

Review of the safety of irradiated foods

Area of research interest: Foodborne pathogens

Study duration: 2005-12-01 Project code: A05009

Conducted by: University of Wales Institute - Cardiff

Research Approach

The initial phase involved collation of all the relevant publications. A number of information sources were used, as well as direct contact with bodies that had previously commissioned research on the subject and published their findings. Once all relevant publications were collated an analysis was made of the data presented.

A composite database was then created to compile the findings into the broad sections of toxicological, microbiological, radiological and packaging safety. A risk based approach was employed whereby studies concerning pathogenic organisms, high risk groups of the population or other high risk activities were considered to be more important.

The final stage of the project was the compilation of a literature review that took all the factors into account.

Results

The literature review was commissioned in 2005 by the Agency to ensure that its advice on irradiated food continues to be based on the best available scientific evidence.

The project reviewed literature relating to the safety, both adverse and beneficial, of irradiated food and aimed to identify any possible gaps in current knowledge. The review also critically evaluated both the methodologies employed and conclusions reached in the research.

The review concludes that some areas of food irradiation could benefit from further investigation. Proposals for further targeted research in these areas are now being considered by the Agency.

The Agency emphasises that, while further research is being considered, its advice on irradiated food remains unchanged. Decades of research worldwide have shown that irradiation of food is a safe and effective way to kill bacteria in foods and extend its shelf life. It should be noted that all irradiated food should be labelled 'irradiated' or 'treated with ionising radiation'.

Dissemination

For any enquiries concerning this research project, please contact the relevant Programme contact or email: CST@foodstandards.gsi.gov.uk

Research report

England, Northern Ireland and Wales

PDF

View A05009 final report as PDF(Open in a new window) (346.43 KB)