

GENETICS

Tendency to Leukemia

➤ A TENDENCY to leukemia may be part of the genetic make-up of a person.

That this is true for mice, at least, appears from studies by Dr. Elizabeth Fekete and Miss Hope Otis of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me.

Their studies were designed to rule out all factors in the environment, so that only those present in the genes of the mice would be operating.

The scientists took baby mice of a strain with a high tendency to leukemia from their mothers by caesarean operation and had them foster nursed by mice of a strain with low tendency to leukemia. However, the baby mice developed leukemia at the same rate as their ancestral strain.

Then the scientists removed fertilized mouse ova from a high leukemia strain and transplanted them into the wombs of mice of a low leukemia tendency. The

young that developed in this foster environment and were nursed by their foster mothers of low leukemia tendency also showed the high leukemia tendency. The disease developed in 80% of these mice and their descendants, they report in *Cancer Research* (July).

Some scientists theorize that leukemia is caused by some filterable agent which is passed on from parent to offspring. This is true in the case of breast cancer in mice which has been found to be transmitted by some agent in the mother's milk.

The Jackson Laboratory investigators cannot say, from the present study, that there is no filterable agent in the case of lymphatic leukemia. They do, however, state that if leukemia is caused by such an agent, that agent must be present in the germ cells (egg and sperm).

Science News Letter, August 7, 1954

PUBLIC HEALTH

Keep Food Cold

➤ KEEP FOOD cold, including cooked food, on hot summer days. This is not just a question of wanting everything cold when you feel hot. It is for the protection of yourself and your family or anyone else eating the food.

Cooked food accounts for most cases of food poisoning in hot summer weather, U. S. Department of Agriculture bacteriologists say. Most trouble, they say, comes from food cooked in advance and then not chilled promptly and kept chilled.

Cooking makes many foods, especially the protein foods, more soft and moist for easier growth of bacteria. A toxin, or poison, given off as the bacteria grow in the food causes the sickness in those eating such contaminated food.

The "stewed" chicken that stands in its broth overnight on the kitchen table, or the stuffed hard-cooked eggs that waited several hours in the picnic basket, or the unrefrigerated cream-filled or custard-filled cakes or pastries are spoilage hazards. All too often food prepared in quantity for community picnics or other get-togethers is not safeguarded by adequate refrigeration.

For safety, chill food as promptly as possible after cooking and keep it at 40 degrees Fahrenheit or colder—that is, at good refrigeration temperature—until served or until reheated for serving.

If you are making a quantity of a mixed salad containing such foods as meat, eggs, fish or poultry for a big party, refrigerate it in small containers instead of one big one. If you put it in the refrigerator in a big container, chilling may be so slow that spoilage will occur in the center.

If you are using frozen cooked foods, guard against spoilage during thawing. If

the food takes as long as three to four hours to thaw at room temperature, there may be spoilage. Better thaw such food in the refrigerator.

Remember, also, to wash hands before touching or handling any food. See that your helpers do the same. Liquid soap containing a germicide is highly recommended for hands that prepare food for large gatherings.

Science News Letter, August 7, 1954

PUBLIC HEALTH

Cleanliness Helps To Eliminate Flies

➤ MODERN INSECTICIDES, from DDT on through the list, have helped enormously in keeping us free from the menace and nuisance of flies and mosquitoes. However, these so-called miracle workers cannot do the whole job by themselves. Hygienic practices and cleanliness are still needed, the Illinois State Medical Society points out.

Homes that are not kept clean are a big menace to human health. Garbage standing in kitchens, and soiled dishes are an invitation to insects, particularly flies and cockroaches.

Flies can carry germs of thirty or more diseases, including typhoid, dysentery, cholera, diarrhea and tuberculosis.

As many as 25,000,000 germs have been found on one fly's body. Because of the characteristic regurgitation of the fly before feeding, the cause of "fly specks" on their resting places, food standing about in uncovered dishes may be heavily contaminated.

Dysentery germs, for example, may live in the intestines of the fly for about five

days. Since the travel distance of a fly is about eight miles in one day, one can readily understand the danger.

Every effort should be made to cover breeding places of flies and mosquitoes, preventing the larvae or young of these insects from growing to their stage of maturity when they can fly about. Garbage cans and manure heaps are likely breeding places for flies; stagnant pools of water are favorite breeding place for mosquitoes.

Old cans or bottles, roof drains, lily ponds, sewer basins and similar water should be hunted out and sprayed with an insecticide.

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