



European Technology Platform
Food for Life

**“Food for the 21st Century :
the vision of the ETP Food For Life ”**

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The European Food and Drink Industry

Turnover
€965 billion
(+3.2% compared to 2007)

Largest manufacturing sector in the EU (12.9%)



External trade

Exports

€8.2 billion

(+6.4% compared to 2007)

Imports **€7.1 billion**

(+8.4% compared to 2007)

Trade balance **€1.1 billion**

Net exporter of food and drink products



Employment
4.4 million people
(+0.8% compared to 2007)

Leading employer in the EU (13.5%)

Number of companies
310,000¹
Fragmented industry

of which over
99% are SMEs²
the latter accounting for
48.7%
of food and drink turnover and
63.0%
of employment in the sector

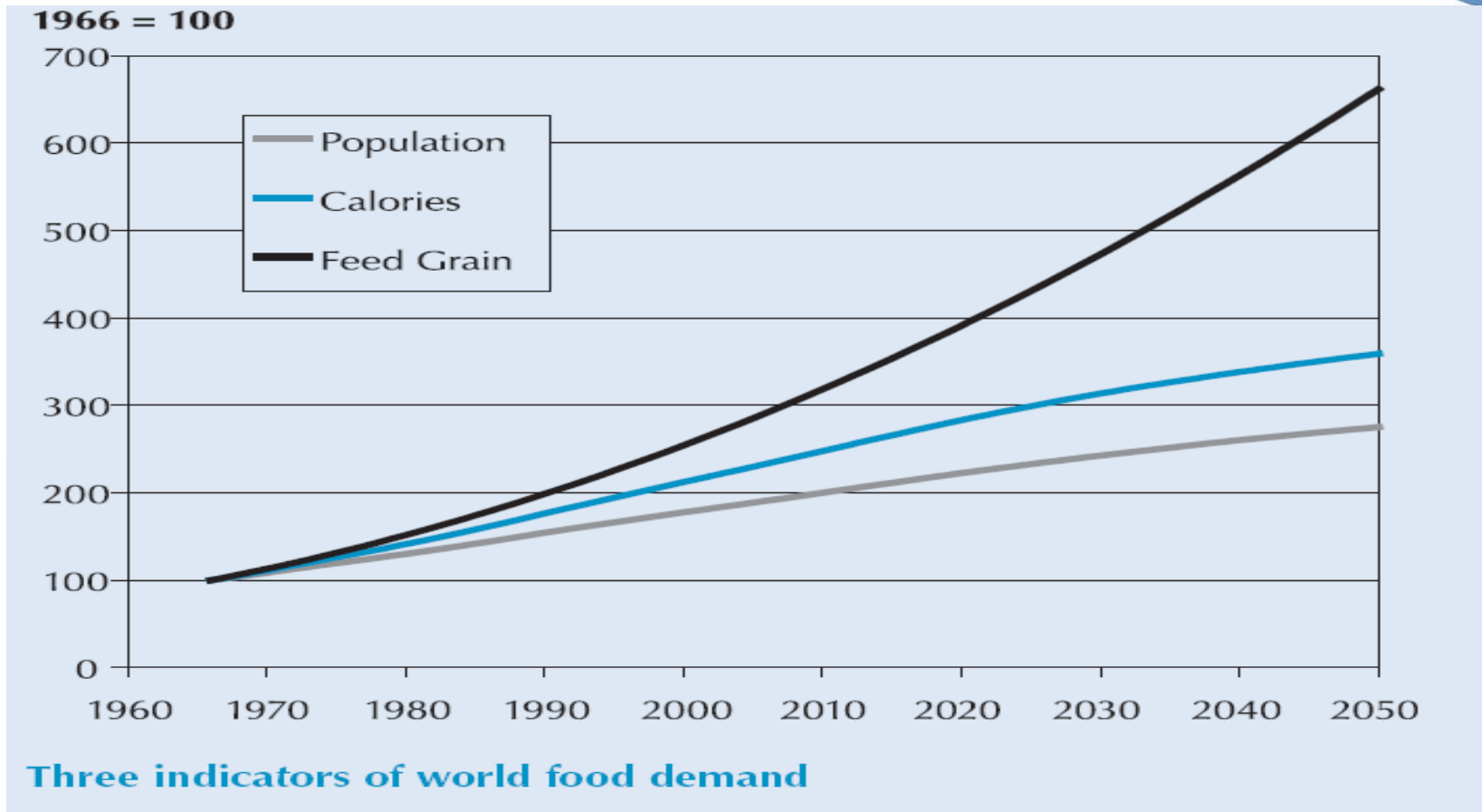


R&D
(% of food and drink output)



0.37%³
Insufficient R&D expenditure

Food Security a Challenge for the 21st Century



