Food for Life Switzerland
Strategic Research Agenda
2009 - 2020
Food for Life Switzerland
Strategic Research Agenda
2009-2020

The food value chain –
an important pillar of the Swiss national economy

Traditional food

High-tech products, processes, services

Sustainable growth based on competitiveness and consumer confidence

Sustainable food chain

Food for a healthy lifestyle

Food with a high level of safety

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1. The Swiss agricultural and food sector

1.1 National economic significance

In order to ensure the long-term prosperity of Switzerland, the opportunities created by economic and technological globalisation must be used to optimum effect. The Swiss Federal Council’s strategy for growth includes the increased integration of Switzerland into the world markets. The Swiss agricultural and food sector is not as well integrated into world markets, especially the European internal market, as the industrial sector, but it is of great significance to the Swiss national economy. (Source: Federal Statistical Office, figures for 2005):

- 2,138 businesses (98% SMEs) (food and drink manufacturers)
- 61,740 employees
- Turnover in excess of CHF 24,414 million
- 5.3% of GDP
- An increasing export share of 22.1%

The very high proportion of small companies is significant for regional development. The large power of demand from two major distributors who make up approx. 80% of the market is also unique worldwide.

In 2007, 71% of Swiss exports of agricultural products and food (CHF 4.6 billion) were to the EU, while 76% of imports (CHF 8.6 billion) were from the EU. Between 2003 and 2007 the agricultural volume of trade with the EU grew by an average of 9.4%. Although Swiss imports during this period only increased moderately, at a rate of 6.4% per annum, exports to the EU showed an increase of 16.5% per annum. The Swiss agricultural and food sector therefore developed a greater emphasis on exports. The constant expansion of Swiss exports leads to the conclusion that there is still a considerable potential for expansion in bilateral trade with the EU (1).

Most Swiss food businesses of an industrial nature are members of the FIAL, the Federation of the Swiss Food Industries. According to the most recent FIAL statistics the 191 member businesses with 33,267 employees generated a total turnover in 2007 of CHF 17,216 million, of which 18% (CHF 3,021 million) was from exports.

Diagram: Export trends for important food types (data from the Swiss Federal Statistical Office)

- Chocolate and other cocoa-based food preparations.
- Water, including mineral water and carbonated water, with added sugar, sweeteners and flavourings, and other non-alcoholic drinks (except for fruit and vegetable juices and milk).
- Cheese and curd cheese.
- Wine from fresh grapes, including fortified wines; grape must, partially fermented or fortified with alcohol, with an alcohol content of > 0.5% vol.
- Coffee, including roasted or decaffeinated; coffee shells and coffee husks; coffee substitutes with any coffee content.
1. The Swiss agricultural and food sector

1.2 Taking the Swiss food industry into Europe

Food markets are becoming ever more international and the competition is continually intensifying. The aim of the Swiss food industry must be to maintain its market share within Switzerland, while growing by tapping into new export markets in ever more numerous product areas. To this end the Swiss Federal Council has passed a mandate for negotiations with the EU for a free trade agreement in the agricultural and food sector and, in connection with this, an agreement on public health. At the same time, the Federal Department of Economic Affairs has established an «Accompanying Measures Working Group». This group is to compile a report by June 2009 proposing the primary measures to support the repositioning of the agricultural production sector and strengthen the competitiveness of the whole food value chain compared with the EU (2). The accompanying measures will also take into consideration the promotion of innovation, as competitiveness on the markets both at home and abroad requires a high level of innovative thinking. To this end the Federal Government could provide the food industry with additional resources for the promotion of innovation for a limited period through the Swiss Innovation Promotion Agency (CTI) (1).

As only 20-30% of price differences in the food sector relate to higher prices for agricultural raw materials, free trade will also exert pressure on prices in the upstream and downstream stages. The focus is therefore on the agricultural procurement market and the initial processing stages (1).

