



Safebag[®]

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SME PARTNERS:

FIAA-Food Industry Association of
 Austria

FFDI-Federation of the Food & Drink
 Industries of the Czech Republic

GZS-Chamber of Commerce and
 Industry of Slovenia - Chamber of
 Agricultural and Food Enterprises

OTHER PARTNERS:

Verdifresh, Spain

OSV Srl, Italy

Fulwell Mill Foods, United Kingdom

Nature 's Best, Ireland

SETBIR-Union of Dairy, Beef, Food
 Industrialists and Producers of Turkey

ABSTRACT:

The EU-27 fruit and vegetable processing and supply chains represent a major pillar of the European food and drink industry. While fresh fruit and vegetable consumption is linked to a plethora of health benefits, it can also be a source of foodborne illnesses. It is critical that effective decontamination steps are in place to ensure consumer protection and confidence in fresh produce. The use of chlorine as a sanitising agent in the washing of fresh-cut produce is widespread in the fresh produce industry. However, this method is neither environmentally friendly, nor is it in line with growing consumer demand for chemical free processes. There is indeed a need to provide fresh-cut fruit and vegetables packers with an affordable and effective method of offering microbiological safety assurance, while at the same time increasing shelf-life and retention of nutritional quality.

The SAFE-BAG project objectives:

- ◆ Development of a novel continuous in-pack decontamination system for fresh-cut products and advancement of the generated knowledge to maximize the potential of the non-thermal plasma technology.
- ◆ Design and building of a plasma-based pre-competitive prototype with a validated effectiveness in real use.
- ◆ Development of an affordable, robust and easy maintained system.

The impact of the results hold benefits for consumer safety and confidence, extended shelf-life and increased demand for fresh produce, which will in turn impact on the competitiveness of hundreds of European fresh-cut processing SMEs.

KEYWORDS: Decontamination, fruits, vegetables, plasma.

Novel continuous in-pack
 decontamination system
 for fresh produce

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01/09/2011 – 01/09/2014