By 2050 the world's population will reach 9.1 billion. ***This means that world food production must increase by up to 70%***

Industry is Responding to these Changes and Demands by Society



History of ETP Food for Life



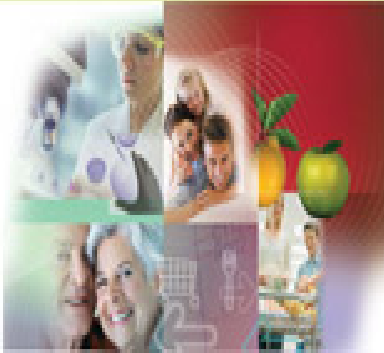
- First ideas for an agri-food ETP discussed, October 2004, consultation
- ETP Food for Life launched July 2005 on basis of Vision Paper
- Board, Operational Committee and Working Groups formed with good representation of all stakeholders across Europe, December 2005
- Stakeholders' Strategic Research Agenda, February 2006
- Recognition by the EU of the ETP's programme on the basis of:
 - financial support through a FP6 Specific Support Action (SSA)
 - the inclusion of SSRA-based priorities in calls of the FP7 KBBE theme
- National, regional and web consultations
- Strategic Research Agenda published, September 2007,
- Implementation Plan, June 2008. Published, October 2008.
- ETP Stakeholders event on March 2010



