

**A dissertation upon the sugar of milk; in which is shwn its great efficacy in consumptions, hectic fevers, the scurvy, vapours or hysterics ... / by J. L Dyvernois.**

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A  
DISSERTATION

UPON THE  
SUGAR of MILK :

Price ( SIX-PENCE. )



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DISSERTATION  
UPON THE  
SUGAR of MILK;

In which is shewn,

Its great Efficacy in Consumptions, hectic Fevers, the Scurvy, Vapours or Hysterics, and hypocondriacal Complaints, the Asthma and Gout: That it is likewise proper for every one, who hath an infirm State of Health, and a tender Constitution, and excellent for Persons advanced in Years.

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Wrote in *French*.

By J. L. DYVERNOIS, M. D.

Physician to his Majesty the King of *Prussia*,  
at *Neufchâtel* in *Switzerland*.

And now translated into *English*.

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The Person who publishes this, has annexed an *Appendix*, containing an Extract from the Medical Essays, printed at *Edinburgh* concerning the Sugar of Milk; an Account of the Cures it has performed, taken out of *Valentini*; and several Observations of his own, relating to this Subject.

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L O N D O N:

Printed for T. James, at the *Royal-Exchange*, and  
J. Jolliffe in *St. James's-street*. 1753.







T H E

## INTRODUCTION.

**O**F all the Discoveries that are made in Arts and Sciences, there is none more useful than those found out in Physick, and which aim at preserving the Health of Mankind. It is concerning them that we should make our chief Enquiries; and it is our Duty to acquaint the Public with the Result of them, if we think them of Moment. The Discovery of the Sugar of Milk is of this Kind. Though this Remedy is not new, its Use is as yet not much known in *England*. This has induced  
me



me to publish the following Dissertation ; which I hope will be acceptable, as it is very probable that it may answer the End for which it is designed, *viz.* to be very useful to those whose Complaints are enumerated in the Title Page. The Success the Sugar of Milk has had Abroad in various Cases, confirmed me in this Opinion. And since that made in *Switzerland*, has the Preference by far above any other, it will not be improper to assign the Reasons for it. That Country is known to produce Herbs out of which several Remedies are made, that have obtained a high Reputation in most Parts of the World ; such are the vulnerary Herbs, commonly called *Swiss Tea*, and an Essence made of it ; so excellent in many Complaints, as in the Rheumatism, Phthifick, Rheums, Coughs,



Coughs, extravasated Blood, Bruises and Falls, &c. &c. Arquebuse Water, which was first made in that Country is well known here; also an Extract of Scurvy Grass and that of Wormwood, which are sent into foreign Countries. On the same Account the Cheese made there is in great Vogue.

It is therefore natural to conclude, that a Remedy made out of the Milk of Cows which feed in such Pastures, must have several of the Qualities attributed to the Plants. Great Care is taken to make this Sugar in the Spring, when Plants are in Flower, and to take the Milk of the most healthy Cows; also to chuse the best Mountains; for as Dr. *Cheyne* very well observes in his Method of Cure, in Diseases of Body and Mind. “ Cows  
“ feeding in a pure Air and  
“ high



“ high Places, on the most ten-  
“ der, light and aromatic Plants,  
“ must communicate a Spirit,  
“ Balsam, and Sweetness to the  
“ Whey, and consequently to  
“ those who use it freely and  
“ plentifully.”

D. d'E.





A  
DISSERTATION  
UPON THE  
SUGAR of MILK.

**I**N order to be acquainted with the Nature of the Sugar of Milk, and its Properties, the Nature of Milk must first be known. I shall therefore speak a few Words concerning it. Those that have a Mind to be thoroughly instructed upon this Subject, may read the three excellent Dissertations, which the incomparable *Frederick Hoffman*, first Professor in Physick at *Hall* in *Saxony*, has given us. The one upon Asses Milk, the other upon Whey, and the third upon the Excellency of a Medicine which results from a Mixture of Milk with Mineral Waters. He has handled this Subject with so much Order and Exactness, that we cannot now talk pertinently of the Sugar of Milk, without borrowing some Ideas from this Author.



I may here then make use of such of them (without any blame) as are fit for my Purpose ; and I shall even, as much as possible, follow the Plan that this great Man has drawn for us.