The Swiss SMEs know their national markets and the expectations of Swiss consumers very well, but when it comes to exporting their products they face a number of problems. The lack of familiarity with foreign markets is currently a substantial barrier for these SMEs, and the effort required by companies if they are to compensate with exports for any losses in the national market sectors is very high. It therefore follows that any measures enabling SMEs to get to know these potential markets better would be welcome in the present context.

1.3 Swissness brings international success to Swiss companies

The reputation of Switzerland is above average. It is based on quality, originality and trustworthiness – values, which are becoming ever more important in a food market where emotional responses are a contributory factor (2).

According to the «Swissness Worldwide» study (2008) by the Institute for Marketing and Retailing at the University of St. Gallen (3), Swiss products and services enjoy an excellent reputation worldwide. No other comparable country’s products were perceived in such a positive light as those of Switzerland. They are deemed particularly reliable, high quality and luxurious, and are associated with accordingly higher prices, with the price being considered an indicator of product quality.

The perception of Swiss products and services has improved more or less across the board in recent years. Innovation in particular is perceived as improved. A contrary development has been found in the food sector (with the exception of chocolate and cheese), which is now perceived as less Swiss than it was a few years ago. However, the effect of Swissness can only generate real additional benefits if used properly. Companies should therefore look carefully at these benefits before using the designation of origin. Swiss products represent tradition, reliability, top quality and exclusivity/luxury. These values no longer need to be explicitly communicated; they are understood. Other values connected with many Swiss products, such as innovation, technology, trendiness or ecological benefits, are perceived to a lesser extent. They should therefore be given greater emphasis in communication in order to help both the product brand and the brand of Switzerland to present themselves on the markets in a more modern light.

The number of consumers of Swiss products in the mid-range price sector is decreasing. On the other hand, the bottom and top price sectors show an increase. In other areas the Swiss economy has succeeded in capturing the high price sectors. There is no reason why the food industry should not also succeed in this (2).
1. The Swiss agricultural and food sector

1.4 Professional qualifications of employees in food processing businesses

When considering the development of products and technologies with high added value, the professional qualifications of employees are a critical factor, and this requirement may be a limiting factor in the attainment of the objectives set. Forced to position themselves increasingly in the high-added-value product sector, Swiss food processing companies therefore need to recruit, or be in a position to be able to recruit, staff with the required professional training and qualifications at each hierarchical level. In order to do this the food processing sector should nurture its image to ensure that it is and continues to be an attractive employer for young graduates. The food processing sector should also enter into partnerships with educational institutes (professional training colleges, universities of applied sciences, universities/Federal Institutes of Technology), thus ensuring that graduate profiles are suited to the prime needs of the economy and the challenges faced by businesses on a daily basis. Human resources are a company’s most valuable asset. It is the quality of its employees that enables a company to position itself in the long term in markets that are subject to ever increasing competition.

2. Innovation: the road to success

An increasingly significant deciding factor for the success of the food sector is to modify the product portfolios to increase the proportion of innovative products. New products ensure a higher organic growth and better margins and, due to a higher perception of benefit, have a lower price elasticity of demand. The growth and profitability profile of the company is also increased. The Swiss market is often too small to make larger investments in innovation profitable. Exports are the solution! The imminent liberalisation will create new access to major markets, thus opening up new opportunities for innovation. Innovation is a major consideration, as it requires vision, together with the necessary resources for implementation.

As it is only market success that determines true innovation, it is necessary to ascertain consumer requirements as the starting point for development. Innovation requires skills, infrastructures and financial resources, which are in limited supply. The Swiss Food Research R&D consortium (www.foodresearch.ch) creates simple, fast access to the most competent specialists, the best possible infrastructure (pilot plants and lab facilities) and financial support from the relevant grant sources.

