

NUTRITION CLASSICS

A
T R E A T I S E
O F T H E
S C U R V Y.
I N T H R E E P A R T S.

C O N T A I N I N G

An inquiry into the Nature, Causes,
and Cure, of that Disease.

Together with

A Critical and Chronological View of what
has been published on the subject.

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Editor's Note: Dr. Lind's study on the Salisbury in 1747 was one of the first controlled, therapeutic trials in clinical medicine and showed that citrus fruits would cure scurvy. Citrus fruits were then used in preventive trials aboard British vessels and finally adopted as compulsory by the British Admiralty in 1795.

It is a subject in which all practitioners of physic are highly interested. For it will be found, that the mischief is not confined to the sea, but is extended particularly to armies at land; and is an endemic evil in many parts of the world. This disease, for above a century, has been the supposed scourge of Europe. But how much even the learned world stands in need of farther light in so dark a region of physic, may appear from the late mournful story of the German troops in Hungary, the disaster in Thorn, and from many other relations in this treatise.

As the salutary effects of the prescribed measures will be rendered still more certain, and universally beneficial, where proper regard is had to such a state of air, diet, and regimen, as may contribute to the general intentions of preservation or cure; I shall conclude the precepts relating to the preservation of seamen, with shewing the best means of obviating many inconveniences which attend long voyages, and of removing the several causes productive of this mischief.

The following are the experiments.

On the 20th of May 1747, I took twelve patients in the scurvy, on board the *Salisbury* at sea. Their cases were as similar as I could have them. They all in general had putrid gums, the spots and lassitude, with weakness of their knees. They lay together in one place, being a proper apartment for the sick in the fore-hold; and had one diet common to all, *viz.* water-gruel sweetened with sugar in the morning; fresh mutton-broth often times for dinner; at other times puddings, boiled biscuit with sugar, &c.; and for supper, barley and raisins, rice and currants, sago and wine, or the like. Two of these were ordered each a quart of cyder a-day. Two others took twenty-five gutts of *elixir vitriol* three times a-day, upon an empty stomach; using a gargle strongly acidulated with it for their mouths. Two others took two spoonfuls of vinegar three times a-day, upon an empty stomach; having their gruels and their other food well acidulated with it, as also the gargle for their mouth. Two of the worst patients, with the tendons in the ham rigid, (a symptom none of the rest had), were put under a course of sea-water. Of this they drank half a pint every day, and sometimes more or less as it operated, by way of gentle physic. Two others had each two oranges and one lemon given them every day. These they eat with greediness, at different times, upon an empty stomach. They continued but six days under this course, having consumed the quantity that could be spared. The two remaining patients, took the bigness of a nutmeg three times a-day, of an electuary recommended by an hospital-surgeon, made of garlic, mustard-seed, *rad. raphan.* balsam of Peru, and gum myrrh; using for common drink, barley-water well acidulated with tamarinds; by a decoction of which, with the addition of *cremor tartar*, they were gently purged three or four times during the course.

The consequence was, that the most sudden and visible good effects were perceived from the use of the oranges and lemons; one of those who had taken them, being at the end of six days fit for duty. The spots were not indeed at that time quite off his body, nor his gums sound; but without any other medicine, than a gargarism of *elixir vitriol*, he became quite healthy before we came into Plymouth, which was on the 16th of June. The other was the best recovered of any in his condition; and being now deemed pretty well, was appointed nurse to the rest of the sick.

As oranges and lemons are liable to spoil, and cannot be procured at every port, nor at all seasons in equal plenty; and it may be inconvenient to take on board such large quantities as are necessary in ships for their preservation from this and other diseases; the next thing to be proposed, is the method of preserving their virtues entire for years in a convenient and small bulk. It is done in the following easy manner.

Let the squeezed juice of these fruits be well cleared from the pulp, and depurated by standing for some time; then poured off from the gross sediment: or, to have it still purer, it may be filtrated. Let it then be put into any clean open earthen vessel, well glazed; which should be wider at the top than bottom, so that there may be the largest surface above to favour the evaporation. For this purpose a china bason or punch-bowl is proper; or a common earthen bason used for washing, if well glazed, will be sufficient, as it is generally made in the form required. Into this pour the purified juice; and put it into a pan of water, upon a clear fire. Let the water come almost to boil, and continue nearly in a state of boiling (with the bason containing the juice in the middle of it) for several hours, until the juice is found to be of the consistence of oil when warm, or of a syrup when cold. It is then to be corked up in a bottle for use. Two dozen of good oranges, weighing five pounds four ounces, will yield one pound nine ounces and a half of depurated juice; and when evaporated, there will remain about five ounces of the extract; which in bulk will be equal to less than three ounces of water. So that thus the acid, and virtues of twelve dozen of lemons or oranges, may be put into a quart-bottle, and preserved for several years.

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