

## NUTRITION

# Up I.Q. by Mother's Diet

Test indicates that babies are smarter when expectant mothers take plenty of vitamins and continue doses through the nursing period.

► IF EXPECTANT mothers want their babies to be smart children, they will themselves take plenty of vitamins during pregnancy and while nursing the baby.

Proof that extra vitamins for mothers during pregnancy and nursing can increase the I.Q. of their children at least up to the age of four comes from a study by Teachers College, Columbia University, with a grant from the Williams-Waterman Fund for Combat of Dietary Diseases.

Some 2,400 mothers and 1,699 of their children were covered by the study. One half of the mothers were maternity clinic patients at the Frontier Nursing Service at Wendover in the rural Cumberland Mountain area of eastern Kentucky. The other half were from the crowded city tenement district of Norfolk, Va., and were patients at the King's Daughters Maternity Center there.

In each group some mothers got vitamin C (ascorbic acid) pills; some got thiamine, or vitamin B-1 pills; some got pills containing thiamine, iron, and riboflavin and niacinamide which are B vitamins; and some got placebos, or "duds" containing no vitamins. The pills were all made and donated by Hoffmann-LaRoche, Inc., of Nutley, N. J.

The psychologists who tested the children at age three, and in some cases at age four, did not know which pills the mothers had had.

At the age of four, in the Norfolk group, children from the vitamin-taking mothers surpassed the placebo group by 5.2 in intelligence quotient, taking the average for the three vitamin groups.

Tests of 811 of the Kentucky children at about age three showed a mean I.Q. of 107.6 for the total group. But no significant differences were found in I.Q. between the vitamin and the non-vitamin group. This, the scientists pointed out, may be due to several reasons: 1. The Kentucky mothers, living in a rural area, probably ate a better diet than the city women. 2. The Kentucky mothers were not as willing to take the vitamin pills and may not have taken them as faithfully as the city women. 3. The Kentucky children were so shy and unwilling to talk that the tests of their intelligence may not have been as satisfactory.

The study was supervised by Dr. Arthur I. Gates, head of the department of psychological foundations, Teachers College. Drs. Ruth F. Harrell and Ella Woodyard, psychologists, were in charge of fieldwork, tests, examinations and preliminary statistical analysis.

The amounts of vitamins in the pills were higher, in the case of vitamin C about twice as high, than those usually recommended for pregnant and nursing women.

Whether the children's I.Q. would be increased by vitamin supplements for mothers who are getting in their diet the recommended or more amounts of these vitamins was not clearly shown by the study. For families living in poorer city environments the vitamins do have an effect on the child's I.Q. up to the age of four at least.

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## METEOROLOGY

# Sees Warm, Dry Summer

► ANOTHER DRY, warm summer, particularly in the southern United States, has been foreseen by Dr. H. C. Willett, professor of meteorology at Massachusetts Institute of Technology.

Summer in 1955 "will not be too different" from 1954, Dr. Willett predicted. Last year's weather was marked by heat and drought, some areas in the southern half of the country being seared for the third or fourth straight year.

Drought conditions will continue there this summer if Dr. Willett's forecast is correct.

Normal summer weather will prevail over the West Coast and the northern part of the country, he predicted.

Reason that the South will be hardest hit, Dr. Willett explained, is that storm tracks and weather patterns are shifting southward. They hit a northerly peak about 15 years ago and, since then, have been receding slowly southward.

Thus during the Dustbowl period of the 1930's, the central and northern sections of the Midwest carried the brunt of the drought, since storm tracks then were gradually moving northward.

The present southward shift, Dr. Willett said, is part of the warm-up of the last 40 years associated with changes in the sun's activity as shown by the sunspot cycle.

Dr. Willett bases his prediction on trends shown during two sunspot cycles combined, finding a current weather pattern similar to a past one, and on a statistical study of recent air mass movements.

He is one of the few recognized meteorologists who ventures to make a weather forecast for several months in advance. Dr. Willett's theory is that solar eruptions and sunspots, irregularly changing the character of the sun's radiation, act upon the earth's

## INVENTION

# Quick-Cooling Ice Cube Has Hour-Glass Hole

► "THE PROBLEM confronting both homemakers and bartenders has been to be able to cool a glass of beverage quickly."

This was the hot-weather problem confronting Carlyle M. Ashley of Fayetteville, N. Y., who received patent No. 2,703,964 for inventing an ice cube that might solve the predicament. Mr. Ashley's ice-cube is square like most other ice-cubes, but has an hour-glass opening on the inside. This, he says, "will cool the liquid which is to be cooled quicker than any of the present pieces of ice."

The secret of the new ice-cube is that it provides a greater surface for a faster heat exchange between the ice and liquid. The inventor assigned the ice-cube patent rights to the Carrier Corporation of Syracuse, N. Y.

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outer atmosphere, resulting in large-scale, long-period weather changes.

Sunspot activity varies in cycles that usually last from 10 to 12 years, averaging about 11 years. Dr. Willett believes these cycles can be used to indicate weather trends when two of them are combined.

If overall sunspot activity for the double cycle is high, as it is currently, then the associated weather cycle is 20 years. Weather in 1957, he said, should correspond to that in 1937. When sunspot activity rates are lower than usual over the doubled period, the associated weather changes may take 24 years instead of 20, Dr. Willett said.

The present cycle seems to be "a little ahead" of the equivalent cycle 20 years ago. For the last 40 years, the double sunspot cycle has been running in 20-year patterns.

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## INVENTION

# Convertible Hardtop Really Convertible

► WITH THE coming of spring motorists will be pleased to learn that a hard top convertible that converts has been invented.

The convertible top is made of metal panels that automatically fold one on top of the other onto a shelf in the trunk. The top's inventors, Harvey J. Anschuetz of Plymouth and Louis J. Serratonni of Walled Lake, Mich., also claim a unique linking system for the panels, which makes the convertible look like a sedan and, at the same time makes the car weather-tight when the top is up.

The "collapsible roof" received patent No. 2,704,225. The patent rights were assigned to the Kaiser Motors Corporation, Nevada.

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