Milk is composed of three principal Substances, which differ as to their Nature and Virtues among themselves. *Cream* is the softest Substance ; it is in a less Quantity than the other two. The Butter which is made of it, is inflameable by its Nature, as all other Oils and sulphureous Bodies are. The Property of Cream is to soften, to mollify, to relax, and it is besides very nourishing ; it is a Specifick against acrid, corrosive Poisons. The *Cheesy Part* is the coarsest, the heaviest, and most fixed ; it thickens the Blood, and so by its Nature tends to cause Obstructions in the small Vessels, and to render the Body costive. It is from its Viscosity, and the Astringency it leaves in the Body, that this Part of the Milk is for many Persons less useful ; and indeed it may be said to be the only Quality that's hurtful. The *serous Part* divided from the others, is very well known by the Name of Whey. It is this that carries along with it, that mild Salt or Sugar, of which I shall speak, and from which it (the Sugar of Milk) borrows its chief Qualities ; and it is also the  
most



most considerable, in regard to its Quantity and Virtues. Nothing more proper to humidate or moisten the Body, to dilute, to cool and sweeten a thick, acrid, and black Blood than this Whey, either by itself, or quickned by other proper Medicines. It is very useful for opening Obstructions, and quieting the extraordinary Motions and Spasms, that such Blood produces, and it is for these Reasons so proper in the Scurvy, in Hypochondriack Affections, Melancholy, the Gout, and inveterate Itch ; especially in brisk, dry and bilious Constitutions. It keeps the Body open, and works by Urine, and there is never the least bad Effect to be feared from the use of it ; especially if it is prepared without an Acid, or with Lemon Juice. These wonderful Qualities have been acknowledged, and deservedly celebrated in all these Cases, both by the Ancients and the Moderns. See upon these Things the Dissertation of the learned Doctor of Hall, *De Serē lactis virtute longè saluberrimā.*

What I have said of Whey, I shall presently apply to the Sugar of Milk in particular, and inlarge upon every Article. In reuniting these three several Substances, such as are in fact found in new Milk, it will be easy to judge (from what



I have said of every one in particular) what is, and ought to be, the natural and necessary Effects of Milk in our Bodies. I come now to my Subject.

The Honour of the Invention of the Sugar of Milk, is attributed to a famous Physician of *Venice*, called *Testy*; and it is certainly known, or we are well assured, that this illustrious Inventor has published about fifty Years ago, a Treatise concerning it. But this Book is so scarce, that it is very hard to be found at present, at least I have not been able to get one. This Consideration has prevailed upon me to comply with the Desire of some Gentlemen, to communicate to the Public, what I know upon this Subject.

The Sugar of Milk is only a Salt contained in this Mixture, and separated as much as may be, from the other Principles of which Milk is compounded. In general, to make it, you must have a sufficient Quantity of Whey, prepared, if possible, without an Acid, extremely clear and limpid, and made out of Milk, coming from Cows well fed in rich Pastures; such are those of our Mountains\*. Then you draw the Salt according to Art. If this Salt is well made, it will be very dry and very white, of

\* In Switzerland.



a sweet and agreeable Smell, of a pleasant Taste, and a little saltish, easily melting upon the Tongue. The Skill and Ingenuity of the Artist doth not a little contribute to the good Success of the Operation ; and I may say, that without them, all the Rules that could be given for its Preparation, would be useless. The Sugar of Milk doth not ferment with Acids, nor with Alkalies. Spirit of Vitriol and Oil of Tartar *per deliquium* act equally upon it. It doth not easily take or attract the Moisture of the Air ; only it becomes then, and in process of Time, yellowish or blackish. It equally melts in hot and cold Water, but sooner in hot Water. You feel upon the Tongue but very little Taste of Salt, which is tempered by a great Sweetness ; and the Smell, I say again, is sweet and pleasant. From whence we may conclude, that it ought to be ranked in the number of neutral Salts, and be assured that it is a mixt Salt, impregnated with some sulphureous Parts, from the Mixture it is made out of ; very near in its Nature to the essential Salts of Plants.

It is by reasoning upon this Principle, that I shall deduce and explain its Virtues in Physick.

Those



Those that are ever so little conversant in the Theory of Diseases cannot but know, that the greatest Part of them proceed originally from thick and viscous Blood, loaded with gross Particles, fixed, and of a Diameter or Configuration which bears no Proportion to the Mouths or Orifices of the smallest Vessels of our Body. These gross Particles of the Blood, not being able to circulate easily with the most fluid, they stop in different Places, chiefly in our Viscera or Bowels, and in the Glands and Vessels appropriated to Secretions and Excretions. There they gather afterward by little and little, and at last, grow hard. Thus they become the real Cause of many Distempers, differing among themselves in regard to the Seat of the morbid Matter only, but which are most certainly the same, both in their Nature and in their Principle. From thence generally proceed slow and hectic Fevers, the Phthisick and dry Asthma's, Schirrus's, and Tubercles, Schirrous, and Cancerous, which now and then draw along with them and cause some Exulcerations; from thence the Obstruction of the Viscera, or Bowels, and chiefly those of the lower Belly, and in the lacteal Vessels in Children. From whence proceed Leanness and Atrophy, or Consumptions;  
from



