



General Motors

**SCIENCE UNDER THE HOOD**—More than 1.5 million people, 100,000 of them on organized class tours, will see this animated automobile chassis exhibit the first year at Los Angeles, California Museum of Science and Industry. Installed by General Motors, it shows the science of automobiles and how simple machines are translated into complex automobile components.

## NUTRITION

## Odd 'Food', Emotion Link

Children eat newspaper, dirt, cigarettes, soap, bugs and other non-food items, not because of nutritional deficiencies, but because of unmet emotional needs.

► CHILDREN who eat newspaper, toilet paper, dirt, plaster, starch, cigarettes, bugs or soap are signaling their unmet emotional needs rather than poor nutrition.

No relationship between nutritional deficiencies and eating strange substances has been found in an investigation at Children's Hospital in Washington, D. C. The habit of eating unnatural "food," medically termed pica, could be cured as well with an injection of a water solution as with an injection of iron, researchers said.

In a second controlled study, Drs. Reginald S. Lourie, Emma M. Layman and Frances Millican found a multi-vitamin preparation was no more effective than a fake, or placebo, in curing pica.

Dirt or paper eating is an outgrowth of a normal stage in early years when a child puts everything in his mouth and practically comes to know the world through his mouth.

Instead of outgrowing this stage, some children persist. Often, the investigators said, this is because the child's mother does not pay attention to his activities and allows him to mouth and swallow harmful objects.

Specific cravings, with special meanings for the child, may then develop. These often signify problems the child has with his mother.

The emotional background of pica, investigators said, may be unmet needs created by an absent mother, excessive gratification by or aggression directed to the mother.

Complete studies of strange eating habits in children are important, investigators said, because pica "represents a craving early in life which has many of the dynamic characteristics of the cravings which later in life form the basis for the common addictions."

Studies that may lead to the identification of "addiction-prone" families are now under way.

In early studies, the researchers found that pica in the District of Columbia area is "especially prevalent" among children whose mothers have pica themselves, and also among children whose mothers came from communities where pica and starch eating are "part of the cultural pattern."

In parts of the southeastern U.S., clay eating is common as a private or social activity like smoking. Laundry starch may be eaten when clay is not available.

The studies of pica, reported in *Children*, 10:143, 1963, grew out of a concern with the many cases of lead poisoning noticed in young children who could not be or were not kept from eating such lead-containing substances as paint and plaster.

• Science News Letter, 84:101 Aug. 17, 1963

## NUTRITION

## Drinking Dinner Brings Neurological Damage

► A WELL-NOURISHED heavy drinker may escape neurologic damage for many years, but the chronic alcoholic who prefers to drink instead of eat runs into neurologic trouble.

Vitamin deficiency and neurological damage in alcoholics have been more firmly related in research just completed by Dr. Robert N. Baker, neurologist of the University of California, Los Angeles, Medical School and the Veterans Administration Center. New biochemical techniques were used on a group of 50 chronic alcoholics.

Not only does the chronic alcoholic not get enough vitamins but in the process of burning alcohol in his system, he drains off what little amount of vitamins he may have acquired.

A wide variety of neurological disorders apparently stem from vitamin deficiency. Of the 50 subjects, 13 had DT's, 10 convulsions, 10 neuritis, six incoordination of gait, six a combination of disorders of eye movement and memory, and five had other neurological difficulties.

Twenty-two of the group had evidence of vitamin B-1 deficiency and 21 evidence of B-6 deficiency. Those with normal values had been receiving an adequate diet or vitamin supplements just prior to the test.

In one drinker an abnormality of body chemistry was detected just prior to appearance of DT's. This abnormality was corrected with vitamin therapy, but the DT's appeared on schedule. This suggests that the disorder involves structural damage to the nervous system rather than a simple lack of vitamins. Nevertheless, impaired nutrition undoubtedly underlies the structural damage, Dr. Baker said.

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## NUTRITION

## Food Leads to Richer Cultural Understandings

► FOOD is an international language. One can better understand people of all nations by understanding their cuisine and its heritage.

By studying the cultural aspects of food—the quality of food, its preparation, dinner table customs and the length of a meal—a person can better appreciate his own heritage and that of other countries.

Recognizing other cuisines by learning the symbolism of certain traditional dishes is one way of breaking down prejudice and appreciating differences. Mrs. Margaret Batjer Jennings of Pennsylvania State University cited the symbolism of the Jewish Sabbath bread, challah, Danish rice pudding and fruit soup, Syrian bulghur (cracked wheat) salad and German onion "cake," as examples at Kansas City.

Cup custard is often used to demonstrate the coagulation of eggs in the classroom. This same process can be shown just as easily by making quiche Lorraine, Spanish flan or creme brule.

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