness, rather than meagre diet; and this ought to be an answer to those dieticians who are continually applauding Cornaro's system of diet, and recommending it for the adoption of others, without any regard to previous habits, age, and individual peculiarity of constitution, or the variable circumstances of season, employment, or climate.

It has been well said, "Never trust a doctor, be his skill and learning ever so famed, if he tell you what you know is unnatural, and prohibit you from indulging in what is good and wholesome." The ignorant doctrine of "restraining the appetite, and keeping spare corners in the stomach, whose cravings and twinges you must meet with a stubborn resistance," will render you the prey of designing doctors. Meagre fare and spare commons, or the doctrine of keeping corners in the stomach unfilled, that is, only satisfying your hunger "one-half, two-thirds, or seven-eighths, will subject that organ to the gnawings of the other half, third, or eighth of its dimensions, till the following meal: the spare corner which you have scientifically left for hunger to gnaw at, will diminish the due supply of nourishment to your body, and you must infallibly fall into some malady or other,

which will furnish the doctor who advised it with occasion for prescribing, and pocketing your guineas—were it for no other reason than this, that leaving the appetite unsatisfied will beget fretting and irritation, and these will put a stop to all digestion, by drawing off the nervous energy from the stomach."

But let those wise doctors, who set their ridiculous ninnyism up in opposition to Nature, who becloud and obscure her simple laws with "note and comment," be asked, "Why is the stomach made capacious enough to contain the measure of three pints, if it is to be put off with two, or two and a half? Nature seldom does any thing in vain, and if two pints, or two pints and a half, had been deemed a sufficient capacity for the stomach of man, why was this superfluous corner formed? The truth is, that Nature never meant to make such a superfluous corner, and it is altogether a clumsy contrivance of the doctors, to increase diseases, and furnish their purses." But those who give their judgment in keeping to the ignorant, must take the consequences. The best reply to the starving doctors, is Lord Bacon's observation, to be found at page 17, ante.

I have been led to these observations, from a conviction that Mr. Abernethy's advice to his patients is erroneous, and likely to be attended with serious consequences, should it be scrupulously followed by the readers of that gentleman's book. "The diet," says he, "I have taken the liberty to recommend

to the public, is Cornaro's, with a few conundrums of my own, as Dr. Franklin says." -The "conundrums," probably, are "the eternal blue pill," and the "flowing cups of sarsaparilla," to which, unhappily, that gentleman's well-merited fame has given too much currency and adoption. The usual prescription—"Read my book, p. 72; never drink but when your are thirsty, and by no means at dinner; do like your horses, eat your corn at one time, and drink your water at another;" may also be ranged among those singular lack-a-daisical "few conundrums." But it is really to be regretted, that so able and common-sense-like a man as Mr. Abernethy, should have given the sanction of his authority to doctrine of so dubious a nature, in which no variety, no suiting of means to ends, no weighing of the differences of constitution, no distinction of diseases, are deemed as at all necessary to be taken into consideration.

## CONCLUSION.

In the preceding pages, I have endeavoured to perform a duty undertaken by many preceding writers, namely, that of showing that one's health ought to be in one's own keeping; and as Cornaro says, that "no one can be a perfect physician to any one but himself." And for this purpose, it has

been my object to prove, that "orderly living" is the surest cause and foundation of health and long life, and the only true medicine; that it removes all liability to disease, and almost supersedes the necessity for doctors and physic. In fact, I have shown that temperate living, though not an infallible security against sickness, tends to neutralize its influence, and to protract or extend life much beyond the period commonly attained. And to the full and certain attainment of this great end, I have shown that fair play should be observed between Cares and Pastimes—between the business of the body and the soul; instead of continually harassing the mind with worldly cares and anxieties, with the selfish and sordid vice of money-scraping, or with false and superstitious ideas of what is pleasing to Heaven, by being too peremptory in our notions of religious observances and interests. And thus I have, I trust, suited my doctrines and prescriptions to the most unearthly of saints, as well as to the most earthly of sinners; while, in Lord Bacon's words, I have instructed them to "cherish Nature," and thus "teach her masteries."

I have proceeded to show that life may be preserved, and even protracted to an uncommon extension, in spite of the most feeble stamina of constitution, and the most formidable physical disability: In fact, that the secret of health may be managed without medicine, and longevity attained without

sickness. I have warned my readers against the ordinary causes of disease, and instructed them how to employ art, according to the best modes of dietetical treatment, for the improvement, the recovery, and the preservation of health.

But as in this age of "philosophical refinement," when man seems especially endowed with "an immortal thinking mind," only to invent high-flavoured sauces, and to consult what dishes are most pleasing to his palate; -when "the right end of life is to live and be jolly;"-when the business of a parish cannot be settled unless a public feast is provided; -when the bounds of a district cannot be ascertained without a like exhibition of feast; -when the Livery cannot attend on the Mayor of a Corporation, unless an eating match is appointed, and the Island of Ascension, so remarkable for turtle, wafts its groans across the Atlantic to the Corporation or Guildhall; -when the governors of public charities cannot meet together, unless dainties and delicacies are prepared, over which public benevolence may be properly digested; -in short, when nothing can be celebrated, nothing performed, nothing said or sung; when there cannot be neither loyalty, patriotism, public spirit, charity, nor harmony, unless the table be plentifully and substantially decorated with choice eatables and drinkables, the produce of every climate; -in a word, when ignorance in gastronomy, or the science of

