

# **"FOOD RESEARCH IN SUPPORT TO SCIENCE – BASED REGULATIONS: CHALLENGES FOR PRODUCERS & CONSUMERS"**

21, 22 APRIL, PRAGUE CONGRESS CENTRE

## **"IMPROVED TRADITIONAL TECHNOLOGIES"**

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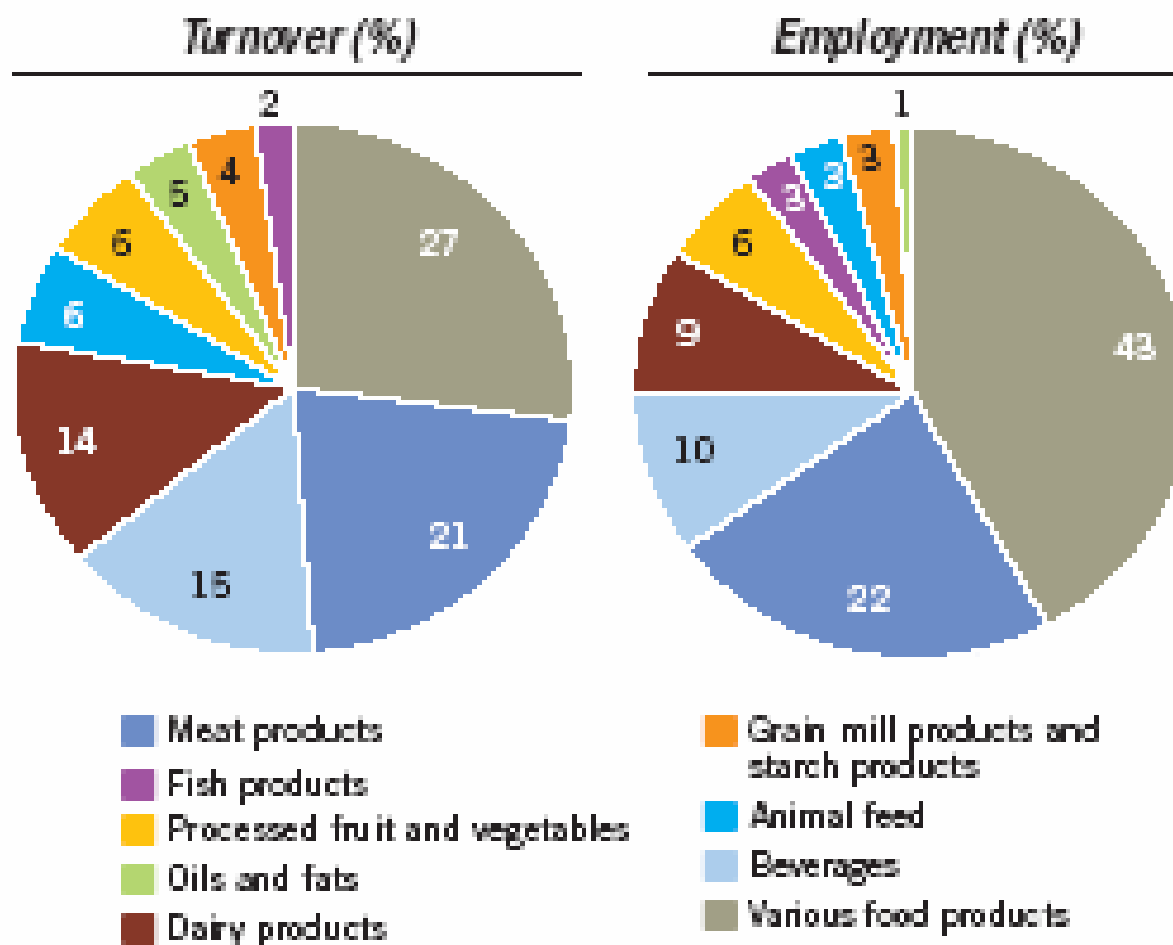




## THE EUROPEAN FOOD AND DRINK INDUSTRY

- **Turnover: €913 billion** - Largest manufacturing sector in the EU (13,4%), ahead of the automobile and chemical industries.
- **Employment: 4.3 million people** - Leading employer in the EU manufacturing industry (13,5%).
- **Number of businesses: 308.000 companies** - fragmented industry. SMEs represent 48,5% of the F&D turnover and 63% of F&D employment.
- **Formal R&D** as a % of food and drink output: **0.24%**, still insufficient formal R&D expenditure, but informal **1,6%** in 2006 (14 billions euro).
- **Exports: €54,7 billion**
- **Imports: €52,7 billion.**
- **Trade balance: €2 billion:** net exporter of food and drink products.
- **EU market share of global export market: 19,8 %.**