Source: "Food for Life" SRA 2007-2020

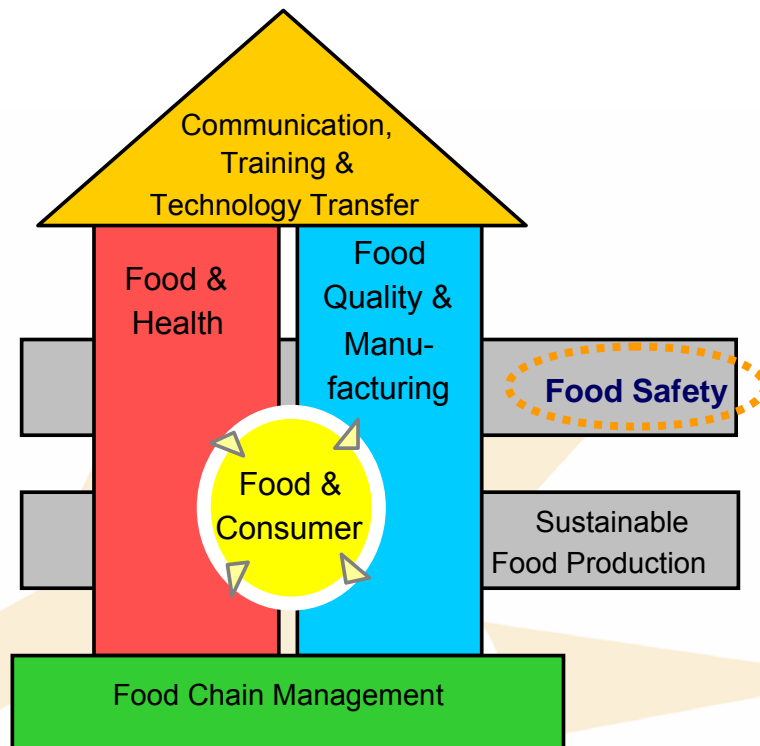
Achievements

- Influencing the priorities for research under the Food, Agriculture and Fisheries, and Biotechnology theme of the Cooperation pillar of Framework Programme 7 (FP7)
 - 90% of SRA-based priorities included in 2009 and 2010 Work Programmes
 - Submission of project proposals which reflect IAP research challenges
- European Commission's High Level Group recognised importance of the ETP in 2009
- Joint Programming: Recognition of specific F4L priorities as "Food health & wellbeing" & "Sustainable food production"
- Mobilisation of stakeholder community
- Establishment of **35** National Food Technology Platforms



Core Research Challenges addressed in the Strategic Research Agenda (SRA- 2007)

1. Ensuring that the healthy choice is the easy choice for consumers
2. Delivering a healthier diet
3. Delivering quality food products
4. Assuring safe foods that consumers can trust
5. Achieving sustainable food production
6. Managing the food chain



Core Research Challenges addressed in the Implementation Action Plan (IAP- 2008)



Improve health, well-being and longevity

New products, processes and tools which.....



Build consumer trust in the food chain



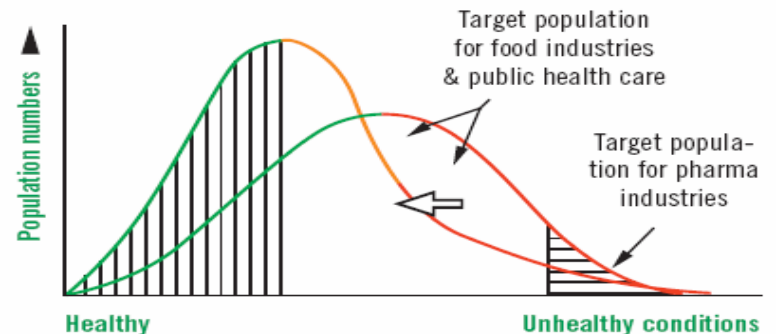
Sustainable and ethical production

Priority research challenges

- Optimal development, wellness and ageing,
- Intestinal health and immune functions, and
- Weight management and obesity.

Key Thrust 1: Improve health, wellbeing & longevity

Expected RESULT: Add Life to Years!



IAP - Key Thrust 1: Improving health, wellbeing and longevity

Scope

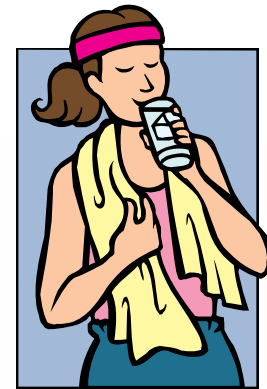
Describe research requirements in key areas of consumer, nutrition and food sciences, to improve health, wellbeing and longevity

Priority research challenges

- Optimal development, wellness and ageing,
- Intestinal health and immune functions, and
- Weight management and obesity.

What progress needs to be made

- Better understanding to assess
 - Consumption patterns
 - Sustainability of various foodchains
 - Establishment of nutrition related infra structures
 - Development of enabling technologies



Expected RESULT: Add years to Life!

