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3648 ite Alm chape AN ESS OF HEALTH AND LONG LIFE. By GEORGE CHEYNE, M. D. F.R.S. The Fifth Edition. Aonnois Y preins, angein Teophs, aonvin 115vwv. Hippoc. At Imbecillis (quo in Numero magna Pars Urbanorum, omnesque pene Cupidi Literarum sunt) Observatio major necesfaria est: ut quod vet corporis, vel Loci, vel Studii Ratio detrahit, Cura restituat. Celf. LONDON. Printed for GEORGE STRAHAN, at the Golden Ball over-against the Royal Exchange in Cornhill; and J. LEAKE, Bookfeller at Bath. 1725.



TO THE Right Honourable Sir JOSEPH JEKYLL, Mafter of the ROLLS. This TREATISE is inferibed

As a Teftimony of Respect, and Gratitude,

BY

His most obliged faithful humble Servant,

GEORGE CHEYNE.





#### THE

# PREFACE.



or Wantonness.

HIS being probably the last Time I may trespass on the Publick, I look upon myself in some Measure obliged to settle my Accounts with the World as an Author, before I make my Exit, by endeavouring to shew I have not always offended out of Prefumption, Vanity,

The

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The first Time I adventured in Print, was on the Account of my great Master and generous Friend, Dr. Pitcairn. He thought himself ill-used by Some of his Brethren of the Profession who then were at intestine War on the Subject of Fevers; and fancied the bandfomest Way to bring them down, was to exhibit a more specious Account of this Disease, than any of them had shewn. His Business then in the Praclice of Physick was so great, as not to allow him sufficient Time for such a Work. Two others therefore, with myself, were joined to manage the Affair: In which he was to cut and carve, and to add the practical Part. My Province was the Theory. I was then very young in the Profession, and living in the Country. But in a few Days I brought in my Part finished, as it now appears, under the Title of The

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The New Theory of Fevers. The others either suppress'd or forgot theirs, and mine, without the least Alteration, but in a few Words, was ordered for the Press. I could not resist the Commands of my Friend; but would not fuffer my Name to be put to it, being confcious it was a raw and unexperienced Performance. They are tho' Some Things in it which may be of Use to Beginners, both as to the Method of philosophising on the animal Oeconomy, and in the Account of the Manner of the Operation of the greater Medicines. The Foundations also and the Causes assigned for acute and flow Fevers, I still think folid and just, and more particular and limited than those of any other Theory yet published. But it wants so much filing and finishing, fo many Alterations and Additions as would cost me more Labour and Pains than the writing a new Treatife on the Jame

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Same Subject: So that out of mere Lazinefs and Inapptency, I have thrown it by as unripe Fruit, and suffered it to be as if it never had been.

My next Sally was in a Book of abstracted Geometry and Algebra, entitled, Methodus Fluxionum Inverfa, brought forth in Ambition and bred up in Vanity. There are some Things in it tolerable for the Time, when the Methods of Quadratures, the Menfuration of Ratio's, and Transformation of Curves, into those of other Kinds, were not advanced to such Heights as they now are. But it is a long Time fince I was forced to forgoe these barren and airy Studies for more substantial and commodious Speculations : Indulding and Rioting in these so exquisitely bewitching Contemplations, being only proper for publick Professors, and those born to Estates, and who are under no outward

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ward Necessities. Besides, to own a great but grievous Truth, tho' they may quicken and sharpen the Invention, strengthen and extend the Imagination, improve and refine the reasoning Faculty, and are of Use both in the necessary and the luxurious Refinement of mechanical Arts; yet having no Tendency to rectify the Will, sweeten the Temper, or mend the Heart, they often leave a Stiffness, Positiveness, and Sufficiency on weak Minds, much more pernicious to Society, and the Interests of the great End of our Being, than all the Advantages they bring them can recompence. They are indeed Edge-Tools, not to be trusted in the Hands of any, but those who have already acquired an bumble Heart, a lowly Spirit, and a fober and teachable Temper. For in others they are very apt to beget a fecret and refined Pride, an over-weening and over-bearing Vanity (the most oppo=

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opposite Temper to the true Gospel-Spirit, which, without Offence, I may suppose to be the best Disposition of Mind) that tempts them to presume on a Kind of Omniscience in Respect of their Fellow-Creaturer, that have not rifen to their Elevation; and to set up for an Infallibility, or at least a decifive Judgment, even in Matters which do not admit of a more or lefs (their proper Object) of which Kind whatever relates to the infinite Author of our Being most certainly is. Upon all which Accounts, conscious of my own Weakness, I have long since bid them an Adieu, farther than as they serve to amuse, or are useful in the absolute Necessities of Life.

The Defence of that Book against the learned and acute Mr. Abr. de Moivre, being written in a Spirit of Levity and Refentment, I most fincerely

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cerely retract, and with undone, so far as it is perfonal or peevish, and ask bim and the World Pardon for it; as I do for the Defence of Dr. Pitcairn's Differtations, and the New Theory of Fevers, against the late learned and ingenious Dr. Oliphant, I beartily condemn and detest all per-Sonal Reflexions, all malicious and unmannerly Terms, and all false and unjust Representations, as unbecoming Gentlemen, Scholars, and Christians; and disprove and undo both Performances, as far as in me lies, in every Thing that does not strictly and barely relate to the Argument.

The first Part of the Philosophical Principles, that of Natural Religion, confists merely of Discourses and Lectures of Natural Philosophy, and of its Consequences on Religion, occasionally read or discoursed a 2 to

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to that most noble and great Person, the Duke of Roxburgh, who is now Jo great an Ornament to his Country, and his high Employments, to whom they were inscribed. I thought they might be of Use to other young Gentlemen, who, while they were learning the Elements of natural Philosophy, might have thereby the Principles of natural Religion insensibly instilled into them. And accordingly it has been and is still used for that Purpose at both Universities. Upon which Account, upon proper Occasions, I will not fail to improve it in all the new Discoveries in Experimental Philosophy, or in the final and natural Causes of Things as happen to be made, so as to leave it as little imperfect in its Kind as I poffibly can.

> The fecond Part of the Philosophical Principles, to wit, that of Re-

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Revealed Religion, was added afterward, to shew, that all our Knowledge of Nature was by Analogy, or the Relations of Things only, and not their real Nature, Substance, or internal Principles: That from this Method of Analogy (the only Medium of human Knowledge) we should be necessarily led, to conclude the Attributes or Qualities of the supreme and absolute Infinite, were indeed Analogous to the Properties or Qualities of finite Beings, but only in such a Manner as the Difference between Infinite and Finite requires; and that therefore, not being able to know precifely these Differences, we ought implicitly to believe without reasoning what is revealed to us concerning the Nature of the infinite Being; or bring our Reason to submit to the Mysteries of Faith. How I have fucceeded is not for me to determine. As the End was bonest, I am secure the great Prin-

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Principles and the fundamental Propofitions are true and just. They may want a little farther clearing up and Explication: But as yet I have met with no Reason to retract any Thing material; else I should most certainly do it.

The Effay on the Gout and Bath Waters was brought forth by mere Accident. The first Draught being, as I there mentioned, only a Paper of Directions for a Gentleman, my Friend and Patient, troubled with the Gout. It was enlarged upon different Occafions, and published to prevent its being pyrated; several Copies having been given out to others in the same Circumstances. I have the Satisfaction to know from many different Hands, that it has benefited great Numbers of infirm and afflicted Persons; and shall there-

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therefore go on to cultivate it as far as my poor Abilities will permit.

I am now come to this my last Production; whose Origin was as casual as that of my former. My good and worthy Friend, the present Master of the Rolls, having been last Autumn at Bath, for a Confirmation of his Health, at his Departure defired of me to draw up some Instructions in writing to direct him in the Conduct of his Health for the future, and in the Manner of Jupporting his Spirits free and full, under the great Business he is engaged in. I was then in the Hurry of our Seafon, and could not so soon answer his Expectation, as his real Worth, and my fincere Esteem required. I thought myfelf therefore the more obliged as soon as I had Leisure, to exert myself to the uttermost in Obedience to his Commands. At first I drew up most of thele

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these Rules at the End of the several Chapters; but, upon Reflexion, thought it not Respect enough to his good Tafte and Capacity to judge of the Reasons of Things, to prescribe him bare and dry Directions in Matters of so great Moment. Ladded therefore the philo-Sophical Account and Reasons of these Rules, which make up the Bulk of the Chapters themselves. He, out of his Love to his Fellow-Citizens (which is one shining Part of his Character, and which I ought to suppose has in this Instance only imposed on his better Fudgment) desired they might be made publick. Upon which Account Several Things have been fince added, to make the whole of more general Use. If therefore any Thing in this Treatife be tolerable, or if any Person receive Benefit by it, they owe it entirely to that excellent Person, upon whose Account Jolely

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folely it was undertaken, and at whose Request it is published.

I have indeed long and often ob-Served, with great Pity and Regret, many very learned, ingenious, and even religious Perfons, who being weak and tender (as such generally are) have suffered to the last Extremity for Want of a due Regimen of Diet, and other general Directions of Health, who had good Senfe enough to understand the Force and Necessity of fuch Rules, valued Health sufficiently, and despiled len-Jual Gratifications for the Pleasures of the Mind so far, as to be able and willing to abstain from every Thing burtful, deny themselves any Thing their Appetites craved, and to conform to any Rules for a tolerable Degree of Health, Eafe, and Freedom of Spirits; and yet being ignorant how to

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to conduct themselves, from what to abstain and what to use, they have suffered even to mortal Agonies; who, had they been better directed and instructed, had pass'd their Lives in tolerable Ease and Quiet. It is for these, and these only, the following Treatife is defigned. The Robust, the Luxurious, the Pot-Companions, the Loofe, and the Abandoned, have here no Business; their Time is not yet come. But the Sickly and the Aged, the Studious and the Sedentary, Perfons of weak Nerves, and the Gentlemen of the learned Professions, I bope, by the divine Bleffing on the following Treatife, may be enabled to follow their Studies and Professions with greater Security and Application, and yet preferve their Health and Freedom of Spirits more entire and to a longer Date. I am morally certain,

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tain, had I known and been as well fatisfied of the Necessity of the Rules here laid down, thirty Tears ago, as I am now, I had suffered less, and had had a greater Freedom of Spirits than I have enjoy'd. But every Thing is best as it has been, except the Errors and Failings of our free Wills.

I know no useful Means of Health and Long Life I have omitted, nor any pernicious Custom I have not noted; and have given the plainest and most familiar Reasons I could urge for the Rules I have here laid down. Most of my Arguments (as they needs must) have rifen out of the animal Functions and Oeconomy: And I have used as little Subtilty and Refinement in my Explications of these, as the present State of Natural Philosophy could admit. I have been often contented with b 2 plain

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plain and obvious Facts to account for Appearances, and the Cautions thence deduced; when, according to the Humour of the prefent Age, I might have run into refined Speculations of Metaphyficks, or Mathematicks; being contented with the Crafto Modo philofophari; becaufe we shall never be able to fearch out the Works of the Almighty to Perfection, so as to penetrate the internal Nature of Things.

I have confulted nothing but my own Experience and Observation on my own crazy Carcase and the Infirmities of others I have treated, in the following Rules, their Reasons and Philosophy, (so that if any Thing is borrowed, it has occurred to me as my own) but in so far as Authorities go to shorten philosophical Accounts. Not but that all systematick Writers in Physick,

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Physick, and many particular Authors, have treated the same Subject : But their Rules, besides that they are often inconsistent with Reason, or contrary to Experience, are so general, and express'd in so unlimited and undefined Terms, as leave little or no Certainty in them; when apply'd to particular Cases, they want the neces-Jary Precision and Exactness, and so became useless or perplexing: and lastly, when they come, (which is rarely to be found among them) to give the Reasons and Philosophy of their Directions, they have not the Perspicuity and natural Way of convincing the ingenious, fickly, and tender Sufferers, To necessary to make them chearfully and readily undergo such severe Restraints; which I take to be by far the most difficult Part of fuch a Work, and which I have laboured with my utmost Power to Supply.

I know

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I know not what may be the Fate and Success of this Performance; nor am I folicitous about it, being conscious the Design was honest, the Subject weighty, and the Execution the best my Time, my Abilities, and my Health would permit, which cannot bear the Labour of much Fileing and Finishing. Being careful not to incroach on the Province of the Physician, I have concealed nothing my Knowledge could suggest to direct the Sufferer, in the best Manner I could, to preferve his Health and lengthen out his Life: And I have held out no false or delufory Lights to lead him aftray, or torment him unnecessarily.

If it were possible any Set of Men could be offended at my Performance, it might be my Brethren of the Profession,

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fession, for endeavouring to lessen the Materia Morbifica. But as this would be the most malicious, unjust, and unworthy Reflexion could be thrown on Scholars and Gentlemen of a liberal Education; so I never entertain'd the most remote V anity to think any Endeavour of mine would make so considerable a Change in the Nation; especially when the Devil, the World, and the Flesh were on the other Side of the Question, which have food their Ground even against the Rules of Life and Immortality brought to Light by the Gospel.

I cannot conclude this tedious Preface without begging Pardon of the Reader for troubling him with my private Matters. All I can fay as an Apology is, that of what sever Indifference my Concerns as an Author may be

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be to him, yet they were not so to me; this being the only Place and Time I may have to adjust them in, and it being the Heighth of my Ambition,

Nil confeire mihi, nullà pallescere culpâ.



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In Clarissimi Medici GEO. CHEYNÆI Tentamen de Sanitate & Longævitate, doctum variumque Opus miratus, hæc effudit \*\* Virtutum illius Viri Cultor impensissimus.

H UC ades, o ! fævum Membris arcere Venenum Qui cupis, & Morbi femina tetra gravis.
Sive tremeus pavidufque vides inftare minacem Scorbutum (ut videas hic Liber, ecce! docet)
Sive parant atras Hypochondria turgida Nubes, Quæ Menti offufæ triftia ſpeftra darent;
Seu Monftri quodcunque imis Penetralibus hæret, Principium Morbi, mox generanda Lues:
Ecce Opifer præfens, CHETNÆUS, lenit acerbum In Venis fuccum, nec tibi Membra dolent;
Aut pellit triftis fimulacra fugacia ſpeftri, Atque Animo prohibet Gaudia abeffe tuo;
Maturâque Operâ prævertens triftia Fata Ægrotare vetat, nec doluiffe finit.

Perlege (at attentus) culti Documenta Libelli, Si Te vel fanum vel cupis effe probum : (Arctè etenim fociata Salus fideliter hæret Virtuti, Vitio nec Comes effe volet.)

Difce

Disce Voluptates prudens vitare nocentes;
Hinc disce & veris innocuisque frui.
Ut Tibi fit Somnus Lenimen dulce Laborum;
Quæque onerant Mensas dulcia Fercla fient;
Ut vigeant Artus, nec saucia membra laborent;
Hic Gulæ effrænis Crimina mille lege.
Chirurgi Ferrum Te, & tetrica Pharmaca terrent?
Hinc disce ambobus posse carere Malis.

to a galage a galage a galage to a galage a galage and



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# AN ESSSAY OF

# Health and Long Life.



T is a common Saying, That every Man paft Forty is either a Fool or a Physician: It might have been as juftly added, that he

was a Divine too: For, as the World goes at prefent, there is not any Thing that the Generality of the better Sort of Mankind fo lavifhly and fo unconcernedly throw away as *Health*, except *eter*nal Felicity. Moft Men know when they B are

## An Essar of HEALTH

are ill, but very few when they are well. And yet it is most certain, that 'tis eafier to preserve Health than to recover it, and to prevent Diseases than to cure Towards the first, the Means are them. mostly in our own Power: Little elfe is required than to bear and forbear. But towards the latter, the Means are perplexed and uncertain; and for the Knowledge of them the far greateft Part of Mankind must apply to others, of whofe Skill and Honefty they are in a great measure ignorant, and the Benefit of whose Art they can but conditionally and precarioufly obtain. A crazy Constitution, original weak Nerves, dearbought Experience in Things helpful and hurtful, and long Observation on the Complaint of others, who came for R elief to this universal Infirmary, BATH, have at last (in some measure) taught me some of the most effectual Means of preferving Health and prolonging Life in those who are tender and fickly, and labour under chronical Diftempers. And I thought I could not spend my leisure Hours better than by putting together the most general Rules for that Purpose, and setting them in the clearest and strongest Light I could, for the Benefit of those who may

# and LONGLIFE.

may want them, and yet have not had fuch favourable Opportunities to learn them.

S. 2. And that I might write with fome Order and Connexion, I have chofen to make some Observations and Reflections on the Non-naturals (as they are called, possibly because that in their preternatural State they are eminently injurious to human Constitutions; or more probably, because tho' they be necessary to the Subsistence of Man, yet in respect of him, they may be confidered as external, or different from the internal Causes that produce Diseases) to wit, I. The Air we breathe in. 2. Our Meat and Drink. 3. Our Sleep and Watch-ing. 4. Our Exercife and Reft. 5. Our Evacuations and their Obstructions. 6. The Paffions of our Minds : And lastly, to add fome Observations that come not fo naturally under any of these Heads. I shall not confider here how philosophically these Distinctions are made; they feem to me, the best general Heads for bringing in those Observations and Reflections I am to make in the following Pages.

THE PERSON THE FOLLOWING

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# 4 An Essay of HEALTH.

S. 3. The Reflection is not more common than just, That he who lives physically must live miserably. The Truth is, too great Nicety and Exactness about every minute Circumstance that may impair our Health, is fuch a Yoke and Slavery, as no Man of a generous free Spirit would submit to. 'Tis as a Poet expreffesit, to die for fear of Dying. And to forbear or give over a just, charitable, or even generous Office of Life, from a too scrupulous Regard to Health, is unworthy of a Man, much more of a Christian. But then, on the other Hand, to cut off our Days by Intemperance, Indi-Scretion, and guilty Passions, to live miferably for the fake of gratifying a fweet Tooth, or a brutal Itch ; to die Martyrs to our Luxury and Wantonnefs, is equally beneath the Dignity of human Nature, and contrary to the Homage we owe to the Author of our Being. Without fome Degree of Health, we can neither be agreeable to ourselves, nor useful to our Friends; we can neither relish the Blefsings of divine Providence to us in Life, nor acquit ourselves of our Duties to our Maker, or our Neighbour. He that wantonly transgresseth the self-evident Rules

### and LONGLIFE.

Rules of Health, is guilty of a Degree of Self-Murder; and an habitual Perseverance therein is direct \* Suicide, and confequently, the greatest Crime he can commit against the Author of his Being; as it is flighting and defpifing the nobleft Gift he could beftow upon him, viz. the Means of making himfelf infinitely happy; and also as it is a treacherous forfaking the Post, wherein his Wisdom has placed him, and thereby rendering himfelf incapable of answering the Designs of his Providence over him. The infinitely wife Author of Nature has fo contrived Things, that the most remarkable RULES of preferving LIFE and HEALTH are moral Duties commanded us, fo true it is, that Godliness has the Promises of this Life, as well as that to come.

To avoid all useles Refinement, I will lay down only a few plain eafily observed Rules, which a Man may readily follow, without any Trouble or Constraint.

or valle de lo soustielle de s

Free idence to us in Life,

CHAP.

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### 6 An Essay of HEALTH

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# CHAP. I.

# Of AIR.

S. I. A I R being one of the moft neceffary Things towards the Subfiftence and Health of all Animals; 'tis a Wonder to me, that here in England, where Luxury and all the Arts of living well, are cultivated even to a Vice, the Choice of Air should be so little confidered.

S. 2. From Observations on Bleeding in Rheumatisms, and after catching Cold, 'tis evident, that the Air with its different Qualities, can alter and quite vitiate the whole Texture of the Blood and animal Juices: From the Palsies, Vertigoes, Vapours, and other nervous Affections, caused by Damps, Mines, and working on some Minerals, († particularly Mercury

+ Vide Ramazini of the Difeases of Tradsemen.

# and LONG LIFE.

cury and Antimony) 'tis plain Air so and fo qualified, can relax and obstruct the whole nervous System. From the Cholicks, Fluxes, Coughs, and Confumptions, produced by damp, moist and nitrous Air, 'tis manifest, that it can obstruct and spoil the noble Organs. The Air is attracted and received into our Habit, and mixed with our Fluids every Instant of our Lives; so that any ill Quality in the Air so continually introduced, must in Time produce fatal Effects on the animal OEconomy : And therefore it will be of the utmost Consequence to every one, to take Care what kind of Air it is they fleep and watch, breath and live in, and are perpetually receiving into the most intimate Union with the Principles of Life. I shall only take Notice of three Conditions of Air.

S. 3. The first is, That when Gentlemen build Seats, they ought never to place them upon any high Hill, very near any great Confluence of Water, in the Neighbourhood of any great Mines, or Beds of Minerals, nor on any swamp, marshy, or mossy Foundation; but either in a champpaign Country, or on the Side of a small Eminence, sheltered from the North and East

### 8 An Essay of HEALTH

East Winds, or upon a light gravelly Soil. The Nature of the Soil will be well known from the Plants and Herbs that grow on it, or rather more fecurely from the Nature of the Waters that spring out of it, which ought always to be sweet, clear, light, soft, and tasteles, All high Mountains are damp, as Dr. Halley observed at St. Helena, a mountainous Place, where Damps fell so perpetually in the Night time, that he was obliged to be every Moment wiping his Glasses, in making his Astronomical Observations. And where the Mountains are high, the Inhabitants of them are forced to send their Furniture, in Winter, to the Valley, left it should rot. And 'tis common to have it rain or fnow on Mountains, when the Valleys below are clear, serene and dry. All great Hills are Nefts of Minerals, and Covers (made of the prominent Earth) for Reservoirs of Rain-Water. The Clouds are but great Fleeces of rarified Water failing in the Air, sometimes not many Yards above the champaign Country; and these high Hills intercepting them, they are compressed into Dew or Rain, and are perpetually drilling down the Crannies of the

### and LONGLIFE.

the Mountains into these Basins. Hence the Origin of Rivers, and fresh Water Springs. Besides that, these mountainous Places, are always exposid to high, and almost perpetual Winds. Where any great Concourse of Water is, the Air must needs be perpetually damp, because the Sun is perpetually straining from these Waters, moist Dews and Vapours thro' it. All great Nefts of Minerals, or large Mines, must necessarily impregnate the Air, with their respective Qualities. And moffy Blackneis, is some Degree of Putrefaction, as \* Sir Isaac Newton obferves.

§. 4. Secondly, the Winds that are most frequent, and most pernicious in England, are the Easterly, especially the North East Winds, which in the Winter are the most piercing cold, in Summer the most parching hot. In Winter they bring along with them, all the Nitre of the Northern and Scrthian Snows, Mountains of Ice, and frozen Seas thro' which they come; and in C Summer,

\* See his Treatife about Light and Colours.

# 10 An Essay of HEALTH

Summer, blow with all the fiery Particles of the perpetual Day they pass thro'. From the end of January, till towards the end of May, the Wind blows almost perpetually, from the Eastern and Northern Points, if the Spring is dry; and from the Southern and Western Points, if the Spring is wet, (and generally from the setting in of the Winds, on a New-Moon, you may predict the Weather of the Spring) and our Bodies most certainly attracting, the circumambient Air, and the Fumes of those Bodies that are next to us, it will be very convenient for valetudinary, studious, and contemplative Persons, in a dry Spring, or in Easterly Winds, to change their Bedchambers into Rooms that have Western or Southern Lights, or to shut close up the Eastern and Northern Lights, or to have them but feldom opened; and in wet Seasons, to take the contrary Course. And if any fuch Person, has been much exposed, or long abroad, in a Northerly or bleakish Easterly Wind, it will be very proper for him to drink down, going to Bed, a large Draught of warm Water-gruel, or of warm small Mountainwine Whey, as an Antidote against the nitrous

### and LONG LIFE.

nitrous Effluvia, suck'd into the Body, and to open the Obstructions of the Perspiration made thereby.

S. s. Thirdly, from the beginning of November 'till towards the beginning of February, London is cover'd over with one universal nitrous and sulphurous Smoak, from the Multitude of Coal Fires, the Absence of that material Divinity the Sun, and the Confequence thereof, the falling of the Dews, and Vapours of the Night. In fuch a Sea-Son, weak and tender People, and those that are subject to nervous or pulmonick Distempers, ought either to go into the Country, or to be at home soon after Sun-set, and to dispel the Damps with clear, warm Fires, and chearful Conversation, go early to Bed, and rise proportionally sooner in the Morning; for, as the Sun's Removal fuffers the Vapours to fall and condense, in the Evening, fo his Approach difpels and raifes them in the Morning. I need not add, that it will be very fit, for those that are valetudinary, to have their Servants, Children, Bed-fellows, and all those that approach them, with whom they live con-C 2 stantly

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ftantly, and mix Atmospheres, to be as healthy, found and fweet as poffibly they can; and, for their own fakes, to have them remov'd till they are made fo, if they are otherwife. Nor fhall I add any preffing inftances, to avoid wet Rooms, damp Beds, and foul Linnen, or to remove Ordure and Nusances; the Luxury of England having run all these rather into a Vice.

S. 6. The Air is a Fluid, wherein Parts of all Kinds of Bodies fwim as in Water. But Air differs from Water in this, that the first is compressible into a lefter Compass, and smaller Volume, like a Fleece of Wool, either by its own Weight, or any other Force, which Weight or Force being removed, the Air immediately recovers its former Bulk and Dimensions again, whereas no Force whatever can bring Water into narrower Bounds; that is, Air is extreamly elaflick and fpringy, but Water is not at all fo. Yet the Parts of Air would feem to be groffer than the Parts of Water : For Water will get through a Bladder, and may be forced through the Pores of Gold; but Air will pass through neither. By this its elastick Force, the Air infinuates

### and LONG LIFE. 13

nuates itself into the patent Cavities of all animal Bodies; and the Infant, which never breathed before, asson as it is exposed to this Element, has the little Bladders, whereof the Lungs confift, blown up into a perpendicular Erection on the Branches of the Wine-pipe; whereby the Obstruction, from the Pressure of the Vesicles (arising from their being compressed together, and lying upon one another) being in some Measure taken off, the muscular Action of the right Ventricle of the Heart is able to force the Blood through the Lungs into the left Ventricle. But these little Bladders, being thus inflated by an elastick Fluid, still prefs fo far upon, and grind the großer Particles of the Blood into more fizeable ones, that they may become small enough to circulate through the other capillary Veffels of the Body. This elastick Air, prefling equally every Way round, by its Weight and Spring, shuts close the Scales of the Scarf-skin of healthy and ftrong Perfons; fo that it denies all Entrance to the nitrous and watry Mixture, contained in it, and thus becomes a Kind of Cold Bath, to them, and defends them from catching Cold: But in fickly, studious, and sedentary People,

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ple, and those of weak Nerves, where the Spring of the Coverlets and Scales, that defend the Mouths of the perspiratory Ducts is weak, the Perspiration little or next to none at all, and the Blood poor and fizey; the nitrous and watry Particles of the Air get a ready and free Entrance, by these Ducts into the Blood, and by breaking the Globules thereof, coagulating and fixing its Fluidity, quite ftop the Perspiration, and obstruct all the capillary Veffels, the cutaneous Glands, and those of the Lungs and alimentary Paffages, when fuch Bodies are long exposed to such an Air : And thus begets all these Diforders in the Body, that Air thus and thus poison'd, was shewn capable to produce. So long as the Perspiration is strong, brisk, and full, 'tis impoffible any of these Diforders should happen; because the Force of the perspiratory Steams outward, is greater than the Force whereby these noxious Mixtures enter; unless the Body be indifcreetly too long exposed, or the Action of the nitrous and watry Mixtures be extremely violent. Hence it comes to país, that those who are very strong and healthy, and those who have drank strong Liquors 10 pientifully, as to have thereby a brisk Circulation

### and LONGLIFE. 15

Circulation and full Perspiration, seldom or never catch Cold. And this is the Reafon why rich Foods and generous Wines, moderately used, become so excellent an Antidote in infectious and epidemick Distempers; not only as they banish Fear and Terror, but as they make fo full and free a Stream of Perspiration, and maintain fo active and brisk an Atmosphere, as suffers no noxious Steams or Mixtures in the Air to come within it; but drives and beats off the Enemy to a Distance. But Persons of viscous, heavy Fluids, of poor and fizey Juices, of little or no Perspiration, such as generally all studious, sedentary, and sickly Persons are, but especially those that are subject to nervous Disorders, must neceffarily fuffer under these poisonous Mixtures in the Air, if they do not cautioufly and carefully fence against them, or take not a prefent Remedy and Antidote, when tainted. For besides the Air that gets through the perspiratory Ducts into the Blood, whenever we Eat, Drink, or Breath, we are taking into our Bodies, fuch Air as is about us. And when the concoctive Powers are weak, as in fuch Persons, and the Quantity of the Food is too great, or its Quality too ftrong for them,

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them, the Chyle is too gross, and the perspiratory Matter is stopped, because too large for these small Ducts; and this whole Mass, which in common Health is more than double of the gross Evacuations, recoils in upon the Bowels, and becomes, as it were, Spears, and Darts, and Armour to the Air receiv'd from without; which being thus sharpened with the Salts of the unconcocted Food, together with its own elastick Force, pierces the Sides of the Veffels, and gets into all the Cavities of the Body, and between the Muscles and their Membrances, and there, in Time, brings forth bypochondriack, bysterick, nervous, and vapourish Diforders, and all that black Train of Evils fuch Conftitutions fuffer under.

I shall now draw out the Cautions here inculcated into a few general Rules.

General

# and LONGLIFE. 17

General Rules for Health and Long Life, drawn from the Head.

#### Of AIR.

1. THE healthieft Situation for a Seat is in a champaign Country, or on the Side of a fmall Eminence, on a gravelly Soil, with a Southern or Weftern Exposition, sheltered from the North and East Winds, distant from any great Concourse of Waters, or any great Mines or Beds of Minerals, where the Water is sweet, clear, light, soft, and tastles.

2. Tender People on the fetting in of Easterly and Northerly Winds, ought to change their Bed-Rooms for others of Westerly and Southerly Lights, and the contrary in wet Seasons.