from thence also the Gout, and sometimes nephretick Cholicks, with the Accidents that are their Attendants; and in short, all the Effects and Complaints, which are the Consequences of Obstructions, the Suppression of excrementitious Humours, the Plethora, a Deposition of heterogeneous Particles and Congestions. It is not less certain, on the other side, that there be many Distempers, which can only be attributed to a manifest Alteration of the Juices contained in our Body, which degenerate from that soft well tempered and balsamick Quality, which ought to be in a State of Health; whence the Parts wherewith the Blood is naturally compounded, are not each of them in due Proportion, nor all united and tied together among themselves as they should be. This is the Origin and Cause of many Obstructions that are formed in several Parts of the Body, according to the particular Disposition of each Part, but which differ from those already spoken of. From thence also are derived the irritative, spasmatick Contractions of the Nerves, very frequently met with in Practice. It is to such a Constitution of the Blood, and to the Effects it produces, that I chiefly attribute bad Catarrhs, the wandering Gout, the Rheumatism,



matism, and various other Symptoms that attend the Scurvy. Persons advanced in Years are exposed by a natural Consequence of their Age, to different Complaints that the Sugar of Milk can and will prevent. What I am going to say, will be a Paradox to many. It is commonly said, that Wine is the Milk of old People, and that it is only this which can keep them up ; but it is a gross Error and a Heresy in Physick. The Blood and the Solids in old People are dried up with Age, the Vessels grow narrower ; and by the natural Effect of such a Disposition, the Secretions and Excretions are not performed as they ought to be. On the other hand, Persons often cannot give themselves the Motion and take the Exercise necessary to break and subtilize the Blood, and keep the excretory Vessels open. They neglect most commonly Bleeding and Physick, grounded upon an old Prejudice fatal to many ; that you should not take a Purge, nor Bleed, when once you have attained at a certain Age. By this means the Humours accumulate beyond measure in the Body, and soon contract afterwards a bad Quality ; from which proceeds in an advanced Age, an obstinate cutaneous Foulness, attended with an extreme Itching ; Stagnations in the Bowels or Viscera ;



Viscera, Cholic, and a Languor or Faintness, in which we see often old People fall into, and many other Disorders, which are peculiar and familiar to them. It will be seen by and by, in recollecting these Hints, for what reason, Sugar of Milk is proper for such sorts of Persons, and Wine not suitable to them, so much as is believed and commonly said.

If my Design was not to keep to these Generals, and I had a mind to run over some particular Distempers, in which the Sugar of Milk is useful, I could speak of many. But I shall confine myself to one alone, very common, and upon which Physicians have wrote several Volumes; tho' the Nature and Causes of it are still obscure and hidden to many. I shall here enlarge for this purpose, more than the particular Subject of this Dissertation seems to require. The Distemper I mean, is very well known, under the general Name of Vapours. It is called an Hypochondriack Affection, or Complaint, in Men, and in Persons of the fair Sex, they give it the Name of hysterick Passion. This Distemper has no Accidents or Symptoms that are proper and peculiar to it, and that essentially distinguish it from any other Illness; so that it is impossible to give a short and exact Definition of it,



and by which the specific Difference shall be obvious. It is only a Complication of different Accidents, which vary as to their Number, Violence, and Duration in various Subjects or Patients, and often in the same Person. In general those that are seized with the Vapours, have a very great and frequent Swelling of the Stomach, which excites from Time to Time, chiefly in Persons of the other Sex, a feeling like a Globe which rises from the Stomach to the Throat, and seems as if it would suffocate them. Often they feel in the lower Belly Pains, wandering and obscure it is true, but which cause mortal Uneasiness to them. It is not seldom that they are seen to fall into an Anguish and Perplexity, and into a Weakness or Inanition, so that they seem to be breathing out their last. The throbbings of the Heart chiefly then afflict them, and sometimes a fainting Fit happens. But what troubles them most, is a heavy and dull Pain in the Head, attended sometimes with light Vertigo's or Light-headedness, and Tinglings of the Ears; it seizes them often all of a sudden, and without any evident Cause. It is to this grievous Distemper, to which the Name of Vapours is properly given, which stupifies them, renders them fretful,



