

NUTRITION

Carrots Give Longer Life

Vitamin A in large doses increased life span of rats by over 10% and may possibly do the same for humans. Extra decade comes in prime of life.

► GET ON the carrot wagon if you want to add an extra 10 years to your life at its prime.

This advice seems justified on the basis of latest nutrition studies by Dr. Henry C. Sherman of Columbia University. Rats given four times the normal amount of vitamin A in their diet lived more than 10% longer than their life expectancy. And carrots are a very rich food source of vitamin A for humans.

The increased length of life comes at the prime of life in the rats and would in humans, too, Dr. Sherman thinks. The rats with the extra vitamin A grow more rapidly and more uniformly and have more vigorous offspring.

Vitality is higher and death rates lower at all ages. Full adult capacity, or the prime of life, is reached earlier and kept longer. Life expectation is increased not only for the young but also for grown-ups.

"The previous general progress of public health had increased the life expectation of the infant but not of the grown person," Dr. Sherman points out. "Now the nutritional improvement of the norm raises the life expectation of the adult as well.

"The extra years thus offered are not to be pictured as added to old age. Rather it appears that something like an extra decade can be inserted at the prime or apex of the life lived in accordance with today's newer knowledge of nutrition. Life becomes longer because it is lived on a higher health level throughout. The apex of attainment is higher, the period of prime is longer and, in human terms, there is a smaller percentage of years of dependence."

The basic diet to which Dr. Sherman added extra vitamin A and got longer-lived rats had the same relation between amounts of vitamin A and calories as that recommended as a good diet for humans in 1941. So if you are going to add a decade to your prime, you will eat four times the recommended amounts of carrots and other yellow vegetables

and fruits and green, leafy vegetables and liver.

Dr. Sherman, whose studies are supported by grants from the Nutrition Foundation, the Markle Foundation and Swift and Company, is now trying to learn what further benefits can be achieved by increased amounts of calcium in the diet and by improving the relation of meat and other protein foods to phosphorus and the B vitamin, riboflavin.

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ASTRONOMY

World's Largest Telescope To Bring Universe Closer

See Front Cover

► THE 200-INCH telescope on Mount Palomar in California, the largest telescope in the world, will begin sweeping the skies before the end of 1947.

The grinding of the lens, delayed more than four years by the war, is now essentially completed. The supporting structure is ready. This summer the telescope will be assembled and the whole equipment put into operation by the end of the year, reports Raymond B. Fosdick, president of The Rockefeller Foundation.

Funds for the erection of the giant

telescope have been supplied by three Rockefeller boards. A total of \$6,250,000 has been appropriated to the California Institute of Technology for this unique instrument of scientific research.

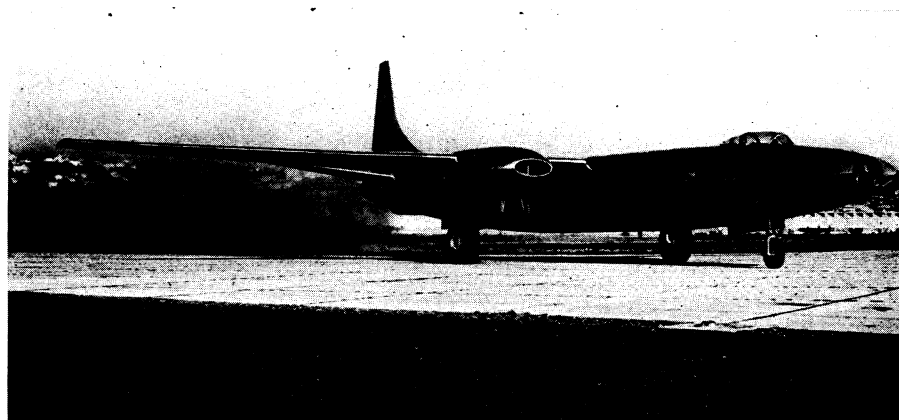
First planned about three decades ago, a number of years elapsed before successful solutions were found for the problems of casting so large a block of suitable glass, of grinding and polishing it to a precise curvature within a few millionths of an inch, and of supporting the huge mass of 530 tons so that the telescope could be moved almost without friction to follow the pinpoint of a star across the skies.

"The new telescope will project man's sight into the universe two times farther than it has ever gone before—to a distance more than a thousand million light-years away," stated Mr. Fosdick in explaining why this huge expenditure of money and effort is justified. "It will open up an unexplored sphere eight times the volume of that which has hitherto been sounded.

"What lies beyond the limits of our present knowledge?" he questioned. "Do the stellar systems extend on indefinitely, or is a boundary finally reached beyond which there are fewer and fewer nebulae? What is the true interpretation of the immense velocity with which all the stellar systems appear to be receding?"

"Since stars and nebulae are vast aggregations of atoms or atomic fragments, reacting on each other under conditions of pressure and temperature beyond anything that can be duplicated in man's laboratories, what secrets can we learn that will add to our knowledge of fundamental physics?"

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NEWEST JET—The Army Air Forces' XB-46 recently completed its first test flight. Powered by four jet engines, it is 106 feet long and 113 feet across the wing.