Open innovation is becoming an ever more important factor for success. For many companies the time is past when they could develop everything themselves. This trend is also affecting the food sector. A study by IBM Global Business Services clearly shows that the companies with the strongest competitive positions are much more open to ideas and research resources from outside than companies that are less competitive. Procter & Gamble confirm that more than 45% of their new products have been developed in cooperation with external partners. In this context Swiss Food Research is one of the key partners in an «Open Innovation» strategy.
Numerous industrial sectors have formulated their visions and strategic research agendas under the auspices of the European Technology Platforms (ETP). The ETP for the food sector is called «Food for Life». The platform was formed in July 2005 and consists of an economical and scientific network initiated by 16 core members of the EU under the leadership of the Confederation of the Food and Drink Industries of the EU (CIAA). The aim of the platform is to draw up an agenda with long-term research and development objectives. A variety of different partners are involved in the technology platform, including companies, researchers, professional associations and management organisations from all over Europe. Cooperation of this kind is a sound basis for strengthening the European food industry while ensuring the quality and health of the products. «Food for Life» has developed a «2020 and beyond» vision, which forms the basis for a strategic research agenda for 2007-2020 (4) and the production of concrete implementation plans (http://etp.ciaa.be).

Vision of the European Technology Platform on Food for Life

An effective integration of strategically-focussed, trans-national, concerted research in the nutritional-, food- and consumer sciences and food chain management will deliver innovative, novel and improved food products for, and to, national, regional and global markets in line with consumer needs and expectations. These products, together with recommended changes in dietary regimes and lifestyles, will have a positive impact on public health and overall quality of life (‘adding life to years’). Such targeted activities will support a successful and competitive pan-European agro-food industry having global business leadership securely based on economic growth, technology transfer, sustainable food production and consumer confidence.

Envisaged benefits for companies

- Improvement of competitiveness
- Influence on strategies and research agendas in the Seventh Research Programme of the EU (SME involvement, content)
- Objective-oriented research and outcomes
- Increased usefulness of research results
- Joint presence – joint positioning – representation of interests
3. The strategic research agenda of the European food sector

3.1 National platforms for country-specific requirements

The European vision and resultant Strategic Research Agenda also provide the basis for national research programmes and training and continuing education activities. Since more than 95% of financial support for research still comes from national sources, it is also very important to coordinate these activities. Every country will therefore be asked as part of the European Strategic Research Agenda to define its specific national requirements and incorporate these in research promotion measures at both European and national levels.

Swiss Food Research (www.foodresearch.ch) is a national research and innovation consortium. It brings together the main bodies (R&D institutions) involved in research and innovation in the food processing industry, and those who use it (food processing companies and the industrial suppliers that are associated with this sector). Its objective is to assist companies in the food processing sector to innovate and therefore improve their competitiveness.

This structure, established in 2008, therefore forms the ideal host for the national «Food for Life Switzerland» platform. It is in this capacity that Swiss Food Research has coordinated and undertaken the work required for the establishment of the national «Food for Life Switzerland» platform and the production of the current strategic research agenda.

4. The strategic research agenda of the national «Food for Life Switzerland» platform

A strategic research agenda 2009-2020 has been developed on the basis of the Vision 2020 policy.

Vision 2020

The Swiss food value chain is competitive and generates continuous, sustainable growth which is in excess of any losses in market share on the home market.

Swiss food products enjoy a high level of confidence from both the trade and consumers at home and abroad.

The strategic research agenda pursues objectives on two levels:

1. Strategic basis for the national promotion of innovation

In this context, the strategic research agenda is intended as a strategic consultation document, generating innovative projects which respond to market expectations and thus improving the competitiveness of our companies. The strategic research agenda is positioned upstream of the programmes and measures implemented by the Swiss Confederation to support innovation, such as the CTI, the SATW Transferkolleg on «Food Processing» and activities resulting from support measures aimed at progressively opening up markets. The research topics proposed as part of each action line are of a general and precompetitive nature. They are intended as aspects for consideration and stimulation, to be made available to all companies and research institutions as part of their positioning and development strategies.

