

Irradiated Foods

2000 was the year the FDA approved the irradiation of most classes of food including beef, pork, lamb, chicken, turkey, fruit, vegetables, eggs, juice, sprouting seeds and spices. The FDA is also looking to approve radiation processing for ready-to-eat foods such as frozen meals, luncheon meat, baby food, pre-cut salads, snack foods and shellfish.

What started this? The record meat recalls we have had due to E. coli. Irradiation lowers the bacteria levels in uncooked beef and chicken for instance, but it does not eliminate bacteria altogether. Irradiated meat can still become contaminated if handled incorrectly.

Irradiation is the process by which food is bombarded with high-frequency energy capable of breaking chemical bonds. There are 2 types of irradiation: electron-beam and gamma-ray (which uses radioactive cobalt-60). Food Technology Service, the nation's largest gamma-ray meat irradiator explains the process: "Energy passes through food much like a ray of light through a window." This is a powerful ray however, as the typical dose for meat is 1.5 kilo Grays which is 15 million times the energy in a chest x-ray or 150 times the lethal dose for an adult! Irradiation works by damaging the DNA of disease-causing bacteria such as salmonella and E coli, as well as insects and parasites. They become inactive because they can not reproduce.

At FDA approved doses, irradiation does not wipe out all bacteria in meat. It does not kill prions for instance, because prions do not have DNA. Prions are infectious proteins believed to cause mad cow disease. The government considers irradiation so effective that it allows tainted ground beef that would otherwise be unlawful to sell because it contains E coli, to be irradiated and sold to consumers!

In January of 2004, the USDA said each school district would have the option of ordering irradiated ground beef for their lunch program. The school board in Berkley, Calif. became one of the first to pass a resolution explicitly prohibiting the purchase of irradiated meat for its schools.

In 1971, two University of Massachusetts food researchers discovered that when certain fats commonly found in foods were irradiated, the resulting by-products include a unique class of chemicals called cyclobutanones. These chemicals do not appear naturally in any foods and are shown to cause genetic and cellular damage to human cells. From this research, the FDA's claim that these chemicals are similar to natural food ingredients no longer holds water. And, the FDA has never conducted a formal analysis of potential toxicity of these chemicals!

The trained taste-testers of the ConsumerReport.org noted a distinct off-taste and smell in most irradiated beef and chicken – likening it to singed hair. Irradiation caused pork to turn red, beef smell like a wet dog, fruit and vegetables to get mushy and eggs to lose their color and become runny. Who would want to eat food like this?

How do we protect ourselves from purchasing irradiated foods?

1. Read labels – irradiated foods must have the "radura" which is the international symbol for irradiation. It is a broken circle with what looks like a flower consisting of 2 leaves and a circle.

2. Know where you meat comes from such as buying from a local producer.

Note: Restaurants do not have to tell you they buy irradiated foods. That's why we steer clear of fast-food type restaurants!

Is irradiated food the answer? Not for us at Rocky Mountains Natural Meats! We welcome your visit!