3. Those who have been much exposed to, or long abroad in *Easterly* or *Northerly* Winds, should drink some thin and warm Liquor going to Bed.

4. When the dark, dull, foggy Weather lafts at London in Winter, tender D People,

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People, and those of weak Nerves and Lungs, ought either to go into the Country, or keep much at Home in warm Rooms, go early to Bed, and rise betimes.

5. Valetudinary People ought to have their Servants, Children, and Bed-fellows, or those they continually approach and converse with, sound, sweet, and healthy, or ought to remove them 'till they are so, if they are otherwise.

6. Every one, in order to preferve their Health, ought to observe all the Cleanness and Sweetness in their Houses, Cloaths, and Furniture, suitable to their Condition.



CHAP.

and LONG LIFE. 19

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### CHAP.II.

# Of MEAT and DRINK.

§. I. TO have our Food, that is, our Meat and Drink, as to Quantity and Quality duly regulated, and precifely adjusted to our concoctive Powers, would be of the utmost Consequence to Health and Long Life. Our Bodies require only a determinate Quantity thereof, to supply the Expences of living: and a just Proportion of that to these would very probably preferve us from acute, most certainly from chronical Distempers, and enable us to live, without much Sickness and Pain, so long as our Constitutions were originally made to last. The Sources of chronical Diftempers are first Viscidity in the Juices, or the Overlargeness of their constituent Particles, which not being fufficiently broken, by the concoctive Powers, stop or retard the Circulation, or, secondly, too great abundance of tharp and acrimonious Salts, D 2 whereby
whereby the Juices themfelves are rendered to corrofive, as to burft or wear out the Solids; or, thirdly, a Relaxation, or Want of a due Force, and Springinefs, in the Solids themfelves. An Excefs in Quantity begets the first, the ill Condition of our Meat and Drink the second, and both together, with Want of due Labour, the third.

S. 2. The Meat of England is generally animal Substances. The Animals themselves, from epidemick Causes, bad Food, Age, or other Infirmities, have their Difeases as well as human Creatures: and these diseased Animals can never be proper or found Food for Men. Adult Animals abound more in urinous Salts than young ones: Their Parts are more closely compacted, because more forcibly united; and fo harder of Digestion. 'Tis true, the great Distinction of the Fitness or Unfitness of the several Sorts of Animals and Vegetables for human Food, depends upon their original Make, Frame, and Nature (and that can be found out only by Experience) as alfo upon the special Taste, Complexion, Temperament, and Habits of the Person that feeds on them. But by the Help of these Three

Three Principles, viz. First, That the Strength or Weakness of Cohesion of the Particle, of fluid Bodies, depends upon their Bigness or Smallness; that is, the biggest Particles cohere more firmly, than the *smaller*, because more Parts come into Contact in large Bodies than fmall, and fo their Union is greater. Secondly, That the greater the Force [Momentum] is, with which two Bodies meet, the ftronger is their Cohefion, and the more difficult their Separation. Thirdly, That Salts, being comprehended by plain Surfaces, being hard, and in all Changes recovering their Figure, unite the most firmly of any Bodies whatfoever: Their plain Surfaces bring many Points into Contact and Union: Their Hardness and conftant Figure make them durable and unalterable; and thereby the active Principles, and the Origin of the Qualities of Bodies; and when they approach within the Sphere of one another's Activity, they firmly unite in Clusters; all which make the Separation of their original Particles the more difficult. I fay, from these three Principles, we may in general compare the Eafiness or Difficulty of digesting (that is, breaking into small Parts) the several Sorts of Vegetables and

and Animals, one with another; and fo difcover their Fitnefs or Unfitnefs for becoming Food for tender and valetudinary Perfons.

1. All other Things being supposed equal, those Vegetables and Animals that come to Maturity the foonest, are lightest of Digestion. Thus the Spring Vegetables, as Asparagus, Straw-berries, and fome Sorts of Sallading, are more cafily digefted than Pears, Apples, Peaches, and Nectarines; because they have less of the folar Fire in them; their Parts are united by a weaker Heat; that is, with lefs Velocity, and abound lefs in, nay fcarce have any ftrong and fixed Salts. Among the Animals, the common Poultry, Hares, Sheep, Kids, Rabbits, &c. who in the fame, or a few Years come to their Maturity (that is, to propagate their Species) are much more tender and readily digested than Cows, Horfes, or Affes, (were these last in use for Food, as they have been in Famine) &c. for the Reason already given, because their Parts cohere less firmly. And it is observable, of the Vegetables, which are longest a ripening, that is, whole Juices have most of the folar Rays in

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in them, that their fermented Juices yield the ftrongeft vinous Spirits; as Grapes, Elder-berries, and the like: and of the Animals that are longeft in coming to Maturity, that their Juices yield the most rank and most factid urinous Salts.

2. Other Things supposed equal, the larger and bigger the Vegetable or Animal is, in its Kind, the stronger and the harder to digeft is the Food made thereof. Thus a large Onion, Apple, or Pear, and large Beef and Mutton are harder to digest than the lesser ones, of the same Kind; not only, as their Veffels being stronger and more elastick, their Parts are brought together with a greater Force; but also, because the Qualities are proportionably more intense in great Bodies of the fame Kind: Thus, other Things being equal, a greater Fire is proportionably more intenfely hot, than a leffer one; and the Wine contained in a larger Vessel becomes stronger than that contained in a leffer; and confequently the Juices of larger Animals and Vegetables are more rank than the Juices of smaller ones of the fame Kind.

3. Other

3. Other Things being equal, The proper Food appointed for Animals by Nature, is easier digested than the Animals themselves; those Animals that live on Vegetables, than those that live on Animals; those that live on Vegetables or Animals, that soonest come to Maturity, than those that live on such as are longer a ripening. Thus Milk and Eggs are lighter of Digeftion than the Flesh of Beasts or Birds; Pullets and Turkies, than Ducks and Geefe; and Patridge, and Pheasant are lighter than Woodcock or Snipe; because these last, being long-billed, fuck only animal Juices; and for the Reasons already given, Grass Beef and Mutton are lighter than stall-fed Oxen and Sheep.

4. All Things elfe being alike, Fifb and Sea-Animals are harder to digeft than Land-Animals; becaufe univerfally their Food is other Animals, and the Salt Element in which they live compacts their Parts more firmly; Salts having a ftronger Power of Cohefion than other Bodies. And for the fame Reafon, Salt Water Fifb is harder to digeft than frefb Water. Thus the Sea Tortoife is harder to

to digeft than the Land-Tortoife; and Sturgeon and Turbit, than Trout or Perch.

5. Other Things being equal, Vegetables and Animals that abound in an oily, fat, and glutinous Substance, are harder to digest, than those of a dry, fleshy, fibrous Substance; because oily and fat Substances elude the Force and Action of the concoctive Powers; and their Parts attract one another, and unite more ftrongly than other Substances do, (except Salts) as Sir Isaac Newton \* observes. Their Softness and Humidity relaxes and weakens the Force of the Stomach, and the Fat and Oil itself is shut up in little Bladders, that are with Difficulty broken. Thus Nuts of all kinds pass through the Guts, almost untouched : Olives are harder to digest than Pease; fat flesh Meat, than the lean of the fame. Carp, Tench, Salmon, Eel, and Turbit, are much harder to digest than Whiting, Perch, Trout, or Haddock.

6. Vegetables and Animals, all Things elfe being alike, whofe Substance is white, E or

\* Vide Sir Isaac Newton's first English Edition of Light and Colours.

or inclining to the lighter Colours, are lighter to digeft, than those whose Substance is redder, browner, or inclining towards the more flaming Colours; not only because the Parts that reflect white, and the lighter Colours are leffer in Bulk than those that reflect the more flaming Colours ‡; but also because those of the more flaming Colours abound more with urinious Salts. Thus Turnips, Parsnips, and Potatoes, are lighter than Carrots, Skirrets, and Beet-Raves. Pullet, Turkey, Pheafant, and Rabbet, are lighter than Duck, Geefe, Woodcock, and Snipe. Whiting, Flounder, Perch, and Soal, are lighter than Salmon, Sturgeon, Herring, and Mackarel. Veal and Lamb is lighter than Red or Fallow Deer.

7. Lastly, All other Things being equal, Vegetables and Animals of a strong, poignant, aromatick and hot Taste, are harder to digest than those of a milder, softer, and more insiped Taste. High Relish comes from abundance of Salts: Abundance of Salts supposes adult Animals, and such as are long a coming to Maturity;

+ See the just quoted Author.

Maturity; and where Salts abound, the Parts are more difficultly feparated, and harder to be digefted. Strong and aromatick Plants imbibe and retain most of the folar Rays, and become folid Spirits, or fixed Flames. And they that deal much in them fwallow fo much live-Coals, which will at last inflame the Fluids and burn up the Solids.

S. 3. There is nothing more certain, than that the greater Superiority the concoctive Powers have, over the Food, or the stronger the concoctive Powers are, in regard of the Things to be concocted; the finer the Chyle will be, the Circulation the more free, and the Spirits more lightfome; that is, the better will the Health be. Now from these general Propositions, taking in their own particular Complexion and Habits, valetudinary, studious, or contemplative Perfons may eafily fix upon these particular vegetable or animal Foods, that are fitteft for them. And if any Error should be committed, 'tis best to err on the safest Side, and rather chufe those Things that are under our concoctive Powers, than those that are above them. And in the Choice of Animals for our Food, we E 2 muft

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must not pass over the Manner of fattening and fitting them up for the Table. About London we can fcarce have any, but cramm'd Poultry, or stall-fed Butchery Meat. It were sufficient to difgust the floutest Stomach, to see the foul, grofs, and nafty Manner, in which, and the fetid, putrid and unwholesome Materials, with which they are fed. Perpetual Foulnefs and Cramming, grofs Food and Naftinefs, we know, will putrify the Juices and mortify the muscular Substance of human Creatures; and fure they can do no lefs in Brute Animals, and thus make even our Food Poifon. The fame may be faid of hot Beds, and forcing Plants and Vegetables. The only Way of having found and healthful animal Food, is to leave them to their own natural Liberty, in the free Air, and their own proper Element, with Plenty of Food, and due Cleannefs, and a Shelter from the Injuries of the Weather, when they have a Mind to retire to it. I add nothing about Cookery: Plain Roafting and Boiling is as high, as valetudinary, tender, studious, and contemplative Perions, or those who would preferve their Health, and lenghthen out their Days, ought to presume on. Made Dishes, rich Soop,

Soop, high Sauces, Baking, Smoaking, Salting, and Pickling, are the Inventions of Luxury, to force an unnatural Appetite, and encrease the Load, which Nature, without Incentives from ill Habits, and a vicious Palate, will of itself make more than fufficient for Health and long Life. Abstinence and proper Evacuations, due Labour and Exercise, will always recover a decayed Appetite, so long as there is any Strength and Fund in Nature to go upon. And 'tis fcarce allowble to provoke an Appetite, with medicinal Helps, but where the digestive Faculties have been spoiled and ruined by acute or tedious chronical Diftempers. And as foon as 'tis recovered to any tolerable Degree, Nature is to be left to its own Work, without any Spurs from Cookery or Phyfick.

S. 4. The next Confideration is the Quantity of Food that is neceffary to Support Nature, without overloading it, in a due Plight : That is indeed various, according to the Age, Sex, Nature, Strength, and Country the Party is of, and the Exercife he uses. In these Northern Countries, the Coldness of the Air, the Strength and large Stature of People,

People, demand larger Supplies than in the *Eastern* and warmer Countries. Young growing Persons, and those of great Strength and large Stature, require more than the Aged, Weak, and Slender. But Persons of all Sorts will live more healthy and longer by universal *Temperance*, than otherwise. And some general Obfervations on the Quantity Persons of different Nations and Conditions, have lived on, healthy, and to a great Age, may give some Afsistance to valetudinary and tender Persons, to adjust the due Quantity necessary for them.

S. 5. It is furprising, to what a great Age the eastern Christians, who retir'd from the Persecutions into the Defarts of Egypt and Arabia, lived healthful on a very little Food. We are inform'd by Caffian, that the common Measure in twenty four Hours, was about twelve Ounces or a Pound, (for the eastern Pound was but twelve Ounces) with mere Element for Drink. St. Anthony liv'd to 105 Years, on mere Bread and Water, adding only a few Herbs at last. James the Hermit, to 104. Arsenius, the Tutor of the Emperor Arcadins, to 120: 65 in the world, and 55 in the

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the Defart. St. Epiphanus, to 115. St. Jerome. to about 100. Simeon Stylites, 109. And Romualdus, 120. And Lewis Cornaro, a Venetian Nobleman, after he had ufed all other Remedies in vain, fo that his Life was defpair'd of at 40, yet recover'd and liv'd, by the mere Force of Temperance, near to 100 years.

S. 6. Our Northern Climate, as I faid from the Purity and Coldness of the Air, which bracing the Fibres, makes the Appetite keener, and the Action of Digestition stronger; and from the Labour and Strength of the People, which makes the Expences of living more, will neceffarily require a greater Quantity of Food. Yet 'tis wonderful in what Sprightlinefs, Strength, Activity, and freedom of Spirits, a low Diet, even here, will preserve those that have habituated themselves to it. Buchanan informs us, of one Laurence who preferved himfelf to 140, by the mere Force of Temperance and Labour. Spotfwood mentions one Kentigern (afterwards called St. Mongab, or Mungo, from whom the Famous Well in Wales is named) who lived to 185 Years, tho' after he came to the Years of Understanding, he never tasted Wine

Wine nor strong Drink; and slept on the cold Ground. My worthy Friend Mr. Web, is still alive. He by the Quickness of the Faculties of the Mind, and the Activity of the Organs of his Body, fhews the great Benefit of a low Diet, living altogether on vegetable Food and pure Element. The Hiftory of the Milk \* Doctor of Croydon, who by living on Milk only, cured himfelf on an otherwife incurable Diftemper, viz. the E. pilepsy, and liv'd in perfect Health for fixteen Years after, till an Accident cut him off, I have already narrated in my Treatise of the Gout. Henry Jenkins a Fisherman, liv'd 169 Years, his Diet was coarse and sower, as his Historian informs us, that is, plain and cooling, and the Air where he lived fharp and clear, viz. Allerton upon Swale in Torkshire. Parr died fixteen Years younger, viz. at the Age of 152 Years, 9 Months; his Diet was old Cheefe, Milk, coarfe Bread, Small-Beer, and Whey: And his Historian tells us, he might have lived a good while longer, if he had not changed his Diet and Air, coming out of a clear, thin, free Air, into the thick Air of London, and after a constant, plain, and

\* See an Essay on the Gout and Bath Waters.

and homely Country Diet, being taken into a splendid Family, where he fed high, and drank plentifully of the best Wines, whereby the natural Functions of the Parts were overcharged, and the Habit of the whole Body quite disordered; upon which there could not but foon enfue a Dissolution. \* Dr. Lister mentions eight Perfons in the North of England, the youngeft of which was above 100 Years, and the eldest 140. He says, 'tis to be observed, that the Food of all this mountainous Country is exceedingly coarse. And certainly there is no Place in the World more likely to lengthen out Life than England, especially those Parts of it, that have a free open Air, and a gravelly and chalky Soil, if to due Exercife; Abstemiousness, and a plain simple Diet were added.

S. 7. I have + elsewhere offered to determine the Quantity of Food, sufficient to keep a Man of an ordinary Stature, following no laborious Employ-F ment,

\* See Abr. of Philof. Tranfast. by Lowth. + See the Effay of the Gout and Bath Waters.

ment, in due Plight, Health, and Vigour ; to wit, 8 Ounces of Flesh Meat, 12 of Bread, or vegetable Food, and about a Pint of Wine, or other generous Liquor in 24 Hours. But the Valetudinary, and those employed in sedentary Professions, or intellectual Studies, must lessen this Quantity, if they would preferve their Health, and the Freedom of their Spirits long. Studious and Sedentary Men must of Neceffity eat and drink a great deal lefs, than those very fame Men might do, were they engaged in an active Life. For as they want that Exercise that is necessary towards Concoction and Per-Spiration, and that their Nerves are more worn out by intellectual Studies, than even bodily Labour would wafte them; if, in any wife, they indulge Freedom of Living, their Juices must necessarily become viscid, and their Stomachs relaxed. He that would have a clear Head muft have a clean Stomach. The Neglect of which is the Caufe, why we fee fo many bypochondriacal, melancholy, and vapourish Gentlemen, among those of the long Robe; the only Remedy of which is Labour and Abstinence.

S. s. Moft

§. 8. Most of all the chronical Diseases, the Infirmities of old Age, and the short Periods of the Lives of Englishmen, are owing to Repletion. This is evident from hence; because Evacuation of one Kind or another is nine Parts of ten in their Remedy: For not only Cupping, Bleeding, Blistering, Issues, Purging, Vomiting, and Sweating, are manifest Evacuations, or Drains to draw out what has been superfluoufly taken down; but even Abstinence, Exercise, Alteratives, Cordials, Bitters, and Alexipharmicks, are but feveral means to dispose the gross Humours to be more readily evacuated by infenfible Perspiration; that new and well concocted Chyle, and fweet comminuted Juices, may take their Place to restore the Habit. And therefore it were much more cafy, as well as more fafe and effectual, to prevent than incur the Neceffity of fuch Evacuations. And any one may lose a Pound of Blood, take a Purge, or a Sweat; by dropping the great Meal, or abstaining from animal Food and strong Liquors, for four or five Days (in chronical Cafes) as effectually as by opening a Vein, swallowing a Dose of Pills, or taking a sudorifick Bolus.

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§. 9. I advise therefore all Gentlemen of a sedentary Life, and of learned Professions, to use as much Abstinence as poffibly they can, confiftent with the Prefervation of their Strength and Freedom of Spirits: Which ought to be done as foon as they find any Heaviness, Inquietudes, restless Nights, or Aversion to Application; either by lessening one half of their usual Quantity of animal Food and strong Liquors, 'till fuch Time as they regain their wonted Freedom and Indolence; or by living a due Time wholly upon vegetable Diet, such as Sago, Rice, Pudding, and the like, and drinking only a little Wine and Water. And if they would preferve their Health and Conftitution, and lengthen out their Days; they must either inviolably live low (or maigre, as the French call it) a Day or two in the Week; or once a Week, Fortnight, or Month at farthest, take some domestick Purge, which shall require neither Diet, nor keeping at Home; but may at once ftrengthen the Bowels, and discharge superfluous Humours. Of this Kind are a Dose (6 or 7) of the Scotch Pills; half a Dram of the Pilulæ Stomachicæ cum Gummi, with three or four Grains

Grains of Diagryd, mixt; half a Dram of the Pilulæ Ruffi; two Ounces of Hiera Piera, with one Dram of the Syrup of Buckthorn; two or three Ounces of Elixir Salutis; or (what I prefer before all these) this Preparation of Rhubarb:

Take the beft *Rhubarb* in Powder two Ounces and a half; Salt of *Worm*word a Dram; Orange Peel half an Ounce; grated Nutmeg two Scruples; Cochineal, half a Dram. Infufe 48 Hours by a warm Fire-fide, in a Quart of true Arrack. Strain it off, and put it in a well corked Bottle for Ufe.

Of this two or three Spoonfuls may be taken, two or three Times a Week, or at Pleasure, with great Safety and Benefit, without Interruption of Business, or Studies, and continued even to mature old Age, if found necessary. So true is old Verulam's Aphorism : \* Nihil magis conducit ad Sanitatem & Longævitatem

\* Nothing contributes more to Health and Long Life, than frequent Family Purges.

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tatem quam crebræ & domesticæ purgationes. And the Gentlemen of the long Robe, those of learned Professions and contemplative Studies, must of Necessity at last take Sir Charles Scarborough's Advice, as 'tis said, to the Dutchess of Portsmouth: Tou must eat less, or use more Exercise, or take Physick, or be sick.

S. 10. Those who have written about Health have given many Rules, whereby to know when any Perfon has exceeded at a Meal: I think, there needs but this fort one, which is; If any Man has eat or drank fo much, as renders him unfit for the Duties and Studies of his Profession (after an Hour's fitting quiet to carry on the Digeftion;) he has overdone. I mean only of those of learned Professions and studious Lives; for those of mechanical Employments must take the Body, the other Part of the compound, into Consideration. If tender People, and those of learned Professions would go by this Rule, there would be little Use for Physick or Physicians in chronical Cafes. Or if they would but eat only one Part of animal Food, at the great Meal, and make the other two of vegetable Food; and drink only Water, with

with a Spoonful of Wine, or clear fmall Beer; their Appetites would be a sufficient Rule to determine the Quantity of their Meat and Drink. But Variety of Dishes, the luxurious Artfulness of Cookery, and swallowing rich Wine after every Bit of Meat, so lengthen out the Appetite; the Fondness of Mothers, and the Cramming of Nurses have so ftretched the Capacities of Receiving, that there is no Security from the Appetite among the better Sort. 'Tis amazing to think how Men of Voluptuousness, Laziness, and poor Constitutions, should imagine themselves able to carry off Loads of high-feafoned Foods, and inflammatory Liquors, without Injury or Pain; when Men of mechanick Employments, and robust Constitutions, are scarcely able to live healthy and in Vigour to any great Age, on a fimple, low, and almost vegetable Diet.

S. 11. Since then our Appetites are deceitful, and Weight and Measure troublefome and fingular; we must have Recourse to a Rule independent of our Senfations, and free from unnecessary Trouble and Pain. To answer which, Iknow nothing but Eating and Drinking by our Eye:

Eye: that is, determining first of all either by Weight or Measure, or by particular Observation or Experiment, the Bulk, or Number of Mouthfuls of Flesh Meat, and the Number of Glaffes of ftrong Liquors, under which we are best; and then by our Eye determining an equal Quantity at all Times for the future: Thus the two Wings of a middling Pullet, or one Wing and both Legs; three Ribs of a middling Neck of Mutton, two middling Slices of a Leg or Shoulder, throwing away the Fat and the Skin; somewhat less of Beef, may be sufficient for Flesh Meat, at the great Meal. For we are so wifely contrived, that our Food need not be adjusted to mathematical Points: A little over or under will make no Difference in our Health. As for Pork, and all Kinds of Hog's Flesh, I think they ought to be forbidden valetudinary and studious People, as they were the Jews: They feed the foulest of any Creature, and their Juices are the rankest; their Substance the most furfeiting, and they are the most subject to cutaneous Diseases and Putrefaction, of any Creature; infomuch, that in the Time of a Plague, or any epidemical Distemper, they are universally destroyed by

by all wife Nations, as the Southern People do mad Dogs in the hot Months. The fame Cenfure I should pass upon all Fish. Most Fish live in a saltish Element, and come only into fresh Water Rivers, for the Quietness and Conveniency of bringing forth their young ones. This makes their Parts more closely united and harder of Digeftion. Befides, as I have before observed, they feed upon one another, and their Juices abound with a Salt that corrupts the Blood, and breeds chronical Diseases. And 'tis always obfervable, that those who live much on Fifb are infected with the Scurvy, cutaneous Eruptions, and the other Difeafes of a foul Blood. And every Body finds himfelf more thirfty and heavy than ufual after a full Meal of Fifb, let them be ever fo fresh; and is generally forced to have Recourse to Spirits and distilled Liquors to carry them off: So that it is become a Proverb, among those that live much upon them, that Brandy is Latin for Fish. Besides, that after a full Meal of Fish, even at Noon, one never fleeps fo found the enfuing Night; as is certain from conftant Observation. These few Hints may ferve the valetudinary Perfon, in a groß Manner, to judge by the

the Eye the Quantity of folid Flefh Meat he takes or ought to take down: For I judge the mention'd Quantities to be rather a little under than over eight Ounces. As to Broths, Soops, and Jellies, if they be ftrong, I account them equal in Nourishment and harder to digeft than the fame Weight of folid Flesh Meat; and three or four common Spoonfuls, at most, make an Ounce in Weight in Liquids; and about double the Number of Bits commonly swallowed at once make the fame Weight in folid Flesh Meat; for Exactness is not here requisite.

S. 12. Drink is the other Part of our Food. The common Drink here in England is either Water, Malt-Liquor, or Wine, or Mixtures of these; for Cyder and Perry are drank but in few Places, and rather for Pleasure and Variety than common Use. Without all, peradventure, Water was the primitive, original Beverage, as it is the only Simple Fluid (for there are but three more in Nature, Mercury, Light, and Air, none of which is fit for human Drink) fitted for diluting, moistening and cooling ; the Ends of Drink appointed by Nature. And happy had it been for the Race of Mankind/other mixt 2.21

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mixt and artificial Liquors had never been invented. It has been an agreeable Appearance to me to observe, with what Freshness and Vigour, those who, tho' eating freely of Flesh Meat, yet drank nothing but this Element, have lived in Health, Indolence, and Chearfulness, to a great Age. Water alone is sufficient and effectual for all the Purposes of human Wants in Drink, Strong Liquors were never defigued for common Use: They were formerly kept (here in England) as other Medicines are, in Apothecaries Shops, and prefcribed by Physicians, as they do Diascordium and Venice-Treacle; to refresh the Weary, to strengthen the Weak, to give Courage to the Faint-hearted, and raise the Lowspirited. And it were as just and reason. able to see Men (and if they go on, it is not impossible I may hear of it, fince Laudanum is already taken into Feasts and Entertainments) sit down to a Dish of Venice-Treacle, or Sir Walter Rawleigh's Confection, with a Bottle of Hysterick Cordial, as to a Dish of Crawfish Soop, an Ox-Cheek or Venison-Pasty, with a Bottle of Hermitage, or Tockay, or which some prefer to either of them, a Bowl of PUNCH. Wine G 2 marchel is

is now become as common as Water; and the better Sort scarce ever dilute their Food with any other Liquor. And we see, by daily Experience, that (as natural Caufes will always produce their proper Effects) their Blood becomes inflamed into Gaut, Stone, and Rheumatism, raging Fevers, Pleurisies, Small Pox, or Measles; their Passions are enraged into Quarrals, Murder, and Blafphemy; their Juices are dried up; and their Solids fcorch'd and fhrivel'd. Thofe whofe Appetite and Digeftion is good and entire, never want strong Liquors to supply Spirits : Such Spirits are too volatile and fugitive for any folid or useful Purposes in Life. Two Ounces of Flesh Meat, well digested, beget a greater Stock of more durable and useful Spirits, than ten Times as much ftrong Liquors, which nothing but Luxury and Concupiscence makes neceffary. Happy those, whom their Parents, their natural Aversion to ftrong Liquors, or whom kind Providence among the better Sort, has brought to the Age of Maturity and Discretion, without dealing in, or defiring any great Quantity of strong Liquors: Their Paffions have been calmer, their Senfations more

more exquisite, their Appetites less unruly, and their Health more uninterrupted, than any other natural Caufe could have produced. And thrice happy they, who continue this Course to their last Minutes. Nothing is more ridiculous than the common Plea for continuing in drinking on, large Quantities of Spirituous Liquors; viz. Because they have been accustomed fo to do, and they think it dangerous to leave it off, all of a fudden. It were as reasonable for him that is fallen into the Fire or Water to lie there, because of the Danger of removing him fuddenly. For neither *Element* will deftroy him more certainly, before his Time, than wallowing in strong Liquors. If the Quantity of ftrong Liquors they have been accuftomed to, may be supposed prejudicial to their Health, or to introduce noxious Humours into the Habit; the fooner a Stop be put to it, the better. No Man is afraid to forbear strong Liquors in an acute Distemper, what Quantity foever he might have drank in his Health: And yet any fudden Change of the Humours would not only be more dangerous then, than at any other Time; but also would more readily happen and come to pass, in fuch critical Cafes. For the whole System of

of the Fluids, being in a Fermentation' small Changes or Errors then, would not only be more fatal, but more plain and obvious. And if a Perfon be in Hazard by fuch a sudden Alteration, he cannot live long by taking down fo much Poison. But the Matter of Fact is false and groundlefs. For I have known and observed constant good Effects from leaving off suddenly great Quantities of Wine and Flesh Meats too, by those long accustomed to both, am ready to name the Perfons, and never observed any ill Consequence from it in any Cafe whatfoever. Those whose Constitutions have been quite broken, and running into Dissolution, have lived longer, and been lefs pained in Sickness by so doing : And those who have had a Fund in Nature to last longer, have grown better, and attained their End by it. I allow every Man, that has been accustomed to drink Wine, or strong Liquors, a Pint in 24 Hours: And I am well fatisfied, that Quantity is sufficient for Health, let their Cuftom have been what it will. Their Spirits may indeed flag and fink a little at first, for Want of introduced Quick-25 lime and Fire. But Low-spiritedness, in such a Case, I count no Disease. And bearing

bearing it for fome Time, is bountifully recompenced by the Health, Indolence, and Freedom of Spirits, they afterwards enjoy: Not taking into Confideration their being refcued from the Tyranny of fo immoral and mifchievous a Habit. It may be fufficient for those who are tender, studious, or contemplative, to drink three Glasses of Water with a Spoonful of Wine at the great Meal. And as Sir W. Temple has it, One for your Self, another for your Friends, a third for good Humour, and a fourth for your Enemies, are more than fufficient after it.

S. 13. A great Missike committed in this Affair is, that most People think the only Remedy for Gluttony is Drunkenmess, or that the Cure of a Surfeit of Meat is a Surfeit of Wine: Than which nothing can be more false, or contrary to Nature; for, 'tis lighting, as the Saying is, the Candle at both Ends. For, first of all, Wine and all other strong Liquors are as hard to digest, and require as much Labour of the concostive Powers, as strong Food itself. This is not only evident with Respect to People of weak Stomachs, but also from hence, that healthy

thy People who drink only Water, or weak small Beer, shall be able to eat and digeft almost double of what they could, did they drink strong Liquors at their Meals, as every one that pleafes may experience. Water is the only universal Diffolvent or Menstruum, and the most certain Diluter of all Bodies proper for Food; tho' there are a great many that spirituous Liquors not only will not diffolve, but will harden, and make more undigestible; especially the Salts of Bodies, wherein their active Qualities, that is, those which can do most Harm to buman Constitutions, confist. And I have known Men of weak and tender Constitutions, who could neither eat nor digest upon drinking of Wine, who, by drinking at Meals common Water heated, have recovered their Appetites and Digestion, have thriven and grown plump. 'Tis true strong Liquors, by their Heat and Stimulation on the Organs of Concoction, by encreasing the Velocity of the Motion of the Fluids, and thereby quickening the other animal Functions, will carry off the Load that lies upon the Stomach, with more present Chearfulness : Yet, besides the future Damages of such a Quantity of Wine, to the Stomach and

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and to the Fluids, by its Heat and Inflammation, the Food is hurried into the Habit, unconcocted, and lays a Foundation for a Fever, a Fit of the Cholick, or fome chronical Difease.