ful, and inclines them to Solitude, and makes them often Despair of their Salvation. We can attribute all these Ailments to nothing but an extreme Sensibility of the nervous System, joined to a considerable Thickness of the Fluids. The Solids, chiefly those that are nervous, sensible in the manner I suppose them to be, whether they be naturally of a weak and very tender Contexture, as they are chiefly in Persons of the other Sex ; or by some foreign Cause they be too much stretched, and have too great an Elasticity, must be very susceptible of Motion. The Fluids on the contrary, in these Cases being already too thick and too gross, very little agitated and beaten by the Solids, which I suppose therefore weak, and often troubled with an irregular Motion, cannot be compressed to be liquified, and acquire the necessary Fluidity. It will happen from thence, that they will easily cause Infarctions in the Vessels of the Body, where the Compression and Beating of the Arteries are less strong, and where the Blood is naturally restrained in its Course. Thus the greatest Obstructions will be necessarily formed in the floating Viscera or Bowels of the lower Belly ; as well because the Vessels, which convey the Blood, run into infinite Convolutions,



where the Circulation is already flower, as because these Parts are not beaten, or struck by any Muscle, that propells and causes the Blood to move. Or if by any Cause whatsoever, the Blood is sometimes inclined to flow abundantly, or with greater Strength, into these nervous Parts already obstructed and very susceptible, considering their extreme Tenderness or exquisite Sensation of the most minute Impression; or that by some other Cause they be twitched, pinched and irritated, it must necessary follow, that they will be greatly moved and shaken, and by those means they fall into a spasmatick State and convulsive Contraction. It is chiefly to these Spasms or Convulsions of the Bowels or Viscera in general, proceeding from what I have discussed, that I refer and attribute all the Accidents and the different Symptoms that we observe in Persons troubled with Vapours. One may at least deduce them all from thence.

It is easy now to know, and to conclude from the Pathology that I have established, and from what I have said of the Nature of the Sugar of Milk, to what Distempers, and for what Cause this Remedy is proper, by reason of its sweet Salt; it must be opening, inciding, fit to break the Blood, to digest,  
and



and attenuate thick Humours, to de-obstruate those Vessels that are clogged, to keep the Strainers open, to restore every where a free and perfect Circulation. The sulphureous Parts wherewith it is loaded, and that are perceptible by the Smell and Taste, are very proper to soften, and correct the Acrimony and Sharpness of our Juices, and to relax the solid Parts, which are too tight, and too much stretched, be the Cause whatsoever it will. What can there be more proper for Persons of a delicate and tender Constitution? In the Phthisick, chiefly in that of the Lungs and in an Asthma, especially a dry Asthma, than this Salt, so mild and moderate, to disengage the smallest of the pulmonary Vessels, which are much clogged and stuffed, to dissipate, resolve and soften those Tubercles which are formed there, and to deterge, cleanse, and scour that ulcerated Part? What more fitting in these Subjects, than this mild and assured Opener, at the Beginning of the Obstruction of the Mesentery, and of other Viscera, and in that of the Glands of Articulations, in Hypochondriacks as well as gouty Persons, and in some sort of nephritick Cholicks; what can be more efficacious for the same Reasons, in slow and hectic Fevers,



vers, and more convenient to relax the Solids, often then too tense, and already dried up by the Ardency of the Fever, and to abate by these means the Heat which proceeds from thence, and which consumes the Patients? It happens beside (as I have already intimated) that there are several Cases in Practice, where you easily perceive the Blood spoiled and corrupted; and it is common to add, that this Blood must be corrected and purified; but these great Words have often no meaning; and are generally a Cover or Cloak to hide Ignorance. A good Physician ought always to enquire in what the Blood is deficient, and what Remedy he ought precisely to use. For the Blood, though it is altered in Fact, it is not always in the same manner, nor by the same Cause, so that the same Medicine which is said to be proper to purify the Blood, is not always fit, you must often, even in the same Distemper, and what is still more, in the same Person, vary the Medicine. But without attributing too much to Whey, or its Salt, I can assure you, (reserving however the Restriction which I shall make hereafter) that among all the Medicines proper to purify the Blood, there is none of more general use, than this of which I am speaking. Is the  
 Blood



Blood acrid or full of Salts, as some farther say? What fitter to sweeten it, and to destroy this muriatick or briny State which they suppose? Is it too thick and destitute of its Serum? What can be more proper to attenuate, and to dilute it, than Whey and its Salt? Is it on the contrary too full of Serum, or Water? The Sugar of Milk, by opening all the Strainers, will it not diminish this too great Quantity of Sero-fity? Is there formed in the Blood itself some Concretions of the grossest and most fixed sort, because the lightest and most fluid disengage, and separate themselves from the rest? What can there be more effectual to break them? Does there from thence follow any Obstructions in the Glands or capillary Vessels? Is not the Salt of Milk a good Opener? And finally, do the Solids, irritated and pinched by the ill Habit or Intemperies of Blood, suffer strong Vibrations? What can there be more efficacious to make them cease than this Remedy, which is directly levelled at the Cause of the Evil? I conclude then that almost, in all Cases, where the Blood is to be purified, in obstinate Fluxions or Rheums, which return often, in the wandering Gout, in the gouty Rheumatism, in an obstinate Itch, and in general in  
the



