



**PRE-FABRICATION**—To speed the flow of ships off the shipways, whole sections of the hull are now assembled before they are lifted into place. This is an official U. S. Maritime Commission photograph.

## NUTRITION

## Beef for the Unborn

Experiments with rats indicate that "complete reproductive failure" results when mother animals lack meat. Deficiency not made up by pork.

➤ **TOXEMIA** of pregnancy, a serious condition with excessive vomiting and convulsions which sometimes afflicts expectant mothers, may be due to lack of a diet factor found in beef but not in pork.

Experiments suggesting this were announced by Dr. Pearl P. Swanson, of Iowa State College, to the American Dietetic Association, meeting in Detroit. Dr. Swanson's experiments were made with laboratory rats and were planned to show the role meat may play in the rat's nutrition. Instead, they may lead to solution of what has been called the unsolved riddle of the gynecologist.

"Complete reproductive failure" resulted when rats were put on diets containing either beef or pork equivalent to 15% of protein. Increasing the pork in the diet to 30% caused very little improvement. Almost half (40%) of the mother rats died of "pregnancy disease," an ailment with all the characteristics of toxic pregnancy in human

mothers. Those rats that survived gave birth to dead offspring, or could not nurse their offspring, and the second and third generations were sterile.

A diet containing 30% of protein in the form of dried autoclaved beef, however, supported life for six generations. Beef apparently possesses certain nutritive qualities not characteristic of pork. The dietary difference seems to be due to the presence in beef of a factor important for bearing and nursing offspring.

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### Restaurant Eaters Short

➤ **THOSE WHO** eat in restaurants, even the best of them, are being deprived of about three-fourth of the vitamins they should be getting from vegetables. Actual figures on vitamin losses from restaurant-cooked vegetables were reported by Dr. Robert S. Harris, of Massachusetts Institute of Technology.

Eat early and concentrate on raw vegetables, Dr. Harris advised restaurant eaters.

In his study, Dr. Harris selected a restaurant using superior cooking and serving technics. In spite of this, the average loss of anti-scurvy vitamin C from vegetables during cooking was 45%, and the loss of thiamin (vitamin B<sub>1</sub>) averaged 35%.

The large loss was attributed both to the destruction by heat and to the fact that the cooking water in which the vitamins are soluble was discarded. During the time the vegetables were held on the steam table before serving there was a further vitamin loss of about 15%. Only about one-fourth the original vitamin content of the vegetables actually reached the consumer.

It is evident, Dr. Harris pointed out, that the customers who eat earlier and who eat more raw vegetables will be better fed. While the restaurateur cannot be expected to furnish short order cooking, he can be taught that it is advisable to cook food carefully and not too long before serving. Research is needed to determine the best methods of cooking and keeping foods warm when served in large quantities.

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### Three-Cent Soup Mix

➤ **LATEST** addition to large-scale, low-cost, high nourishment feeding is a three-cent soup mix announced by Dr. Robert S. Harris, of Massachusetts Institute of Technology, at the meeting of the American Dietetic Association in Detroit.

Made of skim milk powder, peanut flour, soya flour and peas, the soup mixture is inherently rich in good protein and in vitamins of the B complex. It will be possible to supplement it with minerals and with natural and synthetic vitamins so that each ounce can supply the full day's allowance of these diet essentials. A full day's portion can be supplied at a cost of two to three cents.

The mixture is ready to serve, so will not be subjected to the destructive effects of cooking. All the materials are available in large quantities which will make it possible for the soup to be used on a national or international scale. Used as a stock to which meat and vegetables may be added, it provides the possibility of great variety in a school lunch menu.

A field study conducted in six schools in small communities in Michigan