S. 14. Another Mistake I shall obferve, is the extreme Fondness Persons of the better Sort here in England, have lately run into, for the ftrong and high Country Wines. I can think of no Reason for this, but the very honest one the Vulgar give for drinking Brandy : that they get sooner drunk on it. For furely the middling lighter Wines, inflame the animal Juices lefs, go more eafily off the Stomach, and afford more Room for long Conversation and Chearfulness. Excess in them, gives lefs Pain, and is fooner remedied. Fut there are Degrees in this Matter. \* Nemo repente fuit turpissimus. They begin with the weaker Wines; these by Use and Habit will not do, they leave the Stomach fick and mawkifb, they must fly to ftronger Wine, and ftronger still, and run the + Climax, through Brandy to Barbadoes Waters, and double diftill'd Spirits, 'till at last they can find nothing H hot

\* No Body becomes extremely bad all at once. † Rife bigher by Degrees.

hot enough for them. People who have any Regard for their Health and Lives, ought to tremble at the first Cravings, for such poysonous Liquors. Strong Waters should never be taken but by the Direction of a Physician, or in the Agonies of Death. For when Perfons arrive at that State, that they become necessary to their Ease and Freedom of Spirits; they may be justly reckoned among the Dead, both as to the short Time they have to live, and the little Use they can be of, either to themselves or Mankind. I speak not here of those who are under an actual Fit of the Gout, or Cholick in the Stomach. (We must not die for fear of dying.) Nor am I recommending sour Verjuice or unripe Wines. But I cannot help being well fatisfied, both from Reason and Experience, that the light Wines, of a moderate Strength, due Age, and full Maturity, are much preferable for Chearfulness and Converfation, much more wholfome for human Constitutions, and much more proper for Digestion than the hot and strong Wines. The rich, ftrong, and heavy Wines ought never to be tasted without a sufficient Dilution of Water; at least they should beused, like Brandy or Spirits, for a Cordial

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dial \*. Ad fummum tria pocula sume. Whatsoever is more cometh of Sin, and must be diluted with the Waters of Repentance.

S. 15. I have no Intention here to discourage the innocent Means of enlivening Conversation, promoting Friendship, comforting the forrowful Heart, and raifing the drooping Spirits, by the cheerful Cup and the focial Repast. Perhaps I may like the harmless Frolick, the warm Reception of a Friend, and even the + Dulce Furere itself, more than I ought : Perfons fober in the main, will receive little Prejudice from fuch a Fillip, when the Occasions happen but feldom, and especially when they make it up, by a gteater Degree of Abstinence afterwards. But a Sot is the lowest Character in Life. Did only the Profligate, the Scoundrel, the Abandon'd, run into these Excesses, it were in vain to endeavour to reclam them, as it were, to stop a Tempest, or calm a Storm. But now that the Vice is become Epidemical, fince it has got not only among Mechanicks and Tradefmen, but among Persons of the brightest Ge-H 2 nius,

\* i.e. At most to take but three small Glasses of such. + Horat. i. c. An agreeable Frolick or Extravagance.

nius, the fineft Tafte, and the most accomplish'd Parts; and (oh that I could give my Confcience the Lye, in mentioning them!) even among the first and least fallen Part of the Creation itself, and those of them too, of the most elegant Parts, and the strictest Virtue otherwife; and which is ftill the moft furprifing of all, even those too, who are in all other Respects blameless. Since I fay the Cafe is fo, it will not be amifs to shew, to the Evidence of a Demonstration, the Folly as well as the Fruitlesinels of fuch a Courfe. A Fit of the Cholick, or of the Vapours, J Family-Misfortunes, a cafual Disappointment, the Death of a Child, or of a Friend, with the Affistance of the Nurse, the Midwife, and the next Neighbour, often give Rife and become the weighty Caufes of fo fatal an Effect. A little Lowness regiures Drops, which pass readily down under the Notion of Physick; Drops beget Drams, and Drams beget more Drams, 'till they come to be without Weight and without Measure; fo that at last the miserable Creature suffers a true Martyrdom, between its natural Modesty, the great Neceflity of concealing its Cravings, and the still greater one of getting them fatisfied fome bow. Higher and more fevere

fevere Fits of Hystericks, Tremors, and Convulsions, begot by these, bring forth farther Necessity, upon Necessity, of Drops, Dramps, and Gills, 'till at last a kind Dropsy, nervous Convulsions, a nervous Attrophy, or a colloquative Dirrhaa, if not a Fever, or a Frenzy, set the poor Soul free. It has very often raised in me the most melancholy Reflexions, to fee even the Virtuous, and the Senfible, bound in fuch Chains and Fetters, as nothing less than omnipotent Grace, or the unrelenting Grave could release them: They were deaf to Reason and Medicine, to their own Experience, and even to the express Words of Scripture, that fays, the Drunkard Shall not inherit the Kingdom of Heaven. Did this bewitching Poison actually cure or relieve them, from Time to Time; fomething might be faid to extenuate the Folly and Frenzy of fuch a Courfe. But, on the contrary, it heightens and enrages all their Symptoms and Sufferings, ever afterwards, excepting the few Moments immediately after taking it down; and every Dram begets the Neeeffity of two more, to cure the ill Effects of the first; and one Minutes Indolence they purchase with many Hours of greater Pain and Misery; befides the making the Malady,

lady, more incurable. Low-spiritedness in itself is no Disease; besides that there are Remedies in Art that will always relieve it, fo long as there is any Oil remaining in the Lamp; and 'tis in vain to try to raise the Dead, Exercise, Abstinence, and ptoper Evacuations, with Time and Patience, will continually make it tolerable, very often they will perfectly cure it. The running into Drams is giving up the whole at once; for neither Laudanum nor Arsenick will kill more certainly, although more quickly. The Pretence of its being Phylick, or a present Remedy, is trifling. Cordials of any Kind, even out of the Apothecaries Shops, are but Reprieves for a Time, to gain a Respite, 'till proper and extirpating Remedies can take Place; and are never to be used twice, the one immediately after the other, but in the laft Neceffity. And I can honeftly fay, I never failed of relieving, fo as to make Life tolerable, vapourisb, bysterical, or hypochondriacal Persons, who would be governed in their Diet, by the Use of other proper Means, if their was a Fund in Life, and no incurable Disease, complicated with Lownefs. Thus much the Weight of the Subject forced from me more

and LONGLIFE. 55 more than this, its *Difagreeablenefs* hinders me to fay.

CG. Ramanne Purnales. And P

S. 16. Next to Drams, no Liquor deferves more to be fligmatized and banished the Repasts of the Tender, Valetudinary, and Studious, than PUNCH. 'Tis a Composition of such Parts, as not one of them is falutary, or kindly to fuch Constitutions, except the pure Element in it. The principal Ingredient is, Rum, Arrack, Brandy, or Malt Spirits, as they are called, all of them raifed by the Fire, from the fermented Juices of Plants, brought from Southern Countries, or which have longest born the Heat of the Sun in our own Climate: And 'tis observable, that every Thing that has past the Fire, so that it has had due Time to divide and penetrate its Parts, as far as it possibly can, retains a caustick, corrosive, and burning Quality ever afterwards. This is evident from the fiery and burning Touch and Taste of new-drawn Spirits, as also from the burning of Lime-stone, which, tho' extinguifh'd by Boiling Water, does ever after retain its heating and drying Quality, as appears from the great Use of Lime-Water, in drying up all humid Sores, when given inwardly by itself, or compounded with form
with *fudorifick* Woods and Roots, and from its Success in outward Applications for the same Purposes. And tho' Time may in some Measure get the better of this, in its sensible and obvious Operations; yet fince Water is a groffer Body than Fire, or Flame, it never can penetrate it so far as quite to extinguish its inmost Heat ; especially if we confider, that Spirits are but an Accumulation of fine Salts and light Oil, compacted together into the smallest Volume; the first whereof is so hard and folid, as naturally to retain their Heat the longest, into which Water cannot enter; the other, to wit the Oil, is fo inflamable, that it most readily receives Heat and Fire, and defends the Salts from the Power of the Water over them. And in the continued Distillation of Spirits, this Action of the Fire is fo ftrong, as to reduce them to liquid Flames at last, which will of themselves evaporate in visible Flames and Fumes. The other principal Part of the Composition is the Juice of Oranges and Lemons. And if we confider, that a Lemon or Orange could never be transported half Seas over to us, without rotting or spoiling, if gathered when wholly ripe, we should have no great Opinion of their Juices. Every Spanish or Portugal Merchant can inform

form us, that they must be gathered green, or at least a Month before they are ripe, else they are not fit to be sent beyond the Seas. The Sea-Air, and their being shut up close, gives them that gol-den yellow Colour, we so much admire. The Juice of a Crab Apple, of unripe Grapes, or Goose-berries, or even good Juice of Sorrel, would come up at least to their Virtue of extinguishing the Heat of Spirits, if not to their Flavour. And how kindly a Guest fuch Juices would be to the fine Fibres of weak Stomachs and Bowels, I leave every one to judge. The Truth is, all fermenting Juices, fuch as these eminently are, must be highly injurious to weak Constitutions; for meeting with the Crudities in the Bowels, they must raise a new Battle and Colluctation there, and fo must blow up the whole Cavities of the human Body, with acrid Fumes and Vapours, the great and fore Enemy of fuch Bowels. And in the West Indies, where from the Necessity of drinking much, because of the Violence of the Heat, and from the Want of proper Liquors there, they are forced to drink much PUNCH, tho' Lemons and Oranges be in their full Perfection, they are univerfally afflicted with Nervous and Mortal dry-Belly-aches, Palfies, Cramps,

Cramps, and Convulsions; which cut them off in a few Days, entirely owing to this poisonous Mixture.

The Bath-Water, is the only Remedy in fuch Cafes, whither they all haften, if they can get thither alive. And here I have been inform'd of this Fact, by Men of the Profession, as well as their Patients, who univerfally ascrib'd them to their drinking of PUNCH and Spirituous Liquors. If Acids must be had, without all peradventure, the Vinous ones, are the best and fafest. The Romans, tho' they had the vegetable Acids in perfection, made very little Ufe of them but in Cookery, where the Quantity of the Poison was fo small, as not to do sufficient Harm, to forbid their using them for the Sake of the exquisite Relish they gave their Sauces; and the conftant Drink of the lower Souldiery, was Vinegar and Water, which they found of excellent Ufe, both as it prevented Fevers, Plagues and Putrefaction, and also as it gave an Energy to the unactive Element, and hindred it from lodging in the Body. Hence also the great Use of Oxymel and Oxycrate, (that is, of Vinegar with Honey and with Water) among all the antient Physicians. And indeed, whenever they

they prescrib'd an Acid, they very prudently join'd a Corrective with it, both to promote its good, and to prevent it's bad Effects. The two remaining Ingredients, are Sugar and Water; and these I will give up to the Punch-Drinkers, and allow them all the Benefit of them, they can bring to this Composition: Yet it will still have Malignity fufficient remaining, to be held in Deteftation, (at least for any great Use, or in any great Quantity for some Poisons are so only by their Quantity) by those tender and valetudinary Persons, who value Health and Life. The Strong, the Voluptuous, and the Abandoned, need no Advice, at least they will take none. I could never fee any Temptation, for any one in their Senfes, to indulge in this Heathenish Liquor, but that it makes it's Votaries the fooneft, and all of a sudden the deepest Drunk holds them longest in the Fit, and deprives them the most entirely of the Use. of their Intellectual Faculties, and Bodily Organs, of any Liquor whatfoever. It is likest Opium, both in it's Nature, and in the Manner of it's Operation, and nearest Arsenick in it's deleterious and poisonous Qualities: And fo I leave it to them.

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Who

# O An Essar of HEALTH

Who knowing this, will yet drink on and die.

S. 17. As to Malt Liquors, they are not much in Use, excepting small Beer, with any but. Mechanicks and Fox-hunters. The French very justly call them Barley-Soop. I am well fatisfied, a weak Stomach can as readily and with lefs pain, digeft Pork, and Peafe Soop, as Yorkshire or Nottingham Ale. They make excellent Birdlime, and when simmer'd fome time over a gentle Fire, make the most sticking, and the best Plaister, for old Strains that can be contriv'd. Even the *small-Beer* that is commonly drank at London, if it be not well Boiled, very Clear, and of a due Age, must be hurtful to Perfons of weak Nerves, and flow Digestion. For fermenting again in the alimentary Channels, it will fill the whole Cavities of the Body with Windy Fumes and Vapours, which will at Length play odd Pranks in a crafy Constitution. In Fine, the Veletudinary, Studious, and Contemplative, must be contented with a Pint of middling light Wine a Day, one half with, and the other without Water.

S. 18. Since the Time foreign Luxury has been brought to its Perfection here, there

there are a kind of Liquors in Ufe among the better Sort, which fome great Doctors have Condemn'd by Bell, Book, and Candle, and others have as extravagantly commended: I mean, Coffee, Tea, and Chocolate. For my own Part, I take all their Virtue to confift in Custom, and all their Harm in Excess. As to Coffee, it is a meer Calx, or a Kind of burnt Horse Bean, but lighter on the Stomach, and of somewhat a better Flavour. The Turks use it, and Opium inftead of Brandy. But the Plea that some make for running into Excels in it, from this Mahometan Custom, is altogether weak and groundless; for those that do fo there, fuffer by it, as we do here: And those that Debauch in it, turn Stupid, Feeble, and Paralitick by it, especially when the join Opium with it, as they frequently do, as those who wallow in these do here, and are as much Defpis'd and Expos'd by ferious Perfons, as our Topers and Brandy-fwillers are here. A Dish or two of Coffee, with a little Milk to soften it, in raw or damp Weather, or on a Waterisb and Flegmatick Stomach, is not only innocent, but a present Relief. But 'tis as ridiculous, and perhaps more hurtful, at least in thin and dry Habits, to dabble in it two or three

three Times every Day, as it would be for fuch to drink nothing but scalding Lime-Water. There are two Kinds of Tea in Use, Green and Bohea. Mr. Cunningham, who liv'd feveral Years in China, a very learned and accurate Perfon \* informs us, that they are both gathered from the fame Shrub, but at different Seafons of the Year; and that the Bohea is gather'd in the Spring, and is dried in the Sun, the Green at the Fire. But I suspect, and not without Authority, that, befides these Differences in drying, some Infusion of another Plant or Earth (perhaps fuch a one as that of Japan Earth, or Catechu) must be poured on some sorts of Bohea Tea, to give it the Softness, Flavour, and Heaviness on the Stomach it has, whereby it becomes a meer Drug, and wants the natural Simplicity of Green Tea, which when light, and drank neither too Strong nor too Hot, I take to be a very proper Diluent, when soften'd with a little Milk, to cleanse the alimentary Paffages, and wash off the Scorbutick and Urinous Salts, for a Breakfast, to those who live full and free; as also it, or Tea made of a flic'd Orange or Lemon, is one of the best promoters of Digestion after

\* Vide Phil. Collect.

after a full Meal, or when one is a dry between Meals, and much more fafe and effectual than Drams or ftrong Cordials, which are commonly used for that Purpose. Some Persons of weak tender Nerves, fall into Lowness and Trembling upon using either of these Liquors with any Freedom, from their too great Quantity, or their Irritation on the tender and delicate Fibres of the Stomach. Such ought carefully to avoid and abstain from them, as from Drams and Drops. But I can never be of their Opinion who afcribe the Frequency of Scurvy, Vapours, Lowspiritedness, and nervous Distempers now, to what they were in the Days of our Forefathers, to the Cuftom of Drinking more frequently and freely of these foreign Infusions. The Cause is not adequate to the Effect; nor indeed has any Analogy to, or Connexion with it. We know that warm Water, will most of any Thing promote and affift Digestion in weak Stomachs and tender Nerves. And by this alone I have feen several such Persons recover to a Miracle, when cold Mineral Waters, Bitters, Cordials and Drams, have done rather Hurt than Good. And Tea is but an Infusion in Water of an innocent Plant : Innocent, I say, because we find 1.0.1111 by

by its Tafte it has neither poisonous, deletorious nor acrimonious Qualities; and we are certain from it's Use in the Countries it comes from, (which are larger than most of Europe) that they receive no Damage from it, but on the contrary, that it promotes both Digestion and Perspiration. The Argument from its relaxing the Coats of the Stomach and Bowels by its Heat, is of no force. For unlefs it be drunk much hotter than the Blood itself, it can do no hurt that way: And we see the Bath Guides, who dabble in Water almost as hot as Tea is ever drunk, a great Part of the Day, and for one half of the Year at least, are no ways injured by it; except when they drink strong Liquors, too freely to quench the Thrift it raises. However, I should advise those who drink Tea plentifully, not to drink it much hotter than bloodwarm; whereby they will receive all its Benefit, and be secure against all the Harm it can possibly do. As to Chocolate, I am of opinion, it is too hot and heavy, for valetudinary Perfons; and those of weak Nerves. I have before observed, that Nuts pass through the alimentary Passages untouched; and tho' they may part with fome of their more volatileParticles, yet, I doubt if they can afford much

much nourishment to Perfons of weak Digestions. Some fay, Chocolate gives them an Appetite; the meaning of which may be, that when they have a good Appetite for their Breakfast; it is not unlikely it may continue all the Day: But I am of opinion, 'tis a false and hysterical Appetite, fuch as fharp Wines, and fharp Humours in the Stomach give. For fat and oily Things, fuch as all Nuts are, are hard to digeft, and lie long in the Stomach, for reafons I have already explain'd: It may lubricate and sheath against the Irritation of falt and sharp Humours in the Bowels, and therefore may be good in the Cholicks and Gravel of those of ftrong and ftout Digeftion; but can never be good Food for those of weak Nerves and poor Constitutions. Nothing is fo light and eafy to the Stomach, most certainly, as the Farinaceous or mealy Vegetables; fuch as Peafe, Beans, Millet, Oats, Barly, Rye, Wheat, Sago, Rice, Potatoes, and the like; of fome of which on Milk or Water, I should ever advise the Valetudinary, and those of weak Nerves, to make their two leffer or secondary Meals. Tobacco is another foreign Weed, much in use here in Britain; though not among the best, yet among the middle and inferiour Ranks of the People : For those of gross and K Phleg-

Phlegmatick Conflitutions, who abound in Serous and watry Humours, who are subject to Coughs, Catarrhs, and asthmatick Indispositions; who labour under violent Tooth-achs, or are troubled with Rheums in their Eyes; who have cold and waterifb Stomachs, and live fully and freely, both Smoaking and Chewing is a very beneficial Evacuation, drawing off Superfluous Humours, Crudities, and cold Phlegm, provided they carefully avoid fwallowing the Smoak, or the Juice; and drink nothing, but rinfe their Mouths with fome watry Liquor after it, and spititout. But tothin, meagre, and hectick Conftitutions, it is highly pernicious, and destructive; heating their Blood, drying their Solids, and defrauding the Food of that Saliva, which is so absolutely necessary towards Concoction. Snuffing the Leaves, or the groffer Cut in a Morning, will readily promote a Flux of Rheum by the Glands of the Nofe; and will be of good use, to clear the Head and the Eyes. But the ridiculous Custom, of perpetually fucking in fophisticated Powders, and other Foreign Drugs sold for Snuff, cannot but be prejudicial both to the Eyes, and even to the Stomach; at least, if we believe the Reports of those who say they have brought it up from thence.

S. 19. I

S. 19. I have endeavour'd to affift the Reader, with some Observations and Reflexions, to enable him towards determining the Quantity and Quality of his folid Food, neceffary either to prevent or cure chronical Distempers. It may not be amis, here to make some Refiexions also on the fit Proportion of Drink proper for that purpose: As the Food is, fo must that be, various and uncertain, with regard to the Age, Size, Labour, and Constitution of the Person, and the Season of the Year. I have offer'd to limit the Quantity of strong Liquors, fitteft to preferve Health and lengthen out Life in general, to a Pound or Pint, and that of the middling Kind. But the Sickly, the Aged, and those who would cure the chronical Diftemper, must even abate of this Quantity. The only remaining Question, is about the Quantity of Water, or watry Liquors, proper to be mix'd with this strong Liquor, or drunk by it self : For in this also, though in itself harmless and innocent, yet there is a Choice and Preference; because, too much Water will only ferve to distend and swell up the Vessels, and wash off some of the finer and more nutritious parts of the Chyle; and too little, will not be fufficient to dilute the folid Food, or to make the Chyle thin K 2

and

and fluid enough, to circulate through the fine and small Vessels. I will suppose my Patient to deal in no other Cookery, but Roasting and Boiling; and that he cats only fresh Meat. Boiling animal Food, draws more of the rank, strong, Juices from it, and leaves it less nutritive, more diluted, lighter and easier of Digestion. Roasting on the other hand, leaves it fuller of the strong nutritive Juices, barder to digeft, and wanting more Dilution: Those therefore, who must have full grown and adult animal Food, ought to cat it boiled, and well boiled too; if their Digeftion be but weak. They who can live on young animal Food, (which is best for weak Stomachs,) ought to cat it roasted, but must lessen the Quantity, in respect of the fame Food boiled; but they must dilute it more: For as roaft Meat has a better Flavour, and more Nourishment, fo it lies less flabby on the Stomach, and docs not fo readily flip from, or disappoint the Action of Grinding, which has some share in Digestions, both primary and subsequent: But it will want more Dilution, with a watry Menstruum, to soften its more rigid and crisp Fibres. If therefore, the whole Weight of the folid Food, in twenty four Hours, be supposed a Pound and a Half, then

then three Pounds of Liquor, that is one of ftrong Liquor, and two of fome aqueous Fluid, will in a Medium, be fufficient to dilute it abundantly. For thus there will be two Particles of a Fluid, to one folid Particle; which abating the folid Parts thrown off by Siege, will fuffice to make the Chyle abundantly thin, to circulate through all the fine Channels, whose Diameters are larger than that of the folid Particle, the principal End of its Thinness and Fluidity. More than this, would but distend the Veffels, and carry off the finer Parts of the Chyle by Water or Perspiration; for we constantly find both thefe encreased by an overdose of Fluids: And less would not fufficiently dilute their Food. I should advife those therefore, who have weak Stomachs, or relaxed Nerves, to mix their Wine with the above-named quantity of boiled Water, with a burnt Cruft, at least Blood-warm, and to drink it after their Meal is over, if they can do it with eafe, rather than in the Time of Eating: For the more spirituous and most nourishing Parts of the Food, will readily run off, without much Dilution; and it will be the groffer and harder remaining Part, that will want it most. And if some time after their great Meal, they find their Stomach loaded, the Food rifing, hard Belching, Heart\_

Heart-burning, or much Tawning, to swill down and dilute it with milk-warm, light Green Tea, or warm Water, rather than to run to Drams and Cordials, the usual, but most pernicious Antidote in such Cafes. And upon great and heavy Oppresson, much trouble and great struggle in the Digeftion, to have recourfe to Carduus or Camomile-Flower Tea, to bring it up, rather than to trefpass in these poisonous and caustick Liquors, which, though they may at prefent leffen the suffering, and hurry on the first-Concoction; yet make them dearly pay for it, when the unconcocted load of Crudities comes to pass by Siege or Per-Spiration, either in Cholicks, Gripes, Vapours, and Oppression of Spirits; or by a general Disability and Rheumatick Stitches and Pains.

§. 20. Upon the Head of Cordials mentioned in one of the forgoing Articles, I cannot forbear fetting down one, whose Virtues and Efficacy I have long tried, and have never found it fail, when any thing would fucceed: And I recommend it (to be kept by them) to all those, who are liable to low Spirits, Faintings, Oppressions, Sickness at the Stomach, Head-achs, and Vapours; and also to those who wanting to exert themselves

in

in any business of consequence, need a Flow of Spirits for some short time, for that purpose; or indeed upon any sudden accident arising of his own accord, out of the Habit itself; I think it a kind of an universal Remedy, but never to be used, but upon such occasions; because, Use may weaken it, if not extinguish its Vertue. 'Tis thus,

Take of fimple Chamomile-Flower Water, fix Ounces; Compound Gentian, and Worm-wood Waters, each an Ounce and a Half; Compound Spirit of Lavender, sal Volatile, Tincture of Castor, and Gum Ammoniack diffolved in some simple Water, each two Drams; Tincture of Snakeweed, and Tincture of the Species Diambræ, each a Dram; the Chymical Oils of Lavender, Juniper, and Nutmeg, each ten Drops, mixed with a Bit of the Yolk of an Egg, to make the whole uniform; Affafetida and Campbire in a Rag, each half a Dram: But these may be left out by those to whom they are difagreeable.

Two, three or four Spoonfuls of this is a prefent Help in fuch Cafes. It will keep fix Months good.

General

General Rules for Health and Long Life, drawn from the Head of MEAT and DRINK.

I. THE great Rule of Eating and Drinking for Health, is to adjust the Quality and Quantity of our Food to our digestive Powers. The Quality may be judged by the following Rules.

2. Those Substances that confist of the groffest Parts are hardest of Digestion; the constituent Particles coming into more Contracts, and consequently adhering more firmly.

3. These Substances whose Parts are brought together with the greatest Force, cohere proportionably closer, than those that come together with a smaller \* Momentum.

4. Salts are very hard to be feparated, becaufe united by plain Surfaces, under which they are always comprehended. And in the laft Stages of the Circulation, where it is flower, fboot readily into larger Clusters, and fo are harder to be driven out of the Habit. From thefe we may eafily infer, that (1.) Those Vegetables and Animals that come foonest to their full Growth are easier of Digestion, than those that are longer of attaining the

the State of Maturity. (2.) Those that are the *smallest* of their Kind, than the biggest. (3.) Those of a dry, fleshy and fibrous Substance, than the oily, fat, and glutinous. (4.) Those of a white Substance, than those of a more flaming Co. lour. (s.) Those of a mild, soft, and fweet, than those of a strong, poignant, aromatical, or hot Taste. (6.) Land-Animals, than Sea-Animals. (7.) Those Animals that live on Vegetables, or other light Food, than those that live on other Animals, or hard and heavy Food. (8.) The Nourishment Nature has appointed for young Animals, is lighter than the Flesh of these Animals themselves,

5. All cramm'd Poultry and stall-fed Cattle, and even Vegetables forced by hot Beds, tend more to Putrefaction, and confequently are more unfit for human Food, than those brought up in the natural Manner.

6. Plain-dressed Food is cafier of Digestion, than what is pickled, salted, baked, smoaked, or any Way high-seasoned.

7. Strong Men, those of large Stature, and much Labour, and the Inhabitants of a cold and clear Air, require more Food than Women, Children, the Weak, the Sedentary, and the Aged, and those that live in a warmer Climate, or grosser Air. L 8. Nothing

8. Nothing conduces more to Health and Long Life, than Abstinence and plain Food, with due Labour.

9. Where *Exercife* is wanting (as in *ftudious* Perfons) there is the greater Need of *Abstinence*; for these, 8 *Ounces* of *animal*, and 12 of *vegetable* Food in 24 Hours, is fufficient.

10. Most chronical Diseases proceed from Repletion; as appears from their being cured by Evacuation.

11. Tender Perfons ought to use as much Abstinence, as they possibly can: And, if they neglect it, their only Relief is from frequent stomachick and Family-Purges.

12. A plain Rule for judging of the Quantity is, not to eat so much as indisposes for Business.

13. A more *fensible* and *readier* one is, first by *Experience* to find out how much fits one, so as to be *lightfome* and *healthy* under it, and ever after to judge the *Quantity* by the *Eye*; *Nature* requiring therein no *mathematical* Exactness.

14. Pork and Fish are not fit Food for the Studious and the Tender.

15. Water is the most natural and wholesome of all Drinks, quickens the Appetite, and strengthens the Digestion most.

16. Strong

16. Strong and *spirituous* Liquors freely indulged, become a certain tho' a flow *Poison*.

17. There is no Danger in leaving them off all at once; the Plea for continuing them being false and groundless.

18. The best ftrong Liquor for weak and studious People is Wine; the best Quantity, a Pint in 24 Hours; and the best Way of drinking it is, three Glasses with, and three without Water.

19. The middling, light Wines, fully ripe, and of a due Age, are preferable to the strong Wines.

20. Strong Liquors do not prevent the Mischiefs of a Surfeit, nor carry it off, so safely as Water, tho' they seem to give present Relief.

21. The frequent Use of Spirits in Drams and Cordials, is so far from curing Low-spiritedness, that it increases it, and brings on more fatal Disorders.

22. And even when they are diluted with Water, in PUNCH, the Quantity taken down at once, and the Addition of a corroding *Acid*, produce equally *permicious* Effects in human Conffitutions. 23. Malt Liquors (excepting clear finall

Beer, of a due Age) are extremely hurtful to tender and studious Persons.

L 2 24. Coffee

24. Coffee is only an Infusion of a kind of Calx, and has the Effects of an absorbent Medicine; and so may be of some Service to watry Stomachs, if moderately used.

25. Green-Tea is a good Diluter of the Food, as it is an agreeable, warm *Small* Liquor: But Bohea is too heavy for the Stomach.

26. Chocolate (as all Nuts elfe) is fo heavy and hard of Digestion, that it can never be fit for the Stomachs of weak and tender People.

27. Smoaking Tobacco, without drinking after it, Chewing or Snuffing the großs cut Leaf in the Morning, are useful to flegmatick Constitutions; but to dry and lean Habits they are permicious. Snuff is just good for nothing at all.

28. The proper Quantity of watry Liquors in 24 Hours, to those that live re gularly, is two Pints, (as that of strong Liquor is one Pint) which is best drank warm, and rather after than in the Time of Eating.

