

areas and of civilians living under famine conditions have stimulated this research, and Canadians working under the director-general of medical services of the Canadian Army have found one method of supplying half the needed daily quantities of Vitamin C.

The solution is, of course, to add fresh vegetables to the diet; but how to get them to remote or devastated areas? The answer: take them as seeds and grow them, not for weeks or months, but for a few days. The dried seeds which can be transported anywhere and stored indefinitely have no Vitamin C, but when they are soaked and kept moist until the seeds begin to sprout, the seedlings contain a considerable amount of this vitamin as well as a certain amount of riboflavin.

The problem was to find, first, what seeds contained the highest amount of Vitamin C while at the same time remaining readily acceptable as food, and, secondly, to develop a method of sprouting them that could be duplicated anywhere by anybody.

Cereals and legumes were chosen for the tests, including field peas, soy beans, broad beans, navy beans, common vetch, wheat, rye, oats and barley. Discarded for practical purposes were soy beans, which have to be cooked so long that they lose much of the Vitamin C content and even when served as a vegetable with tomato sauce are tough and tasteless. Navy beans were discarded because it was difficult to produce sprouts of a quality which might be used as food, and the vitamin content of the finished product was low. Oats, barley and rye were not practicable because they were low in Vitamin C throughout their early growth which was the only stage at which they might be used as a palatable food. Corn sprouts developed a strong and disagreeable flavor and were therefore also eliminated.

That left field peas, broad beans, vetch and wheat. While none of these contained sufficient riboflavin to be considered an important source, they all were found to be good sources of Vitamin C -- so good that one serving will supply one half the daily Vitamin C requirement, and that amount is sufficient to protect against scurvy. Peas were found to be best for eating after nine to 10 days' sprouting; vetch after four to five days, and broad beans after five days. They are economical; for instance, 12 pounds of dry beans yield 22 pounds of one-inch sprouts, sufficient to supply 100 servings of thick soup or 200 servings when added to stew. Eight pounds of dry peas grow enough six-inch sprouts in nine days to serve as salad for 100 men.

Palatableness has been one of the main concerns of the scientists, for, while starving people may not be fussy, it is more difficult to please troops accustomed to the best that money can provide. Recipes that use these sprouts, were developed and the food was served to a group of Canadian Women's Army Corps officers who were invited to be free with their criticism. On the basis of their reactions it was decided that pea shoots are acceptable in the form of a tossed salad with french dressing. Sprouted broad beans can be used in many ways - in soups, stews and meat loaves and as a vegetable with a sauce or in a casserole or as chile con carne. Vetch sprouts have a flat taste and are best with the addition of meat or tomato. Wheat sprouts can be used along with rolled oats to make porridge or eaten fried with onions and rice or in soup. They get very hard with overcooking; five to 10 minutes is enough for frying; 20 minutes the limit for boiling.