the Scurvy, where the Blood is always altered, we may make use of Whey and its Salt with Success. It is not less proper for ancient People to remedy the Complaints to which their Age exposes them, and to prevent them. If good Wine is of use to them, to cheer their Spirits, and to keep up their tottering Strength (as we cannot deny it) it must be also acknowledged that being drank to Excess, it will necessarily produce in them, the same Disorders, which I observed old Age brought, and will certainly hasten their Death. The Sugar of Milk on the contrary, or Whey, by humidating and moistening the Body, and by keeping all the Strainers free and open, will consequently prolong Life, or retard the Infirmities of old Age. From what I have said before, every one may perceive its Fitness in these Cases. The chief Medicines that have hitherto been proposed for the entire Cure of the Vapours, besides Exercise and what diverts the Mind, which are here of an absolute Necessity, are Chalybeates and Mineral Waters hot or cold. These Medicines, and others of the same Nature, have their Merit; but I deny that they are proper in every Case, and to every Constitution. I have always observed, that the Filings of Steel or  
Iron,



Iron and all other bracing Medicines did Harm to Patients, whose Solids were too dry, too tense and too elastic. Cold mineral Waters, and Baths of soft Water, do not ease those of whom the Fibres are naturally of a weak and tender Contexture; and the hot often waste what remains of what is liquid and subtile in the Blood. And farther, all these Waters, if you drink a certain Quantity of them, and they do not pass very quickly, will fill by their Bulk, and distend or stretch beyond measure the Vessels already entangled and embarrassed; and by reason of their great opening Quality, will strike with Force against the Obstacle that they will find in their Way. Every body may understand where that will tend. You have none of these Inconveniences to fear from Whey or the Sugar of Milk. Who doth not see what Effect *in these Cases* will be produced by a Medicine so mild, and of which the natural and necessary Operation, is to deobstruate without Violence, and to relax the Parts of the Body which are too much extended? We ought to look upon it as a great Point, in the treating of this Distemper, to have quieted the Patient, and taken away the first Obstacles that oppose themselves to their Cure. It is then to be hoped, that in Process of Time, the Solids, If they



are in Fault, only because they are too weak and tender, will acquire the Strength requisite to resist the least Action, of what can make Impression upon them. In many of these different Cases, the Sugar of Milk hath greatly the Advantage over Milk itself, and other Parts of the Milk. It is not indeed so nourishing, at least of itself, nor so efficacious against corrosive Poisons, as Milk or Cream. I own besides, that where there is a thick black and dried up Blood, which ought to be humidated, moistened and diluted, especially in a dry, bilious or melancholick Constitution, Whey, in regard of its fluid, is to be preferred to Sugar of Milk. But there are many Cases in which Milk or Whey would be proper, where we dare not however prescribe them, and where without Danger Sugar of Milk is given; as where there is a weak Stomach and filled with Acidities, a Disposition of the Body by which every thing is turned into Phlegm, Vessels infarcted, a thick, viscous, phlegmatic Blood. The Aversion, and often the fatal Prejudice of Patients frequently prevent the Administration of this Remedy, though in other Respects proper, and commonly many of those who could take it with Benefit have not an Opportunity to get it. It is much the same with Whey; you cannot conveniently have it,



it, and sometimes the Stomach cannot bear it.

We substitute then the Salt or Sugar that this Whey contains; and every one without Distinction of Sex may take it when they want it, at all times and all Places, without fearing the least bad Effect from it. The Sugar of Milk doth not essentially differ from Whey itself. It is in Truth, as I have already observed, but the same Remedy, the Vehicle of which is only either diminished or changed. The Sugar of Milk is still of more Value than other neutral Salts, in many Cases otherwise essentially the same. It has this great Advantage over them, that it is milder and less irritating. I own, that if the Obstructions are rooted and inveterate, the Humours thickened and compact, and that there is in the Body a schrophulous venereal Taint\*, there is little Effect to be expected from our Remedy: But in weak, tender, sensible Constitutions (which are some of the Complaints I have already mentioned) the Solids whereof have too much Elasticity, and in whom the nervous System is affected, and where consequently you cannot administer Remedies which are possessed of some Activity; the

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\* It is now recommended by several eminent Physicians abroad for Venereal Relicks, for Children who are born of infected Parents, or have sucked Nurses who have that Disease.