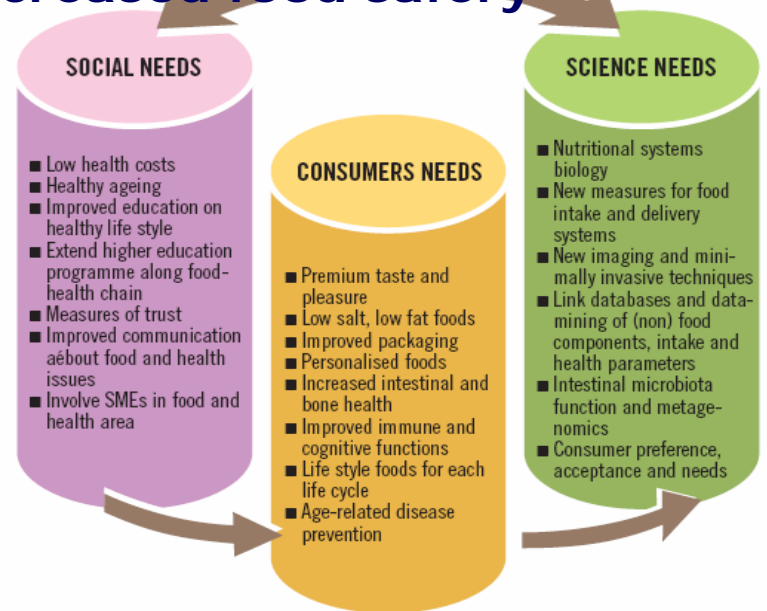


Priority research challenges

- Evaluation of risks-versus-benefits
- System innovation methodologies in the food production chain
- Consumer studies

Key Thrust 2: Build consumer trust in the food chain

Expected RESULT: Increased trust in the food and drink industry thus increased food safety



IAP - Key Thrust 2: Build consumer trust in the food chain



Scope

Development of an integrated and holistic approach to food quality, innovation and food safety, taking the complete food chain into consideration. An effective response requires the integration of the know-how and interventions along the « research to market » continuum.

Priority research challenges

- Evaluation of risks-versus-benefits
- System innovation methodologies in the food production chain
- Consumer studies

