

### Excerpt from James Lind's *A Treatise on Scurvy*

“On the 20<sup>th</sup> of May 1747, I took twelve patients in the scurvy, on board the *Salisbury* at sea. Their cases were as familiar 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 guts 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, also the gargle for their mouth. Two other the worst patients, with the tendons in the hand 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 a 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 the six days fit for duty. The spots were not indeed at that time quite off his body, nor his gums found; but without any other medicine, than a gargarism of *elixir vitriol*, he became quite healthy before we came into *Plymouth*, which was on the 16<sup>th</sup> 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.

Next to the oranges, I thought the cyder had the best effects. It was indeed not very sound, being inclinable to be aigre or pricked. However, those who had taken it, were in a fairer way of recovery than the others at the end of the fortnight, which was the length of time all these different courses were continued, except the oranges. The putrefaction of their gums, but especially their lassitude and weakness, were somewhat abated, and their appetite increased by it.

As to the *elixir of vitriol*, I observed that the mouths of those who had used it by way of gargarism, were in a much cleaner and better condition than many of the rest, especially those who used the vinegar; but perceived otherwise no good effects from its internal use upon the other symptoms. I indeed never had a great opinion of the efficacy of this medicine in the scurvy, since our longest cruise in the *Salisbury*, from the 10<sup>th</sup> of August to the 28<sup>th</sup> October 1746; when we had but one scurvy in the ship. The patient was a marine, (one Walsh); who, after recovering from a quotidian ague in the latter end of September, had taken the *elixir vitriol* by way of restorative for three week;

and yet at length contracted the disease, while under a course of medicine recommended for its prevention.

There was no remarkable alteration upon those who took the electuary and tamarind decoction, the sea-water, or vinegar, upon comparing their condition, at the end of the fort-night, with others who had taken nothing but a little lenitive electuary and *cremor tartar*, at times, in order to keep their belly open; or a gentle pectoral in the evening, for relief of their breast. Only one of them, while taking the vinegar, fell into a gentle flux at the end of ten days. This I attributed to the genius and course of the disease, rather than the use of the medicine. As I shall have occasion elsewhere to take notice of the effects of other medicines in this disease. I shall here only observe, that the result of all my experiments was, that oranges and lemons were the most effectual remedies for this distemper at sea. I am apt to think oranges preferable to lemons, though perhaps both given together will be found most serviceable.”