BARBADOS PRIVATE SECTOR ASSOCIATION

BARBADOS PRIVATE SECTOR TRADE TEAM
A DIVISION OF THE BARBADOS PRIVATE SECTOR ASSOCIATION

EXPORTING TO THE EU

SECTOR STUDY

PROCESSED & SPECIALTY FOODS

Prepared for the Barbados Private Sector Association (BPSA) with the support of the IADB project "Building Capacity to increase exports"

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CHAPTER 1 INTRODUCTION

This report presents a sector study of the processed/ packaged food industry in the European Union (EU 27), with a special focus on the market prospects for Barbadian specialty food. It is intended to elaborate possible opportunities for building export capacity among Barbadian producers to access the EU market, within the context of the Economic Partnership Agreement (EPA). The research is sponsored by the Barbados Private Sector Association (BPSA), through the support of the Inter-American Development Bank and is part of a series of four projects that will strengthen the BPSA in its role as a key participant in public policy debates affecting private sector development; while increasing awareness of changes and challenges that confront the sector. These four component projects involve:

- Improving private sector development and competitiveness;
- Providing information on the challenges and opportunities of the EPA to business owners, managers and workers;
- Building capacity to increase exports; and
- Supporting the Institutional strengthening of the BPSA.

This report contains five Chapters. Chapter 1 provides an introduction to the EU Food and Drink industry with specific reference to the processed/ packaged food sector; including an overview of the size and scope of the Food and Drink industry and the key issues facing the sector. Chapter 2 outlines the various types of market requirements which producers may be required to meet, that is important quality standards and their certification, sanitary and phytosanitary (SPS) regulations and technical barriers to trade (TBT). Chapter 3 provides a summary of standards applicable to the export of processed food to the EU, across the value chain extending from primary production to retail environments. Chapter 4 identifies EU technical regulations for the processing, packaging and presentation of food. Chapter 5 provides a market study of the EU market for processed / packaged food. The report concludes with summary pointers on critical success factors for exporting to the EU, based on the information presented in the sector study.

This sector study is the product of rigorous research and cross referencing of multiple sources conducted over three months in mid 2012. While every attempt has been made to verify the published information as accurate at the time of writing, the environment is very dynamic and subject to frequent changes at short notice. Exporters are therefore advised to remain in close communication on these issues with potential buyers. The manual is not intended as a substitute for legal or marketing advice and no liability will be assumed by the BPSA or its authors arising from the use or interpretation of the information contained herein.

The European Food and Drink Industry

FoodDrinkEurope (www.fooddrinkeurope.eu), an umbrella association based in Brussels, represents the interests of some 300,000 manufacturing companies in the EU27 in the food and drink industry, which is a major component of the food chain, along with the agricultural production and distribution sectors. In its 2011 Annual Report, FoodDrinkEurope states that the food and drink industry in Europe is the largest manufacturing sector in the EU in terms of turnover and employment, boasting an annual turnover of

€956.2 billion (or 16% of the value of the manufacturing sector) and employing 4.1 million people (or about 14.6% of the total employment in the manufacturing sector) in 2010.

The association notes that the food and drink industry is a pillar of the EU economy. At the level of individual countries, this sector frequently features in the top three manufacturing activities in terms of sales. Germany, France, Italy, UK and Spain are the largest EU food and drink producers. At a regional level, it is a fragmented industry with about 274,000 companies, 99.1% of which are small and medium-sized enterprises (SMEs). It purchases and processes 70% of EU agricultural production and in 2010 exported €65.3 billion in food and drink products to third countries, contributing to a positive trade balance of around €9.8 billion; making the EU a net exporter of food and drink. Figure 1 shows some additional information on the EU Food and Drink Industry.

FIGURE 1: QUICK FACTS AND FIGURES ON THE EU FOOD & DRINK INDUSTRY- EUROPE'S LARGEST MANUFACTURING INDUSTRY

- SMEs account for 48.7% of the total turnover and 63.0% of the total employment in the sector. Medium-sized companies contribute to 27% of the turnover and employ 27% of the sector's workforce while representing only 4% of EU food and drink companies.
- The food and drink industry is driven by innovation and the EU accounted for 42% of all agri-food patent applications submitted worldwide in the period 1998- 2008. Within the EU, 2% of patents submitted in the manufacturing industry are from the food and drink industry. On average, increasing the quality and range of goods and services and expanding market shares are the top three objectives of innovating food companies. Estonia, followed by Finland and Germany, has the highest share of product innovation in the food industry. In most Member States, process innovation is surpassed by product innovation.
- Exports €65.3 billion in 2010 (an increase of 21.5% compared to 2009)
- Imports €55.5 billion in 2010 (an increase of 9.3% compared to 2009)
- Value added (2009 data) is 2% of EU GDP
- EU share in global exports: 17.8% (down from 20.4% in 2000)

Source: Food DrinkEurope, Annual Report 2011, http://www.fooddrinkeurope.eu/uploads/publications_documents/1527_FoodDrinkEurope_AR11

Given both the dominance and the sensitivity of the sector, significant advocacy and lobby efforts are in place on behalf of producers in the form of well organized and developed sector-specific associations. Figure 2 shows some examples. With over 500 million consumers as daily recipients of the sectors' output, safety, nutrition and affordability of products are major concerns; hence there are comparatively high levels of regulation. Barbadian producers seeking to enter the market can expect to face significant challenges in maintaining competitiveness and must therefore take a strategic approach to targeting niches in the market and view export development as a medium to long term prospect. The security of supply of adequate quantities of agricultural raw materials is a primary concern of Europe's food and drink industry. These materials are required to correspond to specific quality criteria, be

competitively priced and produced in a sustainable way. In addition to finished products, the consistent supply of inputs to various value chains is therefore a significant opportunity for Barbadian producers.

FIGURE 2: MAJOR ASSOCIATIONS OF THE EUROPEAN FOOD AND DRINK INDUSTRY

BEVERAGES

Beer
The Brewers of Europe
www.brewersofeurope.org

Bottled Waters
EFBW – European Federation of Bottled Water
www.efbw.eu

Fruit & Vegetable Juices
AIJN – European Fruit Juice Association
www.aijn.org

Soft Drinks
UNESDA – Union of European Soft Drinks Associations
www.unesda.org

Tea & Herbal Infusions
ETC - European Tea Committee
www.etc-online.org

EHIA - European Herbal Infusions Association
www.ehia-online.org

FRESH FOODS

Dairy Products
EDA – European Dairy Association
www.euromilk.org

Honey
FEEDM - European Federation of Honey Packers & Distributors
www.feedm.com

SPECIALTY FOODS

Broths & Soups
CULINARIA EUROPE – Federation of Associations and Enterprises of Industrial Culinary Product Producers in Europe
www.culinaria-europe.eu

Chocolate, Biscuits & Confectionery
CAOBISCO – Association of Chocolate, Biscuit and Confectionery Industries of the European Union
www.caobisco.com

Fruit & Vegetable Preserves
PROFEL – European Association of Fruit & Vegetable Processors
www.profel-europe.eu

Ice Cream
EUROGLACES – European Ice Cream Association
www.euroglaces.eu

Intermediate Products for Bakery & Confectionery
FEDIMA – Federation of EU Manufacturers and Suppliers of Ingredients to the Bakery, Confectionary and Patisserie Industries
www.fedima.org

Processed Meat
CLITRAVI – Liaison Centre for the Meat Processing Industry in the European Union
www.clivtravi.eu

Snacks
ESA – European Snacks Association
www.esa.org.uk

Source: Food DrinkEurope, Annual Report 2011

According to FoodDrinkEurope, 2011 saw the introduction of discriminatory taxes by some EU Member States on specific categories of foods under the pretext of fighting obesity. The association states that it is "strongly" opposed to these measures, "due to a lack of scientific evidence demonstrating their

effectiveness in bringing about positive behavioural change among consumers, both in terms of dietary choices and leading healthier lifestyles" (FoodDrinkEurope (2011), p.20).

Definitions

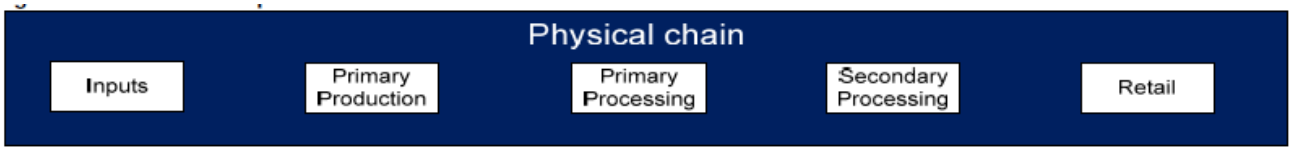
The Codex Alimentarius Commission, an intergovernmental body with more than 180 members, was established in 1963 by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) to develop food standards, guidelines and related texts such as codes of practice under the Joint FAO/WHO Food Standards Programme. The main purposes of this Programme are protecting health of global consumers and ensuring fair trade practices in the food trade, as well as promoting coordination of all food standards work undertaken by international governmental and non-governmental organizations. The Codex Alimentarius (Latin, meaning Food Code) is an evolving collection of internationally adopted food standards, guidelines, codes of practice and other recommendations, which has become the global reference point for consumers, food producers and processors, national food control agencies and the international food trade seeking to achieve the protection of public health and monitoring of fair practices in the food trade. The Codex Alimentarius has always relied on science-based activity. Experts and specialists in a wide range of disciplines have contributed to every aspect of the code to ensure that its standards withstand the most rigorous as scientific scrutiny. The Codex Alimentarius defines food "any substance, whether processed, semi-processed or raw, which is intended for human consumption", and "prepackaged" food as related substances which are "packaged or made up in advance in a container, ready for offer to the consumer, or for catering purposes" (FAO/WHO (2005), p.2). The terms processed, packaged and prepackaged foods are used interchangeably in this report; with accuracy in relation to the specific research sources from which the terms derive.

According to the United States based National Association for the Specialty Food Trade (NASFT), specialty food products are defined as:

> "…foods, beverages or confections meant for human use that are of the highest grade, style and/or quality in their category. Their specialty nature derives from a combination of some or all of the following qualities: their uniqueness, exotic origin, particular processing, design, limited supply, unusual application or use, extraordinary packaging or channel of distribution/sale, the common denominator of which is their unusually high quality" (NASFT,2012).

In recognizing the significant growth potential for specialty foods and individual market segments, the NASFT has identified 59 individual market segments as shown in Table 1 below. Figure 3 below shows the general value chain for specialty foods.

FIGURE 3: SIMPLIFIED PROCESSED AND SPECIALTY FOOD VALUE CHAIN



Source: George Morris Value Chain Management Centre, http://www.valuechains.ca/documents/Specialty%20Food%20VCA%20FINAL%20English%202011.pdf

TABLE 1: NASFT SPECIALTY FOOD SEGMENTS

- Baking Mixes, Supplies and Flours
- Beans, Grains and Rice
- Bread and Baked Goods
- Candy and Individual Snacks
- Carbonated Beverages
- Cheese and Cheese Alternatives
- Chips, Pretzels and Snacks
- Coffee, Coffee Substitutes and Cocoa
- Cold Cereals
- Condiments, Dressings and Marinades
- Conserves, Jams, Spreads
- Cookies and Snack Bars
- Crackers and Crispbreads
- Eggs
- Energy Bars
- Entrées and Mixes
- Frozen and Refrigerated Meat, Poultry and Seafood
- Frozen Appetizers and Snacks
- Frozen Breakfast Foods
- Frozen Desserts
- Frozen Fruits and Vegetables
- Frozen Juices and Beverages
- Frozen Lunch and Dinner Entrées
- Hot Cereals
- Milk: Organic, sheep, goat and small craft creameries
- Nut and Seed Butters
- Nuts, Seeds, Dried Fruits and Trail Mixes
- Oils and Vinegars
- Other Dairy and Alternatives
- Pickles, Peppers, Olives and Other Vegetables
- Pudding and Shelf-Stable Desserts
- Ready-to-Drink Tea and Coffee
- Refrigerated Condiments
- Refrigerated Juices and Functional Beverages
- Refrigerated Pasta
- Refrigerated Pasta and Pizza Sauce
- Refrigerated Salsas and Dips
- Rice Cakes
- Seasonings
- Shelf-Stable Fruits and Vegetables
- Shelf-Stable Functional Beverages
- Shelf-Stable Juices
- Shelf-Stable Meat, Poultry and Seafood
- Shelf-Stable Salsas and Dips
- Shelf-Stable Pasta and Pizza Sauce
- Shelf-Stable Pasta
- Soup
- Sweeteners
- Teas
- Water
- Yogurt and Kefir

Source: Specialty Food Magazine (2012)

CHAPTER 2 UNDERSTANDING MARKET REQUIREMENTS

General

EU market requirements can be legal requirements or non-legal requirements. Legal requirements, otherwise known as technical regulations are trending towards harmonization across EU states. Legal requirements represent the minimum requirements that products marketed in the EU must meet. Products that fail to meet these requirements are not allowed on the EU market. Non-legal requirements offer buyers and producers various options in the form of standards and may have varying preferred status across countries. Non-legal requirements go beyond legislation, as companies (buyers) can go further in their requirements than legislation. The main categories of additional requirements are environmental requirements and social (labour) requirements. **The difference between a standard and a technical regulation therefore lies in the issue of compliance. While conformity with standards is voluntary, technical regulations are by nature mandatory**.

About Quality Standards and Certification

A standard is a document approved through stakeholder consultation and consensus by a recognized standardization body. The document describes features of a product, process, service, interface, or material as well as rules, guidelines or characteristics for products or related processes and production methods which provide for repeated and common use.

Standards are embodied in several forms, such as the definition of terms; specifications for design and construction; detailing of procedures; or performance criteria against which a product, process, etc., can be measured. They may also include or deal exclusively with terminology, symbols, and packaging, marking or labelling requirements as they apply to a product, process or production method.

With increasing concern for management of quality across the supply chain, in the context of the legal responsibility on the part of importers for food safety, there has been a proliferation of private standards, which are in principle voluntary standards, but are in fact basic requirements of various supply chains in order to access consumer markets. In a competitive marketplace, standards increasingly offer important possibilities for product differentiation and quality assurance in meeting the needs of specific niches. Despite this, the investment in standards compliance and certification, in particular the initial investments can be costly to producers; therefore it is recommended that the decision to pursue certification in relation to standards should be an outcome of research on specific buyer interests and quantification of the potential market value of the investment in standards.

In order to avoid the challenges of food suppliers having to conform with different food safety standards, major retailers have joined together to form the Global Food Safety Initiative (GFSI), which aims to establish a recognition scheme for food safety management standards. GFSI provides a platform for collaboration between some of the world's leading food safety experts from retailer, manufacturer and food service companies, and service providers associated with the food supply chain, international organizations, academia and government. The initiative was launched in 2000 following a number of food safety crises when consumer confidence was at an all-time low. Since then, experts have been

collaborating in numerous Technical Working Groups to tackle current food safety issues defined by GFSI stakeholders head on. Current activities within GFSI include the definition of food safety requirements along the entire food supply chain to cover scopes such as feed, distribution and packaging. The development of a capacity building programme for small and/or less developed businesses is facilitating their access to local markets and a focus on food safety auditors is bringing industry experts to common consensus on the skills, knowledge and attributes that a competent auditor should possess. The GFSI recognizes the following food safety management standards: BRC and IFS (food processing), FSSC and GlobeGAP (fresh food). At least seven major global retailers have agreed to accept any of the benchmarked schemes: Walmart, Tesco, Carrefour, Metro, Migros, Ahold and Delhaize.

Given the ongoing introduction of new standards, the International Trade Centre (ITC) has embarked on the creation of a Standards Map to provide users with information enabling them to analyze and compare information on more than 70 voluntary standards operating in over 200 countries, and certifying products and services in more than 80 economic sectors. The interactive tool is available free of charge to registered users in developing countries through the website http://www.standardsmap.org.

About Sanitary and phytosanitary (SPS) measures

"Sanitary measures" are concerned with the life or health of humans or animals; "phytosanitary measures" are concerned with plant health. SPS measures take many different forms and include any measure applied, to protect:

- animal or plant life or health against entry, establishment or spread of pests, diseases, disease-causing organisms, etc.
- human or animal life or health against risks from additives, contaminants, toxins or disease-causing organisms in foods, beverages, etc.
- human life/health against risks from diseases carried by animals, plants or their products, or from pests
- prevent or limit other damage from pests

All SPS measures have the common purpose of protecting something (human, animal or plant life or health) against certain specified risks.

In general terms, the WTO Agreement on the Application of Sanitary and Phytosanitary Measures defines the rights and obligations of the Member countries of the World Trade Organization in relation to their use of food safety requirements, and biosecurity controls. The basic aim of the SPS Agreement is to maintain the sovereign right of any government to provide the level of health protection it deems appropriate while ensuring that these sovereign rights are not misused for protectionist purposes and do not result in unnecessary barriers to international trade. The SPS Agreement requires that SPS measures have an objective basis. In particular, all SPS measures must be based on scientific principles, and cannot be maintained without sufficient scientific evidence unless they are provisional measures that have been put in place until the relevant information can be collected.

