

# ACTIVE CONSUMERS ARE AWARE CONSUMERS

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Today's health care environment is  
undergoing massive and rapid change

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far-reaching effects on all consumers

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e.g.: leaner **health care system**

Because of this:  
we should all try to  
sharpen our self-preservation  
and self-advocacy skills

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may seem overwhelming

BUT

will make us **more aware and more informed**

# TO KEEP YOUR HEALTH SAFE:

- try to be more active and assertive, **not passive !**
- learn as much as possible about your health conditions
- know what buy and eat
- periodically seek updated information on how the food you eat has been produced, distributed and stored.

# Food consumption patterns are changing in Europe:

- year round availability of certain raw materials, higher quality lifestyle
- consumers expectations for food having higher nutritional, functional and sensory properties
- demand for products of high quality, convenient to prepare with fresh or fresh-like properties
- increase in popularity of ready-to-eat minimally or low processed foods

# THE EUROPEAN PROJECT: HIGH Q RTE

Innovative non thermal processing technologies to improve the quality and safety of ready-to-eat (RTE) meals

[www.highqrte.eu](http://www.highqrte.eu)



# The project :

- falls into the EU Sixth Framework Program, Priority 5, Food Quality and Safety
- aims to improve the safety and quality of three representative categories of european ready-to-eat foods: ready-to-eat salads, fluid foods, and ready-to-eat vegetable based meals

**Prevention of heat-induced physiochemical and nutritional changes, non-thermal novel processes:**

- For ready-to-eat vegetable and fruit salads > procedures based on Photosensitization (PHOTO)
- For fluid foods, Pulsed Electric Fields technologies (PEF) and semi-continuous high pressure homogenization (HPH) will be compared
- For ready-to-eat meals of vegetable origin High Hydrostatic Pressure will be applied to meals packaged under CO<sub>2</sub> atmosphere (HHPCO)

# FOR EACH TECHNOLOGY:

- inactivation due to the different treatments
- re-growth of inoculated pathogens during storage
- growth of indigenous flora will be modelled.

# In the first 18 months:

- collection the experimental data on the sensitivity of several food pathogens (*L. monocytogenes*, *Salmonella*, *Bacillus cereus*), or spoilage organisms, deliberately inoculated in different model or real system
- Study on the packaging materials in order to investigate the superficial decontamination ability by PHOTO and the mechanical resistance of packaging subjected to HHPCO treatments
- The British *Institute of Food Research* has developed the primary models to characterize the decrease in cells number of the dose and time for PHOTO, HHPCO, PEF and HPH
- Improvement of the previously developed pilot scale equipment and optimized the process parameters/procedures in order to foster the inactivation efficiency of the new technologies
- evaluation of the effects of PHOTO, PEF, HPH and HHPCO on enzymatic activities, micro-structural, chemical, physical, functional, compositive organoleptic properties of the food matrices

# PARTNERS INVOLVED

- University of Bologna (Food's Science Department), Italy (project leader)
- Orma srl, Italy
- Vilnius University (Institute of Material Sciences and Applied research), Lithuania
- Politechnical University of Valencia, Spain
- Institute SIK (Biotechnic), Sweden
- Institute of Food Research, UK
- National Metrology and Research Laboratory, France
- Consejo Superior de Investigaciones Cientificas, Spain
- UAB Palink, Lithuania
- Tecnoalimenti, Italy
- Ortoreale, Italy
- Acetum, Italy
- Social Cooperative "Il Bettolino", Italy
- Tappery Webert, Italy
- Regional Technical Center of Research on European Consumption (CTRRCE), Italy

# THE ROLE OF CONSUMER ORGANIZATIONS

- Non-governmental organizations, such as consumer organizations and groups for health and well-being promotion have been involved in the dissemination and exploitation activities (**WP7**) of the project
- CTRRCE: to assess, whether the industrialization of a new process of preservation produces a food, whose effect on the consumer is well accepted



# WHAT CONSUMERS THINK

- nowadays consumers tend to give much more importance to food safety and to the rate quality/price.
- they seem to be more informed about food's composition and labeling
- they are ready to accept a new technology, if this guarantees higher hygienic safety at an acceptable price
- thanks to this project, consumer are finally put on top of the matter and of any resolution.