2. The adoption of matters of concern to Switzerland in the European Research Programmes (including FP-7).

The Seventh Framework Research Programme is being undertaken on the basis of calls for projects on topics defined in advance by competent bodies of the European Union (top-down approach). It is therefore with the aim of fuelling the proposition channels that the content of this strategic research agenda is brought to the attention of the decision-making bodies via the European «Food for Life» platform.
The strategic research agenda is firmly based on exploration and analysis, as undertaken prior to the negotiations between Switzerland and the EU for a free trade agreement in the agriculture and food sector (1). The main objective of Swiss agricultural and food companies is to maintain their market share at a national level in a competitive, open and balanced context. Reinforcement of exports is the second most important objective of these companies. In the export sector the future opportunities for the Swiss food sector lie in particular in the marketing of high-quality products. The market sections involved are relatively small – measured against the overall EU market – and a certain amount of time and money is needed to tap them (communications, listing fees for the retail trade, etc.). The industry sees its major opportunities in the affluent conurbations surrounding Switzerland (Lyon, Milan, Turin, Stuttgart, Munich), but potential is also to be found in the emerging new EU countries (1). Internationally established companies have large global opportunities, in particular in the newly industrialised countries.

The European Food Trends Report (5) has put forward some important theories on the eating patterns of tomorrow, which have been incorporated in the considerations for the Strategic Research Agenda:

- New shortages will push agriculture back into the focus of public interest.
- Increasing numbers of consumers will become more critical and value-conscious in their purchases and take greater interest in the origins and production conditions of their food.
- Quality products sourced regionally or produced organically will continue to boom, but they should not remain the exclusive preserve of wealthy consumers.
- With regard to health and wellbeing, producers are being given the opportunity for an approach more closely targeted towards the individual requirements and interests of specific target groups.

The authors conclude that the most successful suppliers will be those whom consumers fully trust. The most important areas of innovation are not within a business, but between businesses: in new forms of cooperation between agriculture, the food industry, the retail trade and the catering trade.

These theories are in line with the conclusions from the Dialogue on Food, Health & Society of 29 to 30 September 2008 in Rüschlikon (6). However, the present Strategic Research Agenda cannot cover all these aspects, but is focused on those areas of research that are essential to achieve the Vision.

The Strategic Research Agenda for Switzerland is focused on five action lines:

- **Action line 1:** Traditional food
  Adaptation of existing specialities to the requirements of the national/international market, while taking care to retain their typical character.

- **Action line 2:** High-tech products, processes and services
  Attaining a leading technological position in certain defined areas.

- **Action line 3:** Food for a healthy lifestyle
  Offering specific customer sectors appropriate food with the clear aim of ensuring that the easy choice is the healthy one for consumers.

- **Action line 4:** Food with a high level of safety
  Further development of food safety with an eye on the future and the finding of fast solutions in crisis situations, thus ensuring consumer confidence.

- **Action line 5:** Sustainable food chain
  Optimisation of the food value chain in terms of sustainability and «internal added value». 
The most important objectives

► Control and further development of good production practices for the main traditional foods, with regard to the requirements of the national/international market (food safety, standardisation, sensory perception, health, environmental aspects, cost reduction by process innovation).

► Determination and weighting of consumers’ evaluation criteria with regard to Swissness (including PAN analysis: Preference/Acceptance/Need), for selected products and market sectors. Definition of the requirements of products, packaging and services on the basis of the selected evaluation criteria.

► Provision of methods for practical applications for providing evidence of origin, ensuring traceability and strengthening the authenticity of products.

► Optimum satisfaction of customer (consumer) requirements by means of the flow of information and close cooperation between raw materials production (including agriculture) and food processing/distribution.

► Tangibility for customers (processors, trade, consumers) of the notion of Swissness, synonymous with quality and reliability.

Research topics

► PAN (Preference/Acceptance/Need) and conjoint analyses (willingness to pay) for traditional Swiss food products. Transparency in food pricing.