About Technical Barriers to Trade (TBTs)

Barriers to trade are measures in place in export target markets which make it difficult, even impossible, for products to gain market entry. These measures are considered undesirable in the context of world trade, because they restrict the flow of goods, drive prices up and are detrimental to the consumer. Barriers may take many forms, but are generally divided into two broad types, namely tariff barriers and non-tariff barriers. Standards, sanitary and phytosanitary measures and technical regulations are considered non-tariff barriers.

Technical barriers to trade generally result from the preparation, adoption and application of different technical regulations and conformity assessment procedures. If a producer in Barbados wants to export to Germany, s/he will be obliged to satisfy the technical requirements that apply in Germany, with all the financial consequences this entails. Differences between one country and another in their technical regulations and conformity assessment procedures may have legitimate origins such as differences in local tastes or levels of income, as well as geographical or other factors. High levels of per capita income in relatively rich countries generally result in higher demand for high-quality and safe products and higher penalties are typically enshrined in legislation for quality and safety failures.

The aim of the WTO Agreement on TBT is to ensure that technical regulations and standards (including packaging, marking and labelling), and assessing conformity with these regulations and standards, are not formulated and applied in order to create unnecessary technical barriers to trade. To provide an incentive to countries to use international standards, the Agreement provides that where international standards or guidelines or a conformity assessment system has been used as a basis for a technical regulation, it shall be presumed that they do not create unnecessary obstacles to trade. In all cases where proposed technical regulations or conformity assessment measures are not based on international standards and are expected to have a significant effect on trade, such regulations mush be, where relevant, based on scientific and technical information. Moreover, countries, under these circumstances are obliged to publish notifications of the proposed technical regulations and conformity assessment procedure. The WTO Agreement on TBT recognizes that no country should be prevented from taking measures to ensure the quality of its exports, protection of human life or health, protection of animal or plant life or health, protection of the environment, prevention of deceptive practices, protection of its essential security interests, which are considered legitimate interests. As a result, any measure taken by a country with the above in view will not be considered as a technical barrier to trade.

CHAPTER 3: SUMMARY OF STANDARDS APPLICABLE TO THE EXPORT OF PROCESSED FOOD TO THE EU

British Retail Consortium (BRC) Global Standards

Product Category

Manufacturers of food, consumer goods, packaging, storage and distribution services

Scope

The BRC global standard is a private, for profit, membership-based association. It represents the whole range of retailers for the UK retail industry, from the large department stores through to independents. Originally developed in response to the needs of UK members of the British Retail Consortium, the standards have gained usage world-wide and are specified by retailers and branded manufacturers in the EU, North America and elsewhere. The Global standards are applicable to manufacturers producing all types of consumer goods such as toys, textiles, electrical items, kitchenware and do-it-yourself (DIY) items. A few products, however, are excluded from the scope (motor vehicles, bulk fuel, services, pharmaceuticals dispensed by doctors, vitamins & minerals, plants & flowers, live animals and pets). Currently there are over 13,000 certified suppliers in over 100 countries and a network of over 80 accredited and BRC recognized certification bodies. The Global standards are available 10 languages.

Summary Rationale/ Associated Issues

Over the past thirteen years, BRC has developed the BRC global standards, a suite of four industry-leading Technical Standards that specify production, packaging, storage and distribution requirements to guarantee safe food and consumer products. These are, the:

- Global standards for Food Safety (1998)
- Global standard for Consumer Products (2003)
- Global standard for Packaging and Packaging Materials (2002)
- Global standard for Storage and Distribution (2006)

No labels appear on BRC certified products since it is a business-to-business (B2B) standard. The BRC maintains a directory of certified suppliers which enables manufacturers to advertise their achievement.

How to Comply

Step 1: Getting prepared: Order a copy of the Standard and assess the compliance of the site to its requirements. The BRC have published guidance documents on best practice and on the use of standards for some sectors which may also be of assistance. A wide range of practical training courses has also been developed

Step 2: Self assessment: Review the site's current systems and practices against the requirements of the standard in order to identify areas which may need further work before undertaking a full audit.

Step 3: Select a certification body through the BRC website: Select an accredited certification body to carry out the evaluation of the site. Only certification bodies that are registered by the BRC can undertake audits.

Step 4: Audit: A plan for the audit should be provided by the selected certification body to ensure that the applicant is properly prepared. It is important that the site is in production at the time of the audit otherwise a further audit will be required.

Step 5: Corrective actions: At the end of the audit the certification body should provide a written list of any areas which need improvement in order to gain certification. These will also be discussed at the closing meeting. Where non-compliance has been identified, the issues must be addressed and suitable evidence provided to the certification body for assessment within 28 days.

Step 6: Certification decision: The certification body will review the audit report from the auditor and corrective action documentation provided in order to make a certification decision.

Step 7: Issue of report and certificate (if applicable): The audit report and certificate (if applicable) should be issued within 42 days of the original audit date to the person who paid for the audit. A copy of the report is automatically sent to the BRC to allow quality control checking of the certification body undertaking the audit. Certified companies are invited to have site details placed on the BRC Directory website to advertise their achievements.

Step 8: Issue of report to customers: It is a principle of the BRC scheme that the audit report is owned by the company paying for the audit and copies can only be provided to other parties at the request of the company (a copy is provided to the BRC which is held confidentially). It is normal practice to authorize the release of a copy of the report and/or certificate for customers.

For further information

BRC global standards, England www.brcglobalstandards.com
+44 20 7854 8900, brcglobalstandards@brc.org.uk
ITC Standards Map http://www.standardsmap.org/
Source: ITC Standards Map

Fairtrade International/ Fairtrade Labelling Organization (FLO)

Product Category

All products

Scope

Fairtrade covers a wide range of product categories covering agriculture, composite and manufactured goods including bananas, cocoa, coffee, cotton, flowers, fresh fruits, honey, juices, rice, spice and herbs, sport balls, sugar, tea and wine. FLO is a non-profit, multi-stakeholder organization responsible for the strategic direction of Fairtrade, setting the Fairtrade standards, and supporting producers in the global south. FLO strives for improved terms of trade and fair prices for farmers and workers in developing countries. Nineteen national organizations, called Fairtrade Labelling Initiatives, market Fairtrade certified products in 23 countries in Europe, North America, Japan, Australia and New Zealand. One organization, FLO-CERT is responsible for inspection and certification of compliance against the Fairtrade standards. Globally, more than 27,000 Fairtrade products are sold in more than 70 countries accounting for an estimated €3.4 billion in global Fairtrade retail sales. Some 827 Fairtrade certified farmer and worker organizations in 58 producing countries represent more than 1 million producers and workers.

Summary Rationale/ Associated Issues

Fairtrade provides producers with access to a fast growing market segment that is highly recognized by consumers in the global North. The system provides a Fairtrade Premium or additional funds available to producers above the selling price for social and business development projects. A price floor (Fairtrade Minimum Price) is available to producers in order to cover average costs of sustainable production (for most products). The Fairtrade Minimum Price and Fairtrade Premium are set at either country specific, regional or global levels. Access for sales pre-financing is available to producers in the form of credit provided in advance of sale. Contracts with buyers tend to be long-term and stable.

The standards are developed through a collaborative and voluntary process by members, farmers, industry, scientists and advisors from the private and public sector. There are two types of standards: *generic* standards which apply regardless of the products to be certified and *product specific* standards. In general, there are three types of requirements:

- General requirements, which must be met from the moment they join Fairtrade;
- Minimum requirements, which must be met before initial certification; and
- Progress requirements, against which compliance must be demonstrated over time and by means of continuous improvement.

How to Comply

Step 1: Review Fairtrade standards application for (i) product in question, (ii) type of organization and (iii) country (See http://www.flo-cert.net).

Step 2: Contact Fairtade directly to receive an information package (via applications@flo-cert.net).

Step 3: Fill in and send back to FLO-CERT the registration form included in the information package.

Step 4: Pay the Initial Certification Fee covering the auditing procedure. The fee differs depending on the organizational structure of the production unit
Step 5: Set a date for the first audit exercise: auditors will check if you adhere to the requirements listed in the standard documents applying to the product and type of organization.
Step 6: The audit report will then be sent to FLO-CERT for evaluation and determination of compliance in order to award certification.
Step 7: In case of non-compliance, a plan of corrective actions needs to be set-up that addresses the identified non conformities with the standard.
Step 8: Once the proposed corrective measures have been approved by FLO-CERT, a certificate is delivered.

For more information
Fairtrade International
Bonner Talweg 177
53129 Bonn, Germany
+49 228 949 230
info@fairtrade.net
www.fairtrade.net

ITC Standards Map http://www.standardsmap.org/
Centre for the Promotion of Imports from Developing Countries (CBI) www.cbi.eu/

Food Safety System Certification 22000 (FSSC 22000)

Product Category

All food

Scope

The FSSC 22000 standard covers the food safety systems of food manufacturers that process or manufacture animal products, perishable vegetal products, products with a long shelf life and (other) food ingredients including additives, vitamins and bio-cultures and food packaging manufacturing. In addition to operations, FSSC 22000 spans transportation and on site storage if these activities are integrated with the operation and is applicable to all food manufacturers, regardless of size and complexity, profit-making or not, public or private. More than 600 organizations are FSSC 22000-certified. Sixteen accreditation bodies recognize FSSC 22000 as a certification scheme that can be certified under ISO/IEC 17021 accreditation. Twenty five certification bodies are licensed to issue accredited certificates based on FSSC 22000, and thirty certification bodies with a provisional license.

Summary Rationale/ Associated Issues

FSSC 22000 is based on the food safety management standard ISO22000: 2005 "Requirements for any organization in the food chain" as well as technical specifications for sector responsible parties. The standard was developed by the Netherlands-based Foundation for the Certification of Food Safety Systems, a non-profit organization founded in 2004. Its development is supported by the Confederation of the FoodDrinkEurope. The Foundation also facilitates and owns the HACCP food safety systems approved by the Global Food Safety Initiative (GFSI) certification scheme. The FSSC 22000 certification scheme has been given full recognition by the GFSI Board of Directors. The FSSC 22000 certification scheme was the first standard accepted by the European Cooperation for Accreditation (EA). The scheme specifies detailed requirements for the food safety system of the food organizations to be certified, the certification system of the certification bodies; and the system of accreditation by the accreditation bodies. Manufacturers that are already certified against ISO 22000 only need an additional review against the applicable technical specifications for sector responsible parties in order to fulfill FSSC 22000 certification criteria.

How to Comply

Step 1: Visit the FSSC 22000 website to obtain a copy of the scheme requirements.
Step 2: Complete a Self Assessment to determine compliance with the requirements in section 3 of Part 1 of the scheme documents.
Step 3: Visit the FSSC 22000 website and select an approved Certification Body.
Step 4: Undergo Initial Audit Stage 1 [Evaluation of Food Safety Management System (FSMS) documentation, scope, resources and preparedness for stage 2].
Step 5: Undergo Initial Audit Stage 2 (Evaluation of the implementation and effectiveness of the FSMS).
Step 6: Attend closing meeting and obtain confirmation of any non conformities.

Step 7: Complete initial audit corrections and corrective action. Corrections and corrective action evidence is assessed by certification body by documented evidence or revisit. Successful close out is documented.
Step 8: Independent certification review is completed and the certification decision is made by the certification body.
Step 9: After successful certification, undergo ongoing surveillance audits.

Further Information
Foundation for Food Safety Certification, The Netherlands, www.fssc22000.com
+31 (0)183 - 64 50 28; info@fssc22000.com
Source: ITC Standards Map

Global Gap

Product Category
Agricultural produce

Scope
The GlobalGAP is a pre-farm-gate standard, which means that the certificate covers the process from farm inputs like feed or seedlings and all the farming activities until the product leaves the farm. The fruits and vegetables module has over 200 control points, 142 of which are related to Food Safety. GlobalGAP represents many leading European food retailers, including AHOLD, Aldi, ASDA, Coop, Delhaize, Keskom, Laurus, Lidl, Marks and Spencers, Migros, Metro, Sainsbury's, Tesco and Waitrose. GlobeGAP is a business-to-business label, so there is no visibility of certification to the consumer. Because of its widespread acceptance and European origins, as well as the inter-relationships between various marketing channels in the EU, it has become a benchmark standard for produce supply, even beyond the large retailers. Although originally a food safety standard, GlobeGAP certification now encompasses an integrated approach to agricultural practices, food safety, ethics, social and environmental responsibility.

The GlobeGAP consists of an Integrated Farm Assurance standard (IFA) which integrates three main product groups: Crops, Livestock and Aquaculture which are then further sub-divided into more specific product categories. For all groups and products, the requirements address:

- Safe products
- Traceability through the supply chain, and
- Environmental aspects of agriculture.

Besides the IFA, there are separate standards on :

- GlobalGAP compound feed manufacturer standard (CFM)
- GlobalGAP plant propagation material standard (PPM)
- GlobeGAP risk assessment on social practice (GRASP)
- Chain of custody certification for coffee, tea and fish.

Summary Rationale/ Associated Issues
GLOBALGAP (formerly known as EurepGAP) is a private sector body that sets voluntary standards for the certification of agricultural products around the globe. It was initially a European initiative developed by retailers to ensure a management system to provide quality assurance of food safety for their products. Initially known as EurepGAP, since 2007, the system which comprises a standard and independent certification process has been known as GlobalGAP; consistent with its international acceptance. The GLOBALGAP is a pre-farm-gate standard, which means that the certificate covers the process from farm inputs like feed or seedlings and all the farming activities until the product leaves the farm. The fruits and vegetables module has over 200 control points, 142 of which are related to Food Safety. GLOBALGAP includes annual inspections of the producers and additional unannounced inspections by independent accredited certification bodies.

Global GAP represents many leading European food retailers, including AHOLD, Aldi, ASDA, Coop, Delhaize, Keskom, Laurus, Lidl, Marks and Spencers, Migros, Metro, Sainsbury's, Tesco and Waitrose. As of July 2011, more than 111,000 producers in more than 100 countries in every continent were certified GLOBALGAP through certification carried out by more than 100 Certification Bodies. In the Caribbean and Central America, certification services are available in Belize, Costa Rica, Dominica, Dominican Republic, Guatemala, Honduras, Jamaica, Nicaragua, Panama, St. Lucia and St. Vincent and the Grenadines have achieved GlobalGAP certification. Because of its widespread acceptance and European origins, as well as the inter-relationships between various marketing channels in the EU, it has become a benchmark standard for produce supply, even beyond the large retailers.

With the recognition that certification is a costly process, which may be inaccessible to small producers, GlobalGAP has developed several approaches to facilitate small holder involvement, including the development of group certification programmes and publication resources including a smallholder manual .

How to Comply

Step 1: ***Registration***. The applicant must register with an approved certification body (CB) as the first step towards obtaining a GLOBALG.A.P Certificate. The CB must accept the application and all the application data needs to be recorded in the GLOBALG.A.P database.

Step 2: ***Internal Assessment***. The self-assessment shall be carried out by the producer at least annually before the initial or surveillance inspections and to cover all sites, products and processes under the certification scope.

Step 3: External CB Assessment. Individual Producers: Announced external inspection that covers all products, production sites and product handling sites. Producer Groups: One announced audit of the quality management system plus announced inspection to (minimum) square root of producers and/or production sites and/or handling sites.

Step 4: Close Non-Compliances Detected. Outstanding non-conformances shall be closed by the producer within three months from the date of initial inspection (28 days in surveillance inspections).

Step 5: Certification Decision. The CB shall make the certification decision within a maximum of 28 calendar days after closure of any outstanding non-conformances. If applicable the certificate is issued.

Further Information

GlobeGAP Organization www.Globalgap.org

ITC Standards Map http://www.standardsmap.org/

Centre for the Promotion of Imports from Developing Countries (CBI) www.cbi.eu/

Hazard Analysis Critical Control Point (HACCP)

Product Category

Processed food

Scope

Except for growers of primary food products, HACCP is globally applied throughout al organizations active in the food chain, including processors, suppliers of additives, colourings or other substances, canners, packaging suppliers, warehouses and distributors. Every food business active in the EU, except for primary producers of non-animal origin, is **legally** required to implement a management system based on HACCP. While EU law cannot extend outside of the EU and in principle there is no obligation to implement HACCP, food safety is a legal requirement and since the importer bears the responsibility for compliance of food placed on the market with food safety regulations, it has become a significant part of buyer requirements in order to minimize safety risks.

Summary Rationale/ Associated Issues

HACCP is a tool to control food hygiene and ensure food safety by :

- Identifying the points in the production or handling process where food hazards can be introduced (Critical Control Points) and
- Determining and implementing procedures to prevent or eliminate those hazards.

As such a management system based on HACCP is a preventative system. By troubleshooting the potential hazards at every stage of the production process, the risk of food safety challenges is minimized. Through certificates and inspection reports, the system provides transparency in allowing buyers to check whether the food supplied is safe. This provides a strong selling point.

How to Comply

HACCP is based on seven principles which have to be included in a HACCP plan, once a decision is made to pursue HACCP in order to optimize food safety. The seven principles are:

1. Analyze the hazards
2. Identify the Critical Control Points
3. Establish critical limits
4. Establish monitoring procedures
5. Establish corrective actions
6. Establish record keeping procedures
7. Establish verification procedures.

General HACCP principles must be translated and interpreted to be aligned with specific activities and processes within an individual business.

