

## **Myth**

***Irradiation destroys essential vitamins and other nutrients.”***

## **Reality:**

***This statement is incorrect. Although irradiation can reduce some vitamins and other nutrients, it does not destroy them nor significantly alter the amount of nutrients relative to the total diet of the consumer.***

Food treated by irradiation is generally as nutritious as, or better than, the same food treated by the conventional familiar processes such as cooking, drying, or freezing. Numerous studies conclude that irradiation has no significant effect on the nutritional value of the macronutrients within foods (proteins, lipids, carbohydrates). Micronutrients, especially certain vitamins, can be reduced by irradiation, but generally these same vitamins are similarly reduced by the other commonly used food processing methods. Even simple storage can lead to major loss of certain vitamins.

The significance of any loss of specific vitamins must be evaluated relative to the role of the irradiated food as a source of that particular vitamin in the diet of the consuming public. This consideration is heavily weighted by the regulatory agencies in their evaluation of petitions for clearance to irradiate any food. The FDA, World Health Organization and the American Dietetic Association have all considered the nutritional aspects of irradiated food and endorsed the process.

An excellent argument can be made that by destroying pathogens in raw food, irradiation will allow safer consumption of these foods and increase their overall nutritional value. On August 22, 2008, the FDA approved the use of irradiation on fresh spinach and iceberg lettuce. Their safety review specifically addressed the effects of irradiation on vitamins and nutrients on products often consumed raw. On February 25, 2014 they reaffirmed their conclusion that food irradiation is nutritionally safe:

“In summary, based on the available data and information, FDA concludes that amending the regulations, as set forth below, to allow for the use of ionizing radiation to treat iceberg lettuce and spinach up to a maximum dose of 4 kGs.

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