► Development of adequate research methods for the measurement of consumers’ attitude to food (Preference & Acceptance as commonly understood in a PAN approach) in a more ecologically appropriate way (e.g. level of implicit learning, memory and expectations instead of explicit hedonic tests).

► Swissness and market preference & acceptance: key characteristics that are leading consumer choices for a given food product.

► Increasing the value of local and regional raw materials, ingredients, products and processes. Utilisation and enhancement of traditional crops and livestock.

► Process development or adaptation to ensure better food safety and quality while minimizing the impact on their characteristics (organoleptic, nutritional…), including curing, packaging and storage.

► Development and maintenance of starter cultures maintaining high biodiversity (strains of technological interest) by defining strain selection procedures and criteria, evaluating the impact of indigenous strains present in foods (organoleptic, quality, typicity, authenticity…).

► Development of food products based on old local/traditional recipes to fulfil the needs of national and international food markets.

► Determination of discriminating markers and development of adequate analytical methods to characterise a product (origin/authenticity, raw materials, production system – e.g. organic or non-organic – processing technology) and identification of possible frauds.

► Limitation of product quality variations in practice by factorial analyses and drawing up recommendations for food producers and food processors.
Action line 2: **High-tech products, processes and services**

> Attaining a leading technological position in certain defined areas

**The most important objectives**

- Definition of technologies in which Switzerland has a leading role, or may do so in the medium term (biotechnology, nano science, nutrigenomics, etc.). Promising potential for success will arise at the interface with areas in which Switzerland is already considered a world leader (e.g. diagnostics, electronics, ICT, etc.)

- Evaluation of the possible applications of these technologies in the food sector for their opportunities and risks. Drawing up the scientific bases for credible communications (consumer acceptance).

- Development and implementation of promising processes, products and services. SMEs will also be in a position to profit from this promising growth sector.

- Optimisation of services in the context of consumer interaction, e.g. using ICT (web services, RFID, mobile tagging, etc.)

- Drug delivery based product development strategy for functional and clinical foods.

- Stabilisation, controlled liberation and bioavailability of functional ingredients.

- New formulation technologies (extrusion, coating, agglomeration, encapsulation, etc.) for increasing the functional properties of food products.

- Complementation of classical nutrition research with modern tools of molecular nutrition, including omics technologies (nutrigenomics), genetics (nutrigenetics), and epigenetics (nutriepigenetics) in order to promote a comprehensive understanding of the interaction between nutrients and the human organism. This approach should aim at developing new foods or dietary strategies that will promote health and/or prevent the development of diseases in the overall population, in population groups, or in individuals. These nutritional interventions should demonstrate clinical utility.

- Establish a Swiss platform aimed at supporting SMEs for the selection of microbial organisms that specifically transform food to produce nutrients with the relevant physiological, nutritional, and sensory properties. This platform should make use of modern tools in life science (genomics, metabolomics, etc.) to promote the use of microbes, in particular lactic acid bacteria, as bio-technological factories for the production of value-added food.

- GMO crops with sustainable added values.

- Use of information and modelling methods for techno-economic process control.

- Development of functional foods aiming at modifying gene expression.

- Development of analytical methods for the specific detection of well known polymorphism as the basis for the development of personalised nutrition.

- Adding value to food products by providing consumer services (e.g. Web services) using ICT.

**Research topics**

- Technology (GMOs, nutrigenomics, nanoscience...) acceptability determinants.

- Food matrix design through reverse engineering: microstructure of food, bioavailability of essential ingredients.

- Nanotechnology and nanoscience in food, nutrition and health. Nano-structured packaging materials and food-processing surfaces.
**Action line 3: Food for a healthy lifestyle**

Offering specific customer sectors appropriate food with the clear aim of ensuring that the easy choice is the healthy one for consumers.