For more Information

World Health Organization http://www.who.int/foodsafety/fs_management/haccp/en/

The International Federation of Organic Agriculture Movements (IFOAM)

Product Category

Organic food

Scope

The International Federation of Organic Agriculture Movements (IFOAM) is a membership-based organization that develops standards for organic agriculture and implements specific projects that facilitate the adoption of organic agriculture, particularly in developing countries. The IFOAM "Organic Guarantee System (OGS)" is based on two main components, together called the IFOAM Norms: the IFOAM Basic Standards (IBS) and the Accreditation Criteria. The IFOAM norms cover a wide range of products including crop production, livestock, wild products, processing, fiber processing, and aquaculture, among others. The accreditation of certification bodies is carried out by the International Organic Accreditation Service (IOAS), which operates independently from IFOAM. IFOAM counts 849 members in 113 countries and IOAS has accredited 35 certification bodies around the world.

Summary Rationale/ Associated Issues

The IFOAM Family of Standards contains all regulations and private standards approved by IFOAM. The "Family" was launched with all organic regulations older than 5 years of implementation, equivalent regulations and private standards of IFOAM Accredited Certification Bodies. Other standards will be approved on the basis of applications and of their equivalence with the Common Objectives and Requirements of Organic Standards (COROS). The IFOAM Principles for Organic Agriculture are:

- Principle of health;
- Principle of ecology;
- Principle of fairness;
- Principle of care

The IFOAM Basic Standards provide a framework for certification bodies and other organizations to develop their own standards that may take into consideration additional or more specific criteria.

How to Comply

Step 1: Identify the appropriate certification body operating in the region/country of interest (See http://www.ioas.org/xlistifo.pdf)

Step 2: Register with a certification body and review the specific requirements associated with that certification body in the local context

Step 3: Perform a self-assessment against the certification requirements and provide the results and background documents to the certification body (http://www.ioas.org/certbod.htm)

Step 4: Inspection is performed by the certification body, which will assess compliance with the standard requirements

Step 5: When the outcome of the inspection is positive, the organic certificate is delivered. The certificate is valid for a maximum period of 5 years, subject to annual surveillance audits.

For further information

IFOAM Head Office, Germany www.ifoam.org, 49 228 926 50 10, headoffice@ifoam.org

International Features Standard (IFS)

Product Category

Post farm gate food processing companies or companies that pack loose food products and non-food items, in particular for retail in France, Germany and Italy

Scope

In 2002, the associated members of the German retail federation (*Hauptverband des Deutschen Einzelhandels (HDE)*) and of its French counterpart (*Fédération des Entreprises du Commerce et de la Distribution (FCD)*) drew up a quality and food safety standard for retailer branded food products, named the IFS Food, intended to allow for the assessment of suppliers' food safety and quality systems, in accordance with a uniform approach. With the globalization of product supply through increased private labelling, outsourcing and sub-contracting arrangements, increasing demands for food safety assurance and mounting liabilities of retailers and wholesalers in the context of increasing of legal requirements, the stakeholders felt it was necessary to develop a uniform quality assurance and food safety standard to cut across the entire packaging supply chain. In addition, there was interest in reducing the time associated with multiple audits, for both retailers and suppliers. As such, the standard features an integrated approach to production and marketing efforts for brand safety and quality.

IFS started with the publication of IFS Food and then developed further standards, such as IFS Logistic, IFS Household and Personal care. Since 2003, more than 11,000 IFS Food audits and 800 IFS Logistic audits have been conducted in more than 96 countries, with the number of audits increasing by 9% in the first eight months of 2011. The standard, which has been made available in 20 languages including Chinese, the European languages and Vietnamese, is supported by major retail groups such as Aldi, Carrefour, Migros,Lidl, WalMart, among others and is one of the few standards accepted by the Global Food Safety Initiative (GFSI).

The IFS Food Standard system applies to all the post-farm gate stages of food processing. IFS Food applies when products are "processed" or when there is a hazard for product contamination during primary packing. The IFS Food Standard is important for all food manufacturers, especially those producing private labels, because it contains many requirements related to specifications' compliance.

Recently, IFS Food standard version 6 has been developed with full and active involvement of certification bodies, retailers, industry and food service companies from all over the world. It represents an upgrade of Version 5, which has been on the market since 2007. It also upgrades the standard to full compliance with a newly released GFSI Guidance Document, as is required for all benchmark standards. The GFSI benchmark is only concerned with food safety requirements; quality requirements are outside of the GFSI domain.

Certified companies are allowed to use the IFS logo and certificate to demonstrate compliance with the standards.

Summary Rationale/ Associated Issues

The basic objectives of the International Features Standard are:

- to establish a common standard with a uniform evaluation system,
- to work with accredited certification bodies and qualified auditors,
- to ensure comparability and transparency throughout the entire supply chain,
- to reduce costs and time for both suppliers and retailers
- to ensure that IFS-certified companies can deliver products or services which are in line with the defined specifications of their customers, and continuously (improve non) food product safety and quality for the consumers
- Efficient and secure process for choosing the right supplier(s), especially for private label products as well as choosing the right service provider(s),
- Secure (non) food safety and quality assessment of the supplier(s) and the production process,
- Safe retailer, wholesaler, industry or food services branded products,
- Liability coverage.

The standard includes requirements related to:

- Senior management responsibility
- Quality and food safety management systems
- Resource management
- Production process
- Measurements, analysis, improvements
- Food defense (counter bioterrorism).

The IFS is divided into four main parts:

- Part 1: audit protocol (scoring of the audit, audit duration, different steps from the audit until the issue of the certificate, etc.)
- Part 2: technical requirements. The check-list contains 250 requirements, which deal with five main subjects: Senior management responsibility, Quality management system, Resource management, Production process, Measurements, analyses, improvements
- Part 3: requirements for accreditation bodies, certification bodies and auditors
- Part 4: reporting (layout of audit report, certificate, etc.)

New features of Version 6, which will apply from 1st July 2012 include:

- A slightly revised scoring system will be implemented to better identify companies implementing best practices
- Clear rules for determining audit duration have been created, based on a pragmatic calculation tool, which will provide the minimum mandatory audit duration to be applied by all certification bodies,
- IFS Integrity Program, which was created in 2010 to monitor performance of certification bodies and of auditors, will be described in the new audit protocol
- As IFS Food is not only a food safety but also a quality standard, version 6 will include more quality requirements (e.g. nutritional analyses, more requirements on weight control, more requirements on the quality/quantity of information provided on labelling, etc.
- In order to comply with GFSI Guidance document version 6, food defense (counter bioterrorism) requirements will be introduced in IFS Food audit check-list. Exhaustive guidelines will also be

developed in order to help companies implement those requirements, based on risk assessment and very importantly, the legislation of destination country.

- IFS auditors will be approved for products and technology scopes. Technology scopes are newly introduced to improve auditors' expertise even more on products and processes.

How to Comply

The initial steps are:

1. Decide which standard is more suitable for the company (IFS Food or IFS Logistic)
2. Order the most recent version of the standard from the website
3. Evaluate the current status (internal evaluation by the company)
4. Select the certification body (quotation, decision and signature of contract)
5. Determine the audit date, the audit times and the audit scope
6. Voluntary: pre-audit to get the status quo
7. Realize the on-site audit at the determined audit date by an auditor competent for the respective product category

For more information

International Features Standard http://www.ifs-certification.com

CHAPTER 4: EU TECHNICAL REGULATIONS FOR THE PROCESSING, PACKAGING AND PRESENTATION OF FOOD

Table 2 below provides a list of the applicable EU technical regulations across various elements of the value chain for processed/ packaged food.

TABLE 2: SUMMARY OF EU TECHNICAL REGULATIONS

INPUTS & PRIMARY PRODUCTION	PROCESSING	PACKAGING AND PRESENTATION	LABELLING
• Food additives • Food enzymes • Food flavourings • Food supplements • Foodstuffs treated with ionising radiation • Novel foods and food ingredients • Protection of Geographical Indications and Designations of Origin • The addition of vitamins, minerals and certain other substances to foods • Traceability and labelling of GMOs	• Edible caseins and caseinates • Edible oils and fats: level of erucic acid • Extraction solvents used in foodstuffs • Good manufacturing practice for materials and articles intended to come into contact with food • Quick-frozen food	• Active and intelligent materials and articles • Caffeine and quinine (until 2014) • Ceramic objects in contact with foodstuffs • Cocoa and chocolate • Coffee and chicory extracts • Deregulation of pack sizes • Fruit jams and sweetened chestnut purée • Gluten-free foodstuffs • Honey • Infant formulae • Materials and articles in regenerated cellulose film • Materials and articles which come into contact with foodstuffs • Plastic materials and articles coming into contact with food • Prepacked products • Preserved milk • Prices of products offered to consumers • Processed cereal-based foods and baby foods for infants and young children • Sugars	• Dietary foods for special medical purposes • Foods used in energy-restricted diets for weight reduction • Foodstuffs for particular nutritional uses • Labelling, presentation and advertising of foodstuffs • Nutrition and health claims • Nutrition labelling (until 2014) • Production and labelling of organic products • Spreadable fats (dairy and non-dairy): Definition, labelling and sale

1. INPUTS & PRIMARY PRODUCTION

i. Food additives

A food additive is any substance not normally consumed as a food in itself and not normally used as a characteristic ingredient of food, the intentional addition of which to food for a technological purpose in the manufacture, processing, preparation, treatment, packaging, transport or storage of such food, results in it or its by-products becoming directly or indirectly a component of such foods. Regulation (EC) 1333/2008 of 16 December 2008 on food additives replaces previous directives and decisions concerning food additives permitted for use in foods. Its aim is to harmonize the use of food additives in foods and food enzymes, at Community level and brings together in a single legislative act all types of food additives, including colours and sweeteners. Food enzymes are covered by a separate Regulation (EC) 1332/2008. The Regulation simplifies the approval procedure for the use of food additives and procedures for the update and supplementation of the European food additives list. Risk assessment and the authorization of food additives are integrated into a common authorization procedure for food additives, enzymes and flavourings, established by Regulation (EC) No 1331/2008.

A food additive may only be approved if it does not pose a safety concern to the health of consumers, if there is a reasonable technological need that cannot be achieved by other economically and technologically practicable means and if its use does not mislead the consumer. Annex I defines the different functional classes of food additives: sweeteners, colours, preservatives, antioxidants, carriers, acids, acidity regulators, anti-caking agents, anti-foaming agents, bulking agents, etc. Annex II lists additives which are authorized at Community level giving details of their conditions of use. In addition, the Regulation creates a list of food additives for use in other additives and in food enzymes, as well as their conditions of use (Annex III). Labelling of food additives must comply with the general labelling conditions defined in Directive 2000/13/EC. It must include, in particular, the information necessary for their identification (name, batch, manufacturer, etc.).

ii. Food enzymes

A food enzyme is a product obtained from plants, animals or micro-organisms or products thereof including a product obtained by a fermentation process using micro-organisms, containing one or more enzymes capable of catalyzing a specific biochemical reaction and which is added to food for a technological purpose at any stage of the manufacturing, processing, preparation, treatment, packing, transport or storage of foods. Regulation (EC) 1332/2008 of 16 December 2008 on food enzymes lays down the rules on food enzymes used in foods, including where such enzymes used as processing aids. Processing aids are substances which are present in the food in the form of a residue, if at all, but have no technological effect on the finished product. The regulation does not cover food enzymes used in the production of food additives falling within the scope of Regulation (EC) No 1333/2008, or those used in the production of processing aids.

Regulation (EC) 1332/2008 amends Council Directive 83/417/EEC, Council Regulation (EC) 1493/1999, Directive 2000/13/EC, Council Directive 2001/112/EC and Regulation (EC) 258/97. It aims to create a harmonized list of authorized enzymes, to lay down the conditions for the use of food enzymes and to

define rules for their labelling. Only the enzymes mentioned in the Community list may be placed on the market and added to food. An enzyme may only be included in the Community list if:

- it does not pose a concern to the health of the consumer, in the concentration used and on the basis of the existing scientific information;
- its use is justified by a technological need;
- its use does not mislead the consumer.

The labelling of food enzymes intended for sale to the final consumer should comply with the general conditions for labelling laid down in Directive 2000/13/EC, including the requirement that the information should be easily visible, clearly legible, indelible and written in a language easily understood by the consumer. Furthermore, the labelling should include the name of the food enzyme or the accepted name laid down in the nomenclature of the International Union of Biochemistry and Molecular Biology (IUBMB) and the statement 'for food' or the statement 'restricted use in food' or a more specific reference to its intended food use.

iii. Food flavourings

Flavourings are products which are added to food in order to impart or modify odour and/or taste. They generally consist of the following categories: flavouring substances, flavouring preparations, thermal process flavourings, smoke flavourings, flavour precursors or other flavourings or mixtures thereof. Regulation (EC) 1334/2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods applies to flavourings used to impart odour and/or taste to food. It amends Regulation (EC) 1601/91, Regulation (EC) 2232/96, Regulation (EC) 110/2008 and Directive 2000/13/EC. Some flavourings or food ingredients with flavouring proprieties may be used in or on food without being subject to an assessment and an authorization as long as they present no risk for human health and their use does not mislead the consumer. The Regulation does not apply to:

- substances which have exclusively a sweet, sour or salty taste;
- raw foods;
- smoke flavourings;
- mixtures of spices and/or fresh, dried or frozen herbs,
- mixtures of teas and
- mixtures for infusion, as long as they have not been used as food ingredients.

This Regulation replaces the existing legislation on food flavourings to take into account scientific and technological developments and simplify the existing legislation concerning food additives, flavourings and enzymes. Its aim is to harmonize at Community level the use of food flavourings and ingredients with flavouring properties in and on foods. The new Regulation provides for the establishment of a Community list of authorized flavourings, conditions for their use and labelling rules. Other requirements of the regulation include:

- The marketing or use of flavourings which do not satisfy purity criteria and maximum levels for dangerous or undesirable elements or substances is prohibited.
- Only the flavourings and source materials on the Community list may be placed on the market and used in or on food under the conditions of use specified therein.

- Amendments to the list are ongoing according to the common authorization procedure for food additives, food enzymes and food flavourings as defined in Regulation (EC) No 1331/2008.
- Labels must include either the word “flavouring” or a more specific name or description of it; and either the statement “for food” or the statement “restricted use in food” or a more specific reference to its intended food use. Labelling of food flavourings must also comply with the general labelling conditions defined in Directive 2000/13/EC.
- The term “natural” may only be used for substances or preparations derived directly from an animal or vegetable material. The statement “identical to natural flavourings” has been removed.

iv. Food supplements

Directive 2002/46/EC of 10 June 2002 concerns food supplements, defined as concentrated sources of nutrients (vitamins and mineral salts) or other substances with a nutritional or physiological effect, alone or in combination, which are marketed in dose form (e.g. capsules, tablets, sachets, etc.) in order to supplement a normal diet. Proprietary medicinal products are covered by separate legislation in Directive 2001/83/EC, which establishes a Community Code relating to medicinal products for human use. The classification of food supplements (vitamins and mineral salts) are harmonized within the European Union (EU). They are analysed beforehand and approved by the European Food Safety Authority (EFSA). The Commission is responsible for establishing the purity criteria for substances contained in food supplements, and the maximum and minimum quantities authorised, with the assistance of the Standing Committee on the Food Chain and Animal Health. The requirements of the legislation are as follows:

- ***Composition of food supplements***: With regard to vitamins and minerals, food supplements may only contain the vitamins and mineral salts laid down in Annex I of the Directive, and the vitamin and mineral formulations listed in Annex II, singly or in combination.
- ***Labelling :*** without prejudice to the provisions of Directive 2000/13/EC relating to the labelling, presentation and advertising of foodstuffs, the labelling of food supplements must contain:
    a. the names of the categories of the nutrients or substances that characterize the product or an indication of the nature of those nutrients or substances;
    b. the portion of the product recommended for daily consumption and a warning of the risks to health if this is exceeded;
    c. a declaration to the effect that the supplement is not a substitute for a varied diet;
    d. the reference "This is not a medicinal product", where the presentation of the product is similar to that of a medicinal product;
    e. a warning to the effect that the product should be stored out of the reach of young children.

  The labelling of food supplements must not contain:

    a. any statement attributing to the product properties of preventing, treating or curing a human disease;
    b. any statement mentioning or implying that a balanced and varied diet cannot provide appropriate quantities of nutrients in general.

- ***Monitoring system***: In order to facilitate efficient monitoring of food supplements, the Directive provides that Member States may require the manufacturer or the person placing the product on the market in their territory to notify the competent authority of that placing on the market by forwarding it a model of the label used.

v. Foodstuffs treated with ionizing radiation

Ionizing radiation is used to reduce the number of pathogenic micro-organisms in food ingredients in order to increase the storage life of the end product. The use of ionization of foodstuffs is harmonized in the European Union (EU). This method of food preservation is subject to specific conditions. Directive 1999/2/EC of 22 February 1999 concerning foods and food ingredients treated with ionizing radiation applies to the manufacture, marketing and importation of foods and food ingredients undergoing this treatment. It does not apply to foodstuffs exposed to ionizing radiation generated by measuring or inspection devices within certain specified limits nor to foodstuffs which are prepared for patients requiring sterile diets under medical supervision. The Annex to Directive 1999/3/EC of 22 February 1999 on the establishment of a Community list of foods and food ingredients treated with ionizing radiation contains an initial Community list of foods and food ingredients authorized for irradiation treatment in accordance with the rules laid down in the framework Directive, namely dried aromatic herbs, spices and vegetable seasonings, and sets a maximum overall average absorbed radiation dose of 10 kGy for this purpose.

