NUTRITION

## Carotene Needed

Yellow pigment present in carrots and other yellow vegetables and in green leaves of all kinds is found necessary for reproduction in cattle.

➤ CAROTENE, the yellow pigment in such vegetables as carrots and rutabagas, present also in green leaves of all kinds, has been found essential to reproduction in dairy cattle, in researches conducted at a number of state experiment stations, as well as at the U. S. Department of Agriculture's great experimental farm at Beltsville, Md.

When carotene is lacking in the ration during the reproductive cycle, dead, paralyzed, and weak calves result. Cause of the paralysis in the calves is a degeneration of the nerve tracts of the spinal cord. Some cattle go blind when deprived of sufficient carotene.

The vitamin A content of milk is considerably lowered during the winter feeding season as compared to milk produced on pasture, due largely to lack of carotene in hay and dried fodder. Carotene is needed for the formation of vitamin A. Whether or not dairymen will be asked to increase the vitamin A content of the winter-produced milk in market milk areas after the war remains to be seen. The American Medical Association has expressed interest in the subject. It seems

doubtful that such increase can be accomplished by using field-cured hay. The use of grass silage offers some possibilities in this direction.

Amount of carotene necessary to bring vitamin A potency of winter milk up to that of summer milk is about 600,000 to 700,000 international units of carotene per day. In order to produce the same effect with vitamin A per se, an intake of 250-300 international units is required, results at the Purdue Agricultural Experiment Station indicate. The cow is not a very efficient user of either carotene or vitamin A, since only from 1% to 3% of the vitamin A or carotene fed actually appears in the milk.

Commercial products containing vitamin A have recently appeared on the market which are supposed to increase milk production. The first one developed was tried extensively at the Walker-Gordon farm in New Jersey with apparently good results. Increases of four pounds of milk per cow per day were reported. Preliminary data on this product have been obtained at University of Maryland.

Science News Letter, December 30, 1944

## Soldiers Are Taller

➤ TODAY the average American drafted man is about two-thirds of an inch taller than during the last war, and the proportion of six-footers has increased, according to a report by the Metropolitan Life Insurance Company.

The average height of men in the twenties examined at induction stations for the armed service in May, 1943, was 68.15 inches, when measured without shoes. The first million draftees of ages 21 to 30 examined at mobilization camps in 1917, averaged only 67.49 inches in

The proportion of tall men among the 1943 selectees was greater than among those of the last war. Over a quarter (27.5%) of the recent selectees were found to be over five feet ten inches, only 22.4% were so tall in the last war.

At present about nine men in every hundred are six-footers. A quarter of a century ago only six or seven in every hundred reached that height, the company statisticians reported.

This trend toward increased height among American men is also shown by a study of men within certain age groups examined for induction, since the older men were obviously born at an earlier period. The average stature of 18- and 19-year-olds, who have not reached their full growth, is actually a little greater than that of men over 30. Men 20 to 24 years of age are about 68.15 inches tall, whereas those over 35 average 67.54 inches in height.

About 91 in every thousand men between the ages of 20 to 24 were found to be six-footers; less than 58 in every thousand of those 35 or over were this tall.

The figures cited by the statisticians of the Metropolitan Life Insurance Company for 1943 were based upon an analysis of data secured from the Office of the Surgeon General of the Army. Adjustment was allowed for the omission of men inducted into the Navy, for which figures are not available.

Science News Letter, December 30, 1944

Zinc ore containing certain quantities of silver has been discovered near Ravlidmyr, Sweden, at a depth of about 200

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