The most important objectives

- Offering specific customer sectors (risk groups, physical and mental activity, philosophies of life, genetic dispositions, etc.) appropriate food with added value in terms of health on the basis of a PAN analysis.
- Ensuring that natural properties which have a positive effect on health can be retained during processing, storage and preparation.
- Development of convenience foods and fast foods which offer varied, balanced nutrition.
- Awareness of what has to be done to ensure that the easy choice for consumers is the healthy one.
- Ensuring that the law on food products enables the effective development and introduction to the market of practical foodstuffs, while protecting the health of consumers.
- Validation of positive or deleterious effects of various diet types on wellbeing and health.
- Identification of food components alleviating chronic low-grade inflammation as a strategy to prevent the development of chronic diseases with inflammatory components (cancer, cardiovascular diseases, obesity, etc.).
- Evaluation of food ingredients reducing bone loss in the elderly, preventing the development of metabolic syndrome in the overweight, or targeting risk factors associated with cardiovascular disease.
- Influence of the intestinal flora on metabolism and immune disorders. Identification of food components, e.g. prebiotics and probiotics, that selectively induce the formation and maintain of a health-promoting microflora. Identification of strategic vectors, e.g. dairy products, for carrying health-promoting nutrients and bacteria to the gastrointestinal tract.
- Link research projects and nutritional claims in relation to legislation and consumer expectations.
- Healthy convenience food and fast food product development: easy to handle, pre-prepared, ready-to-use foods at home and for restaurants.
- Design of new concepts of functional food products with defined characteristics (impact on intrinsic added values, pro- and prebiotics).
- Impact of minimal processing on the sensorial and nutritional quality of food.
- Redesign and improvement of commercialised food products based on a PAN approach.
- How should the consumer environment be designed to facilitate healthy food consumption at all times?

Research topics

- Improvement of knowledge on specific consumption patterns and diets. Food products for personalised nutrition.
- Food preference and behaviour development studies over the entire life span (babies, children, adults, elderly people). Development of innovative methodologies for nutritional quality evaluation.
- Consideration of food products / food matrix (incl. processing) in terms of their complexity and their influence on the risk-benefit situation.
Action line 4: Food with a high level of safety

Further development of food safety with an eye on the future and the finding of fast solutions in crisis situations, thus ensuring consumer confidence

The most important objectives

- Recognition and evaluation of potential risks at an early stage. Proactive development of food safety.
- Finding solutions quickly in crisis situations, thus ensuring consumer confidence. Establishment of effective communication between all those involved in the food chain, including the authorities and inspection institutions. Bringing a (virtual) «Swiss Food Safety & Quality Institute» to full functionality.
- Optimisation and perfection in terms of safety of production, storage and distribution procedures. Optimisation and implementation of traceability systems.
- Ensuring that Switzerland leads the way in the implementation of new requirements for food safety (international standards).
- Awareness of how consumer confidence can be strengthened by communication.

Research topics

- Consumer perception of risk, consumer behaviour and consumer confidence.
- Study of pathogenic and spoilage flora (bacteria, fungi, viruses). Development of starter cultures for the inhibition of pathogenic and spoilage flora.
- Suppression of transmission of antibiotic resistances.
- Chemical and immunochemical danger studies.
- Development of predictive and risk assessment methods and tools (both microbiological and toxicological risks and dangers) by both exposure models and safety and traceability management in a risk-benefit approach.
- Integration of comprehensive safety assessment (toxicology, side effects) into the development of new bio-active food. Development of comprehensive methods and guidelines to evaluate the risk-benefits of food.
- Prevention and management of food crises by integrating social, economic and environmental consequences.
- Integrity of the food chain including traceability. Safe livestock feed for safe food production.
- Validation of cleaning processes and of the hygienic design of food production lines.
**Action line 5: Sustainable food chain**

**Optimisation of the food value chain in terms of sustainability and «internal added value»**

### The most important objectives

- Ensuring availability of raw materials from Swiss agriculture (milk, meat etc.) at competitive prices, with fulfilment of «internal added value» criteria (nutritional value, ecology, animal husbandry, working conditions, etc.).