29. The Form of a Cordial fit to be kept in private Families, as a present and certain Relief, for sudden Qualms, Faintnefs, Sickness, or low Spirits; but never to be taken but in Case of Necessity.

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# CHAP. III.

# Of SLEEPING and WATCHING.

S. I. THE next general Head in order, is our Sleeping and Watching. All Bodies by their Actions upon one another, and by the Action of the circumambient Bodies, are liable to be impaired and wasted : And all animal Bodies, from an active and felf-moving Principle within them, as well as from the Rubs of Bodies without them, are conftantly throwing off fome of their fuperfluous and decayed Parts; fo that animal Bodies, are in a perpetual Flux. To reftore this Decay and Wasting of animal Bodies, Nature has wifely made alternate Perods of Labour and Rest. Sleeping and Watching, necessary to our Being; the one for the active Employments of Life, to provide for and take in the Materials of our Nourishment; the other, to apply those Materials to the proper wasted Parts, and to supply the

the Expences of Living. And it feems as improper in the Order of Nature, to disturb the animal Functions in the time of Sleep, by any other Employment, than that of the secondary Concoctions (as they are called;) i.e. the applying the Nourifhment to the decayed Parts, to recruit the Blood, perfect the Secretions, and to lay up plenty of Spirits, or (to speak more Philosophically,) to reftore the weakened Tone of nervous Fibres; that is in short, to restore the Decays of Watchings and Action: This I fay, is as improper, as it would be (were possible,) to eat or drink, or make provision for the Neceffities of Life, in the time of Sleeping. From hence is evident, the Abfurdity of heavy, various, and luxurious Suppers, or of going to Reft 'till many Hours after fuch a Meal; which must otherwise break in upon the Order of Nature and the due and appointed Times of Sleeping and Watching. Wherefore, I advise the Valetudinary, the Studious, and the Contemplative, either to make no Suppers, or only of vegetable Food; and to take a due Time for Watching after them.

S. 2. There is nothing more certain, than that (abstracting from acute Cases) our

our Sleep is found, sweet and refreshing, according as the alimentary Organs, are eafy, quiet and clean. If any one not fuffering under any disease, is disturbed in his Sleep, 'tis certain his Stomach is filled with Food, or Crudities; or his Guts filled with Wind, Choler, or superfluous Chyle: And those reftles Nights, and the difficulty of going to Sleep, which are generally ascribed to Vapours, are entirely owing to these Causes; though they be not so *strong*, as to become sen-fible; for then *Pain* is added to *Watch*ing and they are felt. And upon complaints of such restless Nights, I never once failed, upon enquiry of finding the true Cause in the Diet, of the preceding Day, or of fome few Days before; and conftantly have difcovered that fome error in Eating and Drinking, either in Quantity or Quality has produced them. I have been aftonished to see hypochondriacal and hysterical People, refiles all Night, toffing and tumbling till towards Morning, then dropping asleep 'till late Hours, awake heavy, oppressed, and unrefreshed, complain of being hag-ridden, tired and wearied, as if they had been whipp'd, spurr'd, lashed, and beaten thro' all the Watches of the Night; rife with foul Mouths, and white Tongue, Belchings, Yawnings,

Yawnings, Coughing, Spitting, or Reaching and Heaving, without Appetite, Spirits of Life, all the Day-time; begin to live and breath, become cheerful and hungry, about ten, eleven, or twelve a-clock at Night; eat a hearty, various, and luxurious Supper; drink a cheeruping Cup of the beft, become as merry as Crickets, and long to fit up later; at laft, tumble to Bed, and repeat the fame Farce over again. The Reason of all this Complaint, is the Load on the Stomach, that will not fuffer them to reft, till 'tis got The fharp and crude Humours, off. twitching and twinging the nervous Fibres, and Coats of the Bowels, become like fo many Needles and Pins, conftantly running through them; though not always with sensible pain: The unconcoEted Chyle stopping or circulating flowly, first in the Bowels, then in the smalleft Keffels, begets these Convulsions, Flatus, Night-Mares, and Oppressions of Spirits. So that the fecondary Digeftions are not over 'till next Evening, (hence their want of Appetite:) And when these are finished their Stomachs come, and their Spirits flow; and thus the perpetual Round is carried on. Did they but follow the Dictates of Nature, go to Bed for fome days with a light Vegetable,

or no Supper at all, and bear the Inconveniencies thence arifing; their Appetites would come in due feason, and they would quickly find the Truth of the Aphorism of the Schola Salernitata

#### \* Somnus ut sit levis, sit tibi Cana brevis.

S. 3. The Seafons for Sleeping and Watching, which Nature feems to point out to us, at least in these our Climates near the Tropick, are the Vicifitudes of Day and Night. Those Damps, Vapours, and Exhalations, that are drawn up into the higher Regions, and are fo rarified by the Heat and Action of the Sun, as to become innocent or very weak in the Day-time; are condensed, sink low, near the Surface of the Earth, and are perpetually drooping down in the Night Seafon; and confequently must be injurious to those tender Persons, that unnaturally watch in that Seafon; and must necessarily obstruct the Perspiration, which the Activity of Watching, and the Motion of Labour promotes. I have already shewn, that our Bodies fuck and M draw

\* i.e. That your Sleep may be fweet, let your Supper be light.

draw into them, the good or bad qualities of the circumambient Air, through the Mouths of all the perspiratory Ducts of the Skin. And if we were to view an animal Body with a proper Glass, it would appear with an Atmosphere quite round it, like the Steam of a boiling Pot. Now we may eafily conceive, what injury a Constitution may receive, not only by ftopping fuch a perpetual Difcharge of Superfluities, but also by forceing into the Habit, by the Air's Weight and Pressure, those noxious Fumes and Vapours, that are perpetually falling near the Surface of the Earth, in the Nighttime. Your true Topers are so fensible of this, that by Observation they have gathered it to be more fafe for their Health, and better for prolonging their Lives, to get drunk betimes and go to Bed, than to fit up and be fober.

§. 4. On the contrary, the Heat of the Sun in the Day-time, by its Action on human Bodies, the very Light, and free Air, and the Motions of things about us, diffurbing the Quiet of the Air, must neceffarily diforder the equable Course of the Perspiration, the Tenour of the secondary Concoctions, and the Tranquility of the Spirits so necessary to Rest and Quiet.

Quiet. So that nothing feems more directly pointed out to us by Nature, than the Day for Labour, and the Night for Reft: And this without taking in the Confideration of the Necessity of the Sun's Light for the ends of Labour, and providing the Necessaries of Life. Some Animals that are exceeding tender, are directed by Nature to alternate Periods of Watching and Rest, not twice in 24. Hours, but twice in the Year, viz. Summer and Winter; fuch as Swallows, Bats, and many forts of Infects, who fleep all the Winter, and watch all the Summer. So confistent is Nature, in appointing the brightest and most enlightened Parts of our Lives for Action, and the darkest and most inclement for Rest. Not but that robust Constitutions (as well as Animals fitted by Nature for different ways of living) may by Cuftom, get the better of these natural Appointments: But I write for the Valetudinary, the Studious, and the Contemplative.

S. s. I advise all such, if they would preferve their Health and lengthen out their Days, to avoid as much as is poslible evening Dews, nocturnal Studies, and unseasonable Watching; in Summer to go to Bed with the Sun, and in Winter to rife M 2

rife at leaft by Break of Day. Those who live temperately, will neceffarily Sleep but little : But to recompence that, their Sleep will be much more found, refreshing, and fruitful of Chearfulness and free Spirits, than that of those who live more freely. For as I have before faid, the Quantity of Sleep will always be in proportion to the Quantity of Eating and Drinking. Valetudinary, Studious, and Contemplative People, ought to go to Bed by eight, nine, or ten at farthest, and rise by four, five, or fix, by which they will have eight Hours a Bed ; and that is sufficient for any Person, not under an acute, or the sharp Fits of a Chronical Distemper.

§. 6. Nothing can be more prejudicial to tender Conftitutions, ftudious and contemplative Perfons, than lying long a Bed of lolling and foaking in Sheets, any time after one is diffinctly awake, or has flept a due and reafonable Time: It neceffarily thickens the Juices, enervates the Solids, and weakens the Conftitution. A free open Air is a kind of a cold Bath, efpecially after rifing out of a warm Bed; and confequently makes the Circulation brisker and more compleat, and braces up the Solids, which lying a Bed diffolves and foaks

foaks in Moisture. The erect Posture, and the Activity of Watching, make the Perspiration more plentiful, and the großs Evacuations more readily thrown off. This is evident from the Appetite and Hunger, those that rise early feel, beyond that which they get by lying long a Bed. Add to all these the Influence of the fresh, benign, Morning Air, the retreating of all the noxious Damps and Vapours of the Night, together with the Clouds and Heavinefs, that are thrown upon the Brain from Sleep; and laftly, that Chearfulness and Alacrity that is felt by the Approach or Presence, of that glorious Luminary the Sun, which adds a new Force to the Heart, and a Spur to the Spirits.

§. 7. All Nations and Ages have agreed that the morning Seafon is the proper Time for fpeculative Studies, and those Employments that most require the Faculties of the Mind. For then the Stock of the Spirits is undiministed, and in its greatest Plenty, the Head is clear and ferene, the Passions are quieted and forgot; the Anxiety and Inquietude that the Digestions beget in the nervous System, in most tender Constitutions and the Hurry the Spirits are under after the great Meal,

Meal, are settled and wrought off. I fhould advise therefore those who are of a weak relaxed State of Nerves, who are subject to hypochondriacal or hysterical Diforders, whole Professions lead them to much Use of their intellectual Faculties, or who would indulge speculative Studies, to go early to Bed, and to rife betimes; to employ the morning Hours in these Exercises, till eleven a Clock, then to take some agreeable Breakfast of vegetable Food; to go on with their Studies and Professions till three, four, or five, as their Spirits will hold out, and then to take their great Meal of animal Food; all the reft of the Day to throw off all Study and Thought, divert themselves agreeably in some innocent Amusement, with fome gentle bodily Exercife; and as foon as the Digestion is over, to retire and provide for going to Bed, without any farther supplies, except it be a Glass of fair Water, or warm Sack-Whey. But the Aged and Sickly must go sooner to Bed and lye longer, because Age and Sickness break reft, and the stiffen'd and hardened Limbs of the Antient become more pliant and relaxed by much Sleep, a supine Posture, and the Warmth of the Bed.

Rules for Health and Long Life drawn from the Head of SLEEP and WATCHING.

1. THE Valetudinary, the Sedentary, and the Studious fhould eat very light, or no Supper; if any, it ought to be vegetable Food; neither ought they to go foon to Bed, after any Supper what foever.

2. Going to Bed on a full Stomach, and Wind and Crudities fomewhere in the alimentary Paffages, is the Caufe of the want of due Reft, which is found and refreshing, always in Proportion to the Emptines and Cleanness of these Passages, and their Vacation from their proper Office of Digestion: And this is the Cause of the Want of kindly and refreshing Rest, in hypochondriacal and hysterical People.

3. Watching by Night and Sleeping by Day, is of the most pernicious Confequence to Health and Long Life; and plainly contrary to the Indications of Nature and the Constitutions of our Bodies.

4. The Valetudinary, Sedentary, and Studious, ought carefully to avoid evening Dews, nocturnal Studies, and unfeafonable Watching; go to Bed by eight, nine,

nine, or ten, and rife proportionably by four, five, or fix; unless actually under a Fit of Sickness.

5. Nothing is more prejudicial to tender Conftitutions, than lying long a Bed, indulging a lethargical and drowiy Sleep, or lolling or loitering awake; as appears by their Heavinefs, and want of Appetite, upon doing fo; and their good Stomachs, Chearfulpefs, and Freedom of Spirits, when they rife early.

6. The most advantagious manner for the Tender, Sedentary, and Studious, to bestow their Time, on account both of their Health and Studies, isto goearly to Bed, rife betimes, go about their Studies till eleven, taking a light vegetable Breakfast; profecute them till about four in the Afternoon, then to take their great Meal of animal Food, and after that to employ the reft of their Time in some innocent Amusement, or gentle bodily Exercise; to retire betimes, to prepare for going to Bed, taking no farther Nourishment, except a Draught of Water or warm Sack-Whey, which will be particularly useful to those who labour under Stone and Gravel.

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### CHAP. IV.

### Of EXERCISE and QUIET.

§. 1. WE proceed, in the next Place, to the Confideration of Exercife and Quiet, the due Regulation of which, is almost as necessary to Health and Long Life, as Food itfelf. Whether we were fo made before the Fall, as to live in intire Health, in a rigidly sedentary and contemplative Life, is a Speculation of no great Consequence, nor easily determined in our present Situation; for there is no certain Analogy between Things as they now are, and as they might have been then. As there happen'd an intire Revolution in the Complexion and Qualities of the Minds of the First Pair; so, to me, there appear, to be evident Indications of a defigned Change and Alteration of the material World, and the Nature of the Animals and Vegetables which subsist on this Globe, from what they were when GOD pronounced N every

every Thing Good that he had made. Nor feem the Calestial Bodies to have elcaped, fo far as they regard us. Whatever be in this, the Paffage where God tells Adam, \* That in the Sweat of his Brow he (ball eat Bread, feems to be the Injunction of a falutary Penance; that is, Not merely a Punishment, but alfo a Remedy against the Diforders his Body would be liable to in this new State of the Creation, and against the poilonous Effects of the Forbidden Tree he had eaten the Fruit of. I am the more confirmed in this Belief, that I observe, the absolute Necessity of Labour and Exercise, to preferve the Body any Time in due plight, to maintain Health, and lengthen out Life. For, let whatsoever Diet be purfued, however adjusted, both in Quantity and Quality; let whatever Evacuations be used to lessen the Malady, or any + Succedaneum be proposed, to prevent the ill Effects; our Bodies are fo made, and the Animal Oeconomy now fo contrived, that without due Labour and Exercise, the Juices will thicken, the

\* Gen. chap. iii. v. 19.

† i.e. Equivalent.

Foints

Joints will stiffen, the Nerves will relax, and on these Diforders, Chronical Distempers, and a crazy old Age must enfue. Nor is this neceffary only in the colder Climates, and where the Food is grofs, but even in the warmest Climates, and where the Food is lighteft. For though the Warmth of the Air may keep the Perspiration free and open, or rather, where it is very great, promote Sweating; yet, at the same Time, and by Confequence, it will thicken the Fluids, and relax the Fibres; to prevent both which, Exercise is absolutely necessary : but in fuch a Climate it ought to be gone about in the Cool of the Day. And tho' light Food may, in a great measure, prevent the Thickening of the Fluids, yet it cannot do it (afficiently without Exercise; nor can it at all keep the Fibres in due Tension; for to that Purpose Exercise is absolutely necessary. Nay, the joint Power of warm Air, and light Food, cannot fupply the Place of Exercise, in keeping the Joints pliant and moveable, and preferving them from growing refty and stiff.

§. 2. I have fometimes alfo, indulg'd a Conjecture, that Animal Food, and Made or Artificial Liquors, in the Original N 2 Frame
Frame of our Nature, and Defign of our Creation, were not intended for Human Creatures. They feem to me, neither to have these strong and fit Organs for digesting them (at least fuch as Birds and Beasts of Prey have, who live on Flesh;) nor, naturally, to have those voracious and brutifb Appetites, that require Animal Food, and strong Liquors, to fatisfy them; nor those cruel and hard Hearts, or those diabolical Paffions, which could eafily fuffer them to tear and deftroy their Fellow Creatures; at least, not in the first and early Ages, before every Man had corrupted his Way, and God was forced to exterminate the whole Race, by an univerfal Deluge, and was also obliged (that the Glube of the Earth might not, from the long Lives of its Inhabitants, become a Hell, and a Habitation for incarnate Devils) to shorten their Lives from 900 or 1000 Years, to 70. He wifely forefaw, that Animal Food, and Artificial Liquors, would naturally contribute towards this End; and indulg'd, or permitted, the Generation that was to plant the Earth again after the Flood, the Ufe of these for Food, knowing that though it would shorten the Lives, and plate a Scourge of Thorns for the Backs of Franciac

of the Lazy and Voluptuous, it would be cautiously avoided by those who knew it was their Duty and Happiness to keep their Paffions low, and their Appetites in Subjection. And this very Æra of the Flood, is that mentioned in Holy Writ. for the Indulgence of Animal Food and Artificial Liquors, after the Trial had been made, how infufficient alone, a Vegetable Diet (which was the first Food appointed for Human-kind, immediately after their Creation) was, in the long Lives of Men, to restrain their Wickedness and Malice; and after finding, that nothing but shortning their Duration could poffibly prevent the Evil. 'Tis true, there is scarce a Possibility of preventing the deftroying of Animal Life, as Things are now constituted, fince Infects breed and nefle in the very Vegetables themfelves, and we scarce ever devour a Plant or Root, wherein we do not destroy innumerable Animalcules. But besides what I have faid, of Nature's being quite altered and changed from what was originally intended, there is a great Difference between destroying and extinguishing an Animal Life (which otherwife might fubfilt many Years) by Choice and Election, to gratify our Appetites,

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petites, and indulge Concupiscence; and the Cafual and Unavoidable crushing of those, who perhaps, otherwise, would die within the Day, or at most, the Tear, and obtain but an inferior kind of Existence and Life at best. Whatever be in this Conjecture, 'tis evident to those who understand the Animal Oeconomy, and the Frame of Humane Bodies, together with the History, both of those who have lived Abstemiously, and of those who have lived Freely, that indulging in flesh Meats, and strong Liquors, inflames the Paffions, and shortens Life, begets Chronical Distempers, and a Decrepid Age, as the History of the Life of Cornaro, manifest to a Demonstration.

§. 3. Of all the Exercifes that are, or may be used for Health (such as Walking, Riding a Horfe back, or in a Coach, Fencing, Dancing, playing at Billiards, Bowls, or Tennis, Digging, Working at a Pump, Ringing a Dumb Bell, &c.) Walking is the most natural, as it would be also the most natural, as it would be also the most natural, if it did not spend too much of the Spirits of the Weakly. Riding is certainly the most Manly, the most Healthy, and the least Laborious, and Expensive of Spirits, of any;

any; shaking the whole Machine, promoting an universal Perspiration and Secretion of all the Fluids ( to which may be added. The various Changes of the Air, thro' which they fo quickly pass, every Alteration of which, becomes, as it were, a new Bath) and thereby, varioufly twitching the Nervous Fibres, to brace and contract them, as the new Scenes amuse the Mind. Those who cannot ride, must be carried in a Coach or Litter, which is the best Exercife for the Lame and Crazy, and the only one proper for Old and Decrepid Perfons, as well as those that are fo Young, that they are not able to manage their own Exercise. The Home Exercifes, fuch as playing at Tennis and Billiards, Dancing, Fencing, and the like, ought to be follow'd only when the Seafon forbids being Abroad; for being in the Air, contributes much towards the Benefit of Exercise. 'Tis beautiful to observe that carnest Desire, planted by Nature, in Toung Persons, to romp, jump, wrestle, and run, and constantly to be purfuing Exercises and Bodily Deversions, that require Labour, even till they are ready to drop down; especially the healthier Sort of them : So that fitting,

fitting, or being confined, feems to be the greatest Punishment they can fuffer, and imprisoning them for fome Time, will much more readily correct them than Whipping. This is a wife Contrivance of Nature; for thereby, their Joints are render'd pliable and strong; their Blood continues sweet, and proper for a full Circulation; their Perspiration is free, and their Organs stretched out, by due Degrees, to their proper Extension.

6.4. It is also very agreeable to observe, how the feveral different Organs of Labouring Men are strengthen'd, and render'd Brawny and Nervous, as they happen to be most employ'd in their feveral Vocations, let them be otherwife ever to small or weakly. The Legs, Thighs, and Feet of Chairmen; the Arms and Hands of Watermen; the Backs and Shoulders of Porters, grow thick, strong, and brawny by Time. 'Tis certain, that speaking strong and loud, without overstraining, will strengthen the Voice, and give Force to the Lungs. Our Nails and Hair, the more they are cut and shaved, the more they grow. And we may promote any one Evacuation fo far, as to weaken and starve all the rest. Using any

any Organ frequently and forcibly, brings Blood and Spirits into it, and fo makes it grow Plump and Brawny. And, if due Pains were taken by the Labour proper to them, the Organs of all the Functions of the Animal Oeconomy might be ftrengthen'd and kept in due plight.

§. 5. Therefore, to the Asthmatick, and those of weak Lungs, I should recommend Talking much and loud, even by themselves, walking up an easy Ascent, and when any degree of Weariness warns them, to fit and reft, 'till they are eafy, and then to return to their walking again, and fo to increase it every Day, 'till they are able to walk a reasonable Distance, in a reasonable Time. To those who have weak Nerves and Digestion, and to those who are much troubled with Head-aches (most of all which arise from the ill State of the Stomach and Bowels) I should recommend riding on Horseback as much as poffibly they could, in the clearest and driest Air, and to change the Air daily, if possible. To those who are troubled with the Stone or Gravel, to ride much over rough Cauleways in a Coach. To those that have Rheumatick Pains, to play at Billiards, Tennis or Cricket, till

till they sweat plentifully, and then go immediately into a warm Bed, and drink liberally of fome warm'thin Liquor, with Ten Drops of Spirit of Sal Armoniac or Harts-born in each Draught, to encourage the Sweating. To those who have weak Arms or Hams, playing two or three Hours at Tennis, or at Foot-ball, every Day. To those who have weak Backs or Breasts, ringing a Bell, or working at a Pump. Walking thro' rough Roads, even to Lassitude, will soonest recover the Use of their Limbs to the Gouty; tho' Riding on Horfeback or in a Coach will best prevent the Distemper. But the Studious and the Contemplative, the Valetudinary, and those of weak Nerves, if they aim at Health and Long Life, must make Exercise a Part of their Religion, as it is among fome of the Eastern Nations, with whom Pilgrimages, at stated Times, are an indifpenfible Duty, and where Mechanical Trades are learned and practifed by Men of all Ranks. Those who have their Time in their own Hands, ought to have stated Seafons for Riding or Walking in a good Air, as indifpensible, as those for going to Dinner, to Bed, or to Church. Three Hours for Riding, or Two for

### and Long Life.

for Walking, the one half before the great Meal, and the other before going to Bed, is the leaft that can be difpenfed with: As the first Part begets an Appetite, the fecond helps on the Digestion. Those who are not Masters of their own Time, must take it when they can; but to be fure they ought to let no Opportunity of taking it flip.

§. 6. There are Three Conditions of Exercise to make it the most Beneficial that may be. First, That it be upon an empty Stomach (as, indeed, that is the proper Time for all Medicinal Evacuations) for thereby, the now concocted \* Crudities, or those Superfluities Nature would be rid of, and has fitted, by going through the proper Secretions, for being ejected, but cannot throw off without foreign Affistance, will be readiest discharged. For, on a full Stomach Exercife would be too tumultuous, precipitate the Secretions, and throw off the found Juices with the corrupted Humours. Secondly, That it be not continued to down-right Lassitude,

\* Cocta non cruda funt evacuanda, Hippocrat. O 2 De-

Depression of Spirits, or a melting Sweat. The First will wear out the Organs, the Second spend the Strength, and the Third will only do Violence to the Natural Fun-Etions. Thirdly, Due Care is to be had after Exercise, to retreat to a warm Room and proper Shelter from the Injuries of the Weather, left fucking into the wafted Body, the nitrous Particles of the circumambient Air, they should inflame the Blood, and produce a Rheumatism, Fever or Cold. I might add a Fourth Condition, Joining Temperance to Exercise, otherwise the Evil will be as broad one Way, as 'tis long the other. For fince Exercise will create a greater Appetite, if it is indulg'd to the full, the concoctive Powers will be as unequal to the Load, as they were before. But I pafs that over, having fufficiently treated this Subject already.

§. 7. Under this Head of Exercise, I cannot forbear recommending Coldbathing; and I cannot fufficiently admire, how it should ever have come into fuch Disus, especially among Christians, when commanded by the greatest Langiver that ever was, under the Direction of God's Holy Spirit, to to his Chosen People, and perpetu-ated to us in the Immersion at Baptism, by the fame Spirit, who, with infinite Wildom in this, as in every Thing elfe that regards the Temporal and Eternal Felicity of his Creatures, combines their Duty with their eternal Happiness. First, The Necessity of a free Perspiration to the Preservation of Health, is now known to every Body, and frequent washing the Body in Water, cleanfes the Mouths of the Perspiratory Ducts from that Glutinous Foulness that is continually falling upon them, from their own condensed dewy Atmosphere, whereby the Perspiration would be foon obstructed, and the Party languish. Secondly, The having the Circulation, full, free and open, thro' all the Capillary Arteries, is of great Benefit towards Health and Long Life. Now nothing promotes that fo much as Cold-bathing; for by the violent and fudden Shock it gives to the whole System of the Fluids, from the Circumference inward towards the Centre, and the Fluids (because Reaction is always equal and contrary to Action) fpringing back again from the Centre to the Circumference, a Force is raised almost ever sufficient to break thro' all the Dams and Obstructions of the (malleft

smallest Vessels, where they mostly happen, and to carry the Circulation quite round. Thirdly, Nothing is fo injurious, and fo much prevents the Benefit of Exercise to weak and tender Constitutions, as *fucking* into their Bodies the Nitrous and Humid Particles of the Air, that is, Catching of Cold. Now nothing fo effectually prevents this, as Coldbathing; as the Nature of the Thing shews, and Experience confirms; for if Exercise, to attenuate the Juices, and ftrengthen the Solids, be added to Coldbathing, a new Spring and Force will be given to the Blood, both to drive out these foreign and noxious Mixtures, and to unite the Cuticular Scales, which form the Scarf Skin, fo as to strengthen it for the future against fuch violent Entries.

§. 8. I fhould advife therefore, every one who can afford it, as regularly to have a Cold Bath at their Houfe to wafh their Bodies in, as a Bason to wafh their Hands; and conftantly, two or three Times a Week, Summer and Winter, to go into it. And those that cannot afford such Conveniency, as often as they can, to go into a River or Living Pond, to wash their Bodies. But this ought

ought never to be done under the actual Fits of a Chronical Diftemper, with a quick Pulse, Head ach, weak Lungs, or a foul Stomach; nor ought they to ftay in till they are over-chill'd. And in Winter, they ought to purfue their Exercifes immediately after they come out; and those of tender Nerves, ought to pour Basons of Cold Water on their Head, or wash it well with a dripping Sponge before they. go in. I cannot approve the precipitant Way of jumping in, or throwing the Head foremost into a Cold Bath; it gives too violent a Shock to Nature, and rifques too much the Bursting fome of the smaller Veffels. The Natural Way is, holding by the Rope, to walk down the Steps as fast as one can, and when got to the Bottom, bending their Hams (as Women do when they Curt'fy low) to shorten their Length, fo as to bring their Heads a good Way under Water, and then popping up again to take Breath; and thus alternately for two or three Times, and out again, rubbing and currying well before they are drefs'd. And this brings me to fay fomething of another kind of Exercise.

§. 9. The

§.9. The Flesh Brash is an Exercise most useful for promoting a full and free Perspiration and Circulation; Almost every Body knows, what well Currying will do to Horses, in making them sleek and gay, lively and active; even fo much, as to be worth half the Feeding. This it can no otherwise effectuate, than by affisting Nature to throw off by Perspiration, the \* Recrements of the Juices which stop the full and free Circulation, and by constant Friction, Irritation and Stimulation, to allicite Blood and Spirits to the Parts most distant from the Seat of Heat and Motion, and fo to plump up the superficial Muscles. The fame Effect it would produce in other Animals, even Human Creatures themfelves, if they were managed in the fame Manner, with the fame Care and Regularity. I should think it therefore, well worth the Pains of Persons of weak Nerves and Sedentary Lives, especially those threatned with Paralytick Diforders, to supply the Want of Exercise of other Kinds, with spending

\* i. e. The groffer Parts.

half

half an Hour, Morning and Night, in Currying and Rubbing their whole Body, more-efpecially their Limbs, with a Flesh-Brush. And 'tis a Wonder to me, that Luxury has not brought Cold-bathing and Currying in Use, upon the Animals (especially those of them upon whom they can be fo readily made Ufe of, fuch as Oxen, Pigs, Veal, Lamb, and all Poultry, which naturally delight in Cold-bathing) which are brought to the Table. For certain it is, that Cleanness and due Exersife (of which Currying is one Part) would much contribute to make all Animals whatsoever, without Exception, healthier in themselves, fuller of Juice and Spirits, and, confequently, better Food for Human Creatures.

As to Quiet, the Conditions of Exercife being determined, there needs nothing to be faid of it.



P

RULES

### RULES for Health and Long Life, drawn from the Head

#### Of EXERCISE and QUIET.

1. WHATEVER was the Original Conftitution of Man, in our prefent State, a due Degree of Exercife is indifpenfably neceffary towards Health and Long Life.

2. Animal Food, and Strong Liquors, feem not to have been defigned for Man in his Original Make and Frame; but rather indulg'd to fhorten the Antediluvian Length of Life, in order to prevent the excessive Growth of Wickednefs.

3. Walking is the most Natural and effectual Exercise, did it not spend the Spirits of the Tender too much. Riding a Horseback is less laborious, and more effectual for such. Riding in a Coach is only for the Infirm, and Toung Children. House Exercises are never to

to be allow'd, but when the Weather, or fome Bodily Infirmity will not permit going abroad; for Air contributes mightily to the Benefit of Exercife. Children naturally love all kinds of Exercife, which wonderfully promotes their Health, increases their Strength, and ftretches out their Organs.

4. The Organs of the Body that are molt used, always become *strongest*, and therefore we may strengthen any weak Organ by Exercise.

5. The Lungs are fortified by loud Talking, and walking up an eafy Ascent. The Digestion and the Nerves are ftrengthen'd, and most Head-aches cur'd, by Riding; the Stone and Gravel eafed by riding in a Coach over rough Ground; Rheumatick Pains by playing at Tennis, Billiards, &c. 'till one sweat, and then going to a warm Bed, to promote the Sweating; Feeble Arms by playing at Shittlecock, or Tennis; Weak Hams by Foot-ball, and weak Backs by Ringing, or Pumping. The Gouty best recover the Use of their Limbs by Walking in rough Roads; but prevent the Fits best, by Riding a Horseback, or in a Coach. The P 2 Vale-

Valetudinary, and the Studious, ought to have flated Times for Exercise, at least Two or Three Hours a Day, the one Half before Dinner, the other before going to Bed.