Irradiated foodstuffs may be placed on the market only if they comply with the Directive. To this end, Annexes I, II and III lay down provisions on:

- the conditions for authorising food irradiation (technological need, benefit to the consumer, etc.) and permissible purposes (to reduce the incidence of disease, rid foodstuffs of harmful organisms)
- in addition to the general requirement that foodstuffs must be in a wholesome state and the obligation not to replace hygiene measures.
- Irradiation may be combined with other chemical treatment, only if the chemical treatment is for different purposes;
- sources of ionising radiation (gamma rays, X rays and electrons of certain characteristics);
- dosimetry (determination of the overall average absorbed dose and procedures for measuring it). The Directive also specifies that the maximum radiation dose for foodstuffs may be given in partial doses.

Provision is made for adapting these requirements to scientific and technical progress. The words "irradiated" or "treated with ionizing radiation" must appear:

- on the label or packaging;
- on the documents which accompany irradiated foodstuffs or foodstuffs containing irradiated ingredients.

In the case of products intended for sale to the ultimate consumer, the information requirements laid down in Directive 2000/13/EC on the labelling, presentation and advertising of foodstuffs must be complied with. Products not intended for sale to the ultimate consumer must be marked to indicate that they have been irradiated and the name and address of the facility where this was carried out.

Irradiation facilities must keep a record for each source of ionizing radiation showing the information specified (nature and quantity of foodstuffs irradiated, data for control of the irradiation process, etc.). These records must be kept for five years. Foodstuffs may be imported from a third country provided:

- they comply with the conditions laid down in the framework Directive;
- they are accompanied by documents showing the name, address and records of an irradiation facility approved by the Community.

The Commission may conclude technical arrangements with third countries on the approval and inspection of irradiation facilities in those countries.

vi. Novel foods and food ingredients

Regulation (EC) 258/97 of 27 January 1997 concerns harmonized rules for the placement of novel foods and novel food ingredients on the EU market. The novel foods and food ingredients concerned by this Regulation are those which are not yet currently used for human consumption within the EU. Before they are placed on the market, newly introduced foods, even if they are traditional in their countries of origin must undergo tests carried out by the European Food Safety Authority, in order to demonstrate that these products do not pose any risk to human health or the environment.

The Regulation is not applicable to food additives, flavourings, extraction solvents, nor to food enzymes (which are the subject of Regulation (EC) No 1332/2008). Genetically Modified Organisms (GMOs) are no longer covered by this Regulation, but by Regulation (EC) No 1823/2003 instead. Foods and food ingredients covered by this Regulation must not present a danger for the consumer, mislead them or be nutritionally disadvantageous. The Regulation lays down specific requirements concerning the labelling of novel food and food ingredients which have been added to the European general requirements on food labelling (Directive 2000/13/EC). Without prejudice to the general requirements of European legislation concerning the labelling of foodstuffs, the labelling of novel food and food ingredients must mention:

- any characteristics such as composition, nutritional value or the intended use of the foodstuff;
- the presence of materials which may have implications for the health of some individuals;
- the presence of materials which give rise to ethical concerns.

vii. Protection of Geographical Indications and Designations of Origin

Council Regulation (EC) No 510/2006 of 20 March 2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs, (amended by Regulation (EC) No 1791/2006) establishes the rules for protecting designations of origin and geographical indications for agricultural products and foodstuffs intended for human consumption.

A geographical indication is an intellectual property registration that is used to describe an agricultural product or a foodstuff, which is linked to the name of a region, a specific place or, in exceptional cases, a country. To be eligible for registration, the product must:

- originate in that region, specific place or country, and

- possess a specific quality, reputation or other characteristics attributable to that geographical origin, and
- have the production, processing and/or preparation located within the defined geographical area.

A designation of origin is an intellectual property registration that is linked to the name of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff. To be eligible for registration, the product must:

- originate in that region, specific place or country, and
- exhibit quality or characteristics of which are essentially or exclusively due to a particular geographical environment with its inherent natural and human factors, and
- have the production, processing and preparation of the product located in the defined geographical area.

The two types of geographical description are different. A PDO (Protected Designation of Origin) covers the term used to describe foodstuffs which are produced, processed and prepared in a given geographical area using recognized know-how (such as Mozzarella di Bufala Campana). A PGI indicates a link with the area in at least one of the stages of production, processing or preparation (such as Turrón de Alicante). The link with the area is therefore stronger for PDOs.

- Names that have become generic, i.e. those that, although linked to the place or region where the product was initially produced or sold, denote the common name of a product in the EU (such as Dijon mustard) may not be registered.
- Names that conflict with the name of a plant variety or an animal breed and as a result are likely to mislead the consumer as to the true origin of the product may not be registered.
- A name wholly or partially homonymous with that of a name already registered under this Regulation must only be registered with due regard for local and traditional usage and the actual risk of confusion.
- A PDO or PGI may not be registered where the reputation and the length of time it has been used are liable to mislead the consumer as to the true identity of the product.

This Regulation (EC) No 510/2006 sets out provisions for registration of agricultural products and foodstuffs (excluding all wine-sector products, except wine vinegar) from a defined geographical area. If there is a link between the characteristics of certain products and their geographical origin, they may qualify for either a protected geographical indication (PGI) or a protected designation of origin (PDO). The use of corresponding EU symbols on the labels of such products provides consumers with clear and concise information on their origin, and where significant market interest in the quality of the reputation exists, producers may obtain premium pricing. Registered names are protected against:

- any misuse, imitation or evocation, even if the true origin of the product is indicated or if the protected name is translated or accompanied by an expression such as "style", "type", "method", "as produced in", "imitation" or similar;
- any other false or misleading indication as to the provenance, origin, nature or essential qualities of the product, on the inner or outer packaging, advertising material or documents

relating to the product concerned, and the packing of the product in a container liable to convey a false impression as to its origin;

- any other practice liable to mislead the consumer as to the true origin of the product;
- commercial use of a registered name in respect of products not covered by the registration if they are comparable to the products registered under that name or if this use exploits the reputation of the protected name.

Applications for registration may only be made by a group of producers or processors or, in exceptional cases, natural or legal persons. If the application concerns a cross-border area, it may be made jointly by several groups. Where a PDO or a PGI is registered, applications to register trademarks corresponding to one of the above situations and relating to the same class of product are refused if they are submitted after the date of submission of the registration application to the Commission. In certain cases specified in the Regulation, a trade mark may co-exist with a geographical indication or a designation of origin.

Within the EU, applications are made to the Member State on whose territory the geographical area is situated. Where an application for registration concerns a geographical area in a third country, it has to be sent to the European Commission either directly or through the authorities of that country. The Commission checks that the application is justified and that it meets all the necessary conditions. This check must be carried out within twelve months. Each month, the Commission publishes the list of the names for which registration applications have been submitted. If the conditions are met, it publishes in the Official Journal of the European Union (OJ) the single document and the publication reference of the product specification. If the conditions are not met, the Commission will reject the application for registration. Within six months from the date of publication in the OJ, any Member State, third country, natural or legal person having a legitimate interest may object to the registration proposed by lodging a duly substantiated statement. Proof must be given that either the product specification fails to meet the required conditions, or that the name conflicts with a trade mark or agricultural product or has become a generic name. Where the Commission receives no admissible objection, it will register the name.
A registered name may be used by any operator marketing products conforming to the corresponding specification. The terms "protected designation of origin" and "protected geographical indication" or the associated EU symbols must be included on the labelling of products originating in the EU and may be included on those originating in third countries and sold under these designations.

A group may request the product specification to be amended to take into account technical or scientific developments or to revise the definition of the geographical area. Applications for amendments are made in accordance with procedures similar to those for registering a designation. Controls on the requirements set out in this Regulation are carried out under Regulation (EC) No 882/2004. Verification of compliance of a product with its product specification may be ensured by one or more public authorities set up for this purpose or by one or more product certification bodies.

viii. The addition of vitamins, minerals and certain other substances to foods

Regulation (EC) 1925/2006 on the addition of vitamins and minerals and of certain other substances to foods establishes common rules concerning the addition of vitamins, minerals and certain other substances in foods. This Regulation harmonizes the different rules in force in Member States in order to facilitate the free movement of foods within the European Union (EU) and to improve consumer protection. It also establishes the list of vitamins and minerals which are authorized to be added to foods. Furthermore, it lays down rules for additional labelling to provide consumers with better information on the nutrients added to foods.

The Regulation applies in all instances where vitamins, minerals and other substances are added to foods, including in the cases of genetically modified foods, additives, flavourings, novel foods and food ingredients, among others. The provisions of this Regulation relating to vitamins and to minerals do not apply to food supplements covered by Directive 2002/46/EC. The main provisions are summarized below.

- Only vitamins and/or minerals listed in Annex I, in the form detailed in Annex II, may be added to foods, subject to the rules laid down in this Regulation.
- The modifications to the lists are adopted taking account of the opinion of the European Food Safety Authority (EFSA). However, until 19 January 2014 Member States may allow in their territory the use of vitamins and minerals not listed in Annex I, or in forms not listed in Annex II, under specific conditions
- The nutrition labelling of products which vitamins and minerals have been added to and which are covered by the Regulation is compulsory. Labels must contain the following information:
    a. the total amounts of vitamins and minerals where they are added to a food;
    b. the amount of protein, carbohydrate, sugars, fat, saturates, fibre and sodium (in accordance with Directive 90/496/EEC on nutritional labelling of foods);
    c. the energy value of the product (in accordance with the same Directive on nutritional labelling).
- The labelling, presentation and advertising of foods to which vitamins and minerals have been added shall not mislead or deceive the consumer as to their nutritional merit.
- Similarly, the labelling, presentation and advertising of foods to which vitamins and minerals have been added shall not include any mention stating or implying that a balanced and varied diet is not an adequate source of nutritional substances.
- ***Maximum and minimum levels***: Foods to which vitamins and minerals have been added voluntarily can make a contribution to achieving adequate intakes of these substances, consequently reducing the risk of deficiencies. However, the Regulation specifies that excessive intakes of vitamins and minerals may result in adverse health effects. For this reason, the Regulation provides for the setting of maximum quantities of vitamins and minerals added to foods. The maximum amounts take account of the upper safe levels for vitamins and minerals following a scientific risk assessment, the potential intake of vitamins and minerals from other foods and the reference intakes of vitamins and minerals recommended for the population. Furthermore, if necessary, it also takes account of the contribution of individual products to the overall diet of the population and of the nutrient profile established in accordance with Regulation (EC) 1924/2006.

- The addition of a vitamin or a mineral to a food shall result in the presence in the food in at least a significant amount of that vitamin or that mineral substance, where this quantity has been defined according to the Annex to Directive 90/496/EEC on the nutritional labelling of food.
- Vitamins and minerals may not be added to unprocessed foodstuffs, including fruit, vegetables, meat, poultry and fish; and without exception, beverages containing more than 1.2 % by volume of alcohol and provided that no nutrition or health claim is made.
- The Regulation provides for a procedure to prohibit or restrict the use of substances other than vitamins or minerals which have a nutritional or physiological effect. For some substances, these procedures are accompanied by other specific European control measures.

ix. Traceability and labelling of GMOs

Regulation (EC) No 1830/2003 of 22 September 2003 (amending Directive 2001/18/EC) concerns the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms. The legislation sets out a framework for guaranteeing the traceability of GMOs throughout the food chain, including in processed foods in which the production methods have destroyed or altered the genetically modified DNA (e.g. in oils). These rules apply not only to GMOs to be used in food, but also those intended to be used in crops (e.g. seeds), products destined for industrial processing for uses other than consumption (e.g. in the production of biofuel) or even products destined to be used ornamentally (e.g. in the production of cut flowers), foodstuffs and animal feed products made from GMOs. Traceability of GMOs allows the monitoring and checking of information given on labels by consumers, as well as the monitoring of effects on the environment and the withdrawal of products from the market by regulators in cases where new scientific data demonstrate that the GMOs used in the product present an environmental or human health risk. The legislation imposes the following requirements:

- All the products covered by this Regulation are subject to compulsory labelling, to enable consumers to be better informed and offer them the freedom to choose to buy products consisting of, containing or made from GMOs.
- The specific requirements of this Regulation related to labelling shall not apply in isolation as these rules are in addition to the following rules which also concern labelling: i.e. the general labelling rules applicable to foodstuffs generally intended for human consumption (Directive 2000/13/EC); the general labelling rules provided for the marketing of feed (Regulation (EC) 767/2009) and the specific labelling rules applicable to GMO food and feed (Regulation (EC) 1829/2003).
- Traceability enables GMOs and their products to be traced throughout the production chain. This system is based on the transmission and holding of information by each operator. Operators must transmit the following information in writing: an indication that the products consist of or contain GMOs; the unique identifiers/codes assigned to the GMOs (Regulation (EC) No 65/2004); if the product is a mixture of GMOs, the industrial operator may submit a declaration of use of these products, together with a list of the unique identifiers assigned to all the GMOs used to constitute the mixture. This information must also be held for five years.

- The operators who place on the market a pre-packaged product consisting of or containing GMOs must, at all stages of the production and distribution chain, ensure that the words "This product contains genetically modified organisms" or "Product produced from GM (name of organism)" appear on a label of the product. In the case of products, including in large quantities, which are not packaged and/or if the use of a label is impossible, the operator must ensure that this information is transmitted with the product. For example, it may take the form of accompanying documents.
- When placing a product produced from GMOs on the market, the operator must transmit the following information in writing to the operator receiving the product: an indication of each food ingredient produced from GMOs; an indication of each raw material or additive for feeding stuff produced from GMOs; if there is no list of ingredients, the product must bear an indication that it is produced from GMOs. This information must also be held for five years.
- Only traces of GMOs which do not exceed the threshold of 0.9 % are exempt from the labelling obligation and if their presence is technically unavoidable.

2. PROCESSING

i. Edible caseins and caseinates

Caseins and caseinates intended for human consumption are a type of lactoprotein (proteins founds in milk). Caseins are the principal protein constituent of milk, washed and dried, they are insoluble in water, and obtained from skimmed milk by precipitation, either by the addition of acid, or by microbial acidification, or by using rennet, or by using other milk-coagulating enzymes. Caseinates are products obtained by drying caseins treated with neutralizing agents. The composition and manufacturing of caseins and caseinates have been harmonized at European level. The Commission has proposed a revision of the legislation (Directive 83/417/EEC) to establish a list of authorized enzymes in the manufacturing of caseins and harmonize their labelling. Enzymes authorized in the manufacturing of caseins must comply with the provisions laid down in Regulation (EC) 1332/2008 on food enzymes.

The Directive defines the lactoproteins to which it applies and reserves the names corresponding to those definitions. These names must be used in trade to designate products conforming to the rules of the Directive

- The products defined by the directive may not be placed on the market unless they conform to the definitions and rules laid down in the directive.
- Products which are not covered by the directive must be named and labelled in such a way that the buyer is not misled as to their nature, quality or use
- The composition characteristics and processing specifications of caseins and caseinates are laid down and included in the definition of the products concerned
- In addition, caseins and caseinates are subjected to heat treatment for health and hygiene reasons.
- Without prejudice to Community provisions on the labelling of foodstuffs, labelling of caseins and caseinates must include:
    a. for caseinates: the cation or cations;

b. for mixtures: the words "mixture of…" the products which make up the mixture, the cation or cations for caseinates, and the protein content in the case of mixtures containing caseinates.
c. the net quantity expressed in kilograms or grams;
d. the name or company name and address of the manufacturer or packager, or seller established within the Community;
e. the name of the country of origin for products imported from third countries;
f. the manufacturing date or an indication identifying the batch or lot.

The directive also requires that the indications on the label should also be easily understood by consumers.

- Purity criteria for edible caseins and caseinates and sampling procedures are adopted by the Council, acting on a proposal from the Commission

ii. Edible oils and fats: level of erucic acid

Directive 76/621/EEC of 20 July 1976 relating to the fixing of the maximum level of erucic acid in oils and fats intended as such for human consumption and in foodstuffs containing added oils or fats aims to protect consumers from the possible negative effects of erucic acid in oils and fats. In order to achieve this, it fixes the maximum level of the substance which oils and fats intended for human consumption may contain. This Directive covers oils, fats and blends intended for human consumption and foodstuffs with a fat content of 5% or more. The level of erucic acid contained in the products concerned must not exceed 5% of the total level of fatty acids in the fat component. The Directive has established this maximum level in order to protect consumers from the possible toxic effects of ingesting the acid.

iii. Extraction solvents used in foodstuffs

Extraction solvents are used in an extraction procedure during the processing of raw materials, of foodstuffs, or of components or ingredients of these products. They are typically removed but may result in the unintentional, but technically unavoidable, presence of residues or derivatives in the foodstuff or food ingredient. Directive 2009/32/EC of 23 April 2009 on extraction solvents used in the production of foodstuffs and food ingredients aims at harmonizing legislation on extraction solvents, in order to facilitate the free movement of foodstuffs within the European Union whilst ensuring that human health is protected. The Directive replaces Directive 88/344/EEC and establishes a single list of extraction solvents for foodstuffs.