- Ensuring that energy is used efficiently in agriculture and food processing and that as little damage as possible is done to the environment. Ensuring that the legal constraints on production do not present an insurmountable handicap to companies’ competitiveness.

- Ensuring that Swiss food products enjoy a high level of confidence from both the trade and consumers in the target markets (physical and psychological proximity, etc.). Ensuring that the image of organic products is also compatible with that of industrial production methods that guarantee the quality and safety of the products.

- Establishing new ways of cooperation and communication between agriculture, the food industry, the retail trade and the catering trade.

- Implementation of a cluster approach to facilitate collaboration between SMEs and large enterprises in food research and innovation programmes.

- Intensification of collaboration with the agricultural sector to strengthen the quality and quantity of raw materials at controlled costs. Impact of raw materials on final food quality and «reverse engineering».

- Development of concepts for enhancing energy efficiency as well as waste prevention and management in the food production and distribution chain.

- Development of technologies to reduce the use of drinking water, energy, and non-renewable resources in food production.

- Food production systems (intensive/extensive) and their impact on food price and quality.

- Potential of the specific Swiss geographical features (Jura, Alps) resulting from future climatic changes.

- Factors influencing the marketing and sales strategies of Swiss SMEs in national and international markets.

- Redesign and optimisation of food production processes (production, preservation, storage, distribution) to make them more sustainable (e.g. lower energy consumption, less waste, better use/implementation of renewable energy sources), while at the same time maintaining the necessary product safety and quality levels.

- Increasing the value of the by-products of agriculture and the food industry.

- New methodologies (processes, biopreservation, ...) for food preservation.

- Development of biodegradable food packaging derived from food industry by-products and/or natural renewable sources, compatible with organic production and organic foods.

- Inventory and analysis of the impact of production constraints (environmental legislation, legislation on food products, etc.) on the productivity and competitiveness of Swiss food processing companies.
5. The organisation of «Food for Life Switzerland»

The national technology platform, «Food for Life Switzerland» is supported and run by Swiss Food Research. It is strategically managed by the FIAL President.

President
Rolf Schweiger

Swiss Food Research
• Management
• Economic Board
• Scientific Board

Action line 1
Traditional food

Action line 2
High-tech products, processes and services

Action line 3
Food for a healthy lifestyle

Action line 4
Food with a high level of safety

Action line 5
Sustainable food chain

Projects

6. Sources

1 Negotiations between Switzerland and the EU for a free trade agreement in the agricultural and food sector (FHAL): negotiations between Switzerland and the EU for an agreement on public health (GesA); results of the explorations and analyses. Federal Department of Home Affairs (EDI). March 2008.


7. Liens

Food for Life: http://etp.ciaa.be
Food for Life Switzerland: www.foodforlife-switzerland.ch
FIAL: www.fial.ch
Swiss Food Research: www.foodresearch.ch
8. Acknowledgement

The Strategic Research Agenda of the national technology platform «Food for Life Switzerland» is the result of a fruitful collaboration between the different Swiss Food Research members. I would like to thank the management of Swiss Food Research, the members of the Economic and Scientific Boards of Swiss Food Research for their valuable work. Last but not least, I would like to express my warm thanks to the numerous Swiss food companies for their substantial contribution to this important document.

Rolf Schweiger
FIAL Chairman
and President Food for Life Switzerland

9. Annexes: Organisation of Swiss Food Research

Swiss Food Research is an Association according to the articles 60 and the following of the Swiss Civil Code.