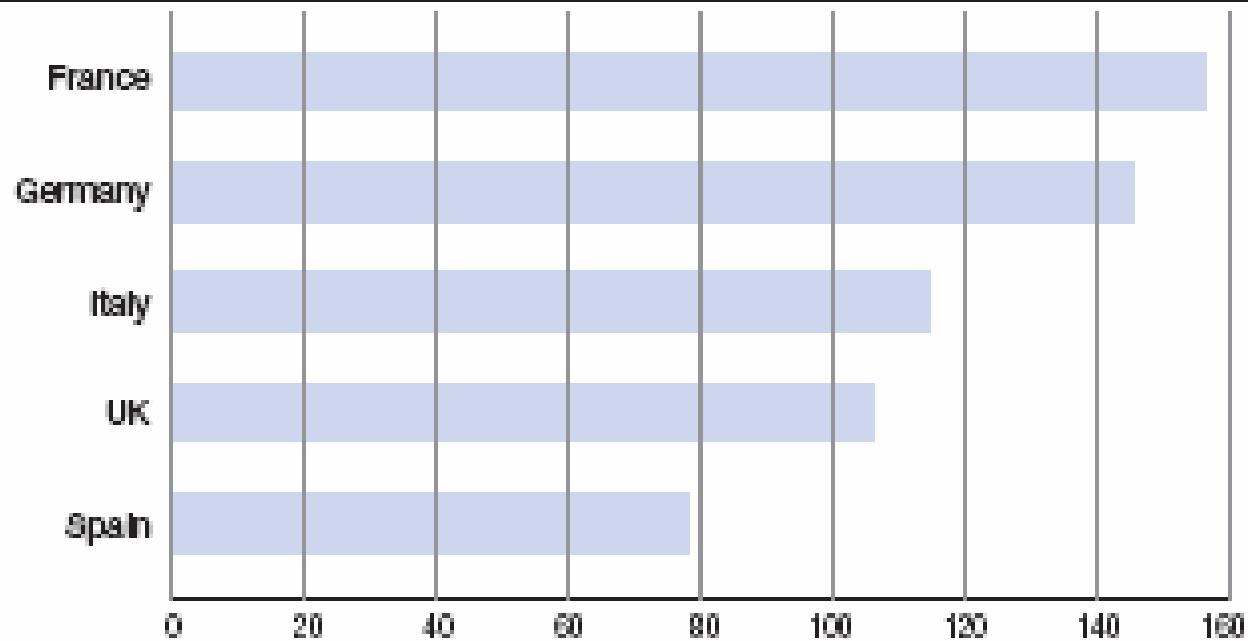
## Distribution of turnover and employment in sub-sectors



Source: Eurostat 2008, 2009 data

# TOP 5 EU FOOD & DRINK INDUSTRY

Top 5 Member States in terms of food and drink industry sales, 2007 (€ billion)



Source: National Accounts

# THE F&D INDUSTRY IN THE MEMBER STATES



Food and drink industry data as published by National Federations<sup>1</sup>

	AT	BE	BG	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK
<b>Net sales<sup>2</sup></b> (€ billion)																											
2006	10.4	33.2	2.8*	1.3*	9.7	138.2	21.0	1.1	77.4	9.0	144.3	11.2	7.4	23.3	110.0	2.5	0.7*	1.6	0.3	57.2	-	12.0	8.4	15.7	1.9	2.9	106.8
2007	11.0	36.9	-	-	10.3	146.8	22.7	1.2	78.2	9.6	154.4	11.5	8.0	-	113.0	-	-	1.8	0.3	-	41.6	12.3	10.1	16.4	2.0	-	106.2
2007/2006 (%)	↑5.7	↑11.2			↑6.2	↑6.2	↑8.1	↑4.5	↑0.9	↑6.7	↑7.0	↑2.7	↑7.0		↑2.7			↑14.0	↓19.7			↑2.5	↑20.9	↑4.5	↑6.4		↓0.6
Rank <sup>3</sup>	5 <sup>h</sup>	3 <sup>rd</sup>	-	-	5 <sup>h</sup>	5 <sup>h</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>	1 <sup>st</sup>	1 <sup>st</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	-	-	-	-	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>	-	4 <sup>th</sup>	5 <sup>h</sup>	4 <sup>th</sup>	1 <sup>st</sup>
<b>Employment</b> (thousand)																											
2006	58.9	90.0	101.0*	12.3*	126.5	532.1	68.4	17.3	486.0	35.3	414.0	72.0	107.0	44.3	260.0	50.7	4.4*	35.2	3.0	122.2	-	107.1	203.8	57.2	16.7	35.0	440.0
2007	58.0	89.6			121.9	531.5	66.0	17.3	487.6	34.8	415.0	72.1	101.5		256.0			33.0	2.9		420.0	108.5	206.7	55.9	15.2		438.0
2007/2006 (%)	↓1.5	↓0.4			↓3.0	↓0.1	↓3.5		↑0.3	↓1.4	↑0.2	↑0.1	↓5.1		↓1.5			↓8.3	↓5.1			↑1.3	↑1.4	↓2.3	↓8.8		↓0.5

