

fruit brimming with vitamin C piled up and going to waste in America, many Americans in remote places have never seen them and have no idea what to do with them. This vitamin is one difficult to provide in adequate amount when citrus fruits are not available. When the Red Cross furnished food to flood refugees in an isolated region of the south, workers found hungry children playing ball with the strange round fruit. One mother complained that she had boiled the grapefruit and she had fried them, but they didn't taste right to her either way.

The diet of these people was limited principally by the fact that they had never encountered most of the wide variety of fruits, meats and vegetables that are available in the city market.

At first they seemed afraid of the unusual diet and refused to touch such strange foods. But after three or four days in the Red Cross camp, they were tasting all sorts of new foods. After six or eight weeks they wanted the recipes for cooking them and, incidentally, reported spontaneously how much better they were feeling.

In the city, national, racial and religious customs give odd turns to the American diet.

Some think the first water in which vegetables are cooked is harmful and must be thrown away. Many believe milk good only for infants or the sick.

The Chinese learned in their own land to drink no milk at all but to feed mothers-to-be on the soft bones of birds or pickled pig's feet. But these people know and like soy beans, an ideal food neglected almost entirely by Americans.

People from the Near East and Poland like a doughnut or bread with coffee for their breakfast.

Food habits are influenced by many other factors besides national or other group customs and folkways. The Food Habits Committee may want to assay the effect of advertising, of food fads, of slimming diets, of popularizing by the movies of boyish-form figures or May West curves as well as the encouragement given certain types of diet by drug-store counters, and handy hamburger shops.

Recent research by psychologists has shown that rats and also men will naturally eat those foods that are best for them and eat as much as they should, provided they have not built up artificial prejudices against some types of food.

Stormy scenes at the table may make young children form dislikes for spinach, carrots, milk and other important foods which well-meaning nurses or mothers

insist on their eating at times when they are not hungry. Unappetizing seasoning, sloppy serving, too much cooking may make many individuals finicky about certain foods.

But not all food habits are faulty, by any means. America is a big land. Through the medium of the new Food Habits Committee, New Englanders may learn ways of eating that are popular in Texas. Those in the mountains of Kentucky or the woods of Michigan may be

told of the golden fruits of Florida and California. Rice eaters will learn of potatoes. Child coffee drinkers will learn about fruit beverages and milk. All will learn that use of the new enriched flour and bread will facilitate planning satisfactory diets.

All America will learn how to arm with physical and spiritual health, the best sort of armor for defense of democracy.

Science News Letter, May 31, 1941

PUBLIC HEALTH

Low Income Farm Families Have Many Physical Defects

Only Five Out of Thousand White Fathers and Mothers Are Really in Good Health; Not One Among Colored

ONLY five out of a thousand heads of low-income farm families and their wives are really in good health—free from physical defects, it was revealed to the Population Association of America, in a report from Dr. R. C. Williams, chief medical officer of the Farm Security Administration.

The accumulation of defects and disabilities affecting these people, termed by Dr. Williams "reservoirs of America's defensive forces" because they contribute so much to the numbers of America's young manhood, was brought to light by a health survey conducted last year by the Farm Security Administration.

"So far," Dr. Williams said, "we have found no dramatic results which would show any great number of them dragging along with one foot in the grave.

"But what we are finding is that they

have an accumulation of defects and chronic conditions which are not serious enough to keep them from carrying on with their activities but which cause progressive debilitation and, in some cases, partial or total disability."

Of 1,005 heads of white families and their wives, only five were free from defects. Of 111 colored husbands and wives, not a single one was in perfect health.

The average person is handicapped by between three and four physical defects, and even children have two or three apiece. Vitamin deficiencies are extremely prevalent.