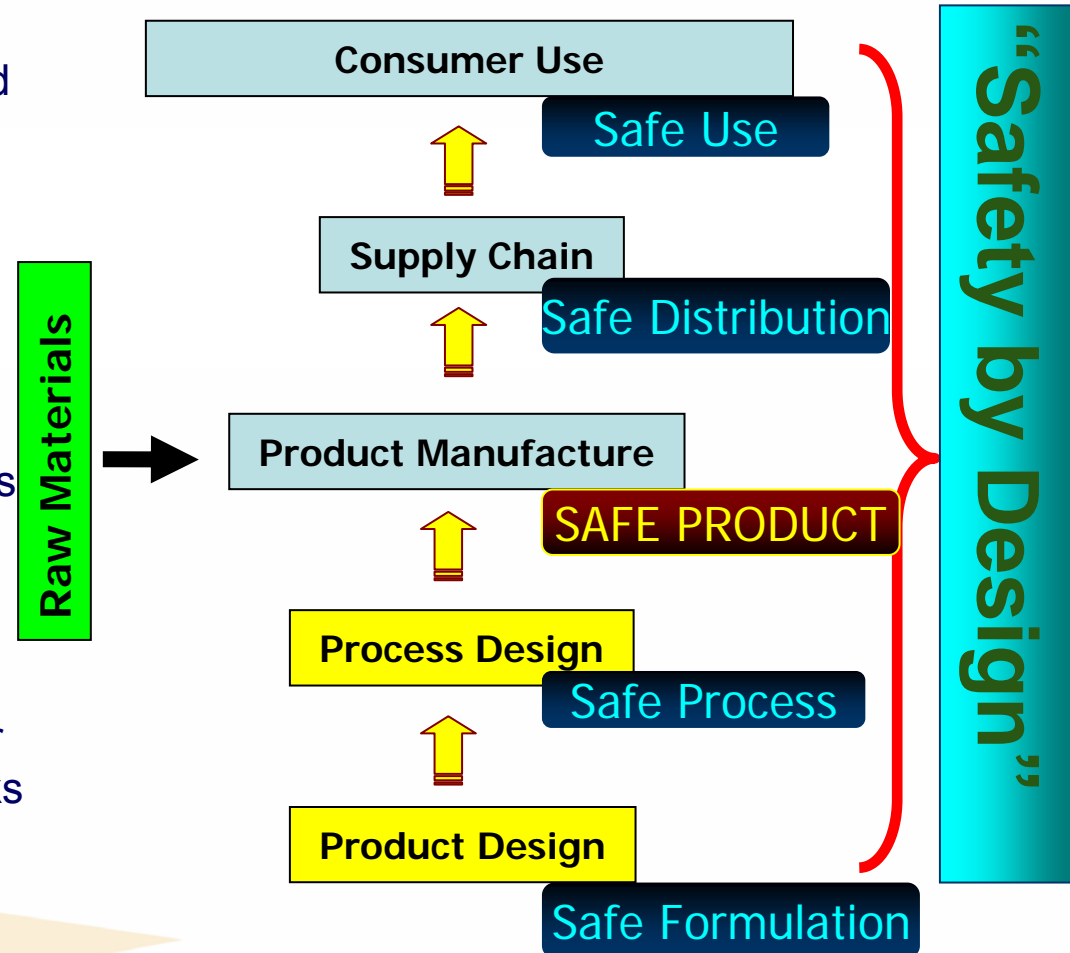


Expected RESULT: Increased trust in the food and drink Industry



Food Safety by design; three lines

- Improved understanding of hazards in the food chain, e.g.
 - the knowledge base needed to support the rational application of control measures and
 - the development of new methods and systems,
- Tools to further secure the food chain, e.g.
 - the development of methods and technologies for continuously improving the safe production and supply of foods.
- Understanding the human factor
 - consumer perception of risks and the need for communication



Food Safety



Assuring safe foods that consumers can trust

- Predicting and monitoring the behaviour and fate of relevant known and emerging biological hazards
- Predicting and monitoring the behaviour and fate of relevant known and emerging chemical hazards including toxins of biological origin
- Improving risk assessment and risk-benefit evaluation
- Developing tools to ensure security of the food chain
- Understanding and addressing consumer concerns with food safety issues

What progress needs to be made?

- Use industrial and pilot scale facilities to test technologies under real or almost-real conditions
- Seek better understanding the relationship between hazards and risks
- Development of innovative measurement tools and new approaches for data analysis for the prediction of hazards
- Engagement with consumers to help them to make informed choices

Expected RESULT: Reduced use of resources, increased efficiency and better governance



Key Thrust 3: Sustainable & ethical production

Priority Research Challenges

- Analysis of sustainability of food products (lack of science-based methodologies)
- Develop opportunities to improve sustainability; develop scenario technologies
- Food system efficiency and effectiveness, improvement potentials for technical and managerial solutions at each step of the food chain



IAP - Key Thrust 3: Sustainable & ethical production



Scope

Improve research focusing on the sustainability of the food chain by taking into consideration the sector's economic and non-economic environment, changes in lifestyles and consumer needs, as well as structural problems with many SMEs.

Priority Research Challenges

- Analysis of sustainability of food products (lack of science-based methods)
- Develop opportunities to improve sustainability; develop scenario technologies
- Food system efficiency and effectiveness, improvement potentials for technological managerial solutions at each step of the food chain



What progress needs to be made

- Better understanding of how to assess sustainability of the various food chain and consumption patterns
- Improve understanding on how to communicate information about more sustainable solutions to consumers and other stakeholder communities

Expected RESULT: Reduced use of resources, increased efficiency and better governance

NTPs: think locally, act globally!

