

MAKING OUR FOOD SAFE



As civilization has progressed societies have strived to make food safer; from using fire to cook our food, and boiling our water to make it safe to drink, advances in technology have helped kill microorganisms that can make food unsafe. The FAO/IAEA Joint Division helps provide technical assistance to Member States that want to implement irradiation technology in making their food safer.

Food and waterborne diarrhoeal diseases are estimated to kill roughly 2.2 million people annually, of which 1.9 million are children. Irradiating some of the foods we eat can save many of these lives by reducing the risk of food poisoning and killing the organisms that cause disease. Irradiation works by treating food with a small dose of ionizing radiation, this radiation disrupts the bacteria's DNA and cell membranes structure stopping the organism from reproducing or functioning, but does not make the food radioactive. It can be applied to a variety of foods from spices and seasonings, to fruits and vegetables and is similar to pasteurization, but without the need for high temperatures that might impair food quality.

Text and Photo: Michael Madsen, IAEA Division of Public Information