6. Exercife, 1. fhould always be gone about with an empty Stomach: 2. Should never be continued to Wearinefs: 3. After it, one must take Care not to catch Cold. And it should always be accompanied with Temperance, elfe, instead of a Remedy, it will become an Evil.

7. Cold-bathing is of great Advantage to Health; but should not be used under a Fit of a chronical Distemper, with a quick Pulse, or with a Headach, or by those that have weak Lungs. It promotes Perspiration, inlarges the Circulation, and prevents the Danger of catching Cold. Those of tender Nerves, should pour Water on their Heads before they go in, and none ought to jump in suddenly, and with their Heads foremost.

8. The Flesh-Brush is a most useful Exercise, as appears by its Advantage to Horses, and ought not only to be used

used on Human Bodies, but also on such of the Animals we defign for our Food, as it can be applied to.



#### CHAP. V.

### Of our Evacuations, and their Obstructions.

§. I. T HE Three Principal Evacuations are, By Siege, by Water, and by Perspiration. All these must be duly regulated, and in the Order of Nature, towards the Preservation of Health, and the prolonging of Life. The First ought to be of a due Consistence between both Extremes. \* Oportet Sanorum Sedes esse siguratas. Those who are costive; have either over-heated their Bodies with strong Liquors; have eaten too sparingly; have too flow a Digestion, or the Peristaltick

\* *i.e.* The Grofs Evacuations ought to be of fuch a Confiftence in the Healthy, as to take the Impression of the Guts.

#### Motion

Motion of their Guts are too weak, whereby the Food staying too long a Time before the Mouths of the Lacteals. is over drain'd of its Moisture : Those who have purging Stools, have eat too much, or of Things too strong for their concoctive Powers. For superfluous Nourishment leaves too much Chyle in the + Fases, which fermenting in the Guts, (timulates them fo as to become a Purge. I have often observed, That a full Meal of strong Meat, as Fish, Beef, Pork, Baked Meat, or made Dishes, in tender Person, goes off with the Harry and Irritation of a Purge, leaving the Bowels inflated, colicked, or griped, and the Spirits funk to the last Degree. The Food, by its various Mixture, Weight, and Fermentation, stimulating all along from the Stomach to the Rectum, and being scarce ever drained of its Chyle, without affording any Nourishment to the Body, runs off thus crudely, and becomes equal to a total Abstinence from Food for a long Time. And hence we have a most infallible Rule, \* à posteriori, to judge if we have

† i. e. The Food, after it is drain'd of its Nutritious Parts.

\* i. e. After the Tryal has been made.

govern-

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governed ourselves in our Diet, in Proportion to the Necessities of Nature, and the Forces of our concoctive Powers. This is the very Reason why the Bark over-dosed, and given to Persons of weak Digestion, so constantly purges them; and why Mercury, given either inwardly, or by Friction, runs off in violent purging, and cannot be raifed into a Salivation; to wit, the not adjusting the Doses to the Strength of the Stomach and nervous Fibres. For the Bark naturally binds, and Mercury naturally rifes to the most pervious Glands. And in this Sense, I myself have frequently observed in weak and screfulous Bowels, even Dia. Scordium, and Venice Treacle to purge : Whereas, had the Doses been duly proportioned, or had they begun by Underdofing, and taken a little longer Time, their End might have been effectually answered; as I have often experienced without ever failing.

§. 2. And here it may not be amifs to take Notice of a *fatal* Miftake those run into, who, being *weakly*, *thin*, and *flender*, aim, by all Means, and at any Price, to become *plump* and *round*, and in order to attain this, are perpetually devouring

devouring huge Quantities of high, strong Food, and fwallowing proportionable Measures of generous Liquors, not knowing, that by this very Method, they promote and confirm the Dileale they would remedy; For in fuch Perfons and Cafes, the globular Part of the Blood is constantly of a small Quantity, and very glewy, and the serous Part, thin and watry (that is, The Blood is poor and weak) and the Solids or Nervesare loofe and relaxed. And the concoctive Powers being in Proportion to thefe Two, of Consequence, the Digestions must be weak and imperfect, and their Force unable to diffolve and break any Quantity of fuch strong Meat or spirituous Liquors into a proper Chyle for Nourishment. And this great Load must either be hurried off intirely thro' the alimentary Ducts in supernumerary Discharges, or the fmall Portion of Chyle drawn out of it, being too gross to unite and make a similar Fluid with the Mass of the Blood, must be precipitated through the other Drains of the Body; and thus the poor thin Creature must starve in Luxury, and waste amidst Superfluity. The Case is the fame with Nurses and Parents in rearing up Toung Children. The perpetual

tual Gripes, Colicks, Loofeneffes, hard Bellies, Choakings, Wind, and Convullive Fits, which torment half the Children of England, are intirely owing to the too great Quantities of too ftrong Food, and too rank Milk, thrust down their Throats by their over-laying Mothers and Nurfes. For what elfe do their flimy, their gray or chylous, their blackifb and cholerick Difcharges, the Noife and Motion in their Bowels, their Wind and Choakings, imply, but Crudities from superfluous Nourishment? This is fo certain, that they are univerfally, and infallibly cured by testaceous Powders, which only abforb fharp Crudities, by Rhubarb Purges, which at once evacuate and strengthen the Bowels, and by Milk Clyfters, Iffues, and Blifters, which are still upon the Foot of Evacuation: by obstinately perfisting in these, and the like (intended to evacuate and strengthen the alimentary Passages) and a thin, spare, and nutritive Diet. Nothing nourishes but Food duly concocted; and, in the Course of Nature, we must first plump up and extend, and then harden and strengthen. This is the Way of Nature in Vegetation. And thus the Animal Creation, devoid of Reason, rear up their Young: And thus even the

the skilful Groom treats his wafted and decayed Horfe : And (which is wonderful) you shall find a sagacious Horfe-Doctor plump up and fatten a rotten, lean, broken-winded Jade, and make him look fleek, gay, and lively, fo as to cheat not only the Esquire, but his Brother-Doctor, in fewer Weeks, than all the Man-Doctors in England could rear up their Fellow Creature, in Years. 'Tis true, the Juices of Men are more variously, and more throughly corrupted, and their Solids intirely broken, which never happens to the Brute-Creation. But the greatest Mistake lies in the Neglect of duly observing, and religiously profecuting a proper Regimen. This must principally confift in a Diet of soft, light, tender, cool, and mucilaginous Foods, or fuch as are already become Chyle, either by Nature or Art, fuch are Milk, and Milk-Meats, Rice, Sago, Barley, Wheat, Eggs, Broths, light Soops, Jellies, white, young, tender, and well-fed Poultry, or Butchery Meat, eaten little at a Time, and often, never without an Appetite, nor to Satiety; joining to these, the other Helps and Affistances mentioned in this Treatife. When Flesh is once come, 'tis eafy to make it strong and hardy, by due

due Exercise, and a gradual adventuring upon higher Foods and more generous Liquors.

§. 3. I have often heard valetudinary and tender Persons, and those of sedentary Lives and learned Professions, complain of Head-aches, Sicknesses at the Stomach, Colicks and Gripes, Lowness of Spirits, Wind, and Vapours, and yet pretend they were very moderate and abstemious in their Eating and Drinking; But, upon Enquiry, I constantly found these very Persons pursued with purging Stools, which was an evident Proof, to me, that they had taken down more than they wanted, or could digeft. For 'tis universally certain, That those that do not exceed, must have either Costive, or, at least, Stools of a middle Consistence. There is nothing more ridiculous, than to see tender, bysterical and vapourish People, perpetually complaining, and yet perpetually cramming; crying out, They are ready to fink into the Ground, and faint away, and yet gobbling down the richest and strongest Food, and highest Cordials, to oppress and overlay them quite. Fresh and generous Food, mixing with the sharp Humours of the Stomach Q 2 and

and Bowels, may, for fome short Time, qualify and abate their Irritation, and may give a Fillip to the fluggish Circulation, and become, as it were, a Cork to ftop the perpetual Fuming up of these noxious Steams upon the Head and Brain: But this is (pardon the Similitude) as if one should go to quench the pestilential Steams of a Common-Shore, by throwing in greater Heaps of Ordure and Nuisance into it. The proper Remedy in this Cafe is, First, To cleanse the fatid. Aby/s, and then to preferve it clean by cutting off all the Inlets of Putrefaction. This will require a little Courage, Labour, and Pain; but the future Eafe and Sweetness, will more than abundantly recompence them; for there is nothing more certain, than that of those born sound here in England, the Headaches, Stomach-aches, Colicks, and nervous Pains and Diforders, universally proceed from Idleness and Fulness of Bread.

§. 4. Those who eat but one moderate *Fless* Meal a Day, will have regularly once a Day a *Discharge* of the Remains of their Food. And, generally speaking, those that go oftner, have exceeded some how. Those who pretend tend to cure themselves of nervous Diforders, or any other chronical Difeases, or preferve themfelves from them, or lengthen out their Days, must underdole themfelves (and therefore can go but once in two Days) even though they should undergo the Pain of Costivenes. For 'tis imposfible the Nerves of those who have *flippery* Bowels, fhould ever be braced or wound up; for there the Cure must begin, where the Evil began ; and must be communicated thence to the rest of the System, as a Ropemaker begins the Twift at one End of the Rope, and communicates it to all the other Parts. Our Access to the Nerves of the Stomach and Bowels, is obvious and open: To the reft, the Way is difficult, and far about. And fince a Relaxation, Weckness, and want of Spring in the Fibres, is the Origin of all nervous Diftempers, no Medicines, but fuch as contract, stiffen, wind up. and sborten them, can remedy this Evil; and they must necessarily contract and bind up the Fibres of the Stomach and Guts, as the Parts they first approach and exert their Virtue upon. And he, who without firm Bowels, thinks to cure a nervous Diftemper, labours as much in vain, as he

he who would keep a Fiddle-string foaking in Oil and Water, to make it vibrate or play off a fine Composition of Musick.

§. 5. By Experience and Observation I have found, That in those who have one regular Discharge in Twenty four Hours, the Time of the Progress of the Food from the Stomach, till its Remains are thrown off, is Three Natural Days. And in those who go but once in Two Days, the Time is Six Natural Days. The Curious may be fatisfied in this, by fwallowing an Almond, or any other Nut, which paffes without being broken, or making any Irritation. The Reafon is this, That a smaller Quantity of Food is retained longer, by their Suction, at the Mouths of the Lacteals, to drain it intirely of its Chyle, and its Weight being lefs, the Concoctive Powers have the greater Force upon it, and fo it is retained till it is perfectly Digested, and drain'd of all its Humidity; whereby fuch People become Costive: whereas in People that exceed, the contrary Causes precipitate the Course of the Aliment, and fo leave the Bowels always *slippery*. And nothing can more demon-

demonstratively shew an Excess, than the Lubricity of the Discharge; and I have often observed in tender Persons, and those of weak Nerves, when a Meal (I mean only of those who eat Flesh Meat but once a Day) has been a little too hard for the Stomach, tho' the Spirits have been full and free, and the Health equal and good, by duly proportioned Meals for two preceding Days; the Third Day, when the gross Meal came off, they have been full of Wind and Vapours, their Eyes dim, and their Heads heavy, with flying Rheumatick Pains over the Body, and Colick-Gripes. From whence we may draw these Three Corollaries.

Corol. 1. It requires the fame Time for the unconcocted Chyle of a groß Meal to run the Circle of the Habit, and the feculent Remains to pass thro' the Guts; the First by Perspiration, and the Last by Siege.

Coroll. 2. We may likewife gather from thence, a Confirmation of that Aphorism of the Physicians; That the Errors of the first Concoction, are never mended in the subsequent, unless the Case

Cafe to be mentioned in the next Paragraph be an Exception to it. For the großs Meal gave rather more Uneasines, when it came to be thrown off by Perspiration.

Coroll. 3. From hence we may alfo fee, the Ridiculoufnefs of the Vulgar Opinion, afcribing univerfally the Pain they fuffer, or the Relief they find, to the last Meal or Medicine.

§. 6. There are fome forts of Food which may oppress and load the Stomach and Alimentary Ducts in the first Concoction, which may be very fafe and benign in the *fubsequent* ones. For instance, Cheese, Eggs, Milk-Meats, and Vegetable Food, tho' duly prepared, and justly proportioned in Quantity, may chance to lie heavy on the Stomach, or beget Wind in the Alimentary Passages of some Persons (and yet drinking of Water will always remedy this Inconveniency): But these neither having their Parts strongly united, nor abounding in sharp Urinous Salts, when they become sufficiently diluted with a watry Menstruum, or dissolved into their Component Parts, and their Parts being still smaller than the smallest Vessels, and their

their Union constantly lefs, than the Force of the Concoctive Powers, in Perfons who have any remaining Fund of Life in them; will thereby yield a fweet, thin, and eafily Circulating Chyle, in the after Concottions become benign and falutary, and afford no Materials for Chronical Diftempers. And the Wind thence generated, not being pointed and armed. with fuch fharp Salts, as those of Flesh Meats, or the Corrolive Juices of Spirituous Liquors, will be as innocent and fafe, as the Element we breathe in.

§. 7. The Second Evacuation is by Water, whofe Circumstances and Condition, tho' little adverted to, may be of great Service to discover both the State of our Constitution, and the Proportion of our Diet. Some People are frightned when they find their Water turbid, broken, and full of Brick-dust Sediment; whereas that is the best Symptom it can have. For tho' it fuppofes the Blood loaded with Urinous Salts and Crudities; yet 'tis still better they should pass off than continue in the Habit. On the contrary, when those that live freely have Quantities of pale, limpid and sweet Water, 'tis a certain Sign that the Per-R pin

Spiration is stopp'd; that neither the First nor the Secondary Concoctions have been duly perform'd; that the Chyle has not been sufficiently broken, nor the finer Secretions duly made by the leffer Drains; and that the Urinous Salts are still retained in the Habit. Upon which must needs enfue Oppression of Spirits, Chills upon the Extremities, flying Rheumatick Pains over the Body, Head-aches, Cholicks and Gripes. And here it may not be amifs, to take Notice of the Difference of the pale Water of Hypochondriacal and Hysterical Persons, from that of those who labour under a true Diabetes, the Apprehension of which terrifies fo often the Low and Dispirited Persons of the First Class. The Water of both has the same Appearance, both in Quality and Quantity; at least, in the first Instance, they are both attended with the fame Sinking and Dispiritedness. But in a true Diabetes, there is a constant Thirst, a low but quick Pulse, the Water is much sweeter, and continues longer to come off in profuse Quantities, insomuch, that fometimes it is fo violent as to run down the Party in a few Days. In Hypochondriacal and Hysterical Persons, there is little or no Thirst, never a quick Pulse,

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Pulse, but rather too low and flow a one, the Flux soon stops of itself, or by any little Diaphoretick Medicine, and they are cold upon the Extremities, which the others are not.

§.8. That bluish and variegated Film, which fometimes looks like Oil and Fat swimming on the Water of Scorbutick and Cachectick Persons, is nothing but the congregated Salts which are crowded to thick together, that they are ready to shoot into Clusters, much like the Film of a \* Lixivium, when standing for the Crystallization of fixed Salts. The Water which has a light Cloud hanging almost from the Top to the Bottom, is of a bright Amber Colour, and about three Quarters of the Liquor taken down. is best, and a certain Sign of a due Concoction, a just Proportion of Food, and a total Absence of Repletion and Crudity. And those who live Temperately, use due Exercise, and enjoy a perfect State of Health, always make fuch Water.

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§.9. Those

§. 9. Those who are subject to great Quantities of limpid and pale Water, ought to conclude, that their Food has been too heavy in Quality, or too much in Quantity for their Concoctive Powers, or their Labour too little; and that therefore, they ought to proportion both, for the future, with more Caution and Exactness, by living low for fome Time, or using more Exercise. And to ftop their Flux of pale Water, they ought to take a little Gascoign's Powder, Confection of Alkermes, or Sir Walter Raleigh's Cordial at Night, and drink liberally of (mall warm Sack Whey, with a few Drops of Spirit of Hart's horn, to fet the Perspiration in order again. Those, on the other Hand, who make high-colour'd, foul, and very turbid Water in smaller Quantities, have either inflamed their Blood too much with Spirituous Liquors, or loaded it with too great a Quantity of Animal Salts. To prevent therefore, Diforders and Difeases, they must lessen the Quantity of their Flesh Meat, and temper the Heat of their Wine with Water. Else they will lay the Foundation of some Acute Inflammatory, or dangerous Chronical Diffemper.

§. 10. The

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§. 10. The worft kind of Water of all, is that of a dark Brown or dirty Red, in a small Quantity, and without any Sediment. This kind of Water, in Acute Diseases, always indicates insuperable Crudity, high Inflammation tending towards Mortification, and a dying Languor in Nature. And in Persons labouring under no visible Distemper at the Time, an almost total Debility of the Concostive Powers, an inseparable Union of the Confituent Parts of the Blood, the highest Degree of Crudity, and a Deadness in all the Animal Functions : And, if preceded by long continual Excesses, requires the Advice of a Phylician. I shall fay nothing of Coffee-colour'd, Bloody, Wheyish, or Purulent Water, or that with white Gravel, Films, Rags or Bits of broken Membranes. They are well known to be Nephritick, or Symptoms of an Ulcer fomewhere in the Urinary Passages.

9.11. There happens also an Evacuation both by Siege and Urine, to some weak Persons of relaxed Nerves, that extremely alarms the Patient, and is not so

O maily Corruption For

fo readily accounted for in common \* Ætiology. It is when either a white transparent, viscid Substance, like Gelly, is constantly voided by the Bowels, more or less; or when a white, milky, glewy Substance, like Cream or laudable Matter, settles in the Water : Both these Appearances are commonly ascribed to an Ulcer in the Guts, or in the Kidneys, the very Apprehension of which is almost fufficient, in some low Persons, to bring on the Diftemper feared : And yet, I am very certain, there is neither Ulcer nor true Matter in either Cafe, as I propose them. For where there is violent and acute Pain, or Matter of different Colours or Mixtures, there, very poffibly, may be, nay, certainly there is, an Ulcer. But in the Cafe I here intend, there is very little or no Pain; no Hectical Paroxysms, which always attend an inward Ulcer; no bloody or fanious Mixtures, which always betray the inward Sore; no fetid Smell to imply Corruption. For the Cases I put at present, happen to

\* That Part of Phyfick which teaches the Caufes of Difeafes.

Per-

Perfons the least capable of Inflammation or Imposthumation, viz. to paralytick Perfons, or those of a Natural Tendency that Way, to cold, vapourifb Perfons of low Spirits and weak Nerves, whole Pulfe is low and flow, and their natural Functions weak and languid; all which evidently shew, that these Difcharges cannot come from an Ulcer. The first Cafe I take to be either an Obstruction of some of the Lasteals, whereby the Chyle cannot be carried off in any sufficient Quantity, but paffing through the Guts, and its more Watry Part being evaporated, it becomes thick and gelatinous, and is thrown off at last with the Remains of the Food. Elfe it must be an Obstru-Stion of those Glands of the Guts, by which a viscid Matter for lubricating of them, is commonly fecerned; by the Imprisonment and Evaporation of which Matter, it thickens and turns like a Gelly (as it does by Cold, or Overfeeding. in the Glands of the Mouth, Throat and Windpipe) and, at last, by the Squeezing of the Guts, is thrown off. And in the fame Manner, I take that Milky Substance subsiding in the Water, in such a Case as I have mentioned, to arise from a Re-
a Relaxation of the Glands of the Kidneys and Bladder, and other Urinary Paffages; and that both are to be cured the fame Way other Nervous Diftempers are cured, viz. by a proper Regimen of Diet, and a Courfe of contracting, ftrengthening, and volatile Medicines.

§. 12. The infensible Perspiration, is the Third Evacuation to be confidered. The Statical Chair invented by Sanctorius, for examining the Quantity of the Per-Spiration, however ingenious and delightful in Speculation, is too cumbersome and laborious to be of any great Use in Common Life. 'Tis certain, however, that the free and full flowing of this Evacuation, is as neceffary to Health as any of the groffer, fince in Quantity it is at least equal to both the forementioned; and an Obstruction thereof, is generally the Source of all Acute Diseases, as it is a Consequence of all Chronical ones. And therefore, I have advised those who are much abroad in Easterly and Northerly Winds (which most of any obstruct Perspiration) and have Fluxes of white and pale Water, to a ready Antidote to prevent the Beginnings of these Obstructions.

9.13. Dr.

§. 13. Dr. \* JAMES KEILL has made it out, beyond all poffibility of doubting, that catching of Cold is nothing but sucking in, by the Passages of Perspiration, large Quantities of moist Air and nitrous Salts, which, by thickening the Blood and Juices (as is evident from Bleeding after catching Cold) and thereby obstructing, not only the Perspiration, but also all the other finer Secretions, raises immediately a small Fever and a Tumult in the whole Animal Oeconomy; and, neglected, lays a Foundation for Consamptions, Obstructions of the great Viscera, and universal Cachessies. The Tender therefore, and Valetudinary ought cautioufly to avoid all Occafions of catching Cold, and if they have been so unfortunate as to get one, to fet about its Cure immediately, before it has taken too deep Root in the Habit. From the Nature of the Diforder thus described, the Remedy is obvious; To wit, Lying much abed, Drinking plentifully of small warm Sack Whey, with a few Drops of Spirit of Harts horn, Posset-Drink, Water-Gruel, or any other warm Small Liquors, a Scruple of Gascoign's Powder Morning and Night, Living S low

\* His Statica Britannica,

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low upon Spoon-Meats, Pudding and Chicken, and drinking every thing warm : In a Word, treating it at first as a small Fever, with gentle Diaphoreticks; and afterward, if any Cough or Spitting fhould remain (which this Method generally prevents) by softening the Breast with a little Sugar Candy, and Oil of Sweet Almonds, or a Solution of Gum Ammoniac, an Ounce to a Quart of Barley Water, to make the Expectoration eafy; and going cautioufly and well cloathed into the Air afterwards. This is a much more natural, easy and effectual Method, than the Practice by Balfams, Linctus's, Pectorals, and the like Trumpery in common Use, which serve only to spoil the Stomach, oppress the Spirits, and hurt the Constitution.

§. 14. The fureft Way of maintaining and promoting a due Perspiration, is, To take down no more Food than what the Concostive Powers are sufficient to reduce into a due Fluidity, and the Expences of Living require, to profecute neceffary Exercise, and use the other Assistances advised in the foregoing Chapters. Want of due Rest, and the Refresement that follows upon it, starting,

ing, toffing, and tumbling abed, are certain Signs that the Perspiration is not duly carried on in the Night Season. And therefore, in order to remedy this, a greater Proportion of Exercise, a greater Degree of Abstinence, or some gentle domestick Purge, must be had recourse to the next Day. Colical Pains, Gripes and Purging, much Eructation and Belching of Wind, Low Spiritedness, Tawning and Stretching, are infallible Signs that the Perspiration flows not freely and plentifully then. And therefore the fame Remedies ought to be profecuted, as foon as an Opportunity offers; else the Party will suffer at last. Wind, as Sanctorius observes and demonstrates, is nothing but obstructed Perspiration : And Tawning and Stretching, are but Convulsions of the proper Muscles and Organs appointed by Nature, the one for Pumping up Wind from the Bowels, the other for preffing upon the Excretory Ducts in the Skin, to force out the fluggish perspirable Matter. And 'tis beautiful to observe, how wifely Nature has contrived the Spafms, Cramps and Convulsions of the proper Organs, to expel every noxious and extraneous Body out of the Habit. Thus Cough-S 2

Coughing is a Convulsion of the Diaphragm, and Muscles of the Breast, to throw out viscid Phlegm; Vomiting of the Stomach, (affisted by the Diaphragm and Muscles of the Abdomen) to throw up its Crudities, and those of the Bowels; or to expel Sand or Stones from the Kidneys. The Throws of Labouring Women, are to bring off the Burden. Sneezing is an Effort of the proper Muscles to eject fome noxious Particles from the Organs of Smelling. Shivering and Stretching to affist Perspiration; and Tawning to pump up noxious Wind. And even Laughing itself, is an Effort of the Muscles of the whole Trunk, to throw off fomething that its delicate Membranes cannot bear. And, Laftly, Hysterical Fits and Convulsions, both in Infants and Perfons come to Maturity, are but violent Efforts, Struggles, Workings, Cramps and Spafms of all the Muscles of the whole Body together, to expel, squeeze, and press out the sharp Acrimonious Wind, Fumes, and Vapours from the Cavities of the whole Machine.

§. 15. There is an Evacuation incident to Perfons of weak Nerves, which could not conveniently come in under

under the general Division, because it happens too feldom to make a new Member of it. It is a Discharge of thin Rheum from the Glands of the Mouth. Throat and Stomach, and is called by fome, A Nervous or Scorbutick Spitting. It rifes fometimes to the Heighth of a petit Flux de Bouche, as the French call it, and threatens fome tender Perfons. as they apprehend, with a Confumption, though it imply nothing lefs. We may observe some, who are struck with a deep Palfey, to flow at the Mouth, and drivel down their Breasts; insomuch, that the Afflicted of this Sort, who are advanced in Years, can fcarce speak intelligibly for the Flux, 'till they have first emptied and cleaned their Mouths. And this arifes to fo great a Heighth, in some much broken paralytick Persons, that, upon the flightest Occasions, either of Joy or Grief, they are apt to run into a Profusion of Tears, Sighs and Sobbings. And some sorts of Ideots, and those Hysterically mop'd, and most of those who fuffer from relaxed and weak Nerves, are more or less subject to these Salival Discharges, especially after Excesses in Diet. Hence the first Sort receive the Appellation of Snivellers or Drivellers. And

And the Difficulty of the Cure of all the Deseafes of weak Nerves depends much on the Quantity and Constitution of this Flux. For much and long Spitting and Running off of this Rheum, implies a total Relaxation of the whole Nervous System, and shews neither the first nor fecond Concoctions have been duly performed. I have frequently had Occasion to shew, how Excesses in the Quantity or Quality of the Food, in Perfons of relaxed and weak Nerves, begot a viscid and gross Chyle, of which that Part, which could not get through the Lacteals, lay fermenting and putrifying in the Alimentary Passages, begot Winds, Gripes and Colicks, and at last wrought itself off like a Purge; and that that Part, which got through the Lacteals, and was received within the Limits of the Circulation, being too gross and glewy to be mixed with the old Mass of the Fluids, to circulate through the smallest Vessels, and to enter the fine Perspiratory Glands, would necesfarily be thrown into the wider, more fpongy and loofe Salivary Glands, which are appointed by Nature to fecern the more Glutinous Parts of the Fluids. And from thence this Salivary Inundation

tion proceeds. The Fact is, When those of weak Nerves, commit habitual Exceffes in their Diet, the Glands and fmall Veffels of all the Body are tumified, swelled and obstructed thereby, as they needs must be. And 'tis from the Preffure of these inlarged Glands, and the obstructed capillary Vessels on the Nerves, and patent Blood Veffels, that most of the Evils they fuffer under proceed. But more especially, are the Glands appointed to draw off the more viscid serous Part of the Blood, obstructed and tumified thereby. Upon which Account, as Boglivi advises, to enquire well into the State of the Tongue and Mouth, in order to discover the Condition of the Stomach, Guts and Bowels; fo I think 'tis highly reasonable, in a Chronical Cafe, to have great Regard to the Condition of the Eyes; and if a dead, cold Languor be observed in the Hue or Water of them (as Jewellers .... fpeak of Diamonds) and more efpecially if the lachrymal Gland in the Corner next the Nofe, which I always narrowly inspect; if, I say, this Gland be found harder, or larger than ordinary, swelled and tumified, it must certainly be concluded, whatever elfe be in the Cafe, there

there must be a relaxed State of Nerves, much Vapours, weak natural Functions, and a mismanaged Regimen. And it is from the Obstruction and Swelling of this and the other Glands, in and about the Eyes, and their Preffure upon the Optical Nerves, and fine Blood Veffels, that those Spots, Flies, Atoms, Dimness, Darkness, and Confusion of Sight, in Vapourish and Hysterical People proceed. For this Gland shews, that the whole serous Glands in the upper Regions of the Body are, in Proportion, tumified and fwelled with viscid Humours through Excess of Diet; unless the Person have fuffered there by Accident, or labours under some natural Disorders of the Eyes. From the Obstruction and Swelling of the Salivary Glands in the Mouth, Throat and Gullet, proceed also those Choakings, Gulping and Strangling, that Hysterick Persons so often complain of. The Wind and Crudities lodged in their Stomach and Guts, and the reft of the Cavities of the Body, preffing to get Vent upwards, are refisted and stopp'd in their Passage by the Diaphragm, whereby the Inspiration is streightned, and, by the Bulk of these Glands throughout the Gullet, the Way is intirely ftopp'd; which

which raises fuch a Tumult and Struggle, as produces the mentioned Symptoms; which I have not Leilure to detail here more minutely. Now this Salivation or Discharge of the thinner Rheum, and that Coughing and Hawking of more viscid Flegm, commonly called a nervous Cough, as also the Chincough of Children, and all fuch Discharges of sharp Serum in Perfons of weak and relaxed Nerves, is an Effort of Nature to relieve them. And, if difcreetly managed, and duly heeded, would prove a Crise to their Diforders, and quite free them from their prefent \* Parosyfms, and fet the Circulation and Perspiration, and confequently the Spirits, at Freedom and Liberty again. Some Perfons most distractedly run to Drams and Cordials to remedy this Evil, to ftop the Violence of this Deluge, and to raise their drooping Spirits. But it ferves only to thicken the Flegm, shut up the Mouths of the Salivary Glands closer, and fo to perpetuate the Evil they mean to cure. Others devour large Quantities of high and generous Foods, because they find a

\* The sharpest Part of the suffering Fit of a Disease.

little

little Relief to their Spirits, from the first Run of the fweet, thin, and spirituous Chyle : But this is only adding Fewel to the Fire, and running on in a perpetual Round of Lowness and Slavering. Whereas, would they suffer Nature to act her own Way, to carry on this critical Discharge as far as it will go, without offering in the least either to check or promote it; but by thin, light Food, and cool Liquors, in moderate, or rather under-dosed Quantities, support her in the manner the Concoctive Powers are sufficient for; after she had difcharged all the Crudities from the Mass of the Eluids, by these Emunctory Glands, and thereby given a free Passage to the Wind to escape the Way it tends, the Salivation would leffen gradually, and at last stop of itself. And if then towards the Decline, a gentle Vomit, to pump up the flow and viscid Remains of the Wind and Flegm in the Upper Part of the Alimentary Passages, and afterwards a gentle Stomachick warm Purge, to fcour the Lower Part of these Tubes. were carefully administred; the Patient would foon find a clear Head, lightfome Spirits, Ease and Freedom from Pain and Oppression; the Girculation and Perspirations

ration would be foon brought to their natural and found State, and Health and Cheerfulnefs reftored together; unlefs a mortal or habitual \* Ptyalifm was the Cafe, which I have fometimes obferved, as fatal and incurable as a true Dropfy, or inveterate Diabetes; all which owe their Being to a deep Scurvy, whereby the Globular Part of the Blood is intirely broken, and the Serum made a meer Lixivium or Lye.

