Photodisinfection for Improved Food Safety

An Innovative Opportunity

KEEPING FOOD SAFE & FRESH

The top priority for anyone handling food, whether at home or in a facility, is to ensure it is fresh and safe to eat. Microorganisms can cause contamination, leading to spoilage or food borne illnesses. Sanitization is crucial at all levels of the food industry to prevent costly recalls and protect public health.

While the food manufacturing process already involves strict safety standards, companies are always seeking better ways to sanitize food and surfaces to reduce food waste and improve safety.

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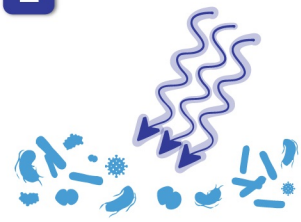
ABOUT PHOTODISINFECTION TECHNOLOGY

Photodisinfection is a state-of-the-art technology that uses a light-activated substance to kill microorganisms. It is used in hospitals to reduce pathogens in patient noses to prevent infections and is being explored for food and surface sanitization in the food industry.

1

A food-safe, natural photosensitizer is sprayed onto the surface

2



A light with a particular wavelength activates the photosensitizer, killing microorganisms immediately

3

The reaction stops when the light is turned off, leaving clean and wholesome food without flavor alteration or the use of radiation

Environmentally friendly & food safe

NO antibiotics
NO articificial cleaners
NO detergents

POTENTIAL USES IN THE FOOD INDUSTRY

Photodisinfection has the potential to **improve food safety and quality** at multiple levels of the food industry. It could be used to sanitize food and surfaces in manufacturing facilities, grocery stores, and homes, extending shelf life and reducing waste **without the need for harsh chemicals or antimicrobials.**

WHAT'S NEXT?

Researchers have already identified natural photosensitizers and light conditions that show excellent microbicidal activity. Ongoing research is focused on developing this technology for use in the food industry.

With its natural, safe, and effective approach to sanitization, photodisinfection could become a preferred method for improving food safety and reducing food waste.

CANADIAN AGRICULTURAL PARTNERSHIP

ondine

CHINOOK CONTRACT RESEARCH

Canada