<sup>(1)</sup> or by National Statistics (retail or Einzel)

<sup>(2)</sup> or production value (in current prices)

<sup>(3)</sup> Rank of the food and drink industry in the manufacturing activities in terms of turnover at national level

<sup>(\*)</sup> 2005 data

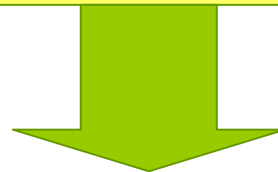
Source: National Federations and CIAA (data available on request)

# COMPETITIVENESS

**Competitiveness of the F&D Industry is expressed in terms of its ability to achieve sustained growth and market share on both EU and third country markets.**

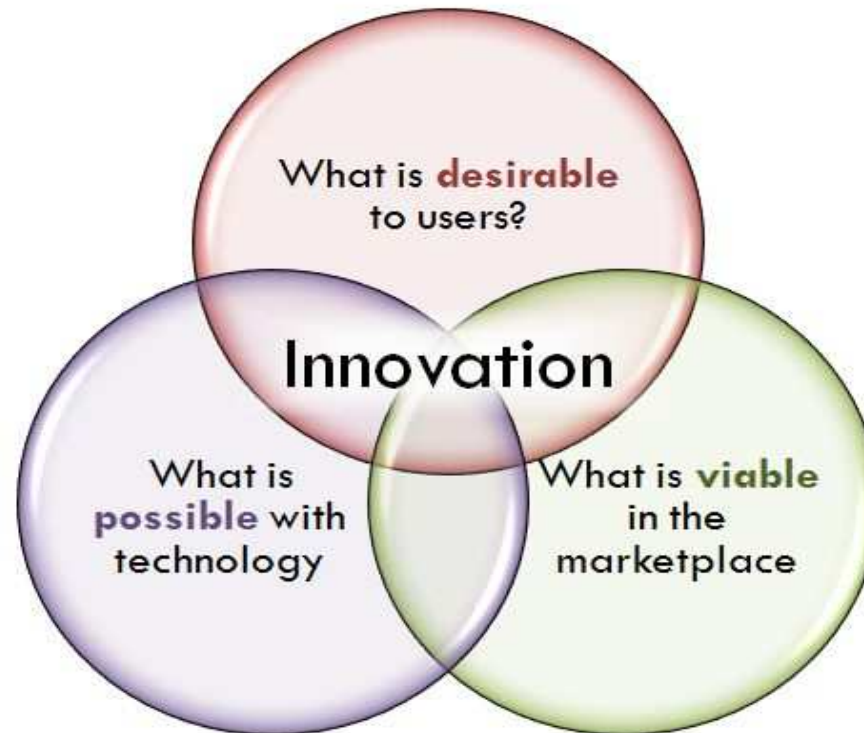
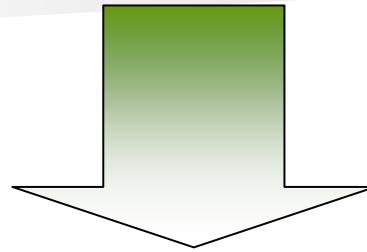
## MAIN INDICATORS FOR COMPETITIVENESS IN EU:

- better regulation & impact assessment
- access to raw materials
- improved exports performance
- enhance R&D and Innovation