Sugar of Milk is to be preferred to all others; because bracing Medicines, and those the Parts whereof are generally stiff and heavy, are likely in what Measure soever taken, to make too great an Impression. I desire a particular Attention to what follows, that I may not be accused of having said too much, when I have spoke of the Virtues of the Sugar of Milk, that it is to this Class or Order of Patients that I confine the Use of it, *viz.* in the Cases already enumerated. The Sugar of Milk is then exceeding mild in its Operation, and it almost acts in an imperceptible Manner. You must continue it for some Time to receive a sensible Benefit from it. It doth not heat during its Operation; you only perceive that it keeps the Body open and maintains a free Course of Urine. It is for this Reason, that in Persons extremely weak, or in the Heat of a Fever, when you would procure these Sorts of Evacuations, you may do it conveniently by this Remedy, if you cannot put any other in Practice. The general Dose of this Medicine is from half a Dram to two Drams. You may always continue the same Dose as you began with; and you may take two Doses of it every Day. It matters not what Vehicle you take it in, provided it be mild and not contrary to the Distemper you are to deal with.



I should like however that you would chuse a Liquor appropriated to the Complaint for which you give the Sugar of Milk. So in the Phthisick, Cough and hectic Fever, an Infusion of *Paul's Betony*, or *Speedwell*, or *Colt's Foot*, seems to me preferable to any other Vehicle. For Spasms and convulsive Contractions which are felt in the lower Belly, chiefly in hypocondriacal Persons, the Infusion of *Yarrow*, *St. John's Wort*, or *Camomile*, is very proper. You may take for an emaciated Person, the Ptisan of *Pearl Barley*; in Difficulties of Urine the Decoction of *Marshmallows* or *Linseed*; and in particular Cases of Obstructions the medicinal Waters such as are thought proper. The Vehicle must be neither hot nor cold. You may prepare yourself for the Use of the Sugar of Milk, by once bleeding and one Dose of Physic, according as the Case and the Constitution require. You must observe a proper Regimen during its Use, and avoid every Thing which may prevent its good Effect.

F I N I S.

A P-





A N

# APPENDIX,

Wrote by the Person who publishes this  
Dissertation in *English*.

**T**HE above Papers recommending the Sugar of Milk for the Scurvy; and this complaint being so universal, it will not be improper here to add, that I have seen surprizing Effects performed in Scorbutic Cases by Herbs boiled in Milk, which is entirely to be attributed to the Whey or serous Part of the Milk, since the caseous Portion and that which generates the Butter remains coagulated in the Sierse. So that I do not doubt, but a Decoction of anti-scorbutic Herbs used as a Vehicle for the Sugar of Milk; such as Scurvy-grass, Brook-lime, Leaves of Wormwood, Sorrel, Fumitory, Spleen-wort, Betony, Carduus benedictus, the lesser Centaury, and Marsh-trefoil, will overcome the Obstinacy of this Distemper, and subdue all its formidable Symptoms. Remarkable Instances also have occurred in scrophulous Cases by Milk boiled with Water-creffes and strained.

In



In the Medical Essays ; Vol. I. Page 335, 336, printed at *Edinburgh* is what follows.

“ We are informed from *Leyden*, that Dr. *Gaubius*, who has succeeded Dr. *Boerhaave* in teaching Chemistry, gave in the Beginning of 1731 a publick College on Milk ; in which he shewed a great Variety of Experiments, and among the rest, prepared its essential Salt, by boiling Whey (*Serum Lactis*) to one half, then filtrating it ; he continued the boiling and filtrating, till it became of the Consistency of a Syrup, when it was put into a Cellar to crystalize, and there the Salt formed into a Cake, which was of a saccharous Taste, and resembled Manna.”

“ *Note.* This Preparation is somewhat different from that which *Valentini*\* alleges to be the famous *Saccharum lactis*, so much cried up by the first Preparer of it, *Ludovicus Testi*†, and recommended by others as an infallible Cure for the Gout.”

Having seen the medical Essays above cited by *Valentini*, I thought it necessary to translate into *English*, the most material Things, this Author mentions concerning the Sugar of Milk. He agrees with Dr. *Dyvernois* in saying, that the Treatise of the Sugar of

\* *Medecina nov. antiq.*

† In *Epistol.*



of Milk made by *Lewis Testi*, Profeffor of Phyfick at *Venice*, was not eafy to be met with; for which Reason to oblige the Public, he has republished feveral Letters wrote to that learned Inventor by feveral Perfons, who gave him an Account of the Succefs of his Sugar of Milk.

The first is a Differtation concerning the Gout, and an Obfervation of the Ufe of the Sugar of Milk, wrote by *Aloyfius a Fabra*, Doctor of Philosophy and Phyfick at *Ferrara*.