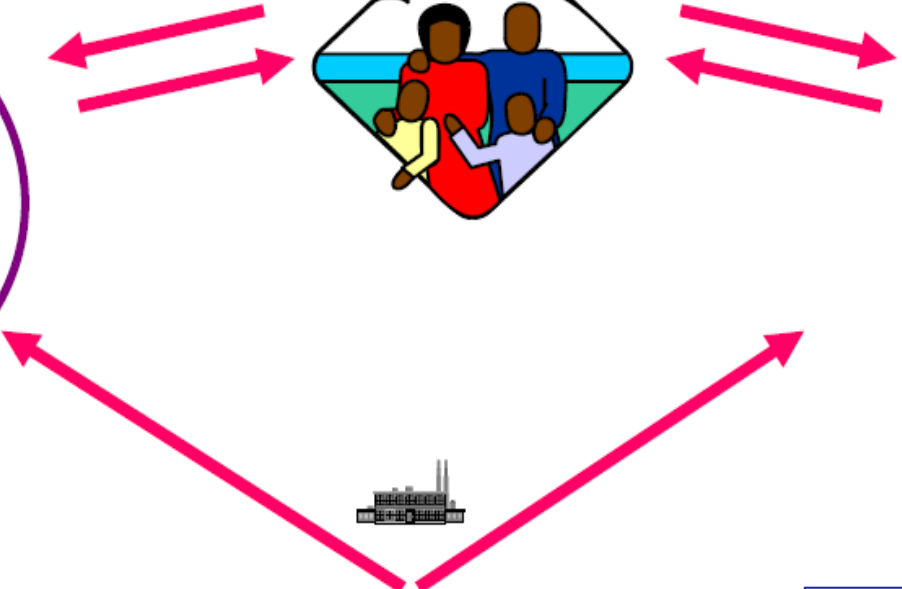


THE EUROPEAN KNOWLEDGE-BASED BIOECONOMY

NUTRITION (nutrigenomics) - PATHOGENS
CONTAMINANTS - ALLERGENS

CONSUMER CHOICE

STABILITY - BIODEGRADABILITY
FUNCTIONALITY (Chirality)



TRACEABILITY SYSTEMS
ADVANCED FOOD TECHNOLOGIES

PROCESSING

WHITE BIOTECH
CLEAN BIOPROCESSES
RAW MATERIALS/WASTE



LOW INPUT FARMING - BIODIVERSITY
ANIMAL HEALTH - RURAL DEVT.

PRODUCTION

GREEN / BLUE BIOTECH
OPTIMISED RAW MATERIALS



Networking with other ETPs

- With the aim to develop a strong bio economy in Europe, ensure networking with other Technology Platforms, such as:
 - BEcoTePs : « The Bio-Economy Technology Platforms join forces to address synergies and gaps between their Strategic Research Agendas »



Improving the competitiveness of the F&D Industry: High Level Group Recommendations (1)

- Identified priorities for the creation of framework conditions to generate stronger and more sustained growth are amongst others:
 - Design an environmental and sustainable industrial policy
 - Efficient authorisation procedures for novel foods
 - Better support for SMEs
 - Better access to finance

Improving the competitiveness of the F&D Industry: High Level Group Recommendations (2)

- Simplify access to funding research programmes:
 - Make better use of some of the FP7 funded projects which support technology transfer
 - Dissemination of results, such as High-Tech Europe as of 1st May 2009
 - Increase awareness of existing projects aimed at facilitating technology transfer to SMEs
 - Feed the research needs gained from European and national technology platforms into the European policy level.

Conclusions: What is the Aim of the ETP « Food for Life » in all this? (1)



- Use the ETP concept as a tool to improve the competitiveness of the European Food industry by:
 - Promoting R & D as a tool to improve innovation
 - Aligning academic knowledge with industry needs
- Increase / Coordinate R&D spending with the aim to match Europe 2020 goals by:
 - Increasing the quantity/quality and the speed of innovation
- Optimise knowledge capture and dissemination of knowledge towards SME's
- Identify the right stakeholders and organise collaboration
- Attract the right personnel and sustain careers, for example by creating a European Academy for Innovation (Technology and Innovation Institute)
- Engage consumers in dialogue
- Play a leading role to improve the KBBE Concept

Conclusions : What is the Aim of the ETP « Food for Life » in all this? (2)



- Establish the policy concepts/contacts to contribute to:
 - Linking different research areas, e.g. nutrition, agriculture, environment, health and consumer protection
 - Encouraging public private partnerships
 - Preventing unnecessary duplication of research efforts
 - Drive Research to fill knowledge gaps via the Joint Programming Initiative
 - Facilitating the use of national funding to complement European funding
 - Using the ETP Strategic Research Agenda to feed into the 8th Framework Programme
 - Facilitating the involvement of SMEs and create special conditions for their involvement
 - Encouraging R & D by creating the right incentives, such as creating a legal framework facilitating bringing products to the market

Thank you for your attention