Directive 2009/32/EC applies to extraction solvents used in the production of foodstuffs or food ingredients and imported into the European Union (EU). Only extraction solvents listed in Annex I may be used. Water to which substances regulating acidity or alkalinity may have been added and other food substances which possess solvent properties are authorised as extraction solvents in the manufacture of foodstuffs or food ingredients. The legislation enables the establishment of specific purity criteria and maximum permitted limits of mercury and cadmium. This Directive lays down labelling requirements including:

- the commercial name as indicated in Annex I;
- a clear indication that the extraction solvent is of a quality suitable for use for the extraction of food or food ingredients;

- the number of the batch or lot;
- the commercial name of the manufacturer or packer;
- the net quantity;
- where required, the special storage conditions or conditions of use.

There may be exemptions from these labelling rules. Only the first two particulars (the commercial name and use) may appear on the label if the extraction solvents are accompanied by commercial documents for the batch or lot which include the remaining information. The particulars must be easily visible, clearly legible and indelible. They must be expressed in a language which can be easily understood by the purchaser.

iv. Good manufacturing practice for materials and articles intended to come into contact with food

From 1 August 2008, the manufacture of materials intended to come into contact with food must comply with the regulations on good manufacturing practice harmonized for the entire European Union (EU), so that these materials do not represent a danger for the consumer, neither change the composition of food nor the organoleptic characteristics of same.

Regulation (EC) 2023/2006 of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food establishes “good manufacturing practice” for materials and articles intended to come into contact with food. “Good practice” harmonizes manufacturing procedures in the European Union for the aforementioned materials at all stages of production, from manufacture to distribution. Manufacturers must establish a quality assurance system and a quality control system following the detailed manufacturing regulations, for example the processes involving printing inks. In addition, manufacturers shall create and maintain documentation regarding the specifications, manufacturing formulae and product processing which are important for the compliance and safety of the finished article, as well as those related to the various manufacturing operations. They are required to make the documentation available to the competent authorities at their request.

Materials in contact with food include objects such as containers and packaging, but also all materials in contact with foodstuffs, such as paper and cardboard or those which could possibly transfer their constituents to food, for example inks and adhesives. Annex 1 to Regulation (EC) 1935/2004 includes a list of the materials covered by this Regulation: active and intelligent objects, adhesives, ceramics, cork, rubbers, glass, ion-exchange resins, metals and alloys, paper and cardboard, plastics, printing inks, regenerated cellulose, silicones, textiles, varnishes and coatings, waxes and wood.

v. Quick-frozen food

Quick-frozen foodstuffs are those subjected to the "quick-freezing" process, in which the temperature zone of maximum crystallisation is spanned as rapidly as possible and the product is then held (after thermal stabilization) at a temperature of -18°C or lower. Directive 89/108/EEC of 21 December 1988

relating to quick-frozen foodstuffs for human consumption lays down the rules for the quick-freezing, packaging, labelling and inspection of quick-frozen foodstuffs. Rules are harmonized at European level.

- Quick freezing must be carried out promptly, using appropriate technical equipment, on raw materials of sound, genuine and merchantable quality.
- Quick-frozen foodstuffs must be labelled as "quick-frozen" and indicate the batch identification.
- The freezing temperature must be -18°C or lower, except during transport and delivery. Deviations from the temperature of -18°C for quick-frozen foods are permitted during transport and local distribution and in retail display cabinets. The temperature in such instances must not exceed 3°C. However, it may be as much as 6°C in retail display cabinets if Member States so decide.
- Only air, nitrogen and carbon dioxide meeting specific purity criteria may be employed as cryogenic media. The purity criteria are set by the Commission.
- Quick-frozen foods must be packaged in pre-packaging which protects them against external contamination and drying.
- The labelling of quick-frozen foods must include the sales name, the indication "quick-frozen" and the batch identification. The other compulsory information varies according to whom the product is intended for:
    a. *For ultimate consumers, restaurants, hospitals, canteens*: the date of minimum durability, the period during which the product may be stored by the purchaser, the storage temperature and the storage equipment required;
    b. *In other cases*: the net quantity and the identity of the manufacturer, packer or seller.

3. PACKAGING AND PRESENTATION OF FOOD

i. Active and intelligent materials and articles

Active materials and articles are intended to extend the shelf-life or to maintain or improve the condition of packaged food. They are designed to deliberately incorporate components that would release substances into or onto the packaged food or the environment surrounding the food. Intelligent materials and articles are materials and articles which monitor the condition of packaged food or the environment surrounding the food.

Regulation (EC) 450/2009 of 29 May 2009 on active and intelligent materials and articles intended to come into contact with food lays down specific provisions for their marketing, supplementing the general principles defined in Regulation (EC) 1935/2004 (materials and articles that are intended to come into contact with food) and describes the procedure for the authorization of substances at Community level. The requirements for active and intelligent materials and articles include:

a. Active and intelligent materials and articles:
b. must be suitable and effective for the intended purpose of use;
c. must not release to the food any components in sufficient quantity as to endanger human health or to bring about an unacceptable change in the composition or organoleptic characteristics of food;
d. must not mislead consumers through their labelling, presentation or advertising material.

- Only substances which are included in the Community list of authorized substances may be used in components of active and intelligent materials and articles.
- However, the following substances may be used in components of active and intelligent materials and articles without being included in the Community list:
  a. released active substances, added or incorporated by techniques such as grafting or immobilisation which are used in full compliance with the relevant Community and national provisions (for example, legislation on food additives and food enzymes);
  b. substances used in the components which are not in direct contact with food or the environment surrounding the food; and if they are not "mutagenic", "carcinogenic", or "toxic to reproduction" or substances produced deliberately in a particle size that exhibits chemical and physical properties that significantly differ from those at a larger scale.
- In order to be included in the Community list, substances constituting the components of active and intelligent materials and articles must meet the requirements that apply to the said products. The applicant sends the application to the European Food Safety Authority which is responsible for assessing whether the substance meets the above conditions.
- The Commission shall adopt the Community list after the Authority has delivered its opinion on all substances for which a valid application for market authorisation has been submitted. The Community list shall specify:
  a. the identity of the substance(s);
  b. the function of the substance(s);
  c. the reference number;
  d. if necessary, the conditions of use of the substance(s) or component.
- Active and intelligent materials and articles in contact with food are to be labelled appropriately to allow the consumer to identify the non-edible parts. In this case the words “DO NOT EAT” must be added to the label as well as (if possible) the symbol reproduced in Annex I; labelled so that it is clear that they are active and/or intelligent.
- Released active substances are considered as ingredients and are to be labelled pursuant to the general rules for the labelling of foodstuffs.

ii. Caffeine and quinine (until 2014)

Directive 2002/67/EC of 18 July 2002 on the labelling of foodstuffs containing quinine, and of foodstuffs containing caffeine provides for consumers to be given clear and precise information on the presence of caffeine or quinine in a foodstuff. This Directive is replaced by Regulation (EU) No 1169/2011 on the provision of food information to consumers, effective 13 December 2014.

The labelling of drinks containing a proportion of more than 150 milligrams of caffeine per litre must contain the wording ‘High caffeine content’, followed by the quantity of caffeine expressed in milligrams per 100 millimetres. This wording must appear in the same field of vision as the name of the drink. These provisions apply to dinks which are ready for consumption, as well as those reconstituted from a concentrated or dried product. However, these provisions shall not apply to beverages based on coffee, tea or coffee or tea extract where the name under which the product is sold includes the term ‘coffee’

or ‘tea’. Quinine and caffeine which are used as flavouring in the production or preparation of a foodstuff must be mentioned by name in the list of ingredients immediately after the term ‘flavouring’.

iii. Ceramic objects in contact with foodstuffs

Ceramic objects used to contain foodstuffs may transfer lead and cadmium to these foodstuffs. These two metals are toxic and can constitute a risk to human health. Directive 84/500/EEC of 15 October 1984 relating to ceramic articles intended to come into contact with foodstuffs, applies only to ceramic objects intended to come into contact with foodstuffs. The Directive lays down maximum limits for the cadmium and lead transferred by ceramic objects to the foodstuffs with which they enter into contact. To be sold, these ceramics must be accompanied by a written declaration provided by the manufacturer or importer, guaranteeing that they do not exceed the maximum limits for lead and cadmium. The information required is described in Annex II (introduced by Directive 2005/31/EC). The declaration was introduced to meet the requirements of Regulation (EC) 1935/2004 on materials and articles intended to come into contact with food (Directive 84/500/EEC is a measure specific to the groups of materials and objects listed in Regulation (EC) 1935/2004). The maximum limits for lead and cadmium must be checked by means of a specific test and a method of analysis (Annex III, introduced by Directive 2005/31/EC). These methods take into account the very latest scientific progress in methods of analysis for official tests of lead and cadmium in foodstuffs, in accordance with Directive 2001/22/EC.

iv. Cocoa and chocolate

The European Union (EU) defines a number of specific common rules for cocoa and chocolate products which complement the legislation applicable to foodstuffs. These rules concern composition, sales names, labelling and presentation. Directive 2000/36/EC of 23 June 2000 relating to cocoa and chocolate products intended for human consumption harmonizes the labelling of cocoa and chocolate products, and establishes definitions for these products in order to enable consumers to make informed choices. This Directive applies to cocoa and chocolate products intended for human consumption as specified in Annex I to the Directive.

This Directive adopts into legislation the composition of cocoa and chocolate products. In particular, for certain products it determines the minimum percentage of cocoa butter which can be used. It also determines the possibility to use a quantity of vegetable fats which does not exceed 5 % of the end product. The vegetables fats (other than cocoa butter) which can be used are listed in Annex II to the Directive. Only products manufactured according to the compositional rules laid down by this Directive may be marketed under one of the following names (see Annex I to the Directive):

- cocoa butter;
- cocoa powder, cocoa;
- fat-reduced cocoa powder, fat-reduced cocoa;
- powdered chocolate;
- powdered drinking chocolate, sweetened cocoa, sweetened cocoa powder (possibly supplemented by the term "fat-reduced");
- chocolate (possibly supplemented by the terms "vermicelli" or "flakes", "couverture", and "gianduja");

- milk, cream or skimmed milk chocolate (possibly supplemented by the terms "vermicelli" or "flakes", "couverture" and "gianduja");
- family milk chocolate;
- white chocolate;
- filled chocolate;
- chocolate a la taza;
- chocolate familiar a la taza;
- chocolates or pralines.

The labelling of cocoa and chocolate products may include additional information. For example, the labelling of chocolate products containing vegetable fats other than cocoa butter must bear the statement "contains vegetable fat in addition to cocoa butter" in the same field of vision as the list of ingredients, clearly separated from that list. The labelling of powdered chocolate, of sweetened cocoas, as well as of chocolate, milk chocolate, family milk chocolate, chocolate a la taza and chocolate familiar a la taza must indicate the total dry cocoa solids content. In addition, the labelling of non-fat and reduced-fat cocoas and powdered chocolate must indicate the cocoa butter content.

v. Coffee and chicory extracts

Directive 99/4/EC of 22 February 1999 relating to coffee extracts and chicory extracts simplifies the legislation relating to extracts of coffee and extracts of chicory (previously regulated by Directive 77/436/EEC). It is aimed at protecting the interests of consumers and producers by establishing rules on the description, definition and characteristics of these products. The harmonization of the legislation on trade in coffee extracts and chicory extracts also promotes the common market for products in this sector. The Directive covers the following products:

- coffee extract and soluble coffee extract;
- soluble or instant coffee (with the exception of café torrefacto soluble);
- chicory extract;
- soluble chicory;
- instant chicory.

These products must comply with certain minimum composition requirements, in particular as regards the dry matter content. Coffee and chicory extracts must be labelled in accordance with the provisions of Directive 2000/13/EC, which relates to the labelling, presentation and advertising of foodstuffs. However, only the above-mentioned descriptions may be used in trade in these products, possibly accompanied by information concerning the form ("paste", "liquid", "concentrated", etc.), any added substances, and the caffeine content. An indication of the minimum coffee- or chicory-based dry matter content as a percentage by weight of the finished product is also obligatory.

vi. Deregulation of pack sizes

Directive 2007/45/EC of 5 September 2007 lays down rules on nominal quantities for pre-packed products, repealing Council Directives 75/106/EEC (making-up of certain liquids) and 80/232/EEC (ranges of nominal quantities and nominal capacities applicable to certain product), and amending Council Directive 76/211/EEC. The liberalisation of pack sizes promotes the free circulation of products in the internal market. This Directive therefore aims to remove the potential obstacles to

competitiveness and to facilitate access by European enterprises to the markets of the different European Union (EU) countries.

Member States may not prohibit or restrict the placing into circulation of prepacked products and pre-packages within the internal market of the European Union (EU). However, up until 11 October 2012 they may continue to set quotas for the placing into circulation of milk, butter, dried pasta and coffee. Similarly, States which set quotas for white sugar may continue to apply them until 11 October 2013. Wines and spirits (see Annex) which are presented pre-packaged are subject to rates and quotas for placing on the market. This Directive does not apply to this category of products when they are sold in duty-free shops for consumption outside the European market. Aerosol dispensers must indicate the nominal total capacity of the container in addition to the indication of the nominal volume of the contents. Indication of the nominal weight of the contents is optional.

vii. Fruit jams and sweetened chestnut purée

The composition and labelling of fruit jams and sweetened chestnut purée are subject to specific rules.
Directive 2001/113/EC of 20 December 2001 relates to fruit jams, jellies and marmalades and sweetened chestnut purée intended for human consumption. Products intended for the manufacture of fine bakery wares, pastries or biscuits are not covered by this Directive. The products concerned are defined on the basis of their composition so as to ensure that the product names are used correctly in trade, and not in a manner which may mislead. The product name is supplemented by an indication of the fruit or fruits used, in descending order of weight. However, for products manufactured from three or more fruits, the indication of the fruits used may be replaced by the words "mixed fruit" or a similar wording, or by the number of fruits used. In addition, the labelling of jams, jellies, marmalades and sweetened chestnut puree must include the following:

- fruit content per 100 grams of product;
- total sugar content if no nutrition claim is made for sugars on the labelling pursuant to Directive 90/496/EEC;
- residual content of sulphur dioxide, where it is more than 10 mg/kg.

Annex II to the Directive establishes a list of authorized additives such as honey, sugar, fruit juice and certain spirits.

viii. Gluten-free foodstuffs

Gluten refers to a protein fraction from wheat, rye, barley, oats or their crossbred varieties and derivatives thereof, to which some persons are intolerant. Regulation (EC) 41/2009 of 20 January 2009 concerning the composition and labelling of foodstuffs suitable for people intolerant to gluten, applies to all foodstuffs with the exception of infant formulae and follow-on formulae. The harmonized European legislation lays down two thresholds suited to the degree of intolerance to gluten in consumers affected by coeliac disease. These thresholds comply with the standards adopted by the Codex Alimentarius Commission in July 2008 and are effective from 1 January 2012. They are as follows.

- Gluten-free foodstuffs must contain less than 20 mg/kg of gluten in the finished product.
- ‘Very low gluten’ foodstuffs must contain less than 100 mg/kg of gluten in the finished product.

ix. Honey

Honey is the natural sweet substance produced by *Apis mellifera* bees from the nectar of plants or from secretions of living parts of plants or excretions of plant-sucking insects on the living parts of plants, which the bees collect, transform by combining with specific substances of their own, deposit, dehydrate, store and leave in honeycombs to ripen and mature. Council Directive 2001/110/EC of 20 December 2001 relating to honey establishes common rules concerning the composition and definition of honey, supplementing the legislation applicable to foodstuffs. Furthermore, it specifies the different types of products which can be placed on the market under appropriate names, as well as the rules concerning labelling, presentation and information on origin. When placed on the market as honey or used in a product intended for human consumption, honey must meet the composition criteria set out in Annex II to this Directive. Directive 2001/110/EC repeals Directive 74/409/EEC from 1 August 2003.

This Directive supplements the general rules relating to the labelling of foodstuffs as provided for in Directive 2000/13/EC by requiring that essential consumer information is included on the labelling. In particular, the labelling must include the country of origin of the honey (with a degree of flexibility for a blend of honeys from different origins), and the product names as set out in Annex I. However, these names may be replaced in certain cases by the simple product name 'honey' (except in the case of 'filtered honey', 'comb honey', 'chunk honey or cut comb in honey' or 'baker's honey'). Information on regional, territorial or topographical origin, or on floral or vegetable origin, or on specific quality criteria may supplement this labelling (except for 'filtered honey' and 'baker's honey').

x. Infant formulae

Infant formulae are foodstuffs intended for particular nutritional use by infants during the first months of life, which satisfy by themselves the nutritional requirements of such infants until the introduction of appropriate complementary feeding. Follow-on formulae are foodstuffs intended for particular nutritional use by infants when appropriate complementary feeding is introduced and constituting the principal liquid element in a progressively diversified diet of such infants. Directive 2006/141/EC of 22 December 2006 (amending Directive 1999/21/EC) on infant formulae and follow-on formulae lays down the compositional and labelling requirements for infant formulae and follow-on formulae intended for use by Community infants in good health.