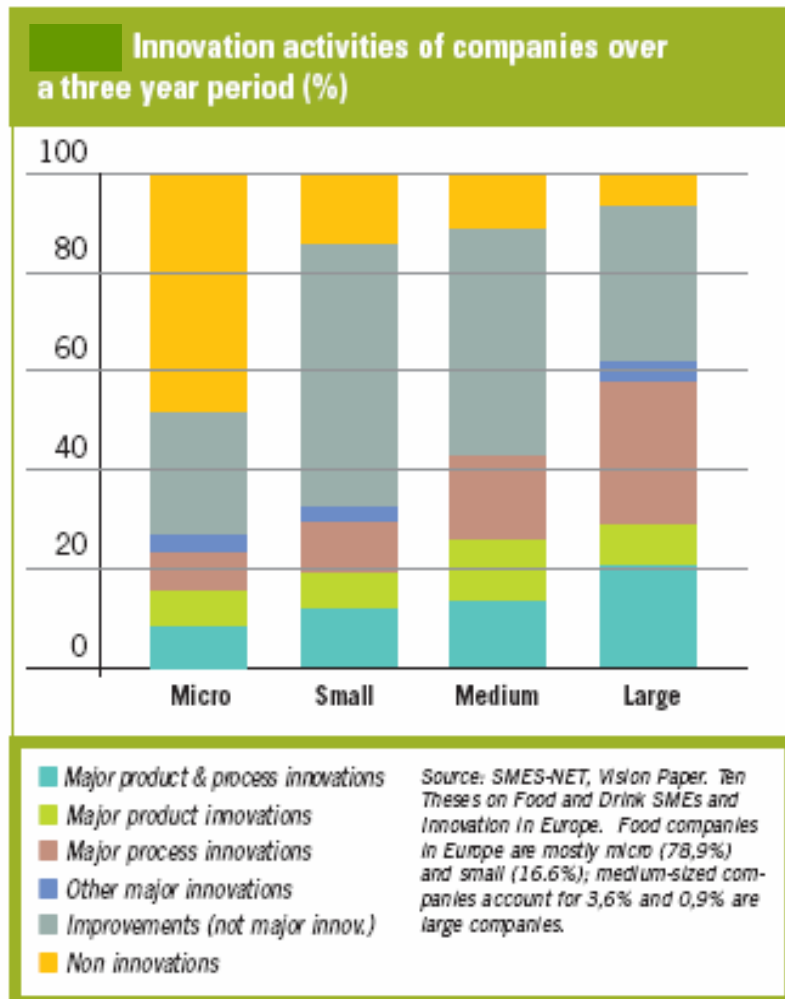


- PUSHING THE LISBON AGENDA FORWARD
- PROVIDING INPUT TO HIGH LEVEL GROUP ON THE COMPETITIVENESS OF THE AGROFOOD INDUSTRY

# HOW TO INCREASE COMPETITIVENESS AND WIN THE CHALLENGE OF GLOBALISATION



# MEDIUM – SIZED COMPANIES: A PROMISING GROUP FOR FOOD & DRINK INNOVATION



(\*) According to the result of a survey, sector differences are no major source of segmentation on these issues. A three-year framework has been chosen, which is a reasonable period for surveying innovation types of companies.

**Size** is one of major factors in determining whether or not companies invest in innovation activities and the type of activities they invest in:

