

PUBLIC HEALTH

Chemicals in Foods

Today's age is a chemical one, causing some people to fear that poisons may be accumulating in a person's body, although others believe such fears are exaggerated.

► WILL TODAY'S generation of young adults find, when they reach the 50- to 70-age bracket, that they have been slowly poisoning themselves and cutting one to five years off their lives because of the food they have eaten?

There are some who fear this may be the case. Others are quite confident that the suggested dangers are exaggerated.

We are living in a chemical age. We use new and powerful poisons in our fight against the insect world. We use new chemicals to preserve or to improve the quality of our food.

We use new chemicals to keep our clothes and homes clean, and to wash our eating utensils and ourselves. Many of the clothes we wear and the things we use and handle daily are the products of chemical laboratories and manufacturing plants.

Our doctors even have a kind of synthetic chemical fluid to put in our veins instead of blood in some emergencies.

Many, probably most, of these new chemicals and chemical products are given rigorous safety tests before they are let loose among us. We have laws, federal and state and even city ordinances, protecting us from much of the danger.

However, there are two limits to the protection such laws and tests can give us:

1. The carelessness of each individual who uses a substance known to be potentially dangerous;

2. Ignorance, unavoidable for the most part so far, of the long-time effect of some chemicals.

Take, as an example of this last, one of the new chemicals developed as a blood extender for use in treating shock if whole blood or plasma is not available. This chemical is polyvinyl pyrrolidone, or PVP for short. It was developed and used in Germany during World War II.

PVP has had extensive tests since then in this country. No adverse effects have been reported. However, after a time, this chemical leaves the blood stream and some of it deposits in the liver and spleen. It stays there without showing any sign of setting up inflammation or other trouble—so far. Whether it will stay there, unchanged and without causing change, for 20 or 30 years is a still unanswered question.

Because that question has not yet been answered, our federal Food and Drug Administration has refused to allow it to go on the general market. In technically correct terms, PVP does not yet have an effective new drug application.

Congress has sent to the White House a bill to give the Secretary of Health, Education and Welfare, actually the Food and

Drug Administration in that department, authority to determine how much insect-killing chemicals can be left on fruits and vegetables when they go to market.

These chemicals, known as insecticides or as pesticides, include some highly poisonous substances. One of these, parathion, is related to the much-dreaded nerve gases developed for war use.

However, even with legal limits, "tolerances" as they are called technically, set for the amount of these chemicals that can be left on foods shipped in interstate commerce, the consumer may be exposed to danger from them right in his own or his neighbor's garden.

Home gardeners as well as farmers use these sprays to protect their fruits and vegetables from insects and other pests. Many farmers sell some of their products at roadside stands and in farmers' markets on the outskirts of our cities.

Since these fruits and vegetables are not shipped in interstate commerce, they, like the home grown ones, are not subject to federal protecting laws. They may or may not come into your home with spray residue still on them.

Here is where the individual consumer comes in. He can protect himself by the

simple method of washing all fruits and vegetables before eating them. Washing or spraying with water will remove any spray residue. Even if there were no spray residue, washing fruits and vegetables before eating is a good idea, since the washing removes dust, fly specks and the like.

The individual consumer needs to do a little self-protecting in still another way. When using insecticides and pesticides in the garden, he should read carefully the manufacturer's label and follow the instructions on it for avoiding any poisonous effect on people and domestic animals, including pets.

A good idea is to read the instructions and warnings every time the insecticide is used, to make sure no important point is forgotten.

This goes for both garden sprays and the insecticide sprays used to rid the house of flies, roaches, ants and the like. It applies also to cleansing agents, rust removers and all the other chemical age aids to daily living.

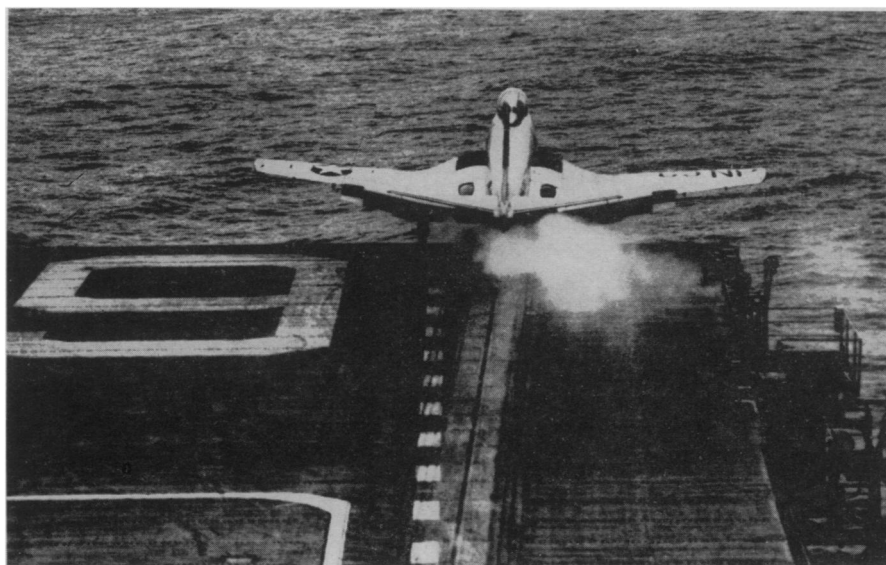
Science News Letter, July 24, 1954

TECHNOLOGY

Hard Vegetable Wax From Saw Palmetto

► A HARD vegetable wax of industrial importance can be obtained from the saw, or "scrub," palmetto that grows almost like a weed from South Carolina to the Florida Keys and along the Gulf coast to Louisiana, Edward A. Wilder and Eugene D. Kitzke of S. C. Johnson and Son, Racine, Wis., report in *Science* (July 16).

Science News Letter, July 24, 1954



STEAM CATAPULT FOR JETS—The first jet fighter to be launched by the U. S. Navy's new steam catapult from aboard a carrier is shown here. A twin-jet fighter, the McDonnell F2H-3 Banshee, is leaving the flight deck of the U.S.S. HANCOCK in tests that may lead to launching of aircraft carrying much heavier loads than can be handled on the hydraulic catapults in use now. A substantial reduction in launching time may also be achieved.