He congratulates *Testi* upon his having found out a Remedy, which according both to Theory and Practice would cure the Gout. He affures him that many have ufed the Sugar of Milk with great Succefs, among the Number of whom he relates the Cafe of “ one *John Denzis*, a Painter of *Bologna* in *Italy*, of thirty-fix Years of Age, a married Man and who lived at *Ferrara*, (he names the Street, &c.) who was afflicted ten Years; firft with the Gout in his Foot, afterwards in his Hand; and at laft his Joints were full of Knobs. Since this laft Symptom appeared, for four Years running, he was fo forely afflicted, that he was not for a whole Month together, without an eryfipelatous, gouty Swelling, attended with a violent acute Pain, and was feized with a burning Heat. So  
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that by this excruciating and very painful Distemper, and the Knobs and Chalk Stones round the Joints of his Hands and Feet, which grew worse and worse, and these last stiff and inflexible, distorted and contracted, from whence he was deprived of Motion and continually kept his Bed ; had likewise a periodical Fever, which was continual towards Night, attended with an excessive Thirst, a frequent, quick, and hard Pulse, with extreme Anguish and great Pains every where ; In this condition he sent for the above Dr. *à Fabra*, (who after having given his Reasons why he ordered a Vein to be opened) says, the Blood, after it had stood a while, was a Jelly, quite white, and clotted at top ; and kept or preserved the Substance of only a fourth part ; of a blackish, rather than reddish Fluid, and of no Consistence. The Doctor advised him, after having tried other Things, to take *Testi's* Sugar of Milk, which was well known to him. He began it the 10th of *June*, keeping to a proper and regular Diet, and taking each Week a mild Purge ; he found so great a Benefit and Ease, that his Feet and Hands were rendered pliable ; and he could walk briskly any where, and followed his Trade as he used to do, before he was ill. But what was more wonderful, about the middle of *July* fol-

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lowing there ran for twenty four Days from a Chalk Stone and Knob in the left Hand, which was larger than the rest, a chalky Matter, liquid or dissolved, as if it were the whitest Pus, with something like corrupted Blood, in which were little Crumbs, very small and few in Number, like unto the Hardness of *Lime*. The rest of the Chalk Stones and Knobs went all away, as well from that left Hand as from the right; the Sinus's left by this corrupted Sort of Matter acquired such a Smoothness and Softness, that being squeezed, the Hardness being gone, they would bear to be handled without Pain. Therefore the Sugar of Milk affords ground to hope, that it is possible the Gout, accompanied even with Chalk Stones and Knobs, may be cured. The Limner now, continues the Doctor, passes his Days chearfully, and is at this very Time at work out of the City, (he mentions the Place) and wrote to him a Letter, telling him he continued the Sugar of Milk. This Account was wrote to *Testi*, Sept. the 16th.

Another Letter was sent to him (*Testi*) by the same Dr. *Aloysius à Fabra* about six Months after; in which, after extolling the Sugar of Milk, he mentions again this *Denzius* the Limner, who, saith he, had not had the least Sign of the  
Gout



Gout during all the foregoing Autumn and Winter, though he had been exposed to a very cold Air, during most part of that Time. The Doctor names afterwards the Marquis *Cornelio Bentivolio*, a noble *Venetian*; who was cured ever since the Month of *October*, of an hereditary Gout by the Use of the Sugar of Milk. This Nobleman, before that time, was hardly a Month together free from it. He also tells us that a Gentleman, whose Name was *Cæsar Gualander*, was as happy as the above Marquiss. That being sorely afflicted with the Gout, and having had severe Fits of it three or four Times in a Month, he began the Use of the Sugar of Milk in *November*, and had not had the least Touch of it since. And whereas, before he took it, he had a fallow Complexion, and a very bad Habit of Body besides, was then fresh coloured and a great deal better in every respect.

*Jacob of Italia*, a Jew, who for ten Years, (the Doctor goes on,) was grieved and tormented with the Gout, and his Juices very bad; yet after taking the Sugar of Milk, he was also better every Way, and grew fresh coloured, so that he looked as if he had been raised from the dead. This Letter is written the 1st of *April*.

The Encomium or Praise of the Sugar of Milk, wrote by *Cajetanus de An-*



*gelis Mevanatis*, Doctor of Philosophy and Physick, and Professor in the illustrious City of *Tody*, to the great *Testi*, contains the following Case.

The Rev. Father *F. Bernard de Montefalchio*, in a Monastery of the Holy Mount of *Todi*, who for ten Years had been confined to his Bed, as if he had been nailed to it, by the Gout, took the Sugar of Milk three Months before this was wrote ; and received so much Benefit by it, that he recovered the Use of his Limbs; and all the Chalk Stones wherewith his Hands were loaded, and one of these Stones in the right Elbow as big as an Egg, were dissolved in the same Manner as Dr. *à Fabra* has related before of the Painter.