**Large – sized companies** tend to be proactive in all directions (product, process, other...).

**Medium – sized companies** emerge as model innovators in the food industry.

**Small – sized companies** tend to improve products and processes (improved traditional food).

Source: CIAA Benchmarking report 2007

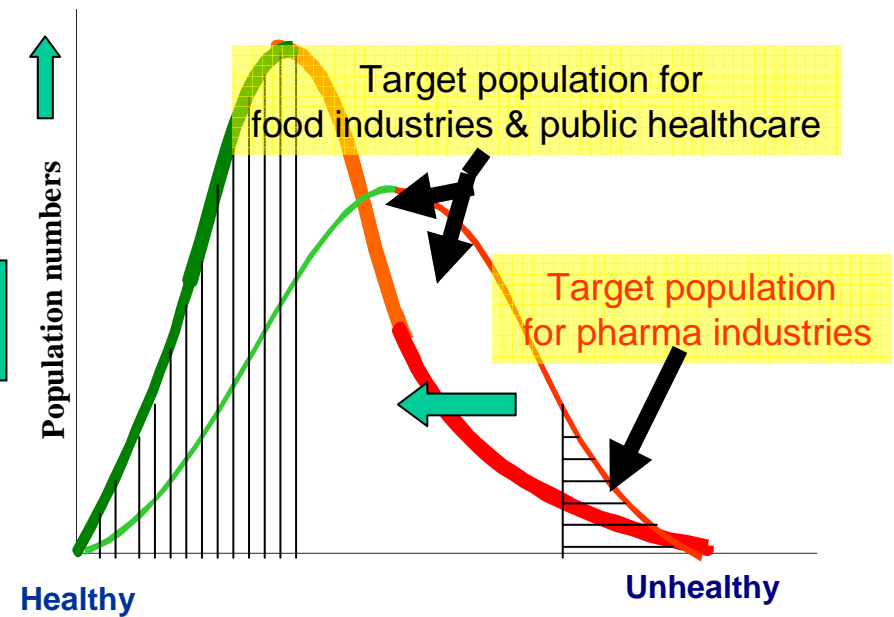
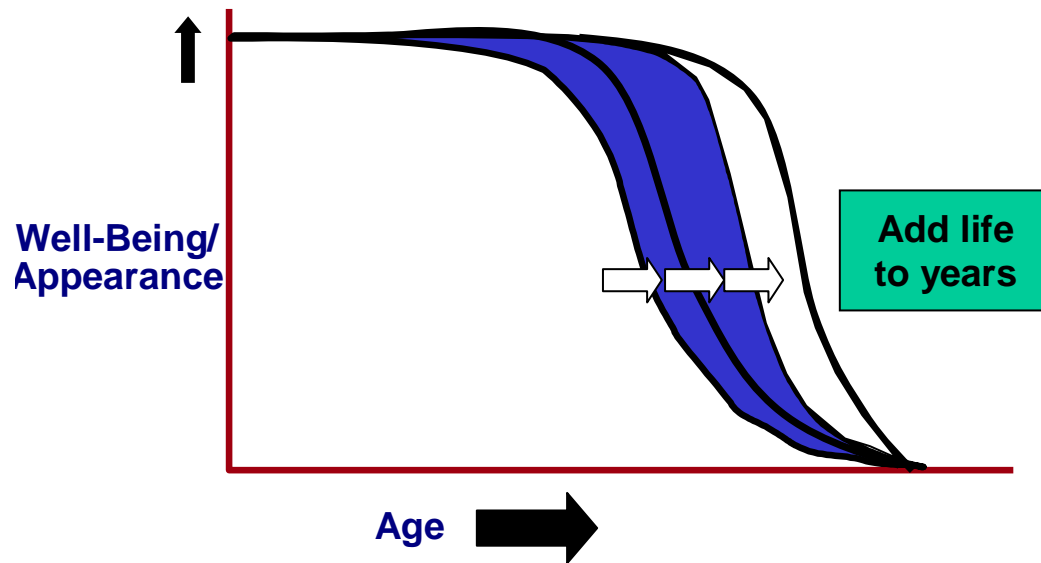
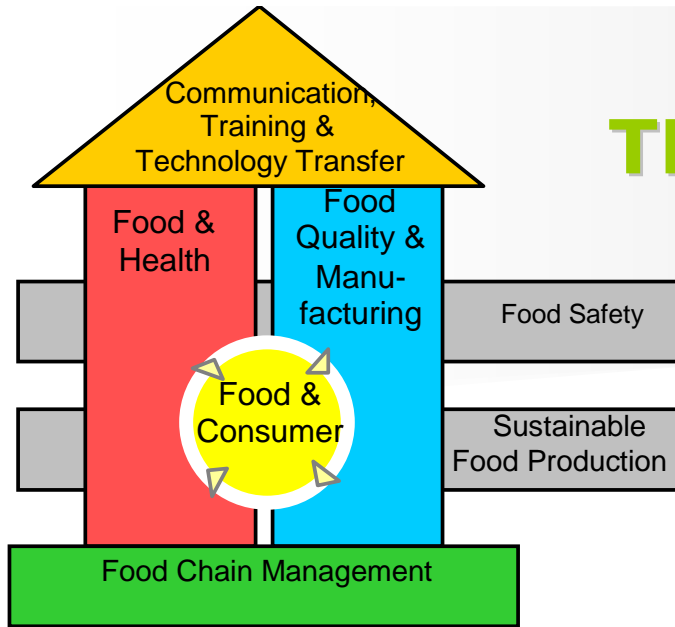
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# THE ETP FOOD FOR LIFE

