

PUBLIC HEALTH

Radioactive Iodine High

► CHILDREN in St. Louis, Mo., who drank a quart of milk daily for the past two months were exposed to more than one-third of the yearly maximum level of radioactive iodine-131 considered permissible under guides set by the Federal Radiation Council, Dr. Gordon Dunning, deputy director of operational safety of the Atomic Energy Commission, said in Washington, D. C.

Levels of iodine-131 in St. Louis milk are still higher than the maximum daily allowance, which is 100 micro microcuries of iodine-131 per liter of milk.

The high levels of this isotope in St. Louis milk resulted from fallout from a Soviet nuclear bomb exploded in Siberia early in September. The deposition resulted when a cold dry air mass diverted the fallout to the St. Louis area.

Iodine-131 is a known cause of thyroid cancer and children are more susceptible to its effects than adults. The thyroid of a child weighs approximately two grams while that of an adult is roughly 20 grams; but the child's thyroid will take up in proportion to its weight, roughly 19 times as much radioactive iodine-131 as the thyroid of an adult.

Dr. Dunning's report on the iodine-131 levels in St. Louis came three days after a release by the U. S. Public Health Service that "radioactive iodine-131 levels in air, water, milk and other foods were not high enough anywhere in the country to justify general use of non-radioactive compounds to block the uptake of radioactive iodine by the thyroid gland."

The PHS statement was based on the fact that the iodine-131 levels do not yet approach the Federal Radiation Council guidelines for "yearly" consumption. However, if the daily levels of iodine-131 should continue to be above the maximum levels, the nationwide daily surveillance system of the PHS will allow areas to be alerted in ample time to institute protective measures, the statement said.

Non-radioactive iodine could be administered under the direction of a physician. This would block thyroid uptake of the dangerous radioactive isotope. It was one of several counter-measures suggested at a recent meeting of state and territorial health officers with the Public Health Service.

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PUBLIC HEALTH

Store Pure Water Now

► A TWO WEEKS' SUPPLY of pure water for each member of the family should be stored immediately as a key measure for survival in the event of a nuclear attack, civil defense officials warn.

They point out that blast survivors might be able to exist for some time without food, but not without water.

The minimum recommendation for drinking purposes is two quarts per person daily, or seven gallons for two weeks. An additional seven gallons will be needed if water is also stored for bathing, brushing teeth and dishwashing.

Part of the need for drinkable liquids can be met by storing a large supply of fruit juice and soft drinks.

Anyone doubting the purity of water intended for storage should get it tested by health authorities or work out his own purification system. The easiest way to make water safe is to boil it for one to three minutes. The taste of boiled water can be improved by pouring it from one clean container to another several times.

A cheap, easy way to purify water is by using one of the many household bleach solutions containing 5.25% of sodium hypochlorite, a chlorine compound, as the only active ingredient in the product. The solution should be added at the rate of two drops per quart of clear water or four drops per quart of cloudy water. The water should be stirred or shaken and allowed to stand

for 30 minutes. If it smells or tastes of chlorine, it can be presumed safe.

Two percent tincture of iodine can be used to purify small amounts of water by adding three drops to each quart of clear water or six drops to each quart of cloudy water.

Inexpensive purification tablets that release chlorine or iodine can be bought at sporting goods stores and drug stores. Follow the directions on the package.

For storage purposes, heavy plastic containers with tight-fitting caps are best. If glass jugs are used, they should be protected from damage or shock by wrapping them separately in newspapers or other packing material.

Stored clean water generally stays drinkable indefinitely, but the containers should be checked for leakage at regular intervals. Taste and appearance also should be checked regularly, and the water changed if it gets cloudy or develops an unpleasant taste.

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IMMUNOLOGY

One Vaccine Protects Against Seven Diseases

► BRITISH scientists have developed a vaccine that protects sheep against seven diseases. Previously the sheep farmer had to use a number of single vaccines, each of which gives protection against one or two of the

seven "soil-borne" diseases that may strike sheep.

Dr. R. F. Montgomerie, director of veterinary research at the Wellcome Research Laboratories, London, where the vaccine was developed, said this was the first time in human or animal medicine that a method had been found in which as many as seven separate diseases can be controlled by only one vaccine.

The new vaccine, named Covexin, enables the farmer to give immunization against all seven. Findings were announced only after lengthy field tests had conclusively proved the success of the vaccine. The diseases against which it gives protection include lamb dysentery, pulpy kidney disease, black-leg (wound gangrene) and tetanus.

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