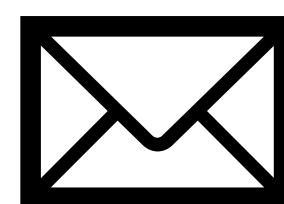


Non-thermal TECHNOLOGIES FOR the inactivation of emerging viral, bacterial and protozoan PATHOGENS on fruit and vegetable products - TECH4PATH

“Food production based on food safety, sustainable development and circular economy”
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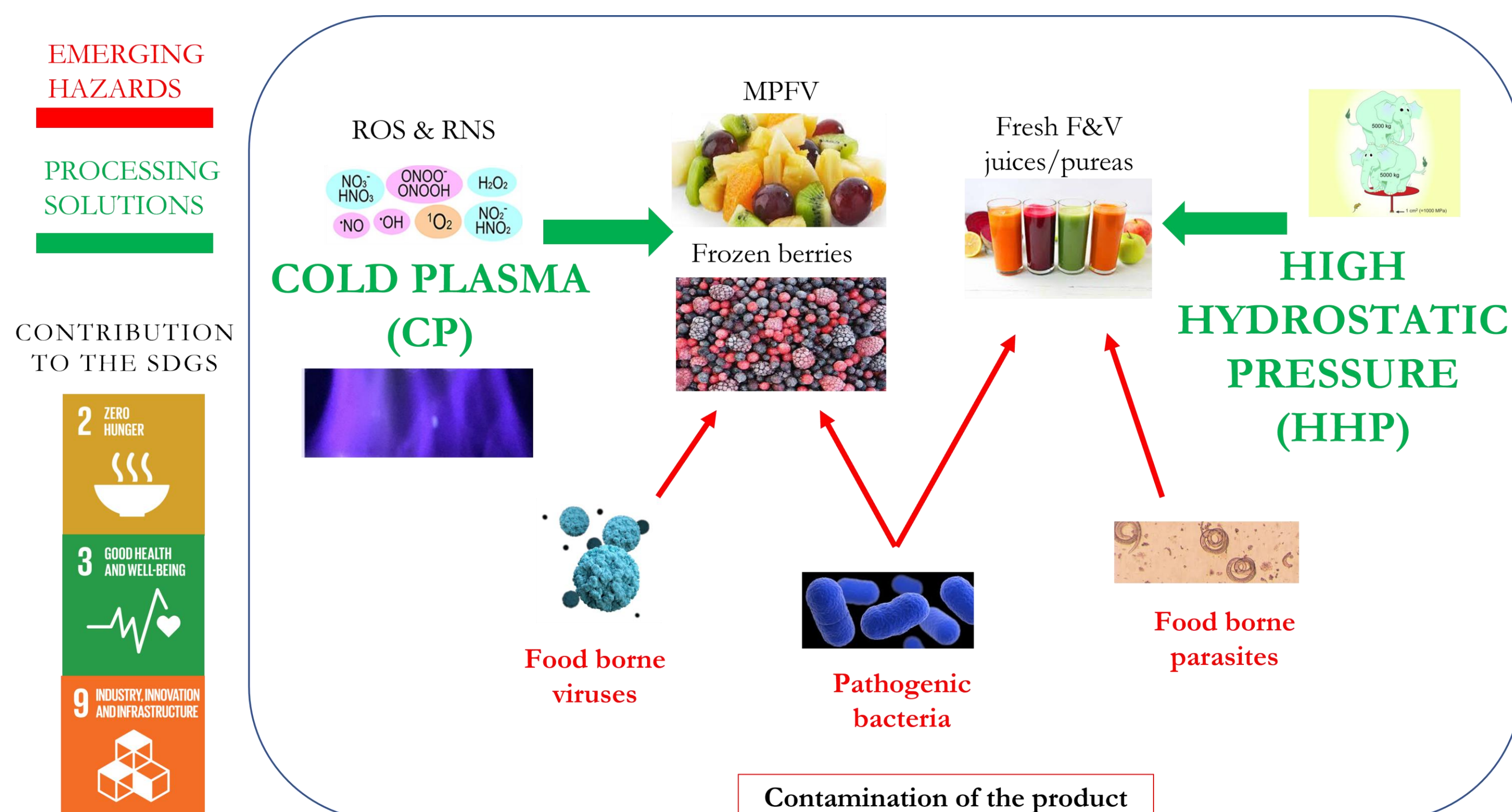
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Background:

Foodborne diseases have long represented a considerable burden to public health and continue to challenge health systems worldwide. Besides the traditional food borne hazards, safety of the food chain is facing new and unprecedented challenges, for emerging pathogens that have been underdiagnosed and underreported so far.

Aim of the project:

study, optimize and create basic protocols for the application of 2 non-thermal technologies (cold plasma-CP and High Hydrostatic Pressure-HHP) as strategies for the decontamination of emerging pathogens of fruit and vegetable food products (FVPs).



Target pathogens

Microorganisms

Cronobacter spp.

Arcobacter spp.

• E coli as reference



Parassites

Cryptosporidium spp.

Giardia intestinalis

Virus

Norovirus

HAV



Specific objectives

- **SO1:** Define processing parameters for optimized sanitation of the food products with each proposed technology and for each type of pathogen considered
- **SO2:** Gain new information on possible inactivation of emerging food safety hazard and share the new information with relevant stakeholders (academia, industry, etc.)
- **SO3:** Increase the shelf-life of the food products
- **SO4:** Characterize environmental sustainability of the proposed technological solutions
- **SO5:** Communicate the project outcomes to the general public to increase people's trust towards innovative food technologies and disseminate the results as seeds for novel business applications, for the need of EU regulation, and for additional discoveries

ACKNOWLEDGMENTS

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