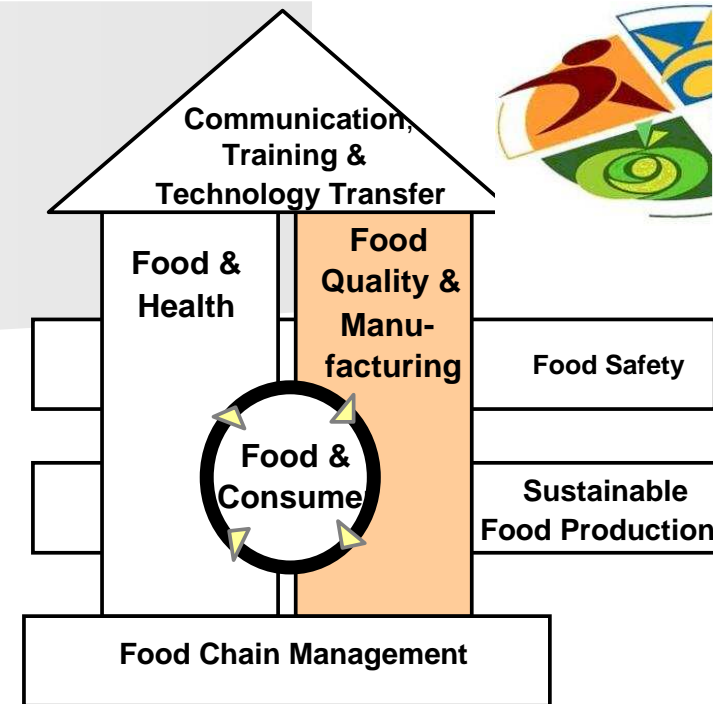
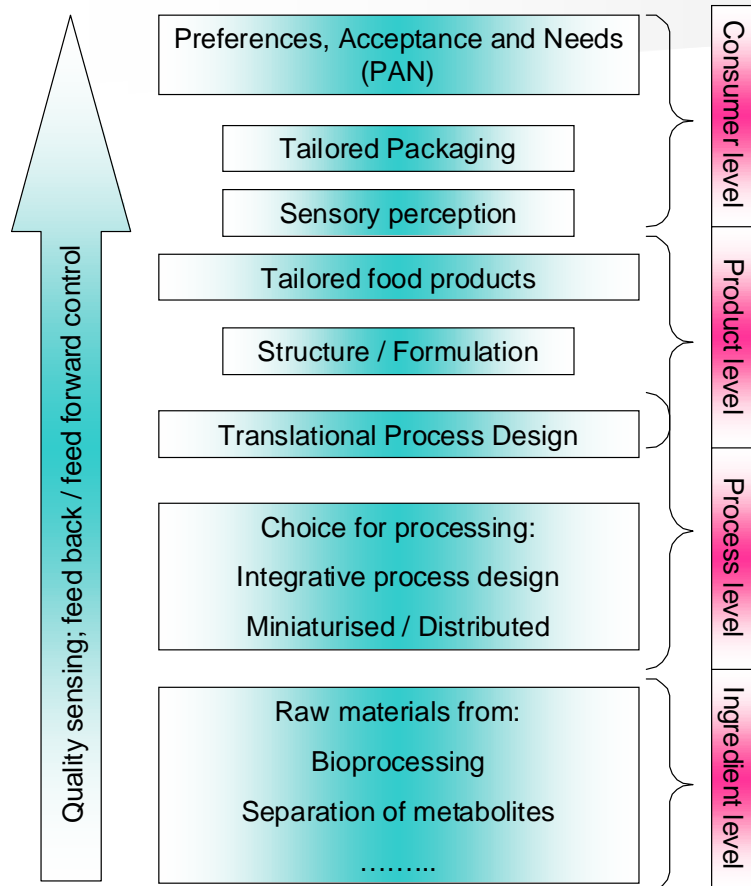
A vision for  
improving  
population health



Source: "Food for Life" SRA 2007-2020

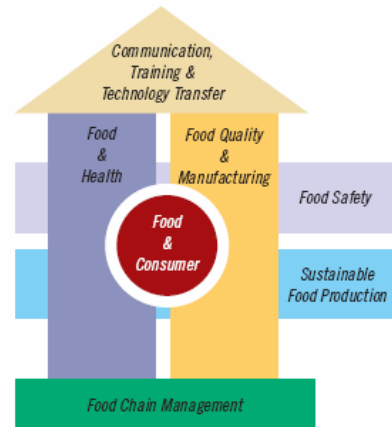
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# THE ETP FOOD FOR LIFE: developing quality food products



- Producing *tailor-made food products*.
- Improving *process design, process control and packaging*. Improving understanding of *process-structure-property relationships*.
- Understanding consumer behaviour in relation to food quality and manufacturing.

