NUTRITION

Eating Habits Change

➤ THE WORLD is changing its eating habits, a Government agricultural expert reports.

Western Europe is consuming more fruit, milk and cheese than before the war; bread is replacing rice in some countries of southeast Asia; and here at home, we are eating less grain products and potatoes and more eggs, green vegetables, citrus fruits and tomatoes.

The change in people's eating habits can not be attributed solely to a change in their tastes and preferences, E. O. Pollock of the U. S. Department of Agriculture foreign agricultural service says.

"Historically," Mr. Pollock points out, "changes in eating habits follow one general trend. At a low income level, people eat mostly cereals, starchy roots and tubers, which are the cheapest source of calories. As their income rises, they consume fewer of these foods and eat more peas and beans, animal products, other vegetables and fruits. This has always been the case and there is little likelihood that this trend will change."

Just how fast the changes take place depends on certain forces. One of these is changed price relationships, a good example of which is the use of wheat instead of rice in India, Ceylon, Japan and the Philippines. A shortage of rice caused its price to go up, so people started to buy the cheaper wheat. Similarly in this country, margarine is now consumed at three times the amount it was before the Second World War, while butter consumption is down 50%.

Other factors that force a change in eating habits are the interplay of consumers' income and the prices charged consumers; government action, such as nutritional programs; and the growth of the population, where an increase usually brings a demand for more milk and other protein-rich foods.

All these factors affect one another, Mr. Pollock says. Each or all may result in a permanent change in food habits, although there could be reversals. If meat prices dropped here for instance, the American housewife might buy more meat and less fruit, milk and cheese.

Mr. Pollock states that any variation in the normal food consumption patterns must be watched for by researchers for it has "decisive effects on world agricultural production and trade."

Science News Letter, July 7, 1956

RADAR

Radar Cooperation Urged

➤ THE NEXT step in keeping the atomic peace may be the internationalization of the radar and other warning nets designed to tell when unauthorized airplanes or missiles start crossing frontiers.

The plain fact right now is that the U.S. and Soviet warning nets are in great danger of clashing and getting mixed up with each other.

Scientists in the know have privately been suggesting that it might be effective for both sides to admit this. Rivals might be able to get together and man jointly a consolidated warning line pointed both ways.

To do this, conceivably, would be easier than aerial inspection of each other's territory.

The United Nations would be the logical agency to perform this function that would help maintain the "truce."

The United States has been pushing to completion the so-called DEW Line (Distant Early Warning Line), a 3,000-mile chain of radar stations across the roof of America. The Continental Air Defense Command knows where and when every four-engine plane or larger craft comes near our continent. If it is not identified, alert fighters hover over it and Nike projectiles are pointed at it.

In Europe, too, there are warning lines and air defenses, guarding the United States military installations and those of our allies.

Behind the Iron Curtain there are doubtless similar neutralizing installations. World peace might be bought more cheaply and more safely with joint operation by the United Nations.

Each side would reserve the right to have also their own air intelligence.

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EMBRYOLOGY

Can Tell Sex of Very Young Embryos

➤ THE SEX of a human embryo can be determined at a very early age, before it has developed to the point where the sex organs have differentiated into ovaries or testes, Dr. T. W. Glenister of Charing Cross Hospital Medical School, London, England, reports (*Nature*, June 16).

Among 13 early embryos suitable for examination he found enough nuclei containing sex chromatin to determine that six had been destined to be females. The youngest of these was a pre-somite, that is, probably less than 17 days old counting from the date of conception, and about one-sixteenth of an inch long.

Sex chromatin cells were also found in an even earlier embryo at the blastocyst stage as it was implanting itself into the maternal tissues. This embryo might have been a week or so old, dating from conception.

Previously, scientists have reported they could tell before birth whether a baby would be a boy or girl by examination of cells found in the amniotic fluid surrounding the unborn infant in the womb.

Dr. Glenister made his sex determinations on embryos and fetuses in the collection of specimens at the Charing Cross Hospital. More specimens will have to be examined and more experience gained, he says, before the test can be said to be entirely reliable.

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