Are We Starving at Full Tables

A VACATIONING U.S. public was probably in no mood this summer to recognize or worry about the most serious threat our population has faced since the war. But America's scientists were deeply concerned about the nation's steadily rising tide of cancer, heart disease, arthritis and mental ailments, particularly among our young.

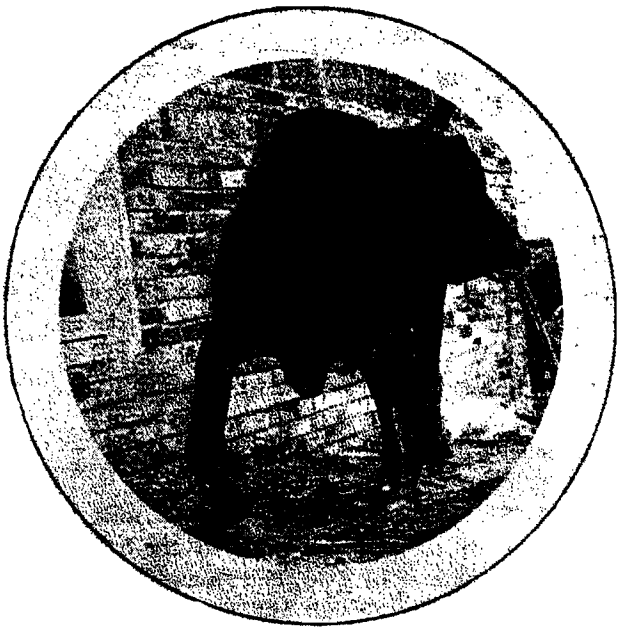
A growing portion of our doctors, scientists and educators were subscribing to the idea that many of the nation's ills were stemming from malnutrition, even though most dinner tables of the country were amply loaded. There seemed to be little doubt that the nation's thin, life-giving layer of top soil was running out of certain essential chemicals in some sections of the country, and that even a juicy two-inch steak from cattle fed on that deficient soil could be practically nutritionless.

The key elements, upon which much of the true fertility of our soil depends, are known as *trace minerals*, a term that has more bearing on your life this summer than *H-Bomb*. These priceless trace minerals consist of some 32 elements such as iron, cobalt, magnesium and zinc and occur in such minute quantities that they must be measured in parts per million. They seem to be basic elements in the complex chemical and electrical mechanism which makes up man's body.

Unfortunately, most farmers and food processors do not yet fully realize the ominous danger that surely lies in this growing deficiency of vital trace elements in some areas of the country. Indeed, the practice of the farmer in adding lime and fertilizer to his land to attain larger and larger crops is only hastening the exhaustion of trace elements. And habit has led food processors to extract nutritive qualities by the barrelful from normally good food—as in the milling of wheat flour—and putting back only a pinch of synthetic nutrition.

FORTUNATELY, the nation's nutritionists are well aware of this tragic depletion of vital trace elements in our soil and are urgently carrying on experiments now to learn all they can about the functions of trace elements in animals and humans and methods of restoring them to mineral exhausted soils.

One of the most notable of these experiments is being conducted by Dr. Ira Allison, with the cooperation of the International Harvester Company, on the O. E. Jennings dairy farm near Springfield, Mo. The Ozark area was chosen because it is probably the oldest land in North America and thus one of the most deficient areas in soil trace elements.



Stricken with rickets, "Bruce" was cured with trace minerals in Dr. Allison's program.

Some of the results turned up by Allison, in close cooperation with Dr. William A. Albrecht of the University of Missouri, are as amazing as they are encouraging. The Jennings herd of dairy cattle had Bangs disease and in each sick cow Allison found a deficiency in some of the precious trace elements. The same elements were *present* in the blood of healthy cows. Allison found corresponding deficiencies in the afflicted cows' milk and in the soil on which they grazed. Everything tied together perfectly.

Allison then decided to use three "pilot" cows, but the amazing case of "Snowdrop," a Jersey champion, is typical of the results of all three. Snowdrop got Bangs shortly after she was acquired by Jennings. She was droopy, had a 104 fever and yielded only 15 pounds of milk a day.

As soon as Allison supplied missing trace elements to Snowdrop's diet, she began to pick up. Within 90 days, she was yielding 45 pounds of milk a day. Her blood hemoglobin content climbed from 50% to 90%. Bangs disease is now completely licked on the Jennings farm. Jennings no longer vaccinates his animals against it and all appearances of mastitis and brucellosis have been banished from the herd.

Allison was now ready to take the next step, to see if these same trace element deficiencies were important contributing factors in human illnesses. A clinic was established in Springfield for people suffering from undulant fever. The miraculous results of Allison's fourth clinic last year are typical.

In the case of all 47 patients, previous treat-

ment had failed. But Allison's therapy, which included trace element salts and a high protein, low sugar diet, provided rapid restoration of good health to each one. Not only was undulant fever controlled, but symptoms of backache, arthritis, fever, constipation and mental depression disappeared! A 74-year-old woman recovered completely from "incurable" eczema on her hands. A diabetic male patient in the clinic, after three months treatment, got along on one-third the insulin formerly required.

An important part of this incredulous trace element therapy at Springfield now includes the consumption of raw milk from cows of the Jennings herd which are being fed their full dietary requirements of essential tracer minerals. Allison wants to be sure that they can be passed along beneficially to humans in milk.

BECAUSE the heat of pasteurizing milk apparently cuts by one-third to one-half the natural contents of B-12, the recently isolated and important growth and development vitamin, and because it seriously impairs the milk's calcium content, a modern, ultra-sanitary McCormick "milk parlor" was installed at the Jennings dairy farm this spring.

Parlor milking is a system by which cows are brought to a separate room or building, apart from their regular quarters, to be milked. International Harvester dairy engineers have perfected automatic milking equipment which uses stainless steel pipes instead of pails to move the milk. The milk is piped directly from the teat cups to covered cans in the milk house—under vacuum all the way! The system assures the highest standard of sanitation and allows milk from the Jennings herd to retain its full nutritive value and purity until it is consumed by patients at the Allison clinic.

In the Jennings milking parlor, the *cows* deliver the milk to the operator, three at a time, in tandem stalls whose gates are opened and closed from the operator's pit. As soon as teat cups are attached to the cows, the vacuum actuated pulsators start the milking action and milk begins to flow through the stainless steel pipe line directly to a series of connected milk cans into an International milk cooler. Moved entirely under vacuum, there is no chance of milk contamination by air borne bacteria.

To assure additional cleanliness, the pipes connecting the milk cans and the milk can covers are made of stainless steel too. When records on milk production of individual cows are desired, the milk is first detoured through stainless steel weighing cans before it enters the stainless milk line. The whole system is designed for quick disassembly and cleaning between milkings.

Because of its speed and economy, the use of McCormick parlor milkers is spreading among modern dairy farms all over the nation. They are comparable in cost to conventional pail-type equipment.

The experiments being carried on today by Dr. Allison and International Harvester provide a powerful front in our fight against the nation's growing problem of malnutrition-on-a-full stomach and the human ailments that seem to stem from it. "It's only a matter of awakening to the problem," says Allison. "The vital trace elements are to be found in abundance in America. It's only a question of finding which ones are lacking in specific plots of land, and then putting them there."

White rat experiments by U. S. Department of Agriculture clearly show how lack of trace minerals affect health of animals.

This chicken may be fed enough, but lack of magnesium can cause crooked legs.

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