Member Institutions

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<th>Organisation</th>
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<tr>
<td>ETH: Eidgenössische Technische Hochschule, Departement Agrar- und Lebensmittelwissenschaft, Zürich</td>
<td>Leo Meile</td>
</tr>
<tr>
<td>HES-SO Valais: Institut Life Technologies, Sion</td>
<td>Jean-Claude Villettaz</td>
</tr>
<tr>
<td>ZHAW: Zürcher Hochschule für Angewandte Wissenschaften, Departement Life Sciences &amp; Facility Management, Wädenswil</td>
<td>Michael Kleinert</td>
</tr>
<tr>
<td>SHL: Schweizerische Hochschule für Landwirtschaft, Food Science &amp; Management, Zollikofen</td>
<td>Magdalena Schindler</td>
</tr>
<tr>
<td>HEIG-VD: Laboratoire Emballage &amp; Conditionnement de la Haute école d’Ingénierie et de Gestion du Canton de Vaud, Yverdon</td>
<td>Didier Louvier</td>
</tr>
<tr>
<td>EIC: filière Œnologie de l’Ecole d’ingénieurs de Changins</td>
<td>André Rawyler</td>
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<td>Agroscope: Landwirtschaftliche Forschungsanstalten</td>
<td>Hans-Peter Bachmann</td>
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<tr>
<td>FIAL: Föderation der schweizerischen Nahrungsmittelindustrien, Bern</td>
<td>Beat Hodler</td>
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Operational Management

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### 9. Annexes: Organisation of Swiss Food Research

#### Economic Board

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<td>Peter Böhni</td>
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<td>Adolphe Fritschi</td>
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<td>Karl Gschwend</td>
<td>HOCHDORF Nutritec AG, Managing Director</td>
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<tr>
<td>Walter Huber</td>
<td>Federation of Migros Cooperatives FCM, Industry Department Manager</td>
</tr>
<tr>
<td>Peggy Schuhmann</td>
<td>SQTS - Swiss Quality Testing Services, Manager</td>
</tr>
<tr>
<td>Peter Schuler</td>
<td>DSM Nutritional Products Europe Ltd, Technical Marketing Human Nutrition &amp; Health</td>
</tr>
<tr>
<td>Franziska Troesch-Schnyder</td>
<td>Konsumentenforum kf (Consumer Forum), President</td>
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#### Scientific Board

<table>
<thead>
<tr>
<th>Institution</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilfried Andlauer</td>
<td>HES-SO Valais, Head of Unit Food Technology</td>
</tr>
<tr>
<td>Raphael Badoud</td>
<td>Nestlé Research Centre, Nestec Ltd, Manager of Competitive Scientific Information and Intelligence</td>
</tr>
<tr>
<td>Richard Hurrell</td>
<td>Institute of Food Science and Nutrition, ETH Zurich, Professor Human Nutrition</td>
</tr>
<tr>
<td>Michael Kleinert</td>
<td>ZHAW Life Sciences &amp; Facility Management, Head of Institute for food and Drink Innovation</td>
</tr>
<tr>
<td>Didier Louvier</td>
<td>Haute école d’Ingénierie et de Gestion du Canton de Vaud, Packaging and Processing Laboratory Director</td>
</tr>
<tr>
<td>Leo Meile</td>
<td>Institute of Food Science and Nutrition, ETH Zurich, Project Manager in Food Biotechnology</td>
</tr>
<tr>
<td>André Rawyler</td>
<td>Ecole d’ingénieurs de Changins, Oenology Assistant</td>
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<tr>
<td>Ernst H. Reimerdes</td>
<td>Deutsches Institut für Lebensmitteltechnik, Chairman of the Board</td>
</tr>
<tr>
<td>Daniel Reumiller</td>
<td>Schweizerische Hochschule für Landwirtschaft SHL, Food Science &amp; Management Course Head</td>
</tr>
<tr>
<td>Michael Siegrist</td>
<td>Institute for Environmental Decisions, ETH Zurich, Head of Consumer Behaviour</td>
</tr>
<tr>
<td>Guy Vergères</td>
<td>Forschungsanstalt Agroscope Liebefeld-Posieux ALP, Head of Biochemistry and Physiology</td>
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