## RULES for Health and Long Life, drawn from the Head

### Of EVACUATION.

1. COSTIVE Stools are Signs of over-heated Blood, too fpare Feeding, Slownefs of Digeftion, or Weaknefs of the Guts.

2. Purging Stools shew intemperate Feeding. Too full a Meal has the Effects of a Purge, fills the Guts with Wind, and gives Gripes. Mercury, and

\* Spitting.

even

even the Bark, Diascordium and Treacle, if over dosed, purge,

3. Head-aches, sick Stomachs, Vapours, low Spirits, Gripes and Colicks, proceed from Cramming; and are ever accompanied with loose Stools.

4. Those that live temperately, have one regular Stool a Day. Those who have more, exceed.

5. The Care of all Relaxations of the Nerves (the Source of Chronical Difeafes) must necessfarily begin at the Stomach and Guts.

6. The Time from eating a Meal, till its Discharge, is three Days, in those that have one Stool a Day: Six in those that have but one in two Days.

7. A gross Meal produces more Diforders, the Day the Excrements of it go off, than the Day it is eaten.

8. A Meal takes the fame Time to get through the Habit by Perspiration, that its Remains do to pass through the Guts.

9. The

9. The Errors of the first Concoctions cannot be mended afterwards.

10. Pain or Relief, is not always the Effect of the last Meal or Medicine, that was taken down.

11. Though Cheefe, Eggs, Milk and vegetable Foods, may be hard to digeft, without drinking of Water, to fome Stomachs; yet their Chyle is good, and produces no bad Effects.

12. Turbid Water with Brick-dust Sediment, proceeds from the critical Discharge of what was preternaturally retained in the Habit.

13. Pale sweet Water, from the Urinous Salts being yet retained.

14. There is great Difference between Hysterick pale Water, and that which proceeds from a Diabetes.

15. That Appearance of Fat on the Urine of fome People, is nothing but a thin Film of Salts.

16. Bright

16. Bright Amber-coloured Water, with a light Sediment rifing toward the Top, amounting to three Quarters of what is drank, is a Sign of good Digestion.

17. Great Quantities of pale Water proceed from Excess in the Quantity of Food, and want of Exercise. The Cure of it is performed by eating less, using more Exercise, and taking some Diaphoreticks, to set the Perspiration right.

18. High colour'd turbid Water in Small Quantity, shews abundance of Animal Salts in the Habit, or the immoderate Use of Spirituous Liquors: And must be cured by vegetable Food, and Water, or other Small Drink.

19. Dark brown Water, or of a dirty red, is extremely dangerous, both in acute Cafes, and in those that seem at present to ail nothing.

20. Bloody purulent Water, and full of Films, is a Sign of Nephritick Ailments, Stone and Gravel.

21. The

21. The viscid Matter, like Gelly, in the Stools, and the viscid milky Substance, somewhat like Matter, in the Urine of some People of weak Nerves, proceed from a Corruption of the Liquor of the Mucous Glands of the Intestines, and of the Bladder, and other Urinary Passages.

22. Obstruction of Perspiration is one Source of acute Diseases, and a Consequence of chronical ones.

23. Catching of Cold is an Obstruction of Perspiration, by the humid and nitrous Particles of the Air. It should be cured by gentle Diaphoreticks, and not by Balsamick Pectorals, which do no good but in the End of the Cure, to promote Expectoration from the Lungs, if there be any Occasion for it.

24. Perfons of weak Nerves, have often a critical Flux of Rheum from the Glands of the Mouth and Throat, to a very large Quantity, which, if not tampered with, brings them great Relief.

CHAP. VI.

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#### CHAP. VI.

### Of the PASSIONS.

§. 1. I Come now, in the Order of my first proposed Method, to treat of the Passions; which have a greater Influence on Health and Long Life, than most People are aware of. And that I may propose my Scheme with the greatest Clearness I can, I will lay down fome Propositions or Axioms, as the Ground-work on which it is founded.

Prop. I. The Soul refides eminently in the Brain, where all the Nervous Fibres terminate inwardly, like a Musician by a well-tuned Instrument, which has Keys within, on which it may play, and without, on which other Persons and Bodies may also play. By the inward Keys, I understand those Means by which the Thoughts of the Mind affect the Body; and by the outward,

ward, those whereby the Actions or Sensations of the Body affect the Mind. Both these Affections may be called Paffions in a general View, as either Part of the Compound is acted upon.

Scholium. As a Man is compounded of two different Principles, Soul and Body; and as there are two different kinds of outward Objects, by which these two different Principles may be acted upon; to wit, Matter and Spirit; the Passions in these two different Views may be divided into Spiritual and Animal. As to the first Branch of this Division, fince Spirits (if I may be allow'd there are any fuch Beings) may be supposed to act upon one another, without the Mediation of Organical Bodies (fuch perhaps was St. Paul's Extaly, when he was rapt up into the Third Heavens; fuch was Mofes's Commerce with his Maker, when he spoke to God Face to Face ; fuch must the Influence of the Divine Grace be fupposed; and all who allow of Revelation, admit, that the Soul may be Serene and Tranquil, while the Body is in Diffress and Pain; and even all the Stoick Philosophy is grounded on this Distinction) it must have a real Ex.

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Existence in Nature. And the other Branch must also be allow'd by all those, who cannot think Brute Animals mere Machines, and who observe, that we have Impressions made on our Bodily Organs, which affect us, sometimes very deeply, even in our Sleep. However these Things be, 'tis sufficient for my Purpose, that Man is allow'd to be a compounded Being, on which outward Objects may act, to abstract the Consideration of the Impressions made on the Spirit, from those made on the Body.

Prop. II. The Union of these two Principles in the Compound, MAN, seems to confist in Laws præ-establish'd by the Author of Nature, in the Communications between Bodies and Spirits, as there are, no doubt, Laws establish'd for Spirits, in their Commerce and Actions upon one another. For every one knows there are Laws of Nature, establish'd by its Author, for the Actions of Bodies upon one another.

Scholium. These Laws of the Actions of the Soul on the Body, and of the Body upon the Soul, are never to be known to

to us, but by their Effects; as the Laws of Nature in the Actions of Bodies upon one another, were first discovered by Experiment, and afterward reduced into general Propositions. One Law of the Action of the Soul on the Body, 5 vice versa, seems to be, That upon such and such Motions produced in the Musical Instrument of the Body, such and such Sensations should arise in the Mind; and on fuch and fuch Actions of the Soul, fuch and fuch Motions in the Body should enfue; much like a Signal agreed to between two Generals, the one within, the other without a Citadel, which should fignify to one another what they have before agreed to, and established between them; or like the Key of a Cypher, which readily explains the otherwise unintelligible Writing. Besides these Passions and Affections, which are involuntary,

Prop. III. As Bodies are purely paffive, and are acted upon by other Bodies, conformable to the fettled Laws of Nature; in Spiritual Beings, on the contrary, there is an active, felf-motive, felf-determining Principle, by which it directs and manages itfelf with regard not only to U 2 its

its own felf, and its own Sentiments; but also to its Actions and Influence on other Beings without it, and their Actions and Influences on it. And this is the Foundation of Liberty, or Freewill, in Rational and Intelligent Beings.

Scholium. That this Faculty or Principle really exifts, and is effential to Spiritual Beings, is as certain, as that there is Motion in the Universe, or that Body and Spirit are effentially different. For, that Motion is not effential to Bodies, is as certain as that Bodies are impenetrable: and that the Quantity of Motion in the Universe, may be, and is daily increased, is as much Demonstration as any Proposition in Euclid. And if Motion be, is, or may be increased, it must arife from Spiritual Beings. And he who can deny this, only fhews himfelf ignorant of the Principles of all true and just Philosophy, and of the first Elements of the System of material and spiritual Beings. For further Conviction of this, and clearing up all poffible Objections and Difficulties, I refer the Reader to the Learned and Ingenious Dr. Clarke, in his Answer to the Enquiry into Liberty, and his Letters to Mr.

Mr. Leibnitz, where he has treated this Matter with the greatest Perspicuity and Justness. Besides these now mentioned Principles,

Prop. IV. As in Bodies there is a Principle of Gravity or Attraction, whereby, in Vacuo, they tend to one another, and would unite, according to certain Laws and Limitations established by the Author of Nature; So there is an Analogous Principle in Spirits, whereby they would as certainly, in their proper Vacuity, be attracted by, tend to, and unite with one another, and their first Author, Centre, and the Rock out of which they were hewn (to use a Scripture-Phrase) as the Planets would to one another, and to the Sun. And this is nothing else but what in Scripture is called CHARITY.

Scholium. This Proposition is as certain as the Rules of Analogy are, which, in my Opinion, are the Foundation of all the Knowledge we can have of Nature, while we can fee only a few Links of the Universal Chain, and but a few disjointed Parts of the grand System of

of the Universe. The Author of Nature, who could create intelligent Beings only in order to make them Happy, could not leave them to fo many different Attractions, without implanting into their Essence and Substance, as an Antidote to fuch Variety of Distractions, an infinite Tendency, Bent and Biass towards Beings of the fame Nature, and towards Himself, who was the Cause and Object of their Felicity. And even in this our lapsed and forlorn Estate, there remain evident Footsteps of this Principle yet un-effaced. Such are the Checks of Conscience, natural Affection, and the universal Desire of Immortality, and Dread of Annihilation; what the World calls the Seeds of Honour and Renown; all that Concern and Regard paid mere Romantick Heroes; and the Worship bestow'd by all Nations, who are not funk into mere Brutality, on some Superior and Invisible Powers. These are Remains of this Principle, and its Workings, fufficient to shew its Reality à posteriori; as the Laws of Analogy, and the Nature and Attributes of the first Being, shew it à priori. Those who admit of Revelation, cannot doubt of it for a Moment; for

for \* Moses calls it, A Law engraven on the Heart of Man, and † St. Paul, The greatest Perfection of Human Nature.

Coroll. 1. Hence the true Nature of Supreme Spiritual Good and Evil may be discovered. For if there be impressed on Spiritual Beings, an infinite Tendency, Bent and Biass, to be reunited with their Divine Original, and the Place in the Divine Substance out of which they were formed (if I may speak so in a Figurative Sense) then their being finally united with this their Divine Original, is the Supreme Spiritual Good, and the feveral Approaches to. ward this Union, are inferior Spiritual Goods; as the being finally separated from it, is the supreme Spiritual Evil, and the feveral Steps toward this Separation, inferior Spiritual Evils. And the Means of this Union and Separation, are Moral Good and Evil.

Coroll. 2. By Schol. of Prop. 1. the most general Division of the Passions,

\* Deut. xxx. 14.

† 1 Cor. xiii. ult.

was

was into Spiritual and Animal. As, in the first Sense, Passion may be defined, The Sentiments produced on the Soul by external Objects, either Spiritual ones immediately, or Material ones, by the Mediation of the Organs of the Body: So, in the second Sense, Passion may be defined, The Effect produced by Spirits or Bodies, immediately on the Body. And fince outward Objects may be confidered as Goods or Evils, the most natural Division of the Passions (whether Spiritual or Animal) as they regard these Objects, is into the Pleasurable and the Painful; which exhausts their whole Extent. And in this Senfe all the Paffions may be reduced to Love and Hatred, of which Joy and Sorrow, Hope and Fear, &c. are but different Modifications or Complexions, as they may be called. I do not descend to a more particular Account, not intending an ac. curate Treatife on the Paffions, but only to lay a Foundation for some general Observations on them, as they regard and influence Health and Long Life.

§. 2. In relation to the Organical Inftruments of the Body, and the Effects wrought on them, or the Diforders brought

brought upon them, the Paffions may be divided into Acute and Chronical, after the fame Manner, and for the fame Reason, as Diseases are. The acute Possions, whether pleasurable or painful, have much the fame Effect, and work much after the fame Manner, as Acute Diseoses do. They effect a brisk and lively Circulation of the Fluids, crifp up and constrict the Solids for some short Time. Thus sudden Gusts of Joy or Grief, Pleasure or Pain, stimulate and fpur the Nervous Fibres, and the Coats of the Animal Tubes, and thereby give a Celerity and brisker Motion to their included Fluids, for the fame Time. And the Functions of the Heart and Lungs being involuntary, they have their more immediate Effects upon them. Thus both fudden Joy and Grief, make us breathe short and quick, and make our Pulse small and frequent. The retaining our Breath for some Time (for fo far our Breathing is voluntary) to reflect more intenfely upon the painful Object, forces at last a strong Expiration, which becomes a Sigh. Thus a sudden painful Idea, makes a quicker Circulation of the Blood, and thereby throwing a greater X Quan-

Quantity thereof upwards, through the proportionally larger Branch of the Aorta, makes it appear in the superficial Vessels of the Face, Neck and Breast, and fo produces a Blufb, which, when longer continued, and being very frong, is dispersed over the whole Surface of the Body. Hence the Observation of Blushing at the Back of one's Hand; and the Reafons why we figh upon fome Occasions, and blush upon others, depend upon the different Structure of the Organs of Pulsation and Respiration. A quick furprizing Pain of Mind acts upon the Heart, because the Motion of the Heart is altogether involuntary: So that a sudden Constriction takes place there immediately to increase the Pulse. Whereas we have fome Power over the Breathing; we can stop or suspend it for a Time; and when we are thinking intensely, our Attention partly makes us hold our Breath, and hence enfues Sighing rather than Blusbing. For the Pain being flow, quickens the Pulse more gradually: But if it continues long, both Actions of both Organs are respectively produced; and hence it comes to pass, that upon Anxiety, Concern, and earnest Expectation, the Pulle

Pulse is found quick and small, and the Breath thick and difficult, as Experience shews. The fame Principles will account for the Effects of Fear and Anger, which make us change Colour, and look red or pale, as the Blood is accelerated or retarded in its Courfe. The fudden Gusts of these Passions being thus accounted for, when they become extreme, they drive about the Blood with fuch a Hurricane, that Nature is overfet, like a Mill by a Flood : So that what drove it only quicker round before. now intirely ftops it, and renders 'the Countenance pale and ghastly. Sudden and great Fear and Grief, do so convulse the Nervous System, that sometimes they alter the Polition of the Parts. and fix them in a new one. Thus the Hair stands on end in a Fright, and the whole System of the Nerves becomes fo rigid and stiff, as to lose their Elasticity; whereby the Animal Functions are ftopp'd at once; and Fainting, and fometimes Death, enfues.

. 9. 3. The Chronical Passions, like Chronical Diseases, wear out, waste and destroy the Nervous System gradually. Those Nerves which are necessary for X 2 con-

confidering, brooding over, and fixing fuch a Set of Ideas on the Imagination, being constantly employ'd, are worn out, broken and impaired. The reft, by Difuse, become resty and unactive, lifeless and destitute of a sufficient Flux of warm Blood and due Nourishment. And thus the whole System languishes and runs into Decay. Thus flow and long Grief, dark Melancholly, hopeles natural Love, and overweening Pride, (which is an outragious Degree of Selflove) impair the Habit, by making the proper Seafons of neceffary Food and due Labour be neglected, and thereby depriving the natural Functions of their wonted Supplies, overworking fome Part of the Nervous System, and leaving the other to rust, and become resty for want of Ufe. Some of these Paffions, as Love, Grief and Pride, when very intense and long indulg'd, terminate even in Madness. The Reason is, as I have been faying, because long and constant Habits, of fixing one Thing on the Imagination, begets a ready Disposition in the Nerves to produce again the fame Image, till the Thought of it become (pontaneous and natural, like breathing, or the Motion of the Heart, which the Machine per-

performs without the Confent of the Will; and also a Disability or \* Tetanus enfues on the other Parts, just as the Faquiers in India, fix one or both Hands by long holding them up, fo as that they cannot bring them down again. There is a kind of Melancholy, which is called Religious, because 'tis conversant about Matters of Religion; although, often the Persons so distempered have little solid Piety. And this is merely a Bodily Difease, produced by an ill Habit or Constitution, wherein the Nervous Syftem is broken and difordered, and the Juices are become viscid and glewy. This Melancholy arifes generally from a Difgust or Disrelis of worldly Amusements and Creature. Comforts, whereupon the Mind turns to Religion for Confolation and Peace : But as the Perfon is in a very imperfect and unmortified State, not duly instructed and disciplined, and ignorant how to govern himself, there enfues Fluctuation and Indocility, Scrupulosity, Horror and Despair.

been faid, in the common Senfory, like

\* Immobility.

a skil-

a skilful Musician by a well tuned Instrument; if the Organ be found, duly tempered, and exactly adjusted, answering and corresponding with the Actions of the Musician, the Musick will be distinct, agreeable and harmonious. But if the Ogran be spoiled and broken, neither duly tuned, nor justly fitted up, it will not answer the Intention of the Musician, nor yield any distinct Sound, or true Harmony. Those therefore who are tender and valetudinary, lead sedentary Lives, or indulge contemplative Studies, ought to avoid Exceffes of the Paffions, as they would Exceffes in high Food, or Spirituous Liquors, if they have any Regard to Health, to the Prefervation or Integrity of their Intellectual Faculties, or the bodily Organs of them. As the Paffions, when flow and continued, relax, unbend, and dissolve the Nervous Fibres; fo the fudden and violent ones screw up, stretch and bend them, whereby the Blood and Juices are hurried about with a violent Impetuosity, and all the Secretions, are either stopp'd by the Constrictions, Cramps and Convulsions begot by them, or are precipitated, crude and unconcocted, and so beget, or, at least, difpofe

pose toward Inflammations, Fevers or Mortifications. Hatred, for Example, Anger and Malice, are but Degrees of a Frenzy, and a Frenzy is one kind of a raging Fever. From all which 'tis plain, the violent and fudden Passions, are more dangerous to Health, than the flow and continued, as acute Diseases are more destructive than chronical.

§. 5. To fhew yet farther, the Influence of the Paffions on the Animal Oeconomy, let us confider the different Conftitutions of Men. Those who have very springy, lively, and elastick Fibres, have the quickest Sensations, a weaker Impulse producing a stronger Sensation in them. These generally excel in the Animal Faculty of Imagination. Hence the Poet,

#### ---- \* Genus irritabile Vatum.

And therefore, your Men of Imagination are generally given to fenfual Pleafure, because the Objects of Sense yield them a more delicate Touch, and a livelier Sensation, than they do others. But if they happen to live so long (which is

\* Poets are foon provok'd.

hardly

hardly possible) in the Decline of Life they pay dearly for the greater bodily Pleasures they enjoyed in the Youthful Days of their Vanity. Those of rigid, stiff and unyielding Fibres, have less vivid Senfations, because it requires a greater Degree of Force to overcome a greater Resistance. Those excel most in the Labours of the Understanding, or the Intellectual Faculties, retain their Impresfions longest, and pursue them farthest; and are most susceptible of the flow and lasting Paffions, which fecretly confume them, as chronical Difeases do. And lastly, Those whose Organs of Sensation are (if I may speak so) un elastick, or intirely callous, resty for want of Exercife, or any way obstructed, or naturally ill-formed, as they have fcarce any Paffions at all, or any lively Senfations, and are incapable of lasting Impressions; so they enjoy the firmest Health, and are subject to the fewest Diseases: such are Ideots, Peasants and Mechanicks, and all those we call Indolent People.

§. 6. We have before fhewn, that weak *Limbs*, and all the bodily Organs, may be ftrengthened and repaired

paired by proper Exercife. And there is no doubt to be made, but the Organs of Senfation, and those the Mind uses in its intellectual Operations, may be likewife improved, strengthned and perfected by constant Use, and proper Application. And if by Exceffes, an original bad Conformation, or any Accident, these Organs come to be fpoiled, or by the bad State of the Juices, they be weakned in their Functions ; then the Medicinal and Chirargical Arts may take place, and come in play. But if the Paffions be raging and tumultuous, and constantly fuelled, nothing lefs than He, who has the Hearts of Men in his Hands, and forms them as a Potter does his Clay, who stills the Raging of the Seas, and calms the Tempests of the Air, can settle and quiet fuch tumultuous, overbearing Hurricanes in the Mind, and Animal Occonomy. Without fuch a Miracle, fince the Soul and Body act mutually upon one another, and the Tabernacle of Clay is the weakest Part of the Compound, it must at laft be overborn and thrown down.

§.7. In fuch a wretched Cafe I know no Remedy, but to drown all other Paffions in that Spiritual one of the Y Love

Love of God. The Reasonableness and Justness of which Proceeding, and (what may feem a Paradox) the Ufefulness of it to Health, and its benign Influence on the Animal Oeconomy, I shall endeavour to demonstrate. Spiritual Love is that Principle analogous to Attraction, spoken of in Prop. IV. 'Tis the Tendency, Byass or Impulse of the Minds of Men and other Spirits, toward the most amiable Objects, communicated by their Creator in their original Formation, by virtue of which, they constantly tend, press and urge to unite (and, if Obstacles were removed, would unite) with one another, and be all united with their Origin. This Principle indeed, in this lapsed Estate of Man (where 'tis overlaid and buried under Rubbifb, involved in fo many other Attractions, and stifled with fuch Letts and Contrarieties, that its Action is felt but just enough to know that it is, and wants to be awaked with Labour, and excited with Violence, as the Scripture mentions, the taking the Kingdom of Heaven by Force) on its first Developement and Expansion, and in its first Exercises, may be called a Spiritual Paffion, as 'tis the first Motions, Endeavours and Velleities toward the Love of

of God or Charity. But in its Advances, and final Perfection and Confummation, it discovers itself to be a Faculty, Quality, or inherent Power in the Soul, whereby it will act without Solicitation, Motive or Direction. As a Stone in a Wall, fastned with Mortar, compressed by furrounding Stones, and involved in a Million of other Attractions, cannot fall to the Earth, nor sensibly exert its natural Gravity, no, not fo much as to discover there is fuch a Principle in it; just so, the intelligent Soul, in this her lapsed Estate, being drowned in Sense, chained and fettered by Ignorance and Perverseness, drawn and hurried away by the Devil, the World and the Flefb, is difabled from exerting this inherent and innate Principle of Re-union, and wants sufficient Light on the Understanding, and a right Turn of the Will, to be put in a Capacity of exercifing it. But in its proper Vacuity, and being freed from these Letts and Impediments, it would mount towards its Original, like an Eagle toward the Sun. Amiability, Pulchritude or Beauty, is as much the peculiar and proper Object of this Affection of the Mind, as Light, or a luminous Body, is of Vision; for Deformity, V 2 25
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as such, can never be loved. And Beauty or Perfection, is, in Reality and just Philosophy, nothing but Analogy, Order, or just Proportion. From hence it necessarily follows, that in the Scale of Beings, all Objects ought to be loved in proportion to their Degree of Beauty, Symmetry or Perfection. And confe-quently, the highest Perfection ought to be loved with the highest Degree of Love, and the several subordinate De-grees of Perfection, with proportionate Degrees of this Affection of the Mind. And fince Finite, when compared with Infinite, vanishes quite, or becomes nothing; it follows necessarily (fince there is, and can be, but one Object that is Infinite, Good and Perfect, and all others are but Created, and Finite Goods; that is, in Comparison they are nothing) that, according to the eternal and immutable Laws of Analogy, the One supreme Good, endued with Infinite Perfection, ought to be loved with a Love infinitely superior to our Affections for other Things, or (which is the fame Thing in other Words) that, in Comparison, our Love to the Author of our Being, ought to be infinite; and that to ourfelves and other Objects, as being

being finite Creatures, none at all. This is the true Philosophy of this Matter, and as much a Demonstration, as any thing in Numbers or Geometry poffibly can be; however it may be received by Men of Self-Love and Carnal Minds.

§. 8. Yet I would not be fo understood, as if I condemned all subordinate and duly proportioned Regards for Ourfelves, and other Objects about us, that are neceffary for our Support and Accommodation in our present State. No! There is a just and laudable Self-love, as well as a false and vitious one. If we love Ourselves, as we love our Neighbours; if we love Ourselves as God loves us; if we love Ourselves as we deferve to be loved by the infinitely perfect Being; if we love Ourselves with a justly proportioned, and duly fubordinate Love: that is, if we love Ourselves with a Finite, and Him with an Infinite Love, or a Love increasing, and going on in infinitum, that has neither Limits nor End; Then we love Our-· felves as we ought : This Self-love is just and laudable, and has its due and proper Degree of Reality and Existence, in the Nature of Things. Perfection, or an

an Object perfect in its kind, or one that we think fo, is the proper Object of our Love. And as in due Analogy, Proportion and Order, infinite Perfection requires infinite Love, or the highest Degree of Love we can give it; fo all other Objects are to be loved with a Degree of Love proportioned to their Perfection. And fince a Being of infinite Perfection can be but one, and all other Beings can have but a finite Degree of Perfection, we must love them but with a finite Love; or, the Proportion of our Love to Him and them, ought to be, as Infinite is to Finite. That is, comparatively we ought to love them with no Love at all; but absolutely ( or, without comparing created Things, to the infinitely perfect Being) with their proper Degree of finite Love, according to their Rank in the Scale of Beings.

Coroll. Tho' from the Nature of the Demonstration I have given, that God is to be loved, it is evident he is to be loved infinitely for Himself, and his own infinite Perfections, abstracting from all other Considerations, even that of our own Happines, in the Enjoyment of, or Union

Union with Him; Yet it is certain, these Two, our Love to God, and our own Happiness, cannot be actually separated. Pleasure consists in this, That the Soul and Body are affected, by the Objects that produce it, with an harmonious and commensurate Action or Touch; for in their original and uncorrupted Make, as they came from the Hands of their Creator, both separately, and each by themfelves, and also in their Actions on one another, all was Harmony and Concord. As to the Body; as nothing but a musical or commensurate Touch, can affect it with Pleasure, and as a discordant and uncommensurate Stroke creates a Jarring, Grating and Obstruction, which is Pain (this is evident in Hearing, where the agreeable Senfations of fonorous Bodies, are altogether harmonious; Sir Isaac Newton, has made it plain in Vision; And, no doubt, it is fo in all the other Senfes) So likewife as to the Soul; Truth, and Beauty or Perfection, are the only . Objects that give Pleasure to the Understanding and Will, its two Cardinal Faculties. And these are nothing but Harmony, or just Proportion in the respective Objects. And we have shewn, that

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that the Union of the Soul and Body (or Life, the fo much covered Good) confifts in a kind of Harmonia præstabilita (though a kind very different from Mr. Leibnitz's) whereby an harmonious Touch or Action upon either of them, produces a pleasurable Sensation. Now as Beauty or Perfection gives Pleasure to both the Parts of the Compound, and as nothing but the highest Degree of Perfection or Beauty, can give the greatest Pleasure, i. e. Happiness; it necessarily follows, That Spiritual Love, or the Love of God, as it is the only Mean of uniting us with the One Being, who is infinitely perfect, is also the only Mean of making us infinitely happy.

§.9. As to the fecond Thing proposed concerning Spiritual Love, however foreign these metaphysical Speculations concerning it may seem, to a Discourse about Health and Long Life; yet, if steadily believed, and their natural Consequences reduced to Practice, they would not only become the most effectual Means to prevent Diseases, but also, the most of any Thing, promote Health and Long Life. For, first, Were our Love proportioned to the Order and Analogy

Analogy of Things; were our Love to the Supreme Good infinite, and that to others, in Comparison, none at all; we should have but one fingle View in all our Thoughts, Words and Actions, viz. The Promoting and Raising that Supreme Love, to its due Degree and Elevation : whereby all Anxiety, carking Care, and Solicitude about other Things ( the Source of all our Miseries, and of many Bodily Diseases) would be cut off all at once. Secondly, Since Love always begets Resemblance of Manners; fince the Object of this Love is infinitely perfect; if we loved him in the supreme Degree, we should infinitely endeavour to resemble kim : whereby Hatred and Malice, Luxury and Lewdness, Laziness, and all the other Seeds of Bodily Difeafes, would be altogether destroyed. Thirdly, Since Spiritual Love is not only the nobleft, but also the most joyful and pleasant Affection of the Mind; fince the Object of our supreme Love (as an inspired Poet expresses it) has Fulness of Joy in his Presence, and Rivers of Pleasures at his Right Hand for ever; and fince our Joy and Happiness will always rife in proportion to our Love; the placing our Jupreme Love on the Supreme Good, Z would would

would render us infinitely joyful, serene, calm and pleased; than which, certainly, no Man can imagine a more effectual Mean of Health and Long Life.

### RULES of Health and Long Life, drawn from the Head

#### Of the PASSIONS.

1. THE Passions have a greater Influence on Health, than most People are aware of.

2. All violent and sudden Passions, dispose to, or actually throw People into acute Diseases; and sometimes the most violent of them bring on sudden Death.

