

FOODS CONTAINING VITAMIN C

(Written for "The Listener" by DR. MURIEL BELL, Nutritionist to the Department of Health)

[I.] INTRODUCTORY

IT does not need me to remind you of what is now common knowledge—that sailors who are away at sea on long voyages develop scurvy, a disease characterised by a tendency to hæmorrhages, for example, gums that readily bleed; and it is also well known that it may be prevented or cured by fresh green vegetable, or by a ration of the juice of certain fruits. We New Zealanders have a particular interest in the history of its prevention because of the part played by Captain Cook in building up the scientific knowledge relating to the measures and precautions needed in preventing an outbreak of the disease; for he actually read a paper to the Royal Society on his experiences of the relative merits of foods that prevent it, and indeed it is no doubt due to his observa-

tions and knowledge of how to keep his men fit that he was enabled to raise Britain's flag in this country.

But there were other points of medical interest recorded by captains at sea, in connection with this particular disease, points which are now being explained by scientific findings of recent date. For instance, it was frequently noted that an outbreak of scurvy followed the occurrence of an epidemic or infection; or again it was observed that one of the first tendencies among the men was a subtle mental change—they became argumentative and quarrelsome. The latter symptom might now be included as evidence of what is termed "sub-clinical" scurvy; the former is of interest in the light of the part played by vitamin C in respect of fighting infections.

The idea is now gaining ground that vitamin deficiencies do not necessarily show up in their frank forms (exemplified here by scurvy) but may yet result in the sub-optimal states of health which invite infections or diminish the power of the body to resist disease. Of interest in this connection is the influence of these deficiencies on the mind—the querulousness in scurvy; the mental confusion, or the more definite lunacy, in pellagra. This idea has led to the distinction being made between "optimal" and "marginal" requirements of vitamins; the latter in the case of vitamin C will prevent scurvy, the former will keep the body fitter to resist disease.

Note that there were outbreaks of scurvy following an acute infection among the crew. We now believe that the explanation is to be found in the way in which the vitamin C is used up in removing the harmful effects of bacterial toxins—hence an acute shortage of the vitamin in the body was induced, and frank scurvy precipitated. It is of interest to know that a diminished quantity of this vitamin is found in the blood of those who are suffering from acute infections such as tuberculosis and pneumonia; and scientific evidence seems to

be accumulating that this particular vitamin has a right to be classified as anti-infective because of the specific part it plays in the production of "immune bodies"—substances required for conferring immunity to bacteria.

Shortage of Oranges

During war there is special need to keep up to the level of optimum nutrition, and yet circumstances of blockade and restricted trade communications act in the contrary direction, leading to the well-known association of war, pestilence, and famine. The special need is probably accounted for by the fact that with concentrations of men in camp there is a greater liability for the spread of infections and for an increase in their virulence. That the circumstances of blockade are getting nearer to our own shores prompts this article on vitamin C—for we must be ready if need be to face a shortage of oranges. Foods which are able to compensate for this shortage are vegetables and fruits. We all know of the recent lack of vegetables, a lack which is liable to be accentuated when men are taken from their gardens to act as watchmen on the shore.

In the next article the relative merits of foods as substitutes for oranges will be considered.

No tummy upsets for your baby!

MOST of Baby's troubles are due to his stomach. Every child, however well cared for, gets occasional windy spasms which make him double his little fists into his tummy to ease the pain. Now, a teaspoonful or so of Dinneford's Pure Fluid Magnesia, given three times a day, with each feed, makes things very much easier for mother and makes Baby's life much happier. For Dinneford's has been, for over 100 years, and still is the safest, most effective remedy. It soothes away discomfort caused by acidity, dispels wind and keeps Baby's bowels regular. Ask your chemist for a bottle of Dinneford's—but wisely see that you get the genuine product.

Free "Dinneford's Dictionary for Mothers." Send name and address, together with 1d. stamp for postage, to Box 1627, Wellington, and this wonderful new book will be sent to you.



DINNEFORD'S
pure fluid **MAGNESIA**

Look at me now...

Cheerful!

Clements Tonic will give you steady nerves, a clear mind and healthy body. Read what Mr. N.G., of Moonee Ponds, Victoria, says of this wonderful tonic.



"I was a prey to disturbing thoughts, could not bear to be left alone, and could not sleep. I was badly depressed, lost my appetite, and suffered a nervous breakdown due to worry and work."

You, too, can ensure a calm and happy outlook by taking Clements Tonic, famous for over 30 years as the natural restorative. Clements contains the vital ingredients needed to restore a jaded appetite, enrich the blood, replace worn-out nerve cells and tissue, and feed the brain. **CLEMENTS TONIC GIVES YOU NERVES OF STEEL.**

thanks to

CLEMENTS TONIC



Wholesale Distributors: Clements Tonic Pty. Ltd., Box 977, G.P.O., Wellington.

4-121