# THE ETP FOOD FOR LIFE



**Specific actions for Innovation of process and product in traditional food production**

**Actions dedicated to SMEs and their needs of technology transfer, training and communication on the so-called improved traditional food sector.**

# TRUEFOOD and the European Food & Drink Industry

- 1. TRUEFOOD will introduce suitable innovations into the Traditional Food & Drink Industry (in particular SMEs) to maintain and increase its competitiveness in a globalised food market.**
- 2. This will be achieved through close integration of research and development, with training, demonstration, dissemination, technology transfer and project management activities.**
- 3. To improve competitiveness of the Traditional Food & Drink Industry, Truefood will promote Research & Innovation on:**
  - **Processing**
  - **Products**
  - **Organisation**
  - **Logistics**
  - **Labelling, consumer information, packaging, portioning etc.**

# TRUEFOOD project Identity Card

**PROJECT TITLE:** Traditional United Europe Food

**CONTRACT NUMBER:** Food-CT- 2006-016264

**DURATION:** 4 years, from 1 May 2006 to 30 April 2010

**PROJECT COST:** € 21 million of which € 15,5 million financed by the EU within the 6th Framework Programme for RTD

**EU TYPE OF INSTRUMENT:** Integrated Project (IP)- 6th Framework Programme –3rd Call

**EU THEMATIC PRIORITY:** Food Quality and Safety (Priority 5)

**PROJECT COORDINATOR:** SPES GEIE (Spread European Safety-European Economic Interest Grouping). The Group associates 12 European Food & Drink Industry Federations representing 280 branches and 35.000 European small to medium size enterprises: ANIA(FR) – FEDERALIMENTARE(IT)- FEVIA (BE)- FFDI(CZ)- FHFH(HU) - FI(DK) - FIAA/LVA(AT)- FIAB(SP)- FIPA(PT)- GZS (SI) - SETBIR(TR) -SEVT(GR).

# TRUEFOOD Partnership

**Project partners are "centres of excellence" in food related R&D with strong technology transfer units or cooperating with the traditional food sector**

1. **SPES GEIE**
2. **Institute National de la Recherche Agronomique (France)**
3. **Ente per le Nuove Tecnologie, l'Energia e l'Ambiente (Italy)**
4. **Matforks AS, Norwegian Food Research Institute (Norway)**
5. **Agricultural University of Athens (Greece)**
6. **Ghent University (Belgium)**
7. **Association de Coordination Technique pour l'Industrie Alimentaire (France)**
8. **Istituto Nazionale di Ricerca per gli Alimenti e la Nutrizione (Italy)**
9. **Institut de Recerca i Tecnologia Agroalimentàries (Spain)**
10. **Warsaw Agricultural University, Faculty of Human Nutrition and Consumer Sciences (Poland)**
11. **National Agricultural Research Foundation (Greece)**
12. **Technische Universität München (Germany)**
13. **Institute of Chemical Technology Prague (Czech Republic)**
14. **Università degli Studi di Perugia (Italy)**
15. **Universidade Católica Portuguesa Escola Superior de Biotecnologia (Portugal)**
16. **Progetto Europa Regions S.r.l. (Italy)**
17. **Campden & Chorleywood Food Industry Development Institute Hungary Kht. (Hungary)**
18. **Agricultural Institute of Slovenia (Slovenia)**
19. **Technological Educational Institution of Ionian Islands (Greece)**
20. **University of Applied Sciences of Weihenstephan (Germany)**
21. **Università degli Studi di Milano (Italy)**
22. **Food Industrial Research and Technological Development Company SA (Greece)**
23. **Istituto Superiore di Sanità (Italy)**
24. **University of Ljubljana (Slovenia)**
25. **Confédération des Industries Agro-Alimentaires de l'UE (Belgium)**
26. **Centre National Interprofessionnel de l'Economie Laitière (France)**
27. **Agriconsulting S.p.A. (Italy)**
28. **Genus plc. – Pic (United Kingdom)**
29. **Adour Bio Conseil (France)**
30. **Norwegian University of life Sciences (Norway)**
31. **Slovak Agricultural Research Centre (Slovakia)**

