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Round Table: Assuring the Safety of Traditional Foods: A Scientific Contribution to Protecting our Cultural Heritage

THE ARTISANEFOOD PROJECT: NOVEL STRATEGIES TO ENSURE THE QUALITY OF ARTISANAL FOODS PRODUCED IN THE MEDITERRANEAN

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Artisanal foods

Precious

Unique flavours

Memories and emotions

High quality

Traditional recipes

Local ingredients

Expensive foods

What is an artisanal food?

- Food that is made in limited quantities by skilled craftspeople
- Processing method is not fully mechanised and follows a traditional method
- Characteristic ingredient(s) used are grown or produced locally, where seasonally available and practical



The ArtiSaneFood project

The PRIMA programme is supported under Horizon 2020, the European Union's Framework Programme for Research and Innovation

Topic of the call:
1.3.2: Food Safety in Local Chains

Duration and starting date:
36 months
01 June 2019

Innovative Bio-interventions and Risk Modelling Approaches for Ensuring Microbial Safety and Quality of Mediterranean Artisanal Fermented Foods

Partners

Portugal, Spain, France, Italy, Greece, Morocco, Tunisia, Algeria + USA

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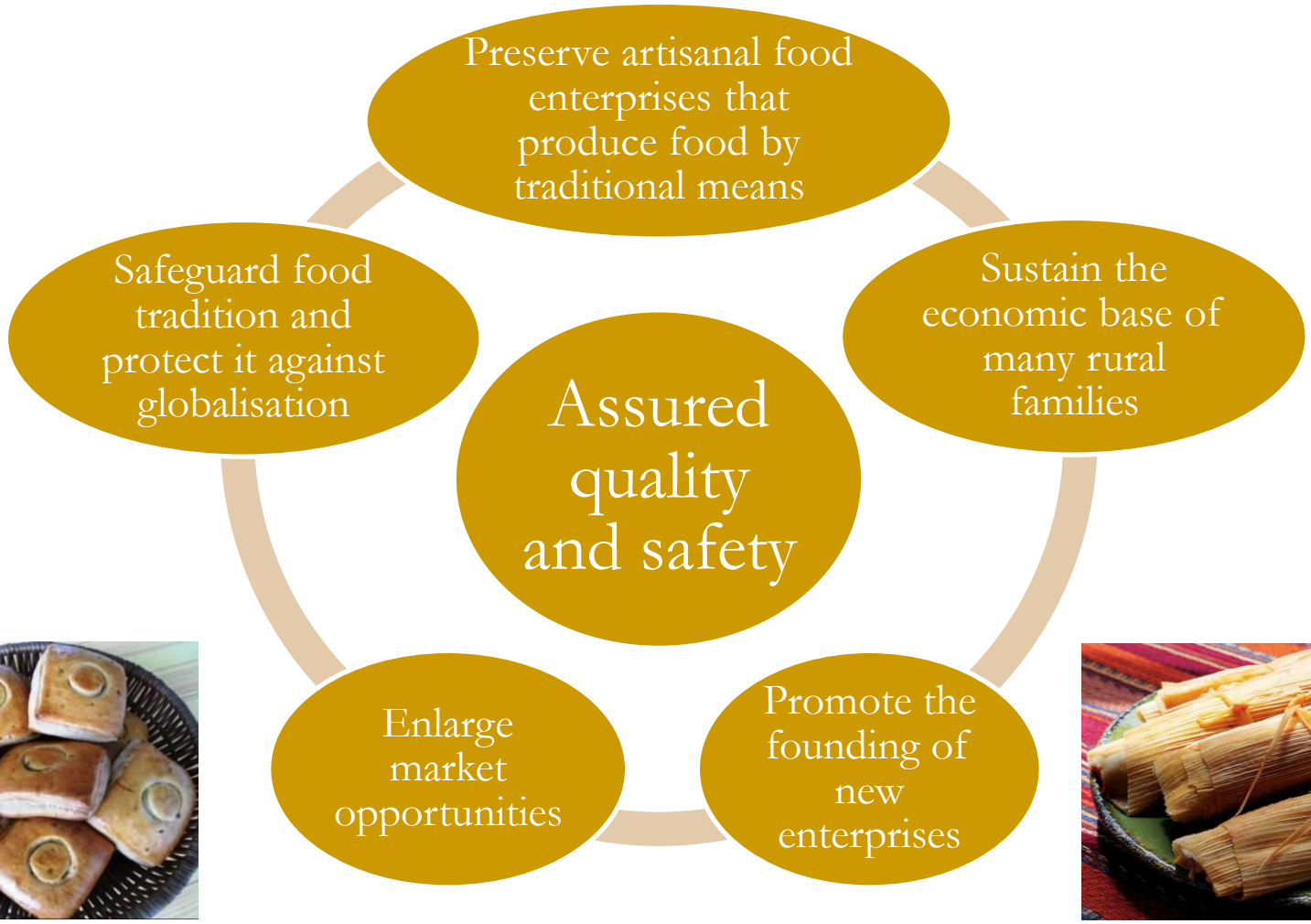
ArtiSaneFood project: ultimate goal



ArtiSaneFood project: objective

- To develop efficient bio-intervention strategies, enhanced process criteria, and an easy-to-use food safety decision support tool for participating artisanal food producers, aiming to the reduction and control of food-borne pathogens in 15 artisanal fermented foods of meat or dairy origin produced in 8 Mediterranean countries



