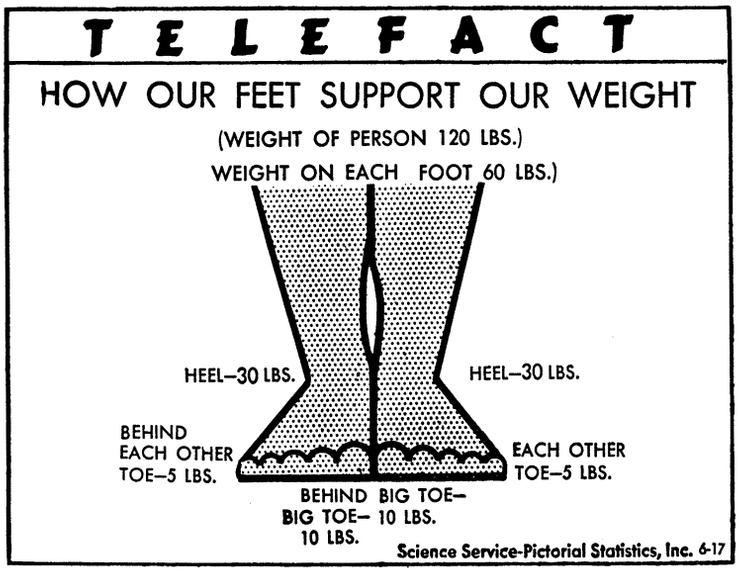

NUTRITION

New Yeast Quintuples Thiamin Content of Bread

Would Give a Loaf of White Bread the Vitamin B_1 Content of a Loaf of Bread Made from Whole Wheat

A LOAF of white bread which has the vitamin B_1 content of a whole wheat loaf, some five times as much as ordinary white bread, was predicted to the Massachusetts Institute of Technology food conference by Charles Frey, Alfred Schultz and Lawrence Atkin, all of the Fleischmann Laboratories.

Vitamin B_1, or thiamin, is an important factor in nutrition but it is not stored in the body to any significant extent and thus must be contained in basic foods. Cereal products, mainstay of the national diet, are suitable for this but these products, especially bread, have been increasingly deprived of their natural vitamin content in recent years.

The problem of restoring this loss, sometimes as great as ninety-three per cent, has been tried along many lines, but the latest and most practical employs a new yeast. This yeast contains enough thiamin to produce a loaf of white bread with the vitamin content of a whole wheat loaf but without any loss of palatableness. Although made by a new process, the yeast offers no new technical problems since its baking properties have not been altered. Possibility of such a loaf at a low cost increase would be a boon to low income groups, it is declared.

Research aimed at irradiating yeast to convert its natural ergosterol to vitamin D and to include milk solids to supplement cereal protein and minerals in the "staff of life" were also described.

Science News Letter, July 8, 1939

Measures Tenderness of Peas

A MACHINE which gauges the maturity and tenderness of green peas before they are canned is science's latest contribution to your palate. The device, known as the tenderometer, was described by Dr. E. J. Cameron, acting director of the National Canners Association Research Laboratory.

Since maturity is the most important factor in determining the quality of canned peas, its accurate determination plays an important part in quality control. The tenderometer measures maturity by the force required to shear a sample of raw shelled peas between two interlocking grids.

Tests show this mechanical method correlates closely with the alcohol insoluble solids test, the most reliable index of maturity in the canned product. It is expected to provide a reliable method for purchasing canning peas on a quality basis as well as for predicting the commercial grade of the canned product.

Science News Letter, July 8, 1939

Humidify Refrigerator

A MARKEDLY more efficient method of eliminating "freezer burn," or surface drying, which is the major cause of deterioration of frozen perishables, was described by Dr. W. H. Cook of the National Research Council, Ottawa.

More or less moisture-proof packaging to prevent evaporation is the current method but Dr. Cook has attacked the problem from the other end, humidifying the freezer's atmosphere. The biggest problems were to provide for the continuous addition of moisture and prevent ice formation on the cooler surfaces. Dr. Cook solved both at the same time by evaporating water from a brine circulated over the coils as a de-icer.

The optimum humidity seems to be about ninety-five per cent and in preliminary tests Dr. Cook has been able to maintain this with an increase of only ten or fifteen per cent on the refrigerating load.

"It seems probable," Dr. Cook said, "that still higher efficiencies can be attained but even the present performance indicates that this equipment will prevent surface drying more effectively and economically than the reduction of temperature without humidification."

Science News Letter, July 8, 1939

MEDICINE

Fight on Virus Diseases Brings $1000 Award

DISCOVERIES that help to speed the recovery of pneumonia patients and that promise to help the fight on virus-caused diseases such as infantile paralysis brought the Theobald Smith Award of $1000 and a bronze medal to 32-year-old Dr. Albert B. Sabin, of the Rockefeller Institute for Medical Research.

Announcement of the award was made at the meeting of the American Association for the Advancement of Science in Milwaukee.

Science News Letter, July 8, 1939

Chemists recall that black and white were fashionable early in the World War because American chemists had not learned to make good dye colors.