



Food & Water

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Many people have inquired about the types of foods that can be eaten after a nuclear event. In this article, we will address some of the “do’s” and “do not’s” of post-nuclear survival, particularly as they relate to food and water.

Fallout from a nuclear explosion consists of tiny particles of dirt and debris fused with fission products. Alpha and beta particles in the fallout can persist for long periods of time and will contaminate any food to which it comes in contact. On the other hand, gamma radiation from the fallout is not a particle and does not contaminate food. In some cases, gamma radiation is actually used to purify food. Our challenge will be in differentiating between foods that can and cannot be cleansed of alpha and beta particles.

Most gamma radiation will not persist beyond two weeks after the nuclear event. Fruits and vegetables harvested from fallout zones in the first month post-attack may need to be decontaminated before consuming. Decontamination can be accomplished by washing exposed parts, removing outer leaves and peeling. FEMA material has stated that most vegetables and fruits that can be washed and peeled, can safely be eaten. If the nuclear event were to occur at harvest time, you could still harvest smooth, hard skinned vegetables and fruits such as apples, potatoes, carrots, squashes, and any other fruits and vegetables you could both wash and peel. You should not harvest fuzzy fruits such as raspberries, strawberries or peaches. Cauliflower and broccoli should not be eaten from the garden because of the uneven nature of their outer layers.

People in areas of low fallout accumulation may be able to plant crops the next season. Small plots of land could be scraped of the upper few inches of contaminated soil and planted. The contaminated soil containing the fallout should be moved away from the garden area. It seems unlikely that there would be any large farming activities for some time.

People may have the opportunity to cover small garden plots with plastic before fallout arrives, generally in low fallout areas that have received no blast. Storage of large rolls of plastic would be advantageous.

Some plants requiring calcium (such as broccoli and cauliflower) will take up radioactive strontium 90 because of its chemical similarities to calcium. If we eat the food containing the radioactive strontium, the strontium will be deposited in our bones. Liming of acid soil will reduce this uptake.

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If possible, in areas of significant fallout deposition, you should plant foods with low calcium content such as potatoes, grains, beans, apples, tomatoes, peppers, sweet corn, squash and cucumbers.

Storage of non-hybrid seeds is extremely important. Hybrid seeds will not reproduce quality fruit. Seeds last several years if stored covered in airtight containers in a cool, dry area. Farming implements should also be stored in a safe place and protected from blast.

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Before opening canned foods, the can should be wiped or washed if contamination is suspected. Meats and dairy products that are wrapped or are kept within closed showcases or refrigerators should remain free from contamination.

Refrigerated foods should be eaten first, then food from the freezer as it thaws, and then canned and non-contaminated packaged foods. Crops, which are in the early stages of growth in heavy fallout areas, will absorb radioactive materials through their leaves or roots and would be difficult to decontaminate.

If possible, animals should be put under cover before fallout arrives and should not be fed contaminated food and/or water. Animals can be slaughtered for food, if they do not appear to be sick. The bones and organs, however, should be removed and disposed of before cooking the meat. The animal may have been foraging on plants and grasses contaminated with Strontium-90.

Since Strontium-90 looks chemically much like calcium, the bone cannot differentiate between Strontium and Calcium, and will absorb the Strontium into the bone. If we cook the meat with the bones, the Strontium from the bones will then be absorbed into our bones. Eggs from poultry can be eaten. Fish from streams and lakes, such as trout and perch can be eaten. Bottom feeders such as carp and catfish should not be consumed because their food sources would be contaminated by radioactive particles.

Thyroid Blocking Agents (TBA) tablets should be started as soon after the nuclear attack as possible. Consult your physician NOW, for proper dosages for you and for each member of your family. People with thyroid problems may not be able to take TBA, therefore make sure your physi-

cian is aware of any thyroid irregularities you may have. The thyroid is always 'looking' for iodine and cannot distinguish between pure iodine and the radioactive isotope. TBA fills the thyroid with healthy iodine and prevents the uptake of radioactive form of the isotope. The thyroid will only accept iodine in certain forms. TBA is formulated with potassium and the proper isotope of iodine. Do not take iodine internally in any other form. TBA is a medicine and can cause certain side effects. TBA should only be taken in the event of a nuclear disaster.

Well water will likely not be available during a power failure. Hand pumps which will pump from as deep as 200 feet are available through many Amish catalogs. Emergency water filtration and decontamination methods will be discussed in the next issue of the *Journal of Civil Defense*. Be creative. Drinkable water can be found in many unexpected places, such as hot water heaters, toilets tanks (not the bowl), etc. A deficiency of vitamin C could cause symptoms of scurvy within four to six weeks. Store a year's supply of vitamin C as well as other multi-vitamins and minerals. A good expedient way to provide vitamin C is through consumption of sprouted seeds or beans. Instructions are given in the book entitled, "Nuclear War Survival Skills", which is available through the TACDA Store at www.tacda.org.

We cannot overly express the importance of a year's supply of food. Many disasters, both natural and man-made, likely will cause a shortage of food or even famine. Even the most God-fearing people will often reconsider and/or lose all moral values when their children are starving.

As always, we encourage you to be prudent and alert. Don't forget ... *study, think, observe and prepare.* ●