3. The flow and lasting Passions, bring on chronical Diseases; as we see in Grief, and languishing hopeless Love.

4. Therefore the *fudden* and *acute* Paffions are more dangerous than the flow or chronical.

#### 5. Men

5. Men of lively Imaginations and great Vivacity, are more liable to the fudden and violent Passions and their Effects.

6. Thoughtful People, and those of good Understanding, suffer most by the flow, and fecretly confuming Passions.

7. The Indolent and the Thoughtless, fuffer least from the Passions: The Stupid and Ideots not at all.

8. The Difeafes brought on by the Paffions, may be cured by Medicine, as well as those proceeding from other Causes, when once the Paffions themfelves cease, or are quieted. But the preventing or calming the Passions themfelves, is the Business, not of Physick, but of Virtue and Religion.

9. The Love of God, as it is the fovereign Remedy of all Miferies, fo, in particular, it effectually prevents all the Bodily Diforders the Paffions introduce, by keeping the Paffions themfelves within due Bounds; and, by the unfpeakable Joy, and perfect Calm, Serenity and Tran-Z 2 quillity

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quillity it gives the Mind, becomes the most powerful of all the Means of Health and Long Life.



#### CHAP. VII.

Containing those OBSERVA-TIONS, that came not naturally under the foregoing Heads.

I. MENTION having been fo often made of Chronical, and fometimes of Acute Diftempers, it may be convenient here, to fuggeft to the Readers, as clear an Account of their Nature and Difference, as I poffibly can. Acute Diftempers, then, are underftood, Such as within fome fhort limited Time have their Periods, either of a perfect Crife, and fubfequent Recovery, or of putting an End to the Diftemper and Life both together; and are therefore called quick?

quick, sharp or acute Distempers, whose Symptoms are more violent, their Duration shorter, and their Periods more quick, either of sudden Death, or a glorious Victory over the Difease. These are generally limited within Forty Days. And those that run out longer, turn into chronical Diftempers, whofe Periods are more flow, their Symptoms lefs fevere, and their Duration longer. They too (if new Fuel were not administred to them) would, by the Course of Nature, and the Animal Oeconomy, have their Periods, and terminate at the last. The Viscidity of the Juices, and the Flaccidity of the Fibres, would, in a great measure, and to some very tolerable Degree, by proper Remedies, and a due Regimen, be removed, and the Party recover in these, as well as acute Cafes. But this requiring long Time, much Care, and great Caution, unwearied Patience and Perfeverance, and fo long a Course of Self denial, as few People are willing to undergo, it is become the Reproach of Phylick and · Physicians, that acute Cases cure themfelves (or rather Nature cures them) and chronical Cafes are never cured. But both the Branches of the Reflexion are

are equally false. In the First, Art and Care, judicioully applied, will always alleviate the Symptoms and Suffering, will help on Nature to the Relief the points out, and quicken the Crife, which it will constantly bring about, if the Distemper is not too ftrong for the Constitution. And even then it will mitigate the Pain, and lay the Patient gently and eafily down. But in the lafe Cafe, if due Care be had, to follow timeoufly the Advice of an honest and experienced Phylician, a Period certainly may be brought about to most chronical Distempers, where the great Viscera are not spoiled and destroyed. The Failing is in the Patient himfelf, who will not, or cannot, deny himself for a Time fufficient to bring about the Cure. Some chronical Distempers indeed are fuch, either by having gone too far, or by being Hereditary, and interwoven with the Principles of Life, as never to be totally overcome. And then 'tis a Piece of great Wildom, to know how far their Constitution will go, and fit down contented with that measure of Health their original Frame will admit of. But of this I am morally certain, If the Rules and [Cautions laid down in this Treatife, be

be carefully, steadily, and constantly obferved, few chronical Distempers but will receive fuch Relief and Alleviation by them, as to make Life tolerably eafy, and free from grievous Sufferings : And in the mentioned Cafe, that is all that is left for Art to do. But in other chronical Distempers taken in due Time, where the Viscera are not quite spoiled, they would infallibly bring about a final Period, and perfect Cure. The most certain distinguishing Mark of an acute Distemper, is, To have a quick Pulse; that of a Chronical, To have a flow one. The first will exhaust the Fluids, and wear out the Solids in a fort Time; whereas the last will require a longer Time to produce the fame Effect. Some chronical Diftempers, especially towards the last and fatal Period, turn acute. And some acute ones terminate in chronical Diftempers. But this Mark will not only keep them diffinct; but also point out, when acute Distempers have chronical Remissions or Intermissions, and when chronical Diftempers have acute Fits or Paroxysms.

§. 2. Some Perfons, who are extremely healthy and found during their

their younger Days, about, or soon after the Meridian of Life (that is, about Thirty-Five or Thirty fix, according to the Observation of an inspired King) fall into chronical Distempers, which cut them off in few Years, or make them miserable all the reft of their Lives. Thus Confumptions prove mortal to fome about that Time. Thus Stone and Gravel, Gout and Rheumatism, Scurvy and Dropfy, King's-Evil and Skin-Diseases, either make their first Appearances, or shew themselves in their true Type about this Time of Life. The Reason is, While the Juices are sweet, fufficiently thin and fluid, but especially while the folid Organs, the Membranes and Fibres, are yet but unfolding, stretching and drawing out to their full Dimensions ; any Acrimony, Sharpness, or corroding Humour, can affect them no other Way, than by making them vibrate, and fo extend themfelves farther and farther. For as Pain, fo thefe sharp Salts by their Twitching and Irritation on the tender Fibres, make them only contract, and fo draw at both Extremities, and thereby unfold and extend themselves farther. So while the original Foldings and Complications of the

the Solids are not yet quite extended, this Irritation ferves only to draw them out, and does not hurt them, till they are arrived at their full Extent, which generally happens about Five-andtwenty. It takes a due Time after that for these sharp Humours to exalt themfelves to their utmost Acrimony, to corrupt and putrify the Juices, and alfo fome more Time to wear out, to obftruct and break the great Organs, and their smaller capillary Vessels. The Sum of all which, brings the Periods of the great Attacks of these Distempers to the mentioned Time of Life. Those in whom the original Taint is deeper and more radicated, and the natural Constitution weaker, fuffer under these Attacks sooner. And those in whom it is flighter and more superficial, and whose Complexion is stronger and more hardy. hold out longer. But the Generality suffer first, eminently, about the Meridian of Life. Hence the common Observation of those that die of a genuine Consumption, that they begin to feel it first before Thirty-fix.

§. 4. There is no chronical Distemper whatsoever, more universal, more ob-A a stinate,

stinate, and more fatal in Britain, than the Scurvy, taken in its general Extent. Scarce any one chronical Diftemper but owes its Origin to a Scorbutick Cachexie, or is fo complicated with it, that it furnifhes its most cruel and most obstinate Symptoms. To it we owe all the Dropsies that happen after the Meridian of Life, all Diabetes, Asthma's, Confumptions of feveral kinds, many forts of Colicks and Diarrhaa's, some kinds of Gouts and Rheumatisms, all Palsies, various kinds of Ulcers, and, poffibly, the Cancer itself, and most cutaneous Fouinesses, weakly Conflitutions, and bad Digeftions, Vapours, Melancholy, and almost all nervous Distempers whatsoever. And what a plentiful Source of Miseries these last are, the Afflicted best can tell. And scarce any one chronical Diftemper whatsoever, but has some Degree of this Evil faithfully attending it. The Reason why the Scurvy is so \* endemick a Distemper, and fo fruitful of Miseries, is, that it is produced by Caufes mostly special and particular to this Island; to wit, The indulging fo much in animal Food, and strong fermenting Liquors, in contemplative Studies, and sedentary Profeffions

\* Peculiar to this Country.

feffions and Employments (and thence the Want of due Labour and Exercise) together with the nitrous Moisture of an Island, and the Inconstancy and Inclemency of the Seafons thence arifing. I have had many Occasions to shew, how such Caufes must necessarily and naturally produce fuch Effects. I will here only touch the Matter flightly, to point out the Connexion. Animal Foods and strong Liquors to Excess, and with Continuance, must load and charge the Flaids with their Salts. Want of due Exercise must fuffer these to unite in Clusters, and increase their Bulk in the small Veffels. Their larger Bulk, and greater Acrimony, thence arifing, must increase the Viscidity of the Fluids, by breaking the Blood Globules, and fo coagulating the Mafs, and at last obstruct the finer Pipes, and all the fmaller Glands: Whereby the Tone of all the elastick Fibres must be interrupted and broken, and their Vibrations stopt at every obstructed Gland and capillary Vessel, and an univerfal Diforder produced in the whole animal Oeconomy. And this Diforder will operate, and shew it felf in Symptoms fpecial and particular, according to the special and particular Make and Aa 2 Con-

Conformation of the Parts, the Weaknefs of the Strength of the Organs, the particular Mismanagements, and precife State of the Air the Party lives in. And the Detail of these general Causes applied to particular Perfons, must produce the respective Diseases mentioned. In a Word, The Scurvy is a kind of Catholick Diftemper here in Britain, arifing from constant and general Causes, from the Customs of the People, and from the Nature of the Climate, which renders the ferous Part of the Blood too thick and glewy, breaks and divides the Union of the globulous Parts, obstructs the finall Veffels, and destroys the Springiness and Elasticity of the Fibres. So that most chronical Distempers, can be little elfe, but Branches and Cions from this Root, which (like Pandora's Box) is fo fruitful of Variety of Mifchiefs. And its arifing from the Climate and Customs of the People, is the Reafon why chronical Diftempers are fo frequent in Britain, to what they are in warmer Climates (which, by a freer Perspiration and lighter Diet, not only prevent those Diseases in their own Inhabitants, but universally cure those of our Island who are afflicted with them, E.

if they flee to those Regions any reasonable Time before Nature be quite worn out). For though the Inhabitants of Britain, live, for the most part, as long, or rather longer, than those of warmer Climates; yet scarce any one, especially those of the better Sort, but becomes crafy, and fuffers under some chronical Distemper or other, before they arrive at old Age. The fame Reafon is to be affigned for the Frequency of Self-murders here, in England especially, beyond any other Country. For few have Grace and Resignation enough, to fuffer patiently the lafting Pains of a chronical Diftemper, or the yet more torturing and crucifying Anguish of a perpetual Dispiritedness; though I have observed generally, and have good Reafon to conclude universally, That all Self-murderers are first distracted and distempered in their intellectual Faculties. Notwithstanding the Diffusiveness and Universality of this Difease, so that scarce a fingle Individual of the better Sort is altogether free from it; yet I never once in my Life, faw it totally extirpated in those who had it to any Degree, so as to be intirely free from it all the reft of their Lives after ; but that it still appeared,

peared, and fprang up again in some Symptom or other, and at last brought forth that grand one, which put a final Period to all their Sufferings. One good Reason for this is, That it requires a Regimen and Conduct fo intirely contrary and opposite to the natural Habits and Customs, and the universal Bent and Appetites of the Inhabitants of this Island, that it becomes a kind of perpetual Self-denial to them; which the British Nation, in general, does not mightily admire. Another Reason is, That fine Folks use their Physicians, as they do their Laundresses, send their Linen to them to be cleaned, in order only to be dirtied again. Nothing lefs than a very moderate Use of animal Food, and that of the Kind which abounds least in urinous Salts (as most certainly the young and the lighter coloured do) and a more moderate Use of Spirituous Liquors, due Labour and Exercise, and a careful guarding against the Inconstancy and Inclemency of the Seafons, can keep this Hydra under. And nothing else than a total Abstinence from animal Foods, and strong fermented Liquors, can totally extirpate it. And that, too, must be begun

gun early; before, or foon after the Meridian of Life; or elfe there will remain too little Oil in the Lamp, the Spirits will fink too far, ever to be recovered again; and the remaining Part of Life, will be too short for so total a Change as must be made. So that those who fuffer greatly under this Britisb Distemper, must be contented to bear and forbear a little, and must expect no greater Degree of Health, than their Time of Life, the Nature of their Disease, and the State of their Constitution will admit of. But still a great Moderation in animal Fouds, and Spirituous and fermented Liquors, due Exercise, and a Care to fence against the Injuries of the Weather, will make Life tolerably eafy; especially if some gentle domeftick Purges be interspersed. The Seeds and young Sprouts of Vegetables, have scarce any gross, fixed, or essential Salts at all in them. This is not only evident from the Reasons formerly given (becaufe they are young, or the Nourishment appointed by Nature for young Vegetables; for the Earth is only a proper Neft or Matrix for them; and the Sun's Heat ferves them inftead

stead of Incubation) but upon \* Trial and Examination, they yield none, being too light and thin to calcine and incinerate, and the Salts too volatile (and confequently, fmall and fit to pass by Perspiration, and thereby can be no way injurious to Human Constitutions) to endure the Fire; which full grown Plants, their Stalks and Wood, readily do. And in unfermented Liquors, the Salts are so enveloped, that they cannot unite to form a Spirit, and are so sheathed, by particular Coats of the Materials of the Vegetable, that they can scarce do any harm (except when they exceedingly abound) to animal Bodies. Hence it comes to pass, that a vegetable Diet for a few Weeks or Months, together with drinking Water or unfermented Liquors ( fuch as Tea, Coffee, Barley-Water, Liquorice-Water, Teas made of Oranges, or other Seeds and Plants) will fasten the Teeth when dropping out, from a Confumption of the Gums by scorbutick Salts, cure any cutaneous Foulness or Eruptions, and even any spreading Ulcer, if it is not Scrofulous, when no

\* See Lowth. Abridg. of Phil. Trans. v. 2. P. 661.

Medicine

Medicine on the Face of the Earth will touch it. Hence the grand Maxim in the Cure of all Ulcers is, by Diet to bring them to the State of a Wound, and then they will cure of themfelves. And, as I have elfewhere obferved, there is fcarce a thin, confumptive, hysterick, or hypochondriack, and weakly Conftitution in England, which has not for its Parent, a latent or manifest scorbutick Cachesy, excepting that which arifes from a Scrofula. From the whole we may gather, how much a proper Regimen of Diet, and due Exercise, with the other Helps and Remedies already mentioned in this Treatife, is able to do in most British chronical Distempers.

§. 4. Having had fo often Occasion to speak of weak and relaxed Nerves, it will not be amiss to fuggest, some of the outward and most sensible Signs and Characters, whereby it may be manifest, whether one's felf, or any particular Perfon he is concerned for, be of this Make and Constitution, before some chronical Distemper, or other dismal Symptom has made it plain; in order to prevent these as far as possible. To which Purpose we must observe, that the Nerves are Bb Bundles

Bundles of Solid, Springy, and elastick Threads or Filaments (like twifted Cat-Guts or Hairs) whose one Extremity is terminated at the common Senfory in the Brain, where the Soul is supposed to reside; the other is interwoven into every Point of the Scarf-skin, the Membranes, the Coats of the Veffels, the Muscles and the other sensible Solids of the Body, in order to convey the Motions, Actions, Vibrations, or Impulses of out. ward Objects to the Soul. These Threads or Filaments are highly elastick or springy, as we may fee from their hardned Substances, fuch as Whalebone, Ivory, Horn, and Cartileges, which are more eminently Jo, than any other Bodies known. Some Persons have their Fibres very quick, readily vibrating, highly springy and elastick, so as to tremble and shake violent. ly, by the least Impulse. Others have more rigid, firm, and stretched Fibres, which yield not but to ftrong Impresfions, and move flowly, but move for a long Time. Lastly, There are those who have weak, loofe, slender, and relaxed Fibres, which, though eafily moved, and yielding to the weakest Impulse, yet communicate only imperfect, languid and faint Impressions and Vibrations to the

the Soul, and have all their other Animal Functions of the fame languisbing Nature. And 'tis of these last, I have been all along speaking. And we may readily discover them, by these outward Characters and Signs. 1. Those who have naturally soft, thin, small, and fort Hair, are of a loofe, flabby, and relaxed State of Nerves. For the Hair feems to be some of the fleshy Fibres, only lengthen'd outwards and harden'd. At least, like the Fibres, they confift of a great many lesser Filaments contained in a common Membrane, are folid, transparent and elastick : And as these Hairs are in Strength and Bulk, fo generally the Fibres of the Body are: 2. Those of the fairest Hair, are of the loofest Fibres (other Things being equal) because the Fairest are more rare, porous, and fungous; And because Bodies of the lighter Colours, consist of smaller Parts, than those of the more flaming Colours; as has been formerly observed. 3. Those of large, or (as they are called) mastiff Muscles, and of big. Bones, are generally of a firmer State of Nerves, than those of little Muscles and Bones : Becaufe the Muscles and Bones being similar to their Fibres, as is highly Bb 2 prø:

probable, and these being bigger, and confequently stronger, fo must those be: And, on the contrary, 4. Soft, yielding, pappy Flesh, is a sure Symptom of loofe Fibres; whereas hard, firm, and unyielding Muscles, are the constant Sign of firm Fibres. 5. A white, fair, blanch'd, or asben-coloured Complexion or Skin, conftantly indicates a weaker and more relaxed State of Fibres, than a ruddy, fresh, dark sallow, or black Hue; for Reasons already given. 6. A fat cor-pulent and flegmatick Constitution, is always attended with loofe, flabby, and relaxed Fibres, by their being disfolved and oversoaked in Moisture and Humidity. And, on the contrary, those of a dry, clean and firm Make, have strong, firm, and tense Fibres. 7. Those who are subject to Evacuations of any kind, in any Degree greater than what is natural; and those who by any Accident, have fuffered long by any preternatural Evacuation whatfoever, are, or become of loofe, relaxed Fibres and Nerves. Thus those who frequently run into Purging, or Floods of pale Water, flow at the Mouth or Nose, or melt into profuse Sweats; those who any Way have loft much Blood, have had a Diarrhæa, have recovered of a

a Fever, and those of the Sex who have purified longer or more than is usual; all of these are originally, or become accidentally, of weak and relaxed Nerves and Fibres. 8. Lastly, Those who are of a cold Constitution, are apt to run into Coldnesses on their Extremities, or ready to catch Cold, are also of weak and loose Fibres and Nerves: because these are Signs of a flow and interrupted Circulation and Perspiration; which manifests a weak Spring in the Fibres of the Coats of the Vesses, the Fibres of the Muscles, and a Weakness of the Spring of the Scales of the Scarf-skin.

§. 5. On this Occasion of rehearing the Signs of weak Nerves, I cannot omit apprising those of the breeding Part of the Sex, and those who are concerned in them, of their Readiness of Miscarrying, unless duly tended and managed, especially those of them of tender and weak Nerves, or of too delicate a Constitution. The Signs I have now laid down, will always make it evident, if any particular Person is so or not. And if upon Examination they be found to be fuch, they will be apt, upon the flightest Occasion, to run into frequent Miscarry.

Miscarriages; whereby a great Part of their Posterity will be destroyed, and they themselves exposed to Dropsies or Consumptions, or (which is worse than either) perpetual Lowness of Spirits, Vapours and other Hysterick Diforders. And by this Misfortune alone, a confiderable Part of the better Sort here in England, perish and are loft. Nature has formed the Generality of the Sex, of a soft, slender, and delicate Make. Want of due Exercise, a full Table, indiscreet Nurses, overfond Mothers, and Hereditary Sharpnesses, make them much more fo. And if by Neglect or Accident, they once begin to miscarry, every first Miscarriage paves the Way for a second, and a third, and fo on, till the poor, pretty Creature, has neither Blood nor Spirits, Appetite nor Digestion left. For one Miscarriage weakens the Constitution, breaks and tears the nervous System more, than two mature Births. If ever this is to be fecured or prevented effectually, 'tis to be done, at least attempted, in the first Instance, if possible, at least as soon as may be, before a total Relaxation and Dissolution of the nervous System is brought on. The Giddiness, Romping and Gadding about of the young Creature

ture herself, is often the Cause of her Miscarriage. But oftner the Forwardness and Indiferetion of Surgeons and Midwives, by bleeding on every little threatning Symptom, without confidering the Constitution. Bleeding may do well enough in Sanguine, robust, and plethorick Conffitutions: But 'tis Death and certain Ruin to those of slender and weak Nerves, and the fureft Way to caufe the Miscarriage 'tis defigned to prevent, by relaxing the Nervous Fibres; which Bleeding does as certainly, as it leffens the Quantity of the Blood. The most effectual Method I have ever found to prevent such Misfortunes, is, To order those in such Circumstances, to drink plentifully Bristol Water, with a very little red Wine, for their constant Drink; to lay the Plaister ad Herniam, with Oil of Cinnamon, and London Laudanum, in a due Proportion, to their Reins; to keep them to a low, light, eafily digested Diet, especially of the farinaceous Vegetables, and milk Meats; to strengthen their · Bowels with Diascordium and toasted Rhubarb, if they become too flippery; to air them once or twice a Day, in a Coach or Chair, and to keep them cheerful, and in good Humour, as much as may

may be. This Method will fcarce ever fail, unlefs a latent Scrofula, or fome other Hereditary Sharpness in their Juices, deftroy the Birth.

§. 6. The Tender, Sickly, and those of weak Nerves, ought to have a Regard in the Conduct of their Health, to the different Seafons of the Tear. I have elsewhere \* observed, that such Constitutions begin to fink, droop and languish, about Christmas or Midwinter, go on from worse to worse, till the Spring is over, get up a little, as the Sun grows higher and stronger, arrive at their Meridian Altitude of Health and Strength about Midsummer, and hold it out so long as the Sun warms them, or the Strength they have acquired lasts. Those who have very weak Nerves, fail sooner, even about the Autumnal Equinox: But they get up sooner, because their weaker Nerves make less Resistance. The Sun new ferments, rarifies, and exalts their viscid Juices : So that the Circulation is better performed, more full, free and universal. The Perspiration is also thereby much increased and pro-

\* Effay on the Gout.

moted :

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moted : And the Load being drawn off, by the Force of the Sun's Heat; their Appetite is sharpen'd, and their Digestion mended: To which the serene, warm and clear Air, and the greater Liberty of Exercise and Business contributes. I should advise fuch therefore, religiously to follow the Indications of Nature, and to take these Benefits it offers then, as a certain Sign of their being best and sittest for them. After Christmas, and in the Beginning of the Spring, Milk, Eggs, and Spring-Herbs, as Asparagus, Spinach, and Sprouts come in first: Of which I advise them, to make the greatest Part of their Diet then. As the Spring advances, Lamb and Veal, Green Peale and Sallading abound. After the vernal Equinox, Chicken and Rabbit, young Turkies, and early Fruit come in Season. About Midsummer, Mutton and Partridge, Colliflower and Artichoak may be had. And Autumn brings in Beef and Venifon, Turnip and Carrot. And it will be found, the concoctive Powers of weak Perfons, and those of relaxed Nerves, rife and fortify gradually, as these stronger Foods come in Seafon. By Seafon, I mean not, those earlier Days, that Luxury in the Ce Buyers,

Buyers, and Avarice in the Sellers about London, have forced the feveral kinds of Vegetables, and Animals in. But by Season I mean, that Time of the Year, in which by Nature, common Culture, and the mere Operation of the Sun and Climate, they are in most Plenty and Perfection in this Country. But the principal Point I would urge is, That Juch Persons, would regularly begin to correspond with Nature, in both lessening the Quantity, and lowering the Quality of their Food, as the Seafons indicate, and Providence provides the proper Food in greateft Plenty and Perfection. By which they will preferve the Ballance of their Health pretty near equal all the Year round, have the lightest and least Food, when their concoctive Powers are least, and their nervous Fibres weakest; and rise in the Food, in proportion as these rife. Add to these, That as Winter is best for Home Exercises, Summer is fittest for those without Doors. And as the Day lengthens, their Labour and Exercises abroad ought to be lengthened out. Neither Sydenham nor Fuller, have been able to tell the Half of what obstinate Exerand LONG LIFE. 195 Exercise will do, in low, cachectick, consumptive Cases.

\* — Labor omnia vincit Improbus. — HORAT. D

§. 7. The Germans have a Proverb, That wife Men ought to put on their Winter Cloaths early in Autumn, and put them off late in the Spring. By which they would infinuate, that People ought always to go well-cloathed. Whatever may be in this, as to Perfons that drink hard, and require a plentiful Discharge by the Skin, those who are sober, or who would render themfelves hardy, ought to accustom themfelves to as few Cloaths, both in Summer and Winter, as is possible. Besides the general Rules, of having as tew Necessaries as may be; much and heavy Cloaths, attract and draw too much by Perspiration; as Dr. Keill proves, in his Med. Static. Britann. tender and debilitate the Habit, and weaken the Strength. The Custom of wearing Flanel, is almost as bad as a Diabetes. Nothing

\* q. d. Unweary'd Exercife will overcome any chronical Diftemper. CC2 Can

can enfeeble and drain, weak and tender Perfons more. To make this clear, we must distinguish between Perspiration and Sweating; which differs as widely, as the daily natural Emptying our Bowels, and a Loofeness or Diarrhaa. And as no Body in their Senfes, much less the Tender and Weakly, would endeavour to encourage this last; no more ought they that other of Sweating. For as promoting slippery Bowels, would always keep the Fibres of the alimentary Passages relaxed; so would perpetual Sweating, those of the Skin. And as the Moisture and Damps that Flanel perpetually keeps the Skin in, and its growing fo readily dirty, shews what a Flux of Perspiration it promotes there; fo the perpetual Fri-Etion produced by it, gives the Reafon. If one lays on a superfluous Load of strong Liquors, 'tis happy for him Nature difcharges the Ocean any how; for he had better sweat, than burn in a Fever. But for temperate, tender and fickly Perfons, the more firm and tight all the Organs of their Evacuations be (if they be not totally obstructed) the better it will be for them, the more it will frengthen their Nerves, and harden their Constitut10%.

tion. Nothing but Superfluity in Food or strong Liquors, requires Sweating : And that is the Reason, the Germans run fo much upon it. So far, that \* Tschirnhaus, a very learned and ingenious Gentleman otherwife, refolves the Cure of almost all Distempers into Sweating, upon observing its Success in their Bottle-Fevers. They drink much thin Sharp Wine, which passes every way; and when it comes through the Skin, both the Conflict and the Danger is over. But for those Inhabitants of our Islands, who are sober because they are tender, or would preferve their Health; the lighter and fewer their Cloaths are, both by Night and by Day, in Summer and Winter, the hardier they will grow. The more open the whole Body is to the Air, provided it be benign, the more fluid, and the more active, will the Animal Juices be; and, by consequence, the more full and free will the Perspiration be. For right tempered Air, is beneficial and medicinal to the Animal Juices : And a great Heap of Cloaths, only condenses our own excrementitious

\* In his Medicina Mentis & Corporis.

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Atmosphere about us, and ftops the kindly Influence of this beneficial Element. As to catching Cold, he that lives foberly, and avoids nitrous, that is, moist or frosty Air, will either not readily catch Cold, or if he does, will foon get rid of it. It is only Air thus conditioned, that thickens and coagulates our Juices, and gives painful and dangerous Colds. It is inward Heat only, which destroys us. No fober Persons ever fuffered by Cold, unless it were extreme, or that they expose themselves obstinately to it, against Sense and Reason.

§. 8. Another Mean of Health, to the Tender, Studious and Sedentary, is much and often shaving Head and Face, and washing, scraping and paring their Feet and Toes. The great Benefit (besides the Pleasure) to the Head, Eyes and Ears, by often shaving the Head and Face, and washing them Daily in cold Water, with a few Drops of the Compound Spirit of Lavender, or Hungary Water, is best understood by those that have felt it. The Cutting off the Hair, and shaving the Head, will, in the first Instance, scarce fail to cure a Head-ach, a Fluxion, or even a nervous Weaknefs of the Eyes. Any

Any one Evacution, will not only leffen the whole Mass; but, if encouraged, will make that Evacuation more ample and full. The more and oftner the Hair is (baved, the faster and thicker it will grow. So that thus shaving the Head and Face frequently, will be like an Isfue, or perpetual Blister on these Parts. Besides the Washing with warm Water and Soap. and scraping the Skin with a Razor, will cleanse the Mouths of the Perspiratory Ducts, from that Morphew and Scurf that adheres to them, and will extremely encourage the Perspiration from these Parts, and give a full and free Vent, to the Fumes on the Head and Brain. And washing well, and dipping in cold Water afterwards, will shut the Scales of the Scarf.skin, and secures against catching Cold in the Head, which is frequently a heavy Grievance, to tender, studious and sedentary Persons. Therefore I should advise such, to shave both Head and Face every Day, or every other Day, or as often as they possibly can, and wosh them well in cold Water afterwards. What shaving does to the upper Parts, the fame do washing and Scraping the Feet, and paring their Nails to the lower. We know by the Ticklifbness
lishness of the Soles, what a multitude of fine nervous Fibres terminate in them. Walking, Standing and Treading, render them callous, and the Skin thick and hard; which much injures the Perspiration, and hinders the Derivation of the Blood and Spirits into them. And 'tis a common Observation, That nothing is a furer Sign of strong and rank Health, than a kindly Heat, and a profuse Perspiration on the Feet. It fhews a full and free Circulation in the fmall Veffels, at the greatest Distance from the Source of Heat and Motion; than which nothing can more plainly indicate great and good Health. On the contrary, weak and tender Perfons, are always cold in the Legs and Feet, and first of all feel Cold there in frosty Weather. Let the Tender therefore, and the Weakly, duly once a Week, wash in warm Water, rub, scrape and pare their Feet and Nails. Which will likewise prevent Corns, Hardnesses, and the unnatural Tendency of the Nails into the Flesh. These are, 'tis true, but low and feemingly trifling Observations towards Health ; but 'tis in this Cafe, as 'tis in a more momentous one; He that despiseth little Things, shall perifb by little and little.