- Infant formulae and follow-on formulae shall be manufactured from cows' milk proteins or soya proteins and other food substances (minerals, vitamins, amino acids, etc.) set out in the Annex to the Directive.
- Infant formulae and follow-on formulae shall not contain any substance in such quantity as to endanger the health of infants and young children.
- When infant formulae or follow-on formulae are placed on the market, the manufacturer or importer of the said formulae shall forward a model of the label used to the competent authority of the Member State where the product is to be marketed. This measure will facilitate official monitoring of the formulae being marketed.
- The maximum pesticide residue level in infant formulae and follow-on formulae is set at 0.01 mg/kg of the product proposed ready for consumption. The use of the pesticides listed in

Annex VIII is prohibited in agricultural products intended for the production of infant formulae and follow-on formulae.

- The name under which infant formulae and follow-on formulae are sold, shall be respectively: “infant formulae” and “follow-on formulae”, unless they are entirely manufactured from cows' milk proteins. In this case their name shall be, respectively: "infant milk" and "follow-on milk".
- Mandatory particulars are added to the general rules for the labelling, presentation and advertising of foodstuffs. **In the case of infant formulae and follow-on formulae**, these are:
  i. the energy value and protein, carbohydrate and fat content,
  ii. the average quantity of each mineral substance and vitamin (see Annexes I and II),
  iii. instructions concerning the preparation, storage and disposal of the product.
- In the case of **infant formulae**, the mandatory particulars state:
  i. that the product is suitable for particular nutritional use by infants from birth when they are not breast fed;
  ii. the superiority of breast feeding;
  iii. that the product is only to be used on the advice of independent persons qualified in this field.
- In the case of **follow-on formulae,** the mandatory particulars state:
  i. that the product is suitable for particular nutritional use by infants aged over six months,
  ii. that it should form only part of a diversified diet,
  iii. that it is not to be used as a substitute for breast milk during the first six months of life,
  iv. that the decision to begin complementary feeding should be made only on the advice of professionals responsible for maternal and child care;
- The labelling of infant formulae shall not include pictures of infants, nor shall it include other pictures or text which may idealize the use of the product.
- Advertising of infant formulae shall be restricted to publications specialising in baby care and scientific publications.
- Member States shall ensure that advertising does not favour bottle-feeding over breast feeding. In any case, Member States may further restrict or prohibit the advertising of infant formulae.

v. Materials and articles in regenerated cellulose film

Materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs are regulated at European level by a specific Directive. Regenerated cellulose film is defined as a thin sheet obtained from refined cellulose derived from unrecycled wood or cotton. To meet technical requirements, suitable substances may be added either in the mass or on the surface. Regenerated cellulose film may be coated on one or both sides. The regenerated cellulose films covered by this Directive belong to one of the following categories:

i. uncoated regenerated cellulose film;
ii. coated regenerated cellulose film with coating derived from cellulose; or
iii. coated regenerated cellulose film with coating consisting of plastics.

Directive 2007/42/EC of 29 June 2007 relates to materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs. This Directive is a specific directive provided for by Regulation (EC) No 1935/2004 concerning materials and articles intended to come into contact with

food. It applies to regenerated cellulose film which constitutes a finished product in itself, or forms part of a finished product containing other materials and which are intended to come into contact or are placed in contact with foodstuffs. It does not apply to synthetic casings of regenerated cellulose. The Directive codifies and repeals Commission Directive 93/10/EEC of 15 March 1993 relating to materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs and its amendments.

The Directive lays down a positive list of substances authorized in the manufacture of regenerated cellulose film with restrictions of use (see Annex II), including quantities not to be exceeded in order to protect consumers' health. Printed surfaces of regenerated cellulose film shall not come into contact with the foodstuffs. At the marketing stages other than the retail stages, materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs shall be accompanied by a written declaration in accordance with Regulation (EC) 1935/2004. However, materials and articles which, by their nature, are clearly intended to come into contact with foodstuffs are not subject to this obligation.

iv. Materials and articles which come into contact with foodstuffs

Regulation (EC) 1935/2004 of 27 October 2004 on materials and articles intended to come into contact with food, which repeals Directives 80/590/EEC and 89/109/EEC, aims at guaranteeing a high level of protection of human health and the interests of consumers. The Regulation covers all materials and articles that are intended to come into contact with food: all types of packaging, bottles (plastic and glass), cutlery, and even adhesives and inks for printing labels. The Regulation also introduces specific provisions concerning "active" and "intelligent" packaging which extends the shelf-life of food or which reacts when food has gone off (packaging which changes colour, for example).

Materials and articles which come into contact with food shall be produced in line with good manufacturing practice. They must under no circumstances transfer substances to the food with which they are in contact in quantities likely to:

- endanger human health;
- bring about an unacceptable change in the composition of the food; or
- bring about deterioration in the organoleptic characteristics thereof.

If "active" materials and articles change the composition or organoleptic characteristics of food, they must comply with Directive 89/107/EEC on additives and/or any national rules. The labelling, advertising and presentation of a material or article shall not mislead consumers under any circumstances.

Annex I of Regulation 1935/2004 identifies 17 groups of materials and articles for which specific measures may be adopted, as follows:

- intelligent materials and articles;
- adhesives;
- ceramics;
- cork;
- rubbers;

- glass;
- ion-exchange resins;
- metals and alloys;
- paper and cardboard;
- plastic materials;
- printing inks;
- regenerated cellulose;
- silicones;
- textiles;
- varnishing and coatings;
- waxes;
- wood.

These specific measures may include:

- the list of substances authorized for use in the manufacture of materials and articles that are intended to come into contact with food;
- criteria of purity;
- specific conditions of use;
- limits on the migration of certain constituents into or on to food;
- provisions aimed at protecting human health or ensuring compliance with requirements for materials and articles that are intended to come into contact with food;
- basic rules for checking compliance with the provisions above;
- rules concerning the collection of samples;
- provisions for ensuring traceability;
- additional provisions of labelling for active and intelligent materials and articles;
- provisions concerning the establishment of a Community Register of authorized substances, processes, materials or articles;
- specific procedural rules for the authorization of a substance, process, material or article.

In the absence of specific measures, Member States may maintain or adopt national provisions.

The Regulation also establishes the requirements to be met regarding the traceability of food contact materials from production to sale. The labelling or documentation accompanying materials and articles placed on the market in the Community should guarantee the traceability of the said materials and articles. This facilitates control, the recall of defective products, consumer information and the attribution of responsibility. The nature of materials and articles intended to come into contact with food is to be described on their labelling. Materials and articles which are not clearly intended to contain or to package food must bear the words “For food contact” or the symbol given in Annex II (the symbol represents a glass and a fork).

Earlier legislation on materials in contact with foodstuffs protected the health of consumers by ensuring that no material or article in contact with foodstuffs could bring about chemical reactions which would change the composition or organoleptic properties of these foodstuffs (taste, appearance, texture or

even smell). This Regulation repeals this legislation in order to allow the introduction of “active” and “intelligent” packaging.

v. Plastic materials and articles coming into contact with food

Plastic materials and articles coming into contact with food may transfer toxic substances to them. In order to prevent any danger to human health, the European Union (EU) establishes migration limits applicable to substances constituting the materials and articles in question and defines specific conditions of use to guarantee food safety. These specific requirements are contained in Commission Regulation (EU) 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food. These requirements supplement the general provisions laid down in Regulation (EC) 1935/2004 on materials and articles used for the packaging of food. The Regulation 10/2011 applies to plastic materials and articles intended to come into contact with food. It establishes specific requirements applicable to their manufacture and marketing. These materials and articles and parts thereof may be composed:

- exclusively of plastics;
- of several layers of plastics; or
- plastics combined with other materials.

This Regulation does not apply to ion exchange resins, rubber, or silicones. The provisions on printing inks, adhesives or coatings supplement the requirements laid down in this Regulation.

Plastic materials and articles intended to come into contact with food must comply with:

- the requirements for use, labelling and traceability set out in Regulation (EC) No 1935/2004;
- the good manufacturing practice defined in Regulation (EC) No 2023/2006;
- the compositional and declaration requirements set out in this Regulation.

Only the substances included in the list set out in Annex I may be intentionally used in the manufacture of plastic materials and articles. The list includes:

- monomers;
- additives (excluding colorants);
- polymer production aids (excluding solvents); and
- macromolecules obtained from microbial fermentation.

By way of derogation, substances not included on this list may be authorized under certain conditions. The Regulation lays down the conditions of use for authorized substances (see Annex II) and migration limits (see Annex I). These migration limits correspond to the maximum amount of substances that materials and articles may transfer to food. They are expressed in mg of substance per kg of food (mg/kg). All plastic materials and articles must comply with specific migration limits and overall migration limits. The composition of each plastic layer in direct contact with food, constituting a material or article must comply with this Regulation.

The original packaging manufacturer is required to draw up a written declaration containing the information set out in Annex IV. The information provided shall identify the materials, articles and

products from intermediate stages of their manufacturing as well as the substances themselves. This declaration shall be renewed when substantial changes in the composition or production occur.

vi. Prepacked products

A pre-package is the combination of a product and the individual package in which it is prepacked. A product is prepacked when it is placed in a package of whatever nature without the purchaser being present and the quantity of product contained in the package has a predetermined value and cannot be altered without the package either being opened or undergoing a perceptible modification. Pre-packages (or packages prepared in advance) and their contents must indicate in the labelling the weight or volume they contain using a harmonized format, taking account of specific metrological conditions.

Council Directive 76/211/EEC of 20 January 1976 relating to the making-up by weight or by volume of certain pre-packaged products requires that the labelling of pre-packages and prepacked products must contain specific information relevant to the consumer. Prepacked products are sold individually at a constant weight or volume chosen in advance by the filler. The weight or volume must be:

- at least 5 grams or 5 millilitres for the smallest packages;
- no more than 10 kilograms or 10 litres for the largest packages.

Prepacked products may bear the lower case letter "e" of a minimum height of 3 mm certifying that under the responsibility of the packer or the importer that the pre-packages meet the requirements of this Directive in terms of quality and metrological controls (Annex I point 5 and Annex II). The letter must be placed in the same field of vision as the indication of the nominal weight or nominal volume. The labelling must indicate the volume in the case of liquid products and the weight in the case of other products. The label of the prepacked product must also bear the weight and volume indications used in trade practice or comply with the national regulations of the destination country if such indications vary in the Member States.

vii. Preserved milk

Directive 2001/114/EC of 20 December 2001 relating to certain partly or wholly dehydrated preserved milk for human consumption defines preserved milk on the basis of its composition and the preparation processes it undergoes, with the aim of promoting a correct and non-misleading commercial use of designations. The products covered by this Directive are:

- partly dehydrated milk (sweetened or not);
- wholly dehydrated milk (containing different percentages of fats).

Furthermore, the Directive defines the specific designations used in certain EU countries and certain languages (see Annex II to the Directive).

Marketing of the products governed by this Directive must comply with the Directive on the labelling and presentation of foodstuffs. The labelling on preserved milk must state:

a. the percentage of fat (except for condensed milk, sweetened condensed partly skimmed milk, and dried skimmed milk);
b. the percentage of fat-free dried milk extract (for the different types of partially dehydrated milk);

c. the method of dilution or reconstitution (for dehydrated milk);
d. that the product 'is not intended as a food for infants under twelve months' (for dehydrated milk).

viii. Prices of products offered to consumers

Through Directive 98/6/EC of 16 February 1998 on consumer protection in the indication of the prices of products offered to consumers it is compulsory for the selling price and the unit price to be indicated in an unambiguous, easily identifiable and clearly legible manner for all products offered by traders to consumers ("unambiguous" meaning the final price including VAT and all other taxes). The unit price need not be indicated if it is identical to the selling price. However, Member States may decide not to apply this rule to products supplied in the course of the provision of a service; and to sales by auction and sales of works of art and antiques. For products sold in bulk, only the unit price must be indicated. Any advertising which mentions the selling price must also indicate the unit price. This Directive repeals Directives 79/581/EEC (foodstuff prices) and 88/314/EEC (non-food product prices) with effect from 18 March 2000.

ix. Processed cereal-based foods and baby foods for infants and young children

Processed cereal-based foods and baby foods for infants and young children are very closely monitored in the European Union. Directive 2006/125/EC of 5 December 2006 on processed cereal-based foods and baby foods for infants and young children covers foodstuffs for particular nutritional use that fulfil the nutritional requirements of infants and young children in good health and are intended for use by infants while they are being weaned, and by young children as a supplement to their diet and/or for their progressive adaptation to ordinary food. 'Processed cereal-based foods', are divided into the following four categories:

- simple cereals which are or have to be reconstituted with milk or other appropriate nutritious liquids;
- cereals with an added high protein food which are or have to be reconstituted with water or other protein-free liquid;
- pastas which are to be used after cooking in boiling water or other appropriate liquids;
- rusks and biscuits which are to be used either directly or, after pulverisation, with the addition of water, milk or other suitable liquids;

This Directive does not apply to milks intended for young children.

The legislation lays down harmonized standards for the composition (list of authorized products) and labelling of products of this type.

- Member States must ensure that only products which comply with this Directive are marketed in the European Union (EU).
- Only ingredients suitable for particular nutritional use for infants and young children (supported by scientific data) may be used in the manufacture of the foods concerned
- Processed cereal-based foods must comply with the compositional criteria specified in Annex I.
- Baby foods which are described in Annex II must comply with the compositional criteria specified therein.

- Only the nutritional substances listed in Annex IV may be added in the manufacture of processed cereal-based foods and baby foods within the maximum limits laid down by the directive.
- Processed cereal-based foods and baby foods may not contain any substance in such quantity as to endanger the health of infants and young children
- In addition to the mandatory particulars stipulated by Directive 2000/13/EC, labelling of processed cereal-based foods and baby foods must bear the following information:
  a. the age from which the product may be used, which must not be less than four months. Products recommended for use from the age of four months may indicate that they are suitable from that age unless persons having qualifications in medicine, nutrition etc. advise otherwise;
  b. the presence or absence of gluten if the indicated age from which the product may be used is below six months;
  c. the available energy value (in kJ and kcal) and the protein, carbohydrate and lipid content (in numerical form) per 100 g or 100 ml of the product as sold and, where appropriate, per specified quantity of the product as proposed for consumption;
  d. the average quantity of each mineral substance and of each vitamin governed by a specific level in Annex I and Annex II respectively, expressed in numerical form, per 100 g or 100 ml of the product as sold and, where appropriate, per specified quantity of the product as proposed for consumption;
  e. instructions for appropriate preparation, when necessary, and a statement as to the importance of following those instructions.
- The labelling may also include non-mandatory particulars:
  - the average quantity of the nutrients set out in Annex IV (in numerical form) per 100 g or 100 ml of the product as sold and, where appropriate, per specified quantity of the product as proposed for consumption;
  - information on vitamins and minerals shown in Annex V (as a percentage of the reference values given therein) per 100 g or 100 ml of the product as sold, and where appropriate, per specified quantity of the product as proposed for consumption, provided that the quantities present are at least equal to 15% of the reference values.
- The Directive sets the maximum permissible level of pesticide residues in processed cereal-based foods and baby foods at 0.01 mg/kg, except for certain substances whose limit is laid down in Annex VI. Standardised analytical methods must be used for determining the presence of pesticide residues. The legislation prohibits the use of certain pesticides in agricultural products intended for baby foods (list in Annex VII). For pesticides or pesticide metabolites in this list, the maximum level of 0.01 mg/kg may be excessive for infants and young children. This is the case for pesticides or metabolites of pesticides with an acceptable daily intake lower than 0.0005 mg/kg body weight. The limit of quantification of the analytical methods is 0.003 mg/kg. At this level pesticides are considered not to have been used. This limit may be altered in the light of technical progress or data on environmental contamination.

Related Acts

Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs establishes maximum levels which are as low as reasonably achievable for foods for infants

and young children in order to protect the health of this vulnerable population group. It establishes the following maximum levels for these foods:

- nitrates: 200 mg/kg;
- aflatoxins B1: 0.10 micrograms/kg;
- aflatoxin M1: 0.025 micrograms/kg;
- ochratoxin A: 0.50 micrograms/kg; the same maximum level also applies to dietary foods for special medical purposes intended specifically for infants;
- patulin: 10 micrograms/kg;
- deoxynivalenol: 200 micrograms/kg;
- zearalenone: 20 micrograms/kg; the same maximum level also applies to maize-based foods for infants and young children;
- fumonsins: 200 micrograms/kg for maize-based foods for infants and young children;
- lead: 0.020 mg/kg wet weight;
- inorganic tin: 50 mg/kg wet weight; the same maximum level also applies to infant formulae and follow-on formulae, and to canned dietary foods for special medical purposes intended specifically for infants, excluding dried and powdered products;
- benzo(a)pyrene: 1 microgram/kg wet weight; the same maximum level also applies to infant formulae and follow-on formulae, and to dietary foods for special medical purposes intended specifically for infants.

