Handling of Meat In an Emergency

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In the United States our per capita consumption of meat is about 145 pounds per person annually. This is divided approximately as follows: beef, 63 pounds; veal, 9 pounds; lamb and mutton, 5 pounds; pork, 68 pounds. We also consume large quantities of poultry. This amounts to about 25 pounds of chickens, about 4 pounds of turkeys, and smaller amounts of ducks and geese per person annually.

Since meat is a highly perishable food, its preparation and handling must be surrounded by safeguards. The consumer of meat has a right to know that the meat he eats has been derived from healthy animals and has been handled in a manner to assure him that it is clean, sound, wholesome, and free from adulteration.

Meat Inspection Service

The animals we use for food, mainly cattle, sheep, goats, and swine are subject to a wide variety of diseases and conditions which might make their meat unsuitable for human food. Some of the diseases are transmissible to humans. One of the principal functions of any meat inspection service is to remove from food channels any meat which is not suitable for human consumption. This can only be accomplished by trained inspectors making careful inspections at all stages of the preparation of meat from the live animal until it is processed and delivered to the consumer. The live animals should be carefully examined on the day of slaughter by competent inspectors in order to assure the removal of those animals which are unsuitable for meat production. It is essential that competent veterinary inspection be provided so that an autopsy may be performed on every animal at the time of slaughter to as-

Dr. Pals is assistant chief of the Meat Inspection Division, United States Department of Agriculture. sure the removal of those carcasses or parts of carcasses which are unsuitable for human food.

In the United States the Federal Meat Inspection Service is charged with the responsibility for inspecting all meat and meat-food products prepared in plants whose products move in interstate or foreign commerce. Meat and meat-food products prepared in plants that sell their product entirely within the State where produced are subject to any inspectional requirements of the city, county, or State in which they are located.

During the past year, our Federal Meat Inspection Service inspected nearly 90 million animals at the time of slaughter. This is more than 80 percent of the animals slaughtered commercially in the United States. About 300 thousand carcasses were condemned in their entirety and nearly 2 million parts of carcasses, principally heads, were condemned for human food and destroyed. Because they were found to be unsuitable for human food, nearly 1.75 million beef and calf livers were condemned for edible purposes and destroyed.

Another important function of the Meat Inspection Service is to inspect the preparation of meat food products, such as hams, bacon, sausage, loaves, canned meats, lard, and shortening, to assure that such products are clean, sound, wholesome, free from adulteration, and informatively, but not deceptively, labeled. Nearly 16 billion pounds of such products were prepared under the supervision of Federal meat inspectors during the past year.

Plant Supervision

The supervision of slaughtering and processing operations in about a thousand plants operating in all parts of the United States requires a well-organized group of veterinarians and meat inspectors working together. Antemortem and postmortem inspection is conducted by veterinarians along with well-trained lay assistants. The inspection of meat and meat food products after slaughter is performed primarily by trained meat inspectors working under the supervision of the veterinarians who have the over-all inspectional responsibility. Federally inspected establishments are required to be in well-constructed buildings supplied

with abundant light, good ventilation, potable water, and an adequate supply of hot water and steam. Meat inspectors are present whenever the plants are operating. The Meat Inspection Service of the Federal Government has served as a model for inspection systems set up in the various States and municipalities.

Since meat is a highly perishable food and for the most part is utilized in the fresh state, rather elaborate systems of refrigeration have been provided. All meat packing plants make a practice of getting the meat into refrigerated rooms as soon as possible. Sometimes, the product goes almost immediately into a low-temperature freezer.

Disaster Effects on Meat Production

Any interference with the normal flow of livestock from the farm to the market and through the meat packing plants may result in serious losses. Problems which result from floods, fires, windstorms, and the like, may be greatly magnified in time of a national emergency. Many of our meat packing establishments are located in large cities which might be regarded as target areas. An attack by bombing or shelling could seriously interfere with the normal supply of such services as heat, light, water, refrigeration, and waste disposal.

An attack with atomic bombs could have vastly greater devastating effects because of their tremendous blast and fire power, and disruption of meat production resulting from such blast and fire is our principal concern.

In addition, there is the problem of radioactivity. Since it is unlikely that there would be large concentrations of livestock in an area where an atomic bomb is exploded, the number of animals exposed to the rays given off at the time of the explosion would likely be rather small. Such animals could be slaughtered and used for food if this is done before any symptoms of radiation sickness develop.

While the possibility of dangerous contamination from residual radiation is rather remote. this possibility should not be overlooked. Animals exposed to radioactive material such as the "fall-out" from an atomic bomb or from material in which radioactivity has been induced should be handled with caution. Persons handling such animals, whether farmers, packing plant employees, or inspectors, should be assured by monitors of the safety of approaching the animals before proceeding with slaughter. Such monitoring service would also assist the veterinarian in determining whether or not it would be safe to allow the meat from such an animal to be used for food. The monitor should also be available to advise the inspector concerning the location and nature of any radioactive material which might have been taken into the body of the animal. The kind of such radioactive material and its location would determine the disposition of the meat.

In making plans to safeguard our meat supply in the event of a local disaster, every attention has been given to making certain that the public hysteria will not be heightened by concern with the wholesomeness of the food supply. As a result, no consideration has been given to lowering accepted meat hygiene standards. Rather than thinking of lowering standards, it is our present belief that the public in time of stress is entitled to the type of planning that will give proper safeguards to its food and assure an adequate supply.