9.9. Those

§. 9. Those tender and valetudinary People, whose Studies or Profession oblige them to read or write much, ought, as far as they poffibly can, to stand in an erect Posture, bending their Head and Breaft, as little as may be, leaning only on a floping Desk, and continuing their Exercises in that Posture, 'till they grow weary; then reft, and be at it again. Custom and Practice, obstinately persisted in, will at length render the Posture easy to them. And 'tis inconceivable, how many and great Advantages it will bring to the Constitution. Sitting, Bending and Leaning low, compress some, if not many of the Vessels of the Body; and fo ftop and retard the Circulation of the Blood and Juices thro' them ; which makes a more ready Flux through the other more patent and pervious ones. Whence that Sleepinefs and Difability to Motion in the Limbs, till the Blood and Spirits, by a proper Posture, get a free Admittance Into them. From this also, there enfues an unequable and fubfultory Circulation of the Juices, and an unequable Secretion in the Glands; and, confequently, an unequal Growth, Strength and Vigour, Dd of

of the Organs and Parts. Which is the Cause of Rickets in Children; careles Nurses, neglecting to rock, dandle and tofs them fufficiently, that the Circulation of the Juices and Spirits may be equally promoted every where. And to avoid this Inconveniency, feems to be the Reason why the Romans and the Eastern Nations, lay along, at their great Meals and Feasts, and when they were obliged to continue long in one Posture. Besides, that in Writing or Reading, if one fits, there is a constant Pressure on the Cavity of the Breast and Stomach, which must necessarily weaken their Functions; and these are commonly the Organs which first decay in Clerks and Under Secretaries. And hanging down the Head, is the ready Way to raife Fumes and Vapours to it : Whereby fuch will be exposed to Lowness of Spirits, and perhaps Confumptions; all which are, in a great measure, avoided by an erect Posture : For thereby all the Organs will be in their natural Situation. Many of the Muscles will be in Action, and fo press on the Blood Veffels, to facilitate the Circulation. But chiefly, by this erect Posture, the Juices will have the Advantage of their own Gravity, to descend

descend with the greater Velocity, to warm and cherists the lower Parts, which are remotest from the Source of Motion; and the groffer Evacuations will be more readily promoted, and thereby preferve the upper Regions clear and serene: Which will bring great Advantages towards Health and Long Life. But this Practice will never become easy, unless to those who begin young. Those who dictate or confult, ought to do them standing or walking; which would relieve both Body and Mind.

§. 10. The Unwieldy, Fat and Overgrown, besides the Rules already laid down, I advise, in particular, as much as is possible for them, to abstain from Drink of all kinds. No one Rule or Condition, ever was contrived, or can be, of so great Use, to preserve and lengthen the Lives of fuch, as an obstinate and universal Abstinence from all kinds of Liquors. If the Doctrine be true (as 'tis highly probable) that the Mass of all the Bodies of Vegetables and Animals, is only Pipes and vascular Tubes, formed all at once, in their first Rudiments and Seeds; then Growth and Increase of Bulk, is only filling and plumping up, dilating Dd 2 and

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and unfolding these Pipes with Liquors. We know from Kircher's and Dr. Woodward's Experiments, to what Bulk Vegetables will thrive, by mere Element alone. Two Pigs of the fame Litter, were fed upon an equal Quantity of Milk; only, to one of them, the Milk was mixt with the same Quantity of Water. After a Month's feeding, they were both killed, and that which had the Water, was found much larger and fatter than the other. Dropfies (at least Ana-(arca's) have been cured by an obstinate Forbearance of Drink. And Lethargies proceed from the Moisture of the Brain. And these are the two Distempers, Unwieldy, Fat and Overgrown Perfons are most subject to. Therefore, such ought to avoid Drink, as those do, who have the \*Hydrophobia, or are bit by a mad Dog. Which they may eafily bring about, if they feed only on young Animal, and moist and cool vegetable Food. But whenever I speak of vegetable Food, I mean that which is dreffed by Fire.

\* i.e. Dread of Water; a Difease so called, proceeding from the Bite of a mad Dog.

§. 11. To

§.11. To the Aged, and those who are paffing off the Stage of Life, I have only two Things to recommend, if they would make the last Hour, as easy, indolent and free from Pain as may be. The first is, That they would avoid the Injuries of the Weather, as much as ever they can. The Blood of the Aged is ever most certainly poor and viscid. Their Perspiration little or none at all; and their concoctive Powers weak. And confequently, they must be subjected to, and fuffer by the weakeft Injuries of the Weather. Therefore I advise such, to keep Home, provide warm Rooms and Beds, and good Fires, whenever the Sky lowrs, Winds blow, or the Air is sharp. Such are not to expect to raife improve, or exalt their Constitutions or Health. Freedom from Pain, to prevent the vital Flame's being extinguished by Accidents, and to have it burn as clear, and as long as Nature, at their Age, has defigned it should, is all they ought to aim at. Exercise is only to purge off Superfluities. If these therefore, be careful not to exceed, they will want none, nor would it much contribute to their Ease. For in old Men the Bones petrify; the

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the Cartilages and Tendons turn into Bones; and the Muscles and Nerves, into Cartilages and Tendons. And all the Solids lose their Elasticity, and turn, in a great measure, into that Earth they are going to be diffolved into. So that the Solids wanting Elasticity, Exercise can do but little to sbake off the Load. It will therefore be enough for such, to air themselves when the Sun lights them, and the Summer Breezes can refresh them. Or, if they would lengthen out their Days, to remove to a warmer Climate, by which they may live as long as the Crow. The fecond Thing I would advise fuch, is, To leffen their Diet gradually, as they grow older, before Nature has forced this Diminution upon them. This is a powerful Mean to make their old Age green and indolent, and to preferve the Remains of their Senses to the very last. By this alone, Cornaro lengthned out his Days, and preferved his Senses, in a great measure, intire to a bundred Tears. He gradually lessened his Diet so far, that, as his Historian informs us, he came at last to live on the Tolk of an Egg three Days. I will not take upon me to advise others, in

in what Measure, either of Time or Quantity of Food, they ought to diminifb. But this, I think, they ought to confider, That fince 'tis certain aged Persons become Children, as to the Weakness of their Digestions, they ought to diminish, as Children increase in their Food, from weaker to weaker, and from less to less. For as their Solids are unelastick, their concoctive Powers weak, their Perspiration little, and the Extences of Living scarce any, their Repairs (not to overlay the Spark of Life remaining) ought to lessen proportionaly. And 'tis to the Neglect of this, in aged Persons that those Rheums, Catarrhs, Wind and Colicks, Lois of Memory and Senfes, those Aches and Pains, and all that difmal and black Train of Miseries, that wait on Long Life, is mostly owing. Which, by a discreet and timeous lessening their Diet, might, in a great measure, be prevented.

§. 12. There is no Mistake more fatal . in the Cure of chronical Diftempers, incident to the Weak and Tender, than the vain and unjust Expectation they entertain of a sudden and quick Cure, or even of a sensible Relief. This, with their

their Inconstancy, and Impatience of being confined in their Appetites, makes them either throw off all Remedies and Restraints in Despair, and give themselves up to an habitual Indulgence in all those Things that brought on or exasperated the Distemper, or run about changing, from Doctor to Doctor, till they end with a Quack, or die under the Hands of a Mountebank, and are fool'd out of their Lives and Money at once. It is furprizing, that reasonable Men can imagine, that in any (mall Time, any possible Methods or Medicines should cure, or even senfibly relieve a Distemper, that perhaps was brought with them into the World, and interwoven with the Principles of their Being, or, at least, may have been Ten or Twenty Tears a breeding, by Excesses, or an indiscreet Regimen. I know no fitter Similitude of the Cafe, than the annual Income of an Estate just sufficient to keep one in decent Necessaries, and due Plenty and Cleannefs. If one that has fuch an Estate, run out every Year, for Ten or Twenty Years, and then set about to retrieve, before he be come to Starving or a Gaol, would we not count him mad, if he should imagine

gine, by Retrenching, Management or Saving, even joining to those Day-labour, that a few Months or Years would recover all, and bring his Estate to its first Condition ? No! he must labour. abstain and manage for feveral Years; and the Time required, will be always in a Proportion compounded of the Rate of his former Expences, and his prefent Saving. That is, If his Ex-pences were but *small*, and his Savings great, the Time will be the fhorter, in respect of the Time he continued his overspending. If he gives over Saving, he must at last most certainly starve or go to Gaol; and if he begins to fave in due Time, he will certainly retrieve all; but the whole confifts in Labour and Saving for a due Time. Exceffes and an undue Regimen, is running out of one's Health; which, without a proper Remedy, as Labour and Abstinence, will necessarily bring a Man to Diseases or Death. And these must be continued a Time proportioned to the Greatness of the Exceffes, with regard to the Labour and Abstinence. Most chronical Distempers have for their Parents, corrupted Fluids, and broken Solids, as has been shewn. A bad State of the Stomach Ee and

and alimentary Organs, either beget these or accompany them. Suppose, for Example, the Cafe be a scorbutick Habit, shewing it self with Blotches and a watry Ichor, or Bumps, with yellow or black Spots on the Skin, a thick, viscid, rheumatick Blood, an obstructed Liver, and a constant overflowing of the Gall, Oppreffion of Spirits, want of Appetite and Digestion, and thereby a Wasting, Lassitude, Inquietude, &c. which I have often met with in your Bon Vivants, and your Free-Livers, who have been born healthy, vigorous and lively; I know no way in Nature to relieve and effectually cure this Cafe, but by oftenrepeated, gentle Vomits and Stomach Purges, as the Choler (which certainly degenerates into Flegm, before the Cure be brought about ; for Flegm is but Choler more diluted, or the groffer Part of the Serum only, as Choler is that of the whole arterial Fluid; and when Choler is come to Flegm, the Cure is half carried on, one Part of the Fluids being already purified, and the Liver free and open; As the Choler, I fay,) and the Flegm rifes and loads the alimentary Passages; Bitters, Aromaticks and Steel varied and prescribed, according

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cording to the Strength of the Patient. and one kind as another has loft its Virtue; Chalybeat and Mineral Waters. constant Labour and Exercise; a cool, light, spare Diet, and constant proper Regimen, long and obstinately persisted in. The Patient will often complain, What! Vomits and Bitters, Galloping and Fasting for ever! Vomits only relieve for a few Days, but do not cure : We grow as bad as ever again, and in some Months Perseverence, find ourselves just where we began. New Doctors must be had, and they must either be cashier'd if they pursue the same Intentions (which, if they be honeft Men, they must do) or else must write Things that can neither do Good nor Harm, or those which will actually hurt, for their Fees (for their is no Medium) till the miserable Person has run thro' the whole Faculty, and at last got into the Charlatan Tribe. It is certain, that when Nature has begun to throw the gross and viscid Parts of the Juices on those loose and spungy Glands, it will continue fo to do, till it has deflegmated the whole Mass; and every new Vomit will make Room for another; and there is no other Remedy as long as Ee 2 there

there is any viscid Humour remaining, nor can the Decline of the Difease be discovered fo certainly by any Thing, as by the Leffening of the Quantity excerned, and the Lengthening of the Intervals: As in a Veffel of Oil and Water incorporated, a fure Way to feparate the Oil from the Water is, to skim it off as it comes to the Top. Now as long as their is any Oil remaining, it will swim, if you but give it Time to extricate itself from the Embraces of the Water, and then you may feparate the vifcid Mixture intirely. No great Purpofe in Life was ever brought about, but by Time and Patience, and by constantly purfuing the most natural and best approved Means that lead towards that End. Nature works not by fudden Jumps and Starts, but goes on steadily fortement & doucement, and 'tis Nature that is the true Physician : Art only removes Obstacles, checks Violences, and gently follicites Nature the Way she tends. This fequires Time and Patience. Tempus edax Rerum. It most certainly confymes chronical Difeases, if not fuelled and fed; Nothing else can.

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§. 13. In fine, Providence has been kind and gracious to us beyond all Expreffion, in furnishing us with a certain Relief, if not a Remedy, even to our most intense Pains and extreme Miseries. When our Patience can hold out no longer, and our Pains are at last come to be insupportable, we have always ready at Hand a Medicine, which is not only a present Relief, but, I may say, a standing and constant Miracle. Those only who have wanted it most, and have felt its friendly and kind Help in their Tortures, can best tell its wonderful Effects, and the great Goodness of Him who has beftowed it on us. I mean Opium, and its Solution Laudanum, which, when properly prefcribed, and prudently managed, is a most certain and sudden Relief in all exquisite and intense Pain. The Manner of its Operation may be gathered, from the Obfervations I have made in the preceding Treatife. Pain constricts, crisps up, fhortens and contracts animal Fibres, It acts like a Wedge in tearing, rending and dividing these small Filaments; it does to them in a living Body, what the Points of Salts do to all animal Subftances

stances, which are to be preferved for Food, viz. hardens, stiffens and contracts them. The Fibres of live Animals being contractile, tonick and fpringy, when a hard pointed Body enters them ( which is the Cafe in all bodily Pain) the Parts, by their contractile Nature, fly from, recede, and fhun, as much as poffibly they can, the wounding Instrument. This appears in the large Gash of a Wound, made across the Fibres of a Muscle; the continual Bending towards in the other Side, when any Part of one is pained; in the Cramps and Convulsions, nay, and sometimes Fevers, produced by intense acute Pain. Pleafure, on the contrary, relaxes the Fibres by a gentle, foft, and bland, or (as the Mathematicians speak) a commensurate and harmonious Touch. It acts on the Fibres as two unifon and concordant mufical Inftruments act on one another, and by ftroaking, foftning and fmoothing, comes at last intirely to relax and unbend them. The Parts of the Fibres run after, follow and pursue, and at last break their Union in some Degree, to reach fuch a demulcent Touch. Some Perfons have had the Faculty to allay

allay Pain, by gently fmoothing the afflicted Part with their Hand; which in some Measure was true of the Touching Doctor. Soft Oils, and emollient Herbs, with gentle Warmth, by relaxing the crifped Fibres, will allay Pain. Soft Beds and Cloaths, and tepid Baths will relax and weaken the whole Habit. Now fince Pain fo certainly crifps up, constricts and contracts animal Fibres, and fince Opiates infallibly, if duly dofed, relieve and eafe Pain, I can see no possible Way it can effect that, but by relaxing and unbending these Fibres as much, or near as much, as Pain contracts and draws them up. And that this is the real Fact, we may observe from many Effects of Opiates. 1. Nothing is fo powerful, or so certain a Diaphoretick as an Opiate. Nothing causes fuch plentiful Sweating, especially if joined with Volatiles, and promoted with plentiful drinking small, warm Liquors. This it can do only by relaxing the Fibres of the Skin and Perspiratory Glands. 2. Nothing fo much palls the Appetite, and weakens the first Digestions, as the frequent Use of Opiates; infomuch, that most People, after a liberal Dose of them,

them, feldom fail to reach, and never care for Food for a confiderable Time after, till their Effects are wrought off; which are the constant Symptoms of a relaxed Stomach and Guts. 3. Nothing fo much promotes the Eruption of the Small-Pox and Measles, the Expulsion of the Stone and Fœtus, the Monthly, and the After-Birth Purifications of the Sex, as Opiates; infomuch, that in difficult Births, they are now the only Refource of the Midwife Phyficians; and, when joined with Volatiles, will bring on the most powerful and vigorous Throws, in the most weak and languisbing Constitutions. These Effects they can produce only by relaxing those Fibres Pain has contracted and render'd unelastick in some measure. 4. Nothing quiets and ftops Cramps, Convulfions and Hysterick Fits, fo fuddenly and certainly as Opiates do. And every one knows thefe arife from violent Contractions, and crifping up of the mufcular Fibres. All thefe, and many more such Effects, Opiates produce, by unbending, loofening, and relaxing those Fibres violent and acute Pain had constricted and contracted, and by giving a Respite and Reprieve from its Tortures, and

and thereby allowing Nature ( the only true Physician) to go undisturbed about its own Work. The Way it ftops Purging, and cures a Diarrhaa, I take to be by carrying off the sharp and watry Humours in the Bowels by Perspiration, which Opium exceedingly promotes; by quieting those Spasms and Convulsions, and allaying those Stimulations excited by Purging; and fettling and calming the Violence of the Peristaltick Motion of the Guts, which hurries off their Contents. I will not take upon me here, to determine the proper Cafes for Opiates, or their Doses. That is the Business of the Physician. But in general I may fay, Wherever Pain is acute, intolerable, and past enduring, where it may indanger Convultions, a Fever or Inflammation; after premifing the proper universal Evacuations (fuch Bleeding, Bliftering, Cupping, as Purging, or Gliftering, as the Cafe re. quires, or will bear) Opiates then will most certainly relieve, and may be fafely administred. If the Cafe is attended with Vomiting, folid Opium will do best; because it will be in a smaller Volume, and will not be fo readily rejected. If fpeedy Relief be required Ff where

where there is no Vomiting, then Laudanum will disperse soonest through the Habit, because Liquid, and joined with a Spirituous Vehicle will soonest effect the Design, raise the oppressed Spirits more, and penetrate deeper and quicker. In common Cafes, a vinous Vehicle will be sufficient, because Opium is best disfolved in Wine, to make Laudanum. There are Four Cafes, in which 'tis abfolutely and eminently neceffary; the Cholick; the Stone; the hard Labours, After-Birth, and Monthly fluggish Purifications of the Sex, especially if attended with violent Pain, as is common in fuch Cafes; and in the Gout and Rheumatism. In the First, it ought always to be given with some Stomach Purge, as Elixir Salutis, or Tincture of Hiera Picra, with Syrup of Buckthorn, and in those of more tender Bowels, with Tincture of Rhubarb; efpecially if the Cholick is in the lower Bowels, and attended with noVomiting; in which Cafe an artificial Vomit is to be premised, if Circumstances forbid it not. In the Stone it ought to be given with Oil of fweet Almonds, or in some fost Emulsion, to lubricate the Parts. In the Two last Cases, it ought always to be

be given with proper Volatiles, Antibystericks and Attenuants. In violent and acute Pain, the first Dose ought to be large, at least from Thirty to Forty-five Drops of Liquid Laudanum, or its Equivalent in Opium, from Two Grains and a half, to Three and a half; and afterwards to be increased by Fifteen Drops of Liquid, or Half a Grain of folid Laudanum every half Hour, 'till the Pain begin to remit; and then an intire Stop is to be put to its Administration. And thus the End will be obtained without any Fear of over-doing. And the Truth is, there is lefs Hazard of that, than Perfons are aware. For those who die of an Over-dofe of Laudanum in the Opinion of the World, would have lived few Days without it. For there are those that by Custom, have brought themfelves to Two Drams of Solid, that is, near Six Ounces of Liquid Laudanum a Day. And I know a Gentleman who took near Three Ounces at once, instead of Elixir Salutis, and had never taken any in his Life before; who (though it extreamly weakened his Stomach for fome Time, and that he dosed almost a Month under it) yet did well, and, for ought I know, is alive Ff 2 ftill,

ftill, though it be many Years fince. If the preceding Dofe be rejected by Vomiting, about a Third Part may be fuppofed to ftay; and then the fubfequent Dofes may be proportioned accordingly. The Difference of Conftitutions will make no great Alteration here, fince very *weak* Perfons feldom fuffer very *violent* Pain, which is the only Cafe I am here confidering.

§. 14. To draw towards a Conclusion. The Grand Secret, and Sole Mean of Long Life, is, To keep the Blood and Juices in a due State of Thinnefs and Fluidity, whereby they may be able to make those Rounds and Circulations through the animal Fibres, wherein Life and Health confift, with the fewest Rubs, and least Resistance, that may be. In fpite of all we can do, Time and Age will fix and stiffen our Solids. Our original Frame and Make renders this unavoidable and neceffary. As in the greater World, the \* Quantity of the Fluids is Daily leffening and decreasing; so in our lesser World after

\* See Sir Ifaac Newton's Princip.

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a limited

a limited Time, the Appetite and Concoctions failing, the Fluids are lessened and spent on the continual Repairs of the Solids, and thereby lofe their Nature, and become firm and hard. For by infinuating themfelves into all the Pores of the Solids, and the Interstices of their Parts, and straitening and damming up the fmall Veffels, which carry in Nourishment to the internal Substance of the Solids, and fo depriving them of their Moisture and Lubricating Juices, these Solids come at last to harden, stiffen, and fix, and thereby lose their Elasticity and Springinefs. Here the Process is Mechanical and Necessary. Age and Time, by weakening the Concoctions, impairing the natural Heat, which confifts in a brisk and extended Circulation of the Juices, by the turning those Juices into folid Substances, and thereby fixing and hardning these Solids, and depriving them of their due Elasticity, the Fluids circulate with lefs Velocity and Force, and feldom reach the Extremities and smallest Vessels, but pass through the more patent and larger Veffels, by their biggest laterial Branches. And if with all these unavoidable and irremediable Cir-

Circumstances, both the nutritious and ferous Part of the Blood, and the globular, become viscid, thick, and glewy, the Circulation must stop at last, and come to an End. Now 'tis certainly in a great measure in our Power to maintain the Juices in a due State of Fluidity and Thinness, and to render them fuch, if they are not corrupted to an extreme Degree, fo that the remaining Part of Life be not too fhort for fuch a tedious Work. We certainly may dilute and thin any Fluid, that has an Inlet and Outlet. And the more fluid a circulating Liquor is, that is, the *smaller* and *finer* its Parts are, the less Force it will require to fet it a going, and to continue its Motion. And in animal Bodies, the thinner and more fluid the Juices are, they will not only circulate by the less Force, and with less Resistance (i.e. Pain) but also, they will preferve by their Circulation, the Solids the longer from stiffening and hardening. There is not a more mifchievous, nor greater Mistake, than the common one, that thin Blood is poor Blood, which the Vulgar and Herd of Mankind are as terribly affrighted for, as outward Poverty and Want. For,

For, on the contrary, the thinnest and most fluid Blood is the richest, that is, the best Blood (if rich and good mean the fame Thing). For in Hydropical, Anafarcous, Cachectick, and Scorbutick Perfons, both the ferous and globular Part of the Blood is thick, glewy and acrimonious, so that it can neither get thro' the Small Veffels, nor can it be long contained in them, but corrodes and frets them, and fo falls (at least the thinnest Part of it) into the Cavities, and begets a Dropfy; or ftops in and obstructs these fmall Veffels, and fo becomes an Anafarca or Scurvy. In all which Cafes, the ferous Part is overloaded with urinous Salts, and becomes a perfect Lixivium ; fo that by its Groffne/s it cannot run into Globules, to facilitate the Circulation through the Capillaries (for these small elastick Globules, by turning Oval or Oblong, wonderfully facilitate the Circulation of the Juices through the small Passages) and the red or globular Part becomes a mere Cake of Glue; and thus the Quantity of Serum is increased, and the Quantity of the globular Part gradually leffened. And in this Sense (of a greater Proportion of Serum) this State of the Blood may be called

called thin; but it can in no Senfe be called good Blood. The thinnest and most fluid Blood, is ever to be look'd upon as the best Blood, as confisting of finest and smallest Parts, which most readily runs into red Globules, and moft eafily circulates thro' the capillary Veffels, which is the most folid Foundation of good Health and long Life. Now as nothing but indulging in ftrong high Foods, which the concoctive Powers cannot break and divide into Parts small enough to run into red Globules, or circulate through the small Veffels, but overflock them with urinous Salts, which run into Clusters, and first obstruct, and afterwards break these small Veffels, and in wallowing in ftrong Liquors, which parboil and eat out the tender and delicate Fibres of the Solids; I fay, as nothing but fuch an Indulgence, and fuch Excesses, long continued, and obstinately persisted in, can beget fuch a State of the Fluids and Solids, and fo bring on a Cachexy, which may end in a Droply, or fome other fatal chronical Diftemper, according to the Habits and particular Make and Constitution of the Party (for no Person that lived low and meagre, and drank only

only small and thin Liquors, ever became Hydropical, if his Solids were originally firm, and his Fluids not tainted with fome hereditary Sharpnefs) fo I know nothing under the Sun, that can folidly and fully effectuate the contrary State of the Blood and Juices, to render them thin, fweet, and in a constant flowing Condition, but taking the contrary Measures, and keeping to a strict Regimen of a thin, fluid, spare and lean Diet. We have no possible Way to attenuate, clean and dilute a Veffel full of gross, glewy, and foul Mixtures, that has only a small Inlet and Outlet, but by pouring into it a thin, clear, infipid Fluid, and by fhaking it often and much. It is much the fame with an animal Body. No voluptuous nor lazy Person, unless he has had an original Constitution of Brass, was ever a long Liver. And even then, as his Life has been more Misery and Pain, than ever a sober Gally Slave endured, his End, and the latter Part of his Days has been Rack and Torture, Horror and Despair. And though he has not had the Hope nor Consolation of a Martyr, yet his Sufferings have been far more exquisite and extreme. All those who have lived Gg long,

long, and without much Pain, have lived abstemiously, poor and meagre. Cornaro prolonged his Life, and preferved his Senses, by almost starving in his latter Days; and fome others have done the like. They have indeed thereby, in some measure, weakned their na. tural Strength, and qualified the Fire and Flux of their Spirits : But they have preferved their Senses, weakened their Pains, prolonged their Days, and procured themselves a gentle and quiet Passage into another State. Gentle domestick Purges frequently repeated, due Exercise, and the Use of the other Means prescribed in the foregoing Treatife, will mightily contribute toward this End. But the Ground-work must be laid, carried on, and finished in Abstemiousness; and though not in absolute Fasting (for that is no ways required, and would be prejudicial) yet in a thin, poor, low, light and meagre Diet. AII the reft will be infufficient without this. And this alone, without these, will suffice to carry on Life, as long as by its natural Frame it was made to last, and will make the Passage easy and calm, as a Taper goes out for want of Fuel.

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# Miscellany RULES of Health and Long Life.

1. CHRONICAL Difeafes last long, wear out the Conftitution leisurely, and are accompanied with a flow Pulle; whereas acute ones foon terminate either in Death or Recovery, and are joined with a quick Pulse.

2. The Scurvy is the Root of molt chronical Difeases of the British Nation; and is a necessary Confequence of their Way of living almost wholly on animal Food, and drinking so much strong Liquors.

3. Soft, thin, *small*, *short*, *fair Hair*, *slender* Muscles and Bones; *oft* Flesh; a white, *fair*, *blanch'd* or *ashen-coloured* Complexion; a *fair*, *corpulent*, *flegmatick*, *cold* Constitution; *Chillines*, *especially* in the *Feet*; a Readiness to *catch* Colds; and being subject to immoderate *Evacuations* of any kind, are *certain* Signs of loofe, flabby, or *relaxed* Nerves.

4. Wo-

4. Women of weak Nerves are very fubject to Miscarriages. Their Danger is increased by high Living, and indifcreet Bleeding. The only Remedy for them, is drinking Bristol Water and red Wine, with a low and light Diet, going Abroad to get Air, and using Astringent Plaisters, and other proper Medicines to corroborate their Bowels.

5. The Weak and Sickly (as their Concoctive Powers fail in Winter, and recover in Summer) fhould carefully proportion the Quantity and Quality of their Food, to the Strength of them in the feveral Seafons.

6. The fewer Cloaths one uses, the hardier he will be. Flannel and great Loads of Cloaths by Day and Night, relax the Fibres, and promote only Sneating, instead of the natural and beneficial Perspiration.

7. The Weak, Sedentary and Studious, fhould frequently shave their Head and Face, wash and scrape their Feet, and pare the Nails of their Toes.

8. People

8. People that read and write much, ought to do them *standing*, or in as erect a Posture as they can. And those who can go about any Part of their Studies walking, should do it.

9. The Fat, unwieldy and overgrown, ought to avoid all manner of Drink, ftrong and fmall, and even Water itfelf, as much as poffible. And if their Food be Vegetables and young Animals, they will have little Occasion for any Liquor.

10. The Aged fhould (1) carefully guard against all the Injuries of the Weather; and (2) lessen the Quantity, and lower the Quality of their Food gradually, as they grow older; even before a manifest Decay of Appetite force them to it.

11. As chronical Difeases are not brought on all at once; so they cannot be quickly removed. A gradual Corruption, must be gradually remedied, 'Tis contrary to the Nature of chronical Difeases to be quickly cured.

12. In all acute and vehement Pain, Opium is the fovereign Relief, particularly in the Colick, Stone, Gout, Rheumatism, and hard Labour of Women. It operates by relaxing and unbending the Fibres, overstretched and crifped up by Pain.

13. The great Secret of Health and Long Life, lies in keeping the Blood (and confequently the other Juices of the Body) in a due Degree of Fluidity.



# CONCLUSION.

TO Conclude, without taking the Benefit of Revelation, which, in a Senfe relating even to our mortal Bodies, has brought Life and Immortality to Light; If but the Precepts of the Pagan Philosophers were observed,

If Men would but observe the golden Mean in all their Poffions, Appetites and Desires; If in all their Thoughts, Words and Actions, they would but mind, I will not fay the End of their Being and Existence here, but the End to which their Thoughts, Words and Actions naturally tended in their last Refort; And, Lastly, If in the Gatifications of their Appetites, Passions and Desires, they follow'd the uncorrupted Dictates of Nature, and neither spurred her on beyond her Craving, nor too violently restrained her in her innocent Biafs ; they would enjoy a greater Measure of Health than they do; have their Senfations more delicate, and their Pleasures more exquisite; live with less Pain, and die with lefs Horror. For had it not been for the Lewdness, Luxury, and intemperate Gratifications of the Poffions and Appetites, which first ruined and spoiled the Constitution of the Fathers, whereby they could communicate only a diseased, srafy and untuneable Carcafs to their Sons, fo that with the World's Decay, vicious Souls and putrified Bodies, have in this our Age, arrived to their highest and most exalted Degrees; I fay, had it not been for these Evils, there never had hap-

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happened fo much Sickness, Pain and Mifery, fo unhappy Lives, and fuch wretch. ed Ends, as we now behold among Men. But even in this our lapsed Estate and Condition, had the Dictates of Nature and Reason, not to fay Religion, been followed ; we might have paffed our Days in Indolence (at least from chronical Distempers) if not innocent Pleasures, arrived at a good old Age, with our Senses free, and our rational Faculties clear, and at last departed in Peace, as a Lamp goes out for Want of Oil. And let the Gentlemen of Wit and Fire, of Banter and Sneer, hug themfelves ever so much in their boasted Tranquillity and Security, gratify their Paffions, Appetites and Humours to the full, and defpife Futurity and Whining; I dare promise, when the Farce is ended, and the last Minutes are drawing on, they would prefer a Life thus led, and an End so calm, to all the Pleasures of Lewdness and Sensuality, and the Bounces of a false and ignorant Security.

MFINIS.