Source: Truefood

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# TRUEFOOD Partnership – Countries involved–



1. Austria
2. Belgium
3. Czech Republic
4. Denmark
5. France
6. Germany
7. Greece
8. Hungary
9. Italy
10. Norway
11. Poland
12. Portugal
13. Slovakia
14. Slovenia
15. Spain
16. Turkey
17. United Kingdom

## Why TRUEFOOD?

- **To improve competitiveness by identifying innovations which comply with EU safety policies and guarantee the quality of traditional food products (TFPs), while at the same time meeting general consumer demand and specific consumer expectations and attitudes to innovations in TFPs.**
- **Traditional food consumers demand products which are, at the same time completely safe with respect to microbiological hazards but also minimally processed, free or low in preservative additives and of high nutritional and sensory values (and this is very challenging for SMEs).**
- **Innovation has mainly focused on the needs of large-scale production and processing systems, and SMEs often lack the facilities or capital to establish facilities for microbiological or toxicological safety assurance systems.**
- **Many sectors of traditional food industries have done little to identify and introduce innovations in primary production or processing in order to improve their nutritional values, while maintaining or improving their sensory qualities.**



# Traditional Food Products

**TRUEFOOD aims to improve quality and safety and introduce innovation into Traditional European Food production systems through research, technology transfer, demonstration, dissemination and training activities.**

**Traditional Food Products include not only product with Designation of Origin and with Geographical Indication, but also all local and national products used in traditional cooking.**

**The project focuses on increasing value to both consumers and producers and on supporting the development of realistic business plan for all components of the food chain, using a fork to farm approach.**

# TRUEFOOD Objectives

- 1. Identify and quantify consumer perceptions/expectations/ attitudes with respect to safety and quality characteristics of traditional foods and innovations that could be introduced into the traditional food industry.**
- 2. Identify, evaluate and transfer into the industry innovations which guarantee food safety, especially with respect to microbiological and chemical hazards.**
- 3. Identify, evaluate and transfer into the industry innovations which improve the nutritional quality, while at the same time maintaining or improving other quality characteristics recognised by traditional food consumers (e.g.sensory, environmental, animal welfare).**
- 4. Support the marketing and supply chain development of traditional food products.**
- 5. Establish an effective and sustainable system of technology transfer of innovation (those developed within the TRUEFOOD projects and in other EU, national and industry funded R&D projects) into traditional food industry, focussing specifically to SMEs.**

# TRUEFOOD Technologies (1)

**Some examples of the main technologies used:**

**1. *Innovation for improving microbial safety of Traditional Food Products (TFPs) origin.***

Different methods and physico-chemical characterisations for identifying and monitoring microbial populations have been compared in relation with cheese and meat products.

**2. *Control of biological derived and process induced chemical hazards in traditional food products.***

In the control of chemical hazard key points are the ability to detect and/or predict the presence of chemical contaminants in food and the individuation of critical control points for the implementation of appropriate strategies for the reduction of the risk.

# TRUEFOOD Technologies (2)

- 3. *Improving nutritional quality of traditional products in line with consumer demand.***
  - Identification of innovations which improve the nutritional composition of traditional milk and dairy products.
  - Development of technologies to reduce the salt content in traditional ham and fish products.
  - Identification of innovations which optimise the nutritional composition of traditional fresh fruit and vegetable products.
  
- 4. *Environmental, societal, human and economic impacts of innovation.***
  - Strategy and innovation directions for traditional products
  - Environmental impact of innovations for traditional products
  - Effects of innovation on human health
  - Social impacts of innovations for traditional food products
  - Micro Economic impact of innovation for traditional products

# TRUEFOOD:

**An opportunity for innovation by SMEs**

## TRAINING FOR SMEs

**A group of Techno Scientific Mediators has organized a Training & Dissemination Unit within every Food & Drink Industry Federation and has developed:**

**A survey on the needs of SMEs in terms of training**



**A match with the Research Centers and Universities' expertise**



**A training program for SMEs which could give an overview about scientific results and other topics (e.g. utilization of by-products, shelf-life and innovative packaging, etc...)**

### **Dissemination and Communication Activities**

**Conferences, focus groups with SMEs and all actors of the food sector, specific newsletters giving an overview of scientific innovations, meetings, workshops etc.**

**THANKS FOR YOUR KIND ATTENTION!**