Regulation (EC) 396/2005 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin, harmonizes the maximum residue limits (MRLs) for authorized pesticides in products of plant and animal origin at the lowest level, in order to prevent contamination. This level is so low that it takes account of the most vulnerable groups, such as children and the unborn. The maximum acceptable daily intake for the different substances includes this population group. The Regulation is amended by Regulation (EC) 178/2006 of 1 February 2006 which features the addition of Annex I listing the food and feed products to which maximum levels for pesticide residues apply.

x. Sugars

Directive 2001/111/EC of 20 December 2001 defines common rules for certain sugars intended for human consumption, in compliance with the general legislation applicable to foodstuffs. The rules improve the labelling of certain edible sugars in order to better inform consumers and to prevent them from being misled by the products they buy. Directive 2001/111/EC defines eleven sugar varieties:

- semi-white sugar;
- sugar (white sugar);
- extra-white sugar;
- sugar solution;
- invert sugar solution;
- invert sugar syrup;
- glucose syrup;
- dried glucose syrup;
- dextrose monohydrate;

- dextrose or dextrose anhydrous;
- fructose.

Each variety has corresponding compositional characteristics and rules relating the composition, sales name, labelling and presentation of foodstuffs.

Directive 2001/111/EC lays down certain specific provisions for pre-packaged products weighing less than 20 g, for sugar solutions, for invert sugar syrup containing crystals as well as for certain products containing more than 5 % fructose. The net weight of pre-packaged products weighing less than 20 g need not be indicated on the labelling. However, the labelling of invert sugar solutions and invert sugar syrup must indicate the levels of dry matter and invert sugar content. Furthermore, the labelling of invert sugar syrup containing crystals must include the qualifying term 'crystallized'. Finally, glucose syrups (including dried glucose syrups) which contain more than 5 % of fructose (dry matter) must be labelled as 'glucose-fructose syrup' or 'fructose-glucose syrup' and 'dried glucose-fructose syrup' or 'dried fructose-glucose syrup', to reflect whether the glucose component or the fructose component is in greater proportion.

4. LABELLING

i. Dietary foods for special medical purposes

Directive 1999/21/EC of 25 March 1999 on dietary foods for special medical purposes lays down compositional and labelling requirements for these foods. Dietary foods for special medical purposes are a category of foods for particular nutritional uses specially processed or formulated and intended for the dietary management of patients and to be used under medical supervision. They are intended for the exclusive or partial feeding of patients with a limited, impaired or disturbed capacity to take, digest, absorb, metabolize or excrete ordinary foodstuffs or certain nutrients contained therein or metabolites, or with other medically-determined nutrient requirements, whose dietary management cannot be achieved only by modification of the normal diet, by other foods for particular nutritional uses, or by a combination of the two. This Directive is a specific directive as described in Article 4 of Directive 2009/39/EC.

- Member States shall ensure that dietary foods for special medical purposes may be marketed within the European Union (EU) only if they comply with the rules laid down in this Directive.
- The formulation of dietary foods for special medical purposes shall be based on sound medical and nutritional principles. Their use, in accordance with the manufacturer's instructions, shall be safe and beneficial and effective in meeting the particular nutritional requirements of the persons for whom they are intended, as demonstrated by generally accepted scientific data. They must comply with the compositional criteria specified in the Annex.
- This Directive specifies the name under which dietary foods for special medical purposes are sold in the 22 official languages of the EU.
- In addition to the particulars provided for in Article 3 of Directive 79/112/EC, the labelling of dietary foods for special medical purposes shall bear the following mandatory particulars:

a. the available energy value expressed in kJ and kcal, and the content of protein, carbohydrate and fat, expressed in numerical form, per 100 g or per 100 ml of the product as sold and where appropriate per 100 g or per 100 ml of the product ready for use in accordance with the manufacturer's instructions. This information may in addition be provided per serving as quantified on the label or per portion, provided that the number of portions contained in the package is stated;
b. the average quantity of each mineral substance and each vitamin mentioned in the Annex present in the product, expressed in numerical form per 100 g or per 100 ml of the product as sold and where appropriate per 100 g or per 100 ml of the product ready for use in accordance with the manufacturer's instructions. This information may in addition be provided per serving as quantified on the label or per portion, provided that the number of portions contained in the package is stated;
c. selectively, the content of components of protein, carbohydrate and fat and/or of other nutrients and their components the declaration of which would be necessary for the appropriate intended use of the product, expressed in numerical form, per 100 g or per 100 ml of the product as sold and where appropriate per 100 g or per 100 ml of the product ready for use in accordance with the manufacturer's instructions. This information may in addition be provided per serving as quantified on the label or per portion, provided that the number of portions contained in the package is stated;
d. information on the osmolality or the osmolarity of the product, where appropriate;
e. information on the origin and the nature of the protein and/or protein hydrolysates contained in the product.

- The labelling must also include the following mandatory particulars, preceded by the words "important notice" or their equivalent:
  a. a statement that the product must be used under medical supervision;
  b. a statement as to whether the product is suitable for use as the sole source of nourishment;
  c. where appropriate, a statement that the product is intended for a specific age group;
  d. where appropriate, a statement that the product poses a health hazard when consumed by persons who do not have the diseases, disorders or medical conditions for which the product is intended.
- The labelling shall also include:
  a. the statement "For the dietary management of...", where the blank shall be filled in with the diseases, disorders or medical conditions for which the product is intended;
  b. where appropriate, a statement concerning adequate precautions and contra-indications;
  c. a description of the properties and/or characteristics that make the product useful in particular, as the case may be, relating to the nutrients which have been increased, reduced, eliminated or otherwise modified and the rationale of the use of the product;
  d. where appropriate, a warning that the product is not for parental use.

  The labelling shall bear instructions for the appropriate preparation, use and storage of the product after the opening of the container, as appropriate.

- This Directive also sets maximum and minimum values for vitamins, minerals and trace elements in nutritionally complete foods intended for use by infants. Directive 2006/141/EC adapts one of its values, the minimum level of manganese in foods intended for infants, to take account of the latest scientific advice. The new requirements for infant formulae manufactured from cows' milk proteins or based on protein hydrolysates shall apply mandatorily to infant dietary foods for special medical purposes as of 1 January 2012.
- To facilitate efficient official monitoring of dietary foods for special medical purposes, when a product is placed on the market, the manufacturer or, where a product is manufactured in a third country, the importer shall notify the competent authority of the Member States where the product is being marketed by forwarding to it a model of the label used for the product. Member States may, if they can demonstrate that notification is not necessary in order to monitor those products efficiently in their territory, not impose that obligation.

ii. Foods used in energy-restricted diets for weight reduction

Directive 96/8/EC of 26 February 1996 on foods intended for use in energy-restricted diets for weight reduction lays down relevant compositional and labelling requirements. Foods for use in energy-restricted diets for weight reduction are specially formulated foods which, when used as instructed by the manufacturer, replace the whole or part of the total daily diet. They are divided in two categories:

a. products presented as a replacement for the whole of the daily diet;
b. products presented as a replacement for one or more meals of the daily diet.

Member States shall ensure that these foods may be marketed within the Community only if they conform to the rules laid down in this Directive. Foods covered by this Directive shall comply with the compositional criteria specified in Annex 1. The name under which the product is sold shall be:

i. for products presented as a replacement for the whole of the daily diet: 'Total diet replacement for weight control';
ii. for products presented as a replacement for one or more meals of the daily diet: 'Meal replacement for weight control'.

The labelling of the products concerned shall bear, in addition to those particulars provided for in Article 3 of Directive 79/112/EEC on labelling, presentation and advertising of foodstuffs, the following mandatory particulars:

- the available energy value expressed in kJ and kcal, and the content of proteins, carbohydrates and fat, expressed in numerical form, per specified quantity of the product ready for use as proposed for consumption;
- the average quantity of each mineral and each vitamin for which mandatory requirements are stipulated in paragraph 5 of Annex 1, expressed in numerical form, per specified quantity of the product ready for use as proposed for consumption. In addition, for products presented as a replacement for one or more meals of the daily diet, information on vitamins and minerals listed in the Table of point 5 of Annex I shall also be expressed as a percentage of the values as defined in the Annex to Directive 90/496/EEC;
- instructions for appropriate preparation, where necessary, and a statement as to the importance of following those instructions;

- if a product, when used as instructed by the manufacturer, provides a daily intake of polyols in excess of 20 g per day, there shall be a statement to the effect that the food may have a laxative effect;
- a statement on the importance of maintaining an adequate daily fluid intake;
- for products presented as a replacement for the whole of the daily diet: a statement that the product provides adequate amounts of all essential nutrients for the day and a statement that the product should not be used for more than three weeks without medical advice;
- for products presented as a replacement for one or more meals of the daily diet: a statement to the effect that the products are useful for the intended use only as part of an energy-restricted diet and that other foodstuffs should be a necessary part of such diet.
- The labelling, advertising and presentation of the products concerned shall not make any reference to the rate or amount of weight loss which may result from their use.

iii. Foodstuffs for particular nutritional uses

Directive 2009/39/EC of 6 May 2009 on foodstuffs intended for particular nutritional uses provides the rules relating to foodstuffs intended for particular nutritional uses. These foodstuffs are clearly distinguishable from foodstuffs for normal consumption owing to their composition or manufacturing process. Moreover, they must meet the particular nutritional requirements of the following categories of person: those whose digestive processes or metabolisms are disturbed; those suffering from a particular physiological condition; and infants or young children in good health. These rules have been harmonized at European level and are summarized below.

- Only foodstuffs which meet the nutritional requirements of the two first categories of person mentioned above may bear the words “dietetic” or “dietary”.
- The labelling of these products should include information concerning the particular characteristics of the product, the energy value or carbohydrate, protein and fat content, etc.
- Specific provisions apply to the following groups of foodstuffs for particular nutritional uses: infant formulae and follow-on formulae; processed cereal-based foods and baby foods for infants and young children; foods intended for weight reduction; dietary foods for special medical purposes and foodstuffs for persons who are gluten-intolerant. Detailed provisions are laid down in specific directives or regulations which may include provisions mainly relating to the nature or composition of products and to labelling.
- It is possible to enrich foodstuffs by adding nutritional substances in order to meet particular nutritional needs and/or particular legal requirements. These enriched foods must be safe for consumption and be prepared on the basis of scientific data. Their composition must comply with the purity criteria laid down by European legislation and national law, or those recommended by international bodies.
- Foodstuffs intended for particular nutritional uses which have not been regulated by a specific directive shall comply with the rules on labelling, presentation and advertising of foodstuffs for general consumption. Nonetheless, the designation under which a dietetic product is sold must be accompanied by an indication of its particular nutritional characteristics and include additional information concerning:

i. the composition or manufacturing process which gives the product its particular nutritional characteristics;
ii. the energy value in kilojoules (kj) and kilocalories (kcal);
iii. the carbohydrate, protein and fat content per 100 grams or 100 millilitres of product.

- Foodstuffs intended for particular nutritional uses shall only be allowed on the market in pre-packaged form, and the packaging shall completely cover the products, except for the retail trade or if a specific directive provides otherwise.
- When a foodstuff that does not belong to the groups of foodstuffs for which specific provisions apply is placed on the market, the manufacturer or importer of the said product shall notify the competent authority of the Member State where the product is marketed for the first time and forward a label of the label used. Where the product is subsequently placed on the market in another Member State, the manufacturer or importer shall send the competent authority of that Member State the model of the label together with an indication of the recipient of the first notification. The competent authority may require the manufacturer or importer to produce the scientific work and data establishing the foodstuff's compliance with a particular nutritional objective for one of the three categories of consumer identified above.
- A Member State may suspend or restrict trade in a foodstuff intended for particular nutritional uses if the latter endangers human health or if it does not comply with this Directive or the specific directives adopted in implementation of this Directive.

iv. Labelling, presentation and advertising of foodstuffs

Directive 2000/13/EC of 20 March 2000 on the labelling, presentation and advertising of foodstuffs applies to pre-packaged foodstuffs to be delivered to the final consumer or to restaurants, hospitals, canteens and other similar mass caterers. It does not apply to products intended for export outside the European Union (EU). **Pre-packaged foodstuffs must comply with the rules on labelling, presentation and advertising of foodstuffs**. These rules are harmonized at European Union (EU) level to enable European consumers to make informed choices and to remove obstacles to the free circulation of foodstuffs and unequal conditions of competition. Directive 2000/13/EC replaces Council Directive 79/112/EEC on the labelling, presentation and advertising of foodstuffs.

The labelling, presentation and advertising of foodstuffs must not:

- mislead the consumer as to the foodstuff's characteristics or effects;
- attribute to a foodstuff (except for natural mineral waters and foodstuffs intended for special diets, which are covered by specific Community provisions) properties for the prevention, treatment or cure of a human illness.

The labelling of foodstuffs must include compulsory information. The particulars indicated on products must be easy to understand, visible, legible and indelible. Some of them must appear in the same field of vision. The **compulsory particulars** include:

a. ***Name under which the product is sold***;
b. ***List of ingredients***, which are listed in descending order of weight and designated by their specific name, subject to the derogations provided in Annexes I, II, III and III a). Ingredients

which belong to more than one category are indicated according to their principal function. Under certain conditions, the listing of ingredients is not required for:

c. fresh fruit and vegetables,
d. carbonated water,
e. fermentation vinegars,
f. cheese, butter, fermented milk and cream,
g. products comprising a single ingredient, where the trade name is identical with the ingredient name, or the trade name enables the nature of the ingredient to be clearly identified.
h. Certain additives and enzymes are not considered as ingredients; this relates to those which are used as processing aids or those contained in an ingredient, which serve no technological function in the finished product;
i. ***Quantity of ingredients*** or categories of ingredients expressed as a percentage. This requirement applies when an ingredient or a category of ingredients:
j. appears in the name under which the foodstuff is sold or is usually associated with that name by the consumer,
k. is emphasised on the labelling in words, pictures or graphics, or
l. is essential to characterize an indicated foodstuff (but certain exceptions may be provided);
m. ***Net quantity expressed in units of volume*** in the case of liquids and units of mass in the case of other products. However, there are specific provisions for foodstuffs sold by number and solid foodstuffs presented in a liquid medium;
n. ***Date of minimum durability***; This date consists of the day, month and year, except in the case of foodstuffs that will not keep for more than three months (the day and month are sufficient), foodstuffs which will not keep for more than 18 months (the month and year are sufficient), and foodstuffs which will keep for more than 18 months (year is sufficient).
   The date shall be preceded by the words: 'Best before …' when the date includes an indication of the day or 'Best before end …' in other cases.
   The date of durability is not required for the following products:
   - untreated fresh fruits and vegetables,
   - wines and beverages containing 10 % or more by volume of alcohol,
   - non-alcoholic soft drinks,
   - fruit juices and alcoholic beverages in individual containers of more than five litres, intended for supply to mass caterers,
   - bakers' or pastry cooks' wares which are normally consumed within 24 hours of their manufacture,
   - vinegar,
   - cooking salt,
   - solid sugar,
   - confectionery products consisting almost solely of flavoured and/or coloured sugars,
   - chewing gums and similar chewing products,
   - individual portions of ice-cream.

i. In the case of foodstuffs which are highly perishable, the date of minimum durability shall be replaced by the 'use by' date;

ii. ***any special storage conditions*** or conditions of use;

iii. ***the name or business name and address of the manufacturer*** or packager, or of a seller established within the Community. However, Member States shall be authorised, in respect of butter produced in their territory, to require only an indication of the manufacturer, packager or seller;

iv. the ***place of origin*** or provenance where failure to give such particulars might mislead the consumer;

v. ***instructions for use*** should be included to enable appropriate use of the foodstuff;

vi. ***indication of the acquired alcoholic strength*** of beverages containing more than 1.2 % by volume of alcohol.

The European provisions applicable to specific foodstuffs may authorize making particulars such as the list of ingredients and date of minimum durability optional. These provisions may provide for other compulsory particulars, provided this does not result in the purchaser being inadequately informed.

Special provisions apply to:

- reusable glass bottles and small packaging items or containers;
- pre-packaged foodstuffs. Where pre-packaged foodstuffs are marketed at a stage prior to sale to the final consumer or are supplied to mass caterers for processing, the particulars need appear only on the commercial documents, provided that the name under which the product is sold, the date of minimum durability and the details of the manufacturer or packager appear on the outer packaging of the foodstuff;
- foodstuffs offered for sale without pre-packaging and foodstuffs packaged on the sales premises at the consumer's request.

On 10 November 1993 the Commission adopted an interpretative communication concerning the use of languages in the marketing of foodstuffs. In this communication the Commission points out that the labelling of foodstuffs for sale to the final consumer must be in an easily understood language, which generally means the official language(s) of the country of marketing. However, foreign terms or expressions easily understood by the purchaser must be allowed.

vii. Nutrition and health claims

Regulation (EC) No 1924/2006 of 20 December 2006 on nutrition and health claims made on foods establishes rules aimed at harmonizing nutrition and health claims at a European level for the first time. This type of claim on food labelling, presentation and advertising must be **clear**, **concise** and **based on evidence accepted by the whole scientific community**. Nutrition and health claims of the type "with no added sugar", "fat-free" and "calcium is needed for the normal growth and development of bone in children", etc. are harmonized at European level in order to guarantee the functioning of the internal market, whilst ensuring a high level of consumer protection. The Regulation applies to all nutrition and health claims including:

- commercial communications (labelling, presentation and promotional campaigns);
- trademarks and other brand names which may be construed as nutrition or health claims.

