

PRESERVATION IONIZING RADIATION

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PRESERVATION IONIZING RADIATION

Sterilization of substance by ionizing radiation

The alpha, gamma, beta rays produced during the disintegration of the nuclei of the radioactive atoms like ^{60}Co , ^{90}Sr , ^{137}Cs etc. and high speed electrons and x-rays produced by powerful electrical accelerators are suitable for preservation

This is most effective methods for preservation

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The microorganism, *Clostridium botulinum* require 4.5 m rads of radiation for complete destruction

Yeast and moulds spore forming bacteria and vegetative bacteria needs 1, 2-5 and 0-5 M rads for complete detracton

The preservation can cause irradiation odour and flavours

For shrimp 0.15 M rad; 0.2 M rad for crab and 0.25 to 1 M rad for fishes like cod, sole, flounder, halibut etc.,