*Vincent Clericus*, a most eminent Physician of *Parma*, and Reader of practical Physic in that University, gives the following Account.

A certain Religious was tortured for seven Years with the most acute Pains of the Gout; though sometimes they were a little abated; conformable to the Changes of the Weather. The Disposition of his Body was sickly, being filled with Obstructions almost every where ; his Abdomen or lower Belly hard, with a Tension of the Spleen and Liver. At last he had the Jaundice to such a Degree, that he scarcely



scarcely had the Look of a human Creature, through the Deformity of his Face and Skin. After having used all the Methods the Physicians could think of, he providentially called upon the above Doctor, who advised him to the Sugar of Milk. And upon using it only four Months (having taken a gentle Purge before he began with it) the former Colour of his Face and Skin returned, the Obstructions above mentioned vanished; and what was more admirable, the gouty Pains entirely ceased, and he was restored to a perfect Health of his whole Body. So true it is, that the Sugar of Milk is the only and constant Remedy to sweeten all the bad Humours of the Body. So far *Valentini*.

I should think myself one of the happiest of Men, if I was made an Instrument in the Hands of Providence, by publishing this Pamphlet to render this Sugar of Milk more universally known; and be the means that Persons, tho' troubled to such a Degree with the Gout as those above mentioned, might be cured.

This Sugar of Milk would also be very proper for those that are obliged to use the Seas, where it is very expensive, and hardly possible to have good Milk. Another Advantage resulting from this Preparation, is, that by this Means you may



may have, all the Year round, as good Milk for medicinal Uses, as in the Month of *May*, and may also enjoy the Produce of excellent Pastures, though ever so remote from *London*. There are several Cases sent to me from abroad, of the Efficacy of the Sugar of Milk, especially in emaciated consumptive Persons, and in the St. *Anthony's* Fire; but I think I have said enough to engage every one who wants it, to try a Remedy, so inoffensive, pleasant, and elegant as this must be allowed to be.

A great Benefit arising from the Use of the Sugar of Milk, is, that a larger Quantity of what is most beneficial in Milk, may be drank, without so much of the watery or aqueous Particles, as are found in Whey; which, to many Persons, is windy and swells them much.

*Hippocrates* advised Whey to be boiled to half its Quantity, that it might be more efficacious.

By preparing Milk in the Manner directed by Dr. *Dyvernois*, this Sugar of Milk contains the same Salts and Particles which are drawn from Women's and Asses Milk; only that one Pint of Cow's Milk produces but one Dram; whereas the same Quantity of the other yields about six Drams each.—Now the Virtues of Milk for medicinal Uses (except the Cream of it, which is good against



against corrosive Poisons) are contained in those Salts and Particles which are found in the Sugar of Milk.

The Sugar of Milk may be greatly adulterated. There are some who take the Whey which is left after the first Coagulation, or after the first Cheese is made, in which there remains a good deal of the Curd. They boil it to the Consistence of Honey ; they dry it, and mix with it common Sugar, and sell it for Sugar of Milk ; which Fraud is easily discovered by putting boiling Water upon it. The curdy Part will not dissolve. Others mix with the true Sugar of Milk (to encrease its Quantity) Cream of Tartar, which they add to the Whey, while it is boiling. The Taste of it will discover the Imposture. There is a very great Difference between the Virtues of the Sugar of Milk made out of Whey, turned with an acid, or kept too long ; and that which is described in the Dissertation. The first will dissolve in cold Water, which has no Effect upon the latter. There is now in Town such Sugar of Milk which was prepared in *Switzerland* according to Dr. *Dyvernois's* Directions. There are two Sorts of it; one generally us'd, because it dissolves soonest, and looks like very fine Sugar of the Shops, in Powder ; the other



other appears exactly the same as white Sugar Candy, and is eaten by the Ladies abroad, in order to promote their Cure. Both are very agreeable to the Sight and Taste.

As a Medicine always acts according to its constituent Parts, it will be proper to set down the Analysis made of the Sugar of Milk. To shew that it contains a very fine Nitre, put some of it upon lighted Charcoal, and it will burn in small Sparks as doth Nitre; to prove that it is destitute of an Acid, and that it is a pure volatile Alkali, when you distil it by a Retort, nothing but a Honey tasted Water will come out; and we may be certain its balsamic Sulphur remains, by the Distillation of the same Retort; for when the Honey-tasted Water comes out, it is united with a balsamic sulphurous Oil.

**F I N I S.**