The artisanal fermented products

Alheira

Serrano

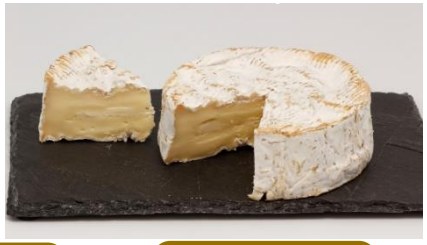
Manchego

Morcilla

Squacquerone

Emilia-Romagna

Camembert Normandy



Numbulo

Katiki Domokou

Jben

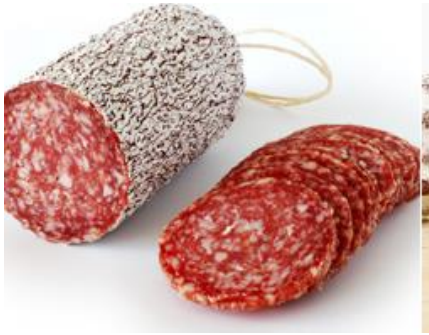
Merguez

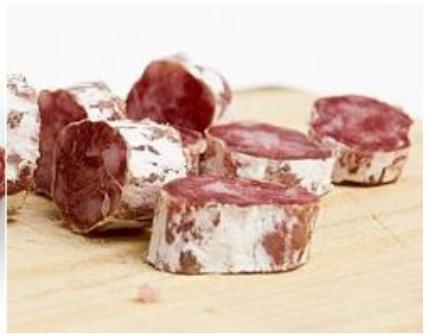
Kaddid

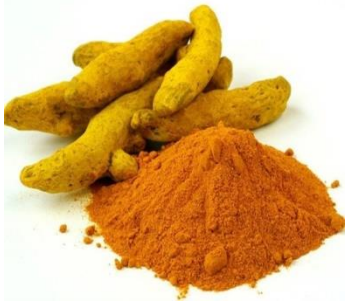
Lben

The concept: Bio-intervention strategies

- Functional starter cultures
  - Commercial starters
  - Development of customised starters
    - Technological properties
    - Bacteriocinogenic properties







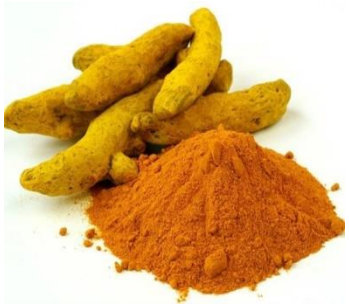
- Natural extracts with antimicrobial properties
  - Those that inhibit *Salmonella*, *E. coli*, *Pseudomonas*, *Listeria* and *S. aureus* will be tested
  - In-vitro
  - In-situ
    - Directly applied
    - Encapsulated in packaging

❖ **Avoid use of nitrites**
❖ **Extend shelf-life**
❖ **Reduce food waste**

The concept: Enhanced process criteria

Salmonella | ***L. mono*** | ***S. aureus…***

Fate studies (processing+shelf-life)
- Traditional elaboration
- Adjusted process variables
- Biopreservation-based

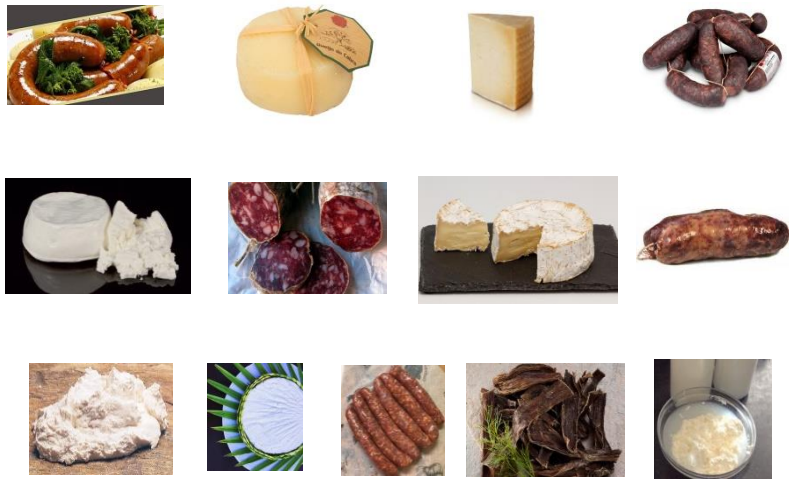


Predictive microbiology
- Dynamic modelling during fermentation, ripening, shelf-life
- New methods to be developed

QRA
- Impact of bio-interventions
- Derivation of standards
- Design of quality monitoring tools

Enhanced process criteria for artisanal producers

The concept: Food safety decision-support tool for artisans



Proof of concept

New capabilities	Lay-man terminology

Easy-to-use front end

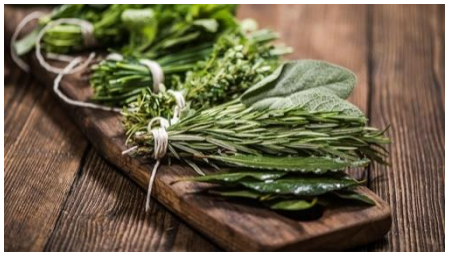
Predictions of safety	Self-generation of control charts

Notebook capability

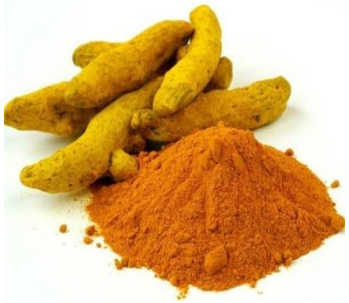
Trace-back information	Access to quality improvements in time

Interested in the ArtiSaneFood project?

- Create an account at the project's site to receive newsletters and information on upcoming seminars/workshops



- A network will be created: Platform of Mediterranean Artisanal Food Producers (PAF)
  - Keep up linkages between food artisans and researchers in order to innovate on products and processes, and solve food safety issues through new collaborations
  - Enrich the safety-decision support tool with other artisanal foods



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Thank you