



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.

Science News Letter, October 31, 1942

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 B₁) 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.

Science News Letter, October 31, 1942

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

showed that the soup was palatable as 426 children consumed it daily for three months and showed no evidence of tiring of it. There were significant improvements in the group to which the soup was given in comparison with the control group who ate the usual school

lunch. These improvements included a better ascorbic acid (vitamin C) and iron status and some improvement in weight and riboflavin status. The study showed that the hot school lunch previously supplied was not properly supplementing the home dietary.

Science News Letter, October 31, 1942

PUBLIC HEALTH

Prostitutes Blamed

Suppression near Army camps held essential to the control of venereal disease. Cleaning up of El Paso and Juarez brings new all-time low in rate.

➤ SUPPRESSION of prostitution is essential for control of venereal disease, two medical and health authorities declared at the meeting of the American Public Health Association in St. Louis.

"Some persons in charge of important medical and public health activities of official agencies, civilian as well as military, are not yet convinced of the desirability of suppression of prostitution as an element of a venereal disease control program," Dr. Theodore Rosenthal of the New York City Health Department charged.

"Proper information on the value of this phase of venereal disease control is essential."

The information, in the shape of a report showing how venereal disease rates dropped among soldiers at Fort Bliss, Texas, when prostitution in the vicinity was suppressed, was furnished by Dr. Bascom Johnson, Jr., U. S. Public Health Service officer assigned to the El Paso, Texas, City-County Health Unit.

Fort Bliss, an expanding military cantonment with many thousands of troops, he explained, is located within a short distance of El Paso which is within easy walking distance of Juarez, Mexican border city just across the Rio Grande.

"When this study was started," he stated, "commercial prostitution was flourishing both in El Paso and in Juarez. There were nine well known houses of prostitution in El Paso under police surveillance, and in some respects, almost under police protection. The women in these houses were being examined once a week in the City police department by local health department personnel.

"During this period almost 75% of

the Army's infections were found to be coming from houses of prostitution. Fifty-seven per cent were apparently contracted in El Paso, the remaining 43% was fairly even divided between Juarez, Mexico, and communities outside the El Paso-Juarez area. However, of 155 cases contracted in El Paso fully 84% was said to be acquired in the nine houses of prostitution where the women were being examined once a week.

"There followed a period when El Paso's houses were closed but flagrant prostitution conditions remained readily accessible in Juarez, Mexico. The percentage of venereal infections coming from El Paso decreased about 25% but the percentage coming from Juarez increased almost an equal amount. It was impossible to demonstrate any decrease in Army venereal rate which could be attributed to the improved conditions in El Paso.

"After war was declared, the International bridge to Juarez was closed to American soldiers on Dec. 8, 1941. It remained closed for 82 days. During this period the Army venereal rate which had previously averaged 64 for a 17-month period dropped to 36. On Feb. 28, 1942, due to diplomatic pressure, the bridge was reopened to soldier traffic and the venereal rate went up again to 60. On June 19, 1942, a policy of repression of prostitution was started in Juarez. Since then the Army venereal rate has gradually declined again. The rate for July, 1942, reached an all time low of 28 cases per 1,000 men per annum.

"If open houses of prostitution are tolerated in the vicinity of an Army camp," Dr. Johnson declared, "they will in all probability prove to be a

major source of venereal disease infection among the troops."

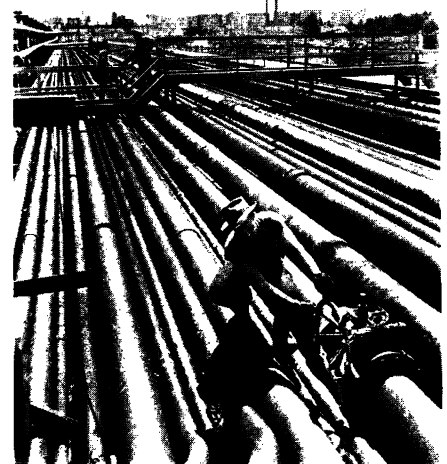
Contrary to one of the standard arguments against suppression of prostitution, closure of the houses did not, so far as Dr. Johnson could find, cause any widespread dissemination of these women throughout the community. According to the statements of the prostitutes themselves, the vast majority leave town as soon as the "heat is turned on."

As the prostitutes are eliminated, the "non-prostitute pick-up" or "chippie" becomes more important as a source of venereal infection, Dr. Johnson stated. An attempt is now being made in El Paso to set up a redirection program for these borderline prostitutes. Sociological studies are badly needed, Dr. Johnson declared, to help health and social workers solve the border-line prostitute problem.

Science News Letter, October 31, 1942

The 1942 production of *bituminous coal* in the United States is expected to reach approximately 560,000,000 tons, and that of anthracite more than 58,000,000 tons.

A German manufacturer has designed detachable extra *wing-tips* which aid the take-off of heavy aircraft, and are dropped off when the plane is in flight.



SEGREGATION — *Through many miles of pipes like these, crude oils are segregated. The operator in the foreground is opening a valve to let a certain batch of crude flow to its destination at a Standard Oil Company (New Jersey) refinery.*