In Maine, the eye specialist on the survey staff examined about 350 persons with slit lamp microscopy for evidence of past or present riboflavin (one of the B vitamins) deficiency. Every individual examined showed evidence of an old,



UPBEAT, DOWNBEAT

Both are caught by the new stroboflash cameras, that take pictures on exposures of one thirty-thousandth of a second. That speed makes even the sixty-per-second beat of a whirring hummingbird's wings stand still. These two photographs, taken by Edward R. Osterndorff at the New York Zoological Park, are of a rare Brazilian species known as the Green Emerald Hummingbird.

existing, or healing deficiency. Over 80% showed both old and existing or new signs of deficiency.

Blood plasma studies of 276 individuals, also in Maine, showed plasma ascorbic acid values below 0.4 milligrams per cent in 38% of those examined. Such low values are usually found with vitamin C under-nutrition which, when fully developed, is scurvy.

Decayed teeth were found in 65% of white persons and 73% of colored. It is defective teeth that accounts for the largest percentage of draft rejections this year.

These poor farm people never seem to have teeth filled. Their teeth get holes in them, remain untreated, and finally are pulled out, a dentist for the survey said.

Of 16,000 cases of serious illnesses among the families surveyed, more than half had received no medical care whatever. One out of three births had not been attended by a physician. Yet the total amount of unpaid doctors' bills was close to half a million dollars.

Among the white wives under 45 years old, 41% had been lacerated in childbirth; the figure was 66% for those over 45.

Incidence of syphilis among the white people surveyed was low, only 0.6%. It was ten times as high among the colored families.

Hookworm is a serious problem, but varies in prevalence in different localities from 15% to 38%.

Among 4,333 white persons of all ages in eight states, 48% had defective tonsils.

Families are large among these farm people. More than 43% of the mothers studied had had five or more children and one wife out of every ten had given birth to ten or more children. One mother had 19 children.

Science News Letter, May 31, 1941

HOROLOGY

Seven-Foot Stone Disk Shows Sun Time

A 3300-POUND sandstone sun dial, seven feet in diameter, has just been erected in Mountain View Park, Denver. It is of the equatorial type, instead of lying flat like most such dials—that is, its disk is parallel to the equator.

The gnomon, or pointer for casting the shadow that shows the time, is the stainless steel shaft that supports the dial, passes through its center like a hub, and projects on the other side. The shadow falls on the south side of the dial, shown here, during winter, or between the fall and spring equinoxes. The



A student from a nearby school examines Denver's new sun-dial and finds that it's 3:10 p. m.

rest of the year the sun shines on the north side, not shown here.

Stephen A. Ionides, Denver engineer whose hobbies include astronomy, the calendar and time-measuring instruments, designed the dial at the request of George E. Cranmer, Denver's manager of parks and improvements, who saw a dial like this once in the Far East.

Mr. Ionides said there are only four days a year when the dial and a watch will agree exactly on the time. In the middle of February, a watch will be 14 minutes and 20 seconds faster than the time shown on the dial; in November, the watch will be 16 minutes and 20 seconds slower than the dial.

Science News Letter, May 31, 1941

BOTANY

Mysterious Chinese Drug Proves New Plant Species

Made From Lo-Han, Household Remedy for Colds and Digestive Upsets Is a Kind of Gourd Cured by Heat

"LO-HAN," widely used Chinese drug of hitherto mysterious origin, has finally been traced to its origin, proved to be a new plant species, and given a name of its own, by Dr. Walter T. Swingle of the U. S. Department of Agriculture.

The drug, widely used in China and in Chinese communities in this country as a household remedy for colds, sore throat and minor digestive upsets, is a kind of gourd, cured by heating over a slow fire. Its pulp, intensely sweet, is used in making a kind of sweet soup, not palatable

to most Occidentals. The fruits command a high price—about 20 cents apiece in Chinatown stores in this country.

An expedition sponsored by the National Geographic Society finally traced the lo-han to its lair. It is not grown by Chinese, but by a primitive people known as the Miao, in the rainy mountainous interior province of Kwangsi.

The lo-han fruits are produced by vines, of which only the ones bearing female flowers are cultivated. The Miao, primitive though they are, have learned