good eating and drinking, is a mark of want of good breeding and gentility; -when all the fashionables and unfashionables in society are disposed to exclaim with Trimalchion in Petronius, "Alas! alas! wretched that we are! what a nothing is poor man! we shall be all like this, when Fate shall have snatched us hence: let us therefore rejoice and be merry while we may:"-it seems absolutely necessary to show how art may be employed in the most prompt and agreeable manner, to oppose the heresies and temptations of "good living,"-of all the eatings and drinkings in this world, in order to afford that assistance to Nature, and counterbalance those accidental deviations from strict temperance, when hunger and savory viands have seduced the tongue of a grand gourmand to indulge his appetite beyond the bounds of moderation; or the gustatory nerves of an abstemious philosopher, or of a deipnosophist, or an agreeable diner-out, to forego the maxims of his cooler moments, and to betray the interests of his stomach in spite of his brains.

To accomplish this purpose, and get rid of the offending and refractory materials, and quell the ventricular rebellion, the sinning offender should "unbutton his waistcoat, to give room to the labouring organ," and lie down. Should he find the sensations very oppressive, he should, in order to assist the sanative operations which Nature has instituted for his relief, freely drink warm water,

or have his tea early, and drink it warm. After a hard day's work of intemperate feasting, the external heat of the stomach-warmer will also considerably assist the digestive organs to throw off the fumes of indigestion. A supper of thin water-gruel, with the addition of a tea-spoonful of Epsom or Glauber's salts, will also materially assist the principal viscera to get rid of their burden. Another good rule to be observed by the veritable gourmand whose whole soul and body is concentrated in his trencher-who eats round the table ab ovo usque ad mala-is, that as often as he feasts with Apicius, he should as often, as a finale, fast with Pythagoras; or, in plainer language, that when he has sacrificed at the orgies of gluttony, he should also finish his devotions at the shrine of abstinence. The late Dr. Kitchiner gives rules and prescriptions for those who intend to employ their stomachs on actual service, with a diffuser version of good living than ordinary; as also for those who wish to "spur the jaded appetite to fresh exertions of gormandizing and cormorance;" but I am unwilling to disgrace my pages with instructions of the kind, and must beg leave to refer "the amateurs and professors of the noble art," to the facetious Doctor's pages, where they will find all the necessary knowledge, and the art of clystering à la Sir William Curtis, of glorious gastronomic memory.

It remains to state how "the dilapidating effects of vinous irrigation" may be coun-

teracted, when the seducing charms of conviviality, and the fascinations of the festive bowl, have seduced the man of sense, or the man of no sense-a bon vivant, a good fellow, or the habitual votary of dissipation -to pour out the regal purple stream, in flowing bumpers of claret or Burgundy, at the shrine of the Jolly God:-in such cases, a like finale to "the day of feast or of song," as is above stated, may quell the qualms of the stomach and the twinges of head-ache, and relieve the sufferer from unpleasant consequences; or, if this be disagreeable, the salts may be taken in beef-tea, which will entirely disguise their taste. And when the languor of hard drinking is very distressing, a beef-tea breakfast may be restorative of "the living dead man;" or if relief be not easily obtained by its use, a breakfast à l'antique, consisting of a large tea-spoonful of magnesia, with a pinch of powdered ginger, or a tea-spoonful of the compound tincture of cardamoms, put into a glass of double soda-water, with an infusion of a little good Cognac brandy, will set the bowels to rights, and relieve them from the turmoil, heartburn, and squeamishness of the preceding night's "hilarious doings," and the necessity of enjoying the visits of "old Death's harbinger, the Apothecary."

I have now brought my instructions to a close; and am willing to believe that my readers will not deem them altogether "patter," nor consider me a denouncer of beef and porter,—an advocate of the règime forte et dure;—that my admonitions have not been

quite "ghastly and ghostly;" that I have not stigmatized "every inordinate cup as unblessed, and its ingredient a devil:" Nonsense of the kind, I have left to "mysterious and jabbering doctors," whose little-or-nowisdom consists in a parade of medical and scientific jargon, in vain and foolish words of no meaning, and Greek and Latin nonsense, (a jumble and caricature of odds and ends of the departed glories of classic literature); a mere farrago of absurdity calculated only to mystify the subject, and confuse the anxious inquirer after health\*;who would fainly persuade us, in their idle love of philosophical improvement and experiment, out of all our little enjoyments-our tea, our sugar, our own home-brewed Sir John Barleycorn, and even a cheerful family glass of wine or liquor, as tending to destroy our nerves, and shorten our days: Instead of nonsense of this kind, -of drinking like horses, and eating like asses,-I have inculcated those doctrines which will infallibly conduce to health, and promote man's happiness and welfare: and with these pretensions, I present my little Book to the tribunal of FAIR, AND IMPARTIAL, AND COMPETENT CRITI-CISM, and am willing to bow to its judgment.

#### THE END.

<sup>\*</sup> This reproof cannot, of course, be supposed to apply to the skilful and experienced physician or surgeon; it extends only to empirical dabblers, and vapouring petits maitres in "medical jobbery," whose knowledge of "the science of life" is confined to a few random scrap notes collected at hospital lectures. Perhaps the wiseacres, who "stand up lustily for the good old paths of ignorance," well knowing "the nakedness of the land," will fear the exposure of their ignorant blundering and rash tampering with human life, and abuse and malign the author and his little book; but he wishes those "medical men" to understand, that he is perfectly indifferent to their praise or their censure: he has discharged a public duty, and is satisfied.

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