Title A critical review: Why isn't "cold pasteurization" being used widespread as a method to prevent food-related illnesses as a result of the consumption of ready-to-eat, fresh fruits, and vegetable

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Abstract

The Centers for Disease Control estimates that foodborne diseases cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year. The American public is becoming more health conscious and there has been an increase in the dietary intake of fresh fruits and vegetables. Affluence and demand for convenience has allowed consumers to opt for pre-processed packaged fresh fruits and vegetables. These pre-processed foods are considered Ready-to-Eat. They have many of the advantages of fresh produce without the inconvenience of processing at home. After seeing a decline in food-related illnesses between 1996 and 2004, due to an improvement in meat and poultry safety, tainted produce has tilted the numbers back. This has resulted in none of the Healthy People 2010 targets for food-related illness reduction being reached. Irradiation has been shown to be effective in eliminating many of the foodborne pathogens. The application of irradiation as a food safety treatment has been widely endorsed by many of the major associations involved with food safety and public health. Despite these endorsements there has been very little use of this technology to date for reducing the disease burden associated with the consumption of these products. A review of the available literature since the passage of the 1996 Food Quality Protection Act was conducted on the barriers to implementing irradiation as a food safety process for fresh fruits and vegetables. The impediments to adopting widespread utilization of irradiation food processing as a food safety measure involve a complex array of legislative, regulatory, industry, and consumer issues. The FDA's approval process limits the expansion of the list of foods approved for the application of irradiation as a food safety process. There is also a lack of capacity within the industry to meet the needs of a geographically dispersed industry.