It applies to claims relating to all types of food intended for final consumers, including foods intended for supply to restaurants, hospitals, canteens etc. The legislation on nutrition and health claims protects consumers by prohibiting any information which:

- is false, difficult to understand or misleading (e.g. which attributes medicinal properties to food wrongly or without scientific evidence);
- casts doubt on the safety or nutritional adequacy of other foods;
- encourages or condones excessive consumption of a food;
- encourages consumption of a food by stating or suggesting directly or indirectly that a balanced diet does not provide all the nutrients that are needed;
- attempts to scare consumers by mentioning changes in bodily functions.

Nutrition labelling is **mandatory** on products for which a nutritional claim and/or health claim is made, with the exception of generic advertising. In accordance with the provisions of Directive 90/496/EEC relating to nutrition labelling on foodstuffs, the mandatory nutrition declaration must include the following information:

- the energy value; and
- the amounts of fats, carbohydrates, sugars, proteins and salt.

Effective 13 December 2016, Regulation (EU) No 1169/2011 will make nutrition labelling obligatory, whether or not the foodstuff carries nutrition or health claims. Nutritional and health claims must meet the following conditions:

- the presence, absence or reduced content of a nutrient or other substance in respect of which the claim is made must have a beneficial nutritional or physiological effect, and be scientifically proven;
- the nutrient or substance in respect of which the claim is made is present in significant quantities in order to produce the nutritional or physiological effect claimed;
- the nutrient or substance in respect of which the claim is made is in an immediately consumable form;
- the specific conditions of use must be complied with, for example, the active substance (e.g. vitamins, fibres, etc.) must be present in sufficient quantity in the food to have beneficial effects.

Nutritional and health claims relating to beverages containing more than 1.2 % of alcohol by volume are prohibited, with the exception of those which refer to a reduction in the alcohol or energy content of an alcoholic beverage.

Only the nutritional claims listed in the Annex to this Regulation are authorized. Comparative nutritional claims are possible for foods in the same category. Moreover, if the claim relates to a reduction of the energy value or the nutrient content, it must correspond to a reduction of at least 30 % (25 % for salt) in comparison to a similar product. Health claims are subject to specific requirements. The labelling, presentation and publicity related to them must provide certain obligatory information:

- a statement indicating the importance of a varied and balanced diet and a healthy lifestyle;
- the quantity of the food and pattern of consumption which will ensure the claimed beneficial effect;
- a statement addressed to persons who should avoid the substance concerned;
- a warning of the health risks caused by excessive consumption.

The Regulation prohibits health claims which refer to the rate ("lose 3 kg in one week") or amount ("lose 3 kg") of weight loss or suggest it is detrimental to health not to consume a certain type of food, references to an individual doctor or health professional or to associations other than national medical associations and health-related charities, and claims which suggest that health could be affected by not consuming the food.

Following Directive 2000/13/EC on labelling and Regulation (EU) No 1169/2011 which will replace it from 13 December 2014, any reference to properties for the prevention, treatment or cure of a human disease is prohibited. However, in contrast, the Regulation authorizes claims concerning the reduction of the risk of a disease, provided that an application for authorization has been approved. To obtain authorization for a new claim or amend the existing list, the manufacturer must submit an application to the Member State concerned, which will forward it to the European Food Safety Authority (EFSA). The Commission then makes a decision on the use of the claim on the basis of the EFSA's opinion.

viii. Nutrition labelling (until 2014)

Nutrition labelling refers to the provision of any information relating to the energy value of foods or the following nutrients: proteins, carbohydrates, fat, dietary fibres, sodium, vitamins and minerals. Rules for nutrition labelling are harmonized throughout the European Union. Member States may not introduce nutrition labelling specifications that are more detailed than those contained in this Directive. The information is optional, but becomes compulsory if a nutrition claim appears on the label or in advertising. Council Directive 90/496/EEC of 24 September 1990 concerns nutrition labelling of foodstuffs for the final consumer and for mass caterers (restaurants, hospitals, canteens, etc.).The Directive does not apply to natural mineral waters or other waters intended for human consumption or food supplements. The main requirements for nutrition labelling are indicated below.

- Nutrition claims are only allowed in relation to the energy value and the nutrients referred to in the Annex to the Directive (i.e. proteins, carbohydrates, fat, dietary fibres, sodium, vitamins and minerals) or to substances which belong to one of the categories of these nutrients or which are components of them.
- The information in nutrition labelling comes under group 1 or group 2, as indicated below:
  a. Group 1: the energy value, and the amount of protein, carbohydrate and fat,
  b. Group 2: the energy value, the amount of protein, carbohydrate, sugar, fat, saturated fatty acids, dietary fibre and sodium.
- Where the nutrition claim refers to sugars, saturated fatty acids, dietary fibres or sodium, group 2 information must be provided. The declared energy value and amount of nutrients must be given in figures using specific units of measurement. The information must be expressed per 100g or per 100ml. They can also be expressed per package or per portion. Information on vitamins and

minerals must, in addition, be expressed as a percentage of the recommended daily allowance (RDA), which may also be given in graphic form.

- Nutrition labelling may also include the quantities of amidone, polyols, monounsaturated fatty acids, polyunsaturated fatty acids, cholesterol and the mineral salts and vitamins specified in the Annex to the Directive.
- All of the above information must be grouped together in a clearly visible place and must be in legible, indelible characters and in a language easily understood by the purchaser.
- With regard to foodstuffs which are not pre-packaged when sold to the final consumer and mass caterers and foodstuffs which are packaged at the places of immediate sale, the scope of the information in food labelling and the manner in which it is provided may be laid down in national provisions until Community measures are possibly adopted in accordance with the procedure provided for in this Directive.

Effective the 13 December 2014, this Directive will be replaced by Regulation (EU) No 1169/2011 on the provision of food information to consumers. The proposed Regulation combines this current Directive and Directive 2000/13/EC relating to the labelling, presentation and advertising of foodstuffs.

ix. Production and labelling of organic products

Regulation (EC) 834/2007 of 28 June 2007 on organic production and labelling of organic products (repealing Regulation (EEC) 2092/91) lays down a new legal framework for organic products. It sets out the objectives and principles applicable to this type of production and illustrates the rules on production, labelling, controls and trade with third countries. This Regulation entered into application on 1 January 2009.The harmonization of the production, labelling and control of organic products ensures that there is fair competition between producers and strengthens the confidence of consumers within the increasing market for organic products. The framework established by this Regulation governs:

- agricultural products (including aquaculture products), either processed or unprocessed and intended for human consumption;
- animal feed;
- vegetative propagating material and seed used for crops;
- yeasts used as food or feed.

This Regulation contains the basic objectives and general principles for organic farming. The objectives focus on sustainable agriculture and production quality, which must meet consumers' needs. The general principles concern, *inter alia*, specific production methods, the use of natural resources and stringent restrictions on synthetic chemical inputs. Furthermore, the Regulation lays down specific principles concerning farming, the processing of organic food and organic animal feed.

According to the general rules for organic production, genetically modified organisms (GMOs) are prohibited in all their forms. Rules concerning the labelling of food allow operators to ensure compliance with this prohibition. Treatment by ionizing radiation is also prohibited. Those wishing to

operate both types of agricultural production (organic and non-organic) must ensure that animals and land for these two activities are separated. Organic plant production must comply with certain rules concerning:

- ground treatment, which must preserve life and the natural fertility of the ground;
- the prevention of damage, which must be based on natural methods but which can make use of a limited number of plant protection products authorised by the Commission;
- seed and plant propagation material, which must be produced using organic methods;
- wild plants collected in some areas are also classified as organic products if they comply with certain conditions relating to their harvest and provenance. Seaweed may also be considered as an organic product as long as its area of production and harvest comply with certain conditions.
- Organic livestock production must comply with certain rules concerning:
- the animals' origin - they must have been born and reared in organic holdings;
- livestock husbandry practices, which, inter alia, relate to certain features of animal housing;
- animal breeding methods, generally natural;
- animal feed, which must be organic;
- the prevention of disease;
- cleaning and disinfection, involving the exclusive use of products authorised by the Commission.

Similar specific rules apply to aquaculture animals. The Commission authorizes the use of a limited number of products and substances in organic farming. These products may be for plant care, animal feed and the cleaning of buildings used for livestock and plant production. The Commission may also set certain limits and conditions for the application of these products. Holdings which are entering into a new organic farming activity must comply with a conversion period. The rules laid down in the Regulation also govern this conversion period. Organic processed feed must contain organic raw materials and may not be processed using chemical solvents. Processed food must contain mainly ingredients of agricultural origin. Other ingredients are permitted if authorization has been requested from the Commission. Organic yeast must be produced from organic substrates and other authorized ingredients.

ABOVE: NEW EU ORGANIC LOGO

Labelling, advertising or commercial documents may use terms such as "eco" and "bio" to describe an organic product, its ingredients, or raw materials. The labelling of an organic product must be clearly visible on the packaging and contain a reference to the control body that certifies the product concerned. Effective 1 July 2010, the use of the European Union logo on organic food products will be mandatory, as will an indication of the provenance of raw materials used in the product. This indication must be shown in the same field of vision as the Community logo.

Compliance with the provisions contained in this Regulation will be guaranteed by a system of controls based on Regulation (EC) 882/2004 and precautionary and control measures established by the Commission. Products from third countries may also be placed on the Community market as organic

products as long as they comply with the provisions of this Regulation and if they have been subject to control. This control may be carried out either by a body recognized by the European Community, or by an accredited control body.

x. Spreadable fats (dairy and non-dairy): Definition, labelling and sale

Regulation (EC) 2991/94 of 5 December 1994 lays down standards for spreadable fats. This Regulation protects consumers from the possibility of confusing butter, margarine and other spreadable fats (e.g. minarines), by differentiating them according to their percentage of fat content and their animal or vegetable origin**.** As of 1 July 2008, products falling within the scope of this Regulation are governed by the common organization of agricultural markets.

Spreadable fats are products with a fat content of at least 10% but less than 90% by weight and which remain solid at a temperature of 20°C (complete definition in Article 1). To avoid any possible confusion, the Regulation limits the use of the terms "butter" and "margarine" to products with a fat content of not less than 80%. Under the terms of the Regulation, the fact that the product has a reduced fat content must be mentioned clearly in the product designation. The Regulation therefore permits the use of nutritional claims which underline that the product has a reduced fat content. The various sales descriptions which are permitted, such as "minarine", "butter" and "cream" or the terms "vegetable" or "traditional" are defined in Articles 3 and 4. Spreadable fats which are imported from non-Community countries are subject to the same requirements as those manufactured in the European Union.

CHAPTER 5: THE EU MARKET FOR PROCESSED / PACKAGED FOOD

EU 27 Major Imports by product

i. Meat, fish and seafood preparations

Imports of meat, fish and seafood preparations were valued at more than US$20.5 billion dollars in 2011. The International Trade Centre (ITC) estimated the global market at over US$42.3 billion in this year. The UK, Germany, France, the Netherlands, Italy and Spain were the leading suppliers of these products to the EU-27 in 2011. As shown in Table 3 below, all of the product categories, with the exception of "*extracts and juices of meat, fish, crustaceans and molluscs"* experienced growth in import values between 2009 and 2011; although these values shrunk in most categories between 2009 and 2010.

TABLE 3: LIST OF PRODUCTS IMPORTED BY EUROPEAN UNION (EU 27)
HS code 16: Meat, fish and seafood food preparations nes

Unit : US $000's

Code	Product label	Imported Value				
		2007	2008	2009	2010	2011
'1602	Prepared or preserved meat, meat offal or blood, not elsewhere stated	6233221	7683625	6969136	6922384	8303847
'1604	Prepared/preserved fish & caviar	5683338	6741955	5831286	5586516	6459218
'1605	Crustaceans & molluscs, prepared/preserved	2187230	2441276	2256371	2403403	2807510
'1601	Sausages and similar products, of meat, offal or blood	2011805	2361204	2290405	2222623	2470887
'1603	Extracts & juices of meat, fish, crustaceans & mollusks	62417	143180	93768	73721	86396

Source: ITC TradeMaps

ii. Preparations of flour, cereal, starch and milk

The EU-27 countries imported in excess of US$24.9 billion worth of preparations and products containing cereal, flour, starch and milk (HS code 19) as shown in Table 4 below. The International Trade Centre (ITC) estimated the value of the global market at US$52.9 billion. All suppliers to the EU-27 market in this category are other EU-27 countries. After registering declines between 2009 and 2010, imports of each of the products in this grouping, including pasta, couscous, breakfast cereals and cereal bars and baked product, showed growth in their import values in 2011.

TABLE 4: LIST OF PRODUCTS IMPORTED BY EUROPEAN UNION (EU 27) HS code 19: Cereal, flour, starch, milk preparations and products						
Unit : US $000's						
		Imported Value				
Code	Product label	2007	2008	2009	2010	2011
'1905	Bread, biscuits, wafers, cakes and pastries	11674065	13479376	12450096	12110335	13763199
'1901	Malt extract; food preparations of flour, meal, starch or malt extract	3340787	4143229	3840383	3788094	4358439
'1902	Pasta & couscous	2697929	3656334	3196319	2976387	3371296
'1904	Breakfast cereals & cereal bars	2332396	2589372	2534522	2421674	2738421
'1903	Tapioca and substitutes therefore prepared from starch	11525	13170	12392	12582	15316
Source: ITC TradeMaps						

iii. Preserved Vegetable, Fruit and Nut Preparations

Imported sweet and savoury preparations from vegetables, fruits and nuts, including, juices, preserves, jams and jellies, pickles, among others into the EU-27, were valued at US$27.5 billion in 2011. The International Trade Centre estimated the global value of imports in this year to be in excess of US$54.3 billion. Leading suppliers of products were EU-27 countries, as well as Brazil, Turkey, China, Thailand and the United States. Further details of imports in this category are shown in Table 5 below.

TABLE 5: LIST OF PRODUCTS IMPORTED BY EUROPEAN UNION (EU 27) HS code 20: Vegetable, fruit, nut, etc food preparations						
Unit: US$000'S						
Code	Product label	Imported Value				
		2007	2008	2009	2010	2011
'2009	Fruit & vegetable juices, unfermented	8282438	9491639	7665989	7608449	9422628
'2008	Preserved fruits not elsewhere stated	4533630	5233276	4604295	4531194	5377564
'2005	Prepared or preserved vegetables not elsewhere stated (excl. frozen)	4038290	4459893	4081040	3970450	4486330
'2004	Prepared or preserved vegetables not elsewhere stated (incl. frozen)	2468863	2502352	2518771	2544178	3017944
'2002	Tomatoes prepared or preserved	1436803	1938747	2102437	1881715	1937093
'2007	Jams, fruit jellies & marmalades	965648	1098905	928848	949310	1103913
'2001	Cucumbers, gherkins and onions preserved by vinegar	801066	921701	895818	845987	889683
'2003	Mushrooms& truffles, prepared or preserved	517842	634604	498835	462648	470712
'2006	Sugar preserved fruits and nuts	122820	121123	111685	115655	128527
Source: ITC TradeMaps						

iv. Sauces, condiments, extracts and miscellaneous preparations

Miscellaneous preparations (Hs code 21) include various food preparations, sauces, mixed condiments and mixed seasonings, extracts, essences and concentrates of coffee and tea, soups and broths, yeast and ice cream. Total EU-27 imports of these items were in excess of US$23.9 billion in 2011; representing almost half of the total global imports of these items. The leading supplier markets for imports of these products to EU countries were Germany, the Netherlands, France, Belgium, Ireland, Italy and the UK. Imports from Thailand, China, Ecuador and Brazil are also significant. Almost all product categories showed growth in import values during the three year period 2009 to 2011. Table 6 shows further details of imports in this category.

TABLE 6: LIST OF PRODUCTS IMPORTED BY EUROPEAN UNION (EU 27) (HS code 21): Miscellaneous edible preparations Unit: US$000'S

Code	Product label	Imported Value				
		2007	2008	2009	2010	2011
'2106	Food preparations, nes	9909356	11469708	10812760	10429513	11255415
'2103	Sauces mixed condiments & mixed seasonings	3137451	3943021	3903644	3813616	4234717
'2101	Extracts, essences & concentrates of coffee and tea	2410837	2875753	2593490	2650674	3246151
'2105	Ice cream	1946252	2310215	2221403	2227938	2407270
'2104	Soups, broths & preparations thereof	1105322	1343072	1310474	1171854	1377863
'2102	Yeast	543350	618980	603114	634225	715211

Source: ITC TradeMaps

Major Imports by Market

Canada's Agri-Food Trade Service, in the January 2012 report on Packaged Food in Western Europe[1] notes that the top five geographic markets are Germany, France, Italy, the United Kingdom, and Spain.[2] On average in Western Europe, 12% of consumer expenditure, or US$2,330 per capita, was attributed to food expenditure in 2010. The packaged food market in Western Europe was worth over US$587 billion in 2010. Germany, France, Italy, and the United Kingdom were the largest markets, with a combined value of US$367 billion and a market share of over 60%. Between 2005 and 2010, Western Europe's packaged food market grew by 3%, and Norway, Switzerland, and Belgium were among the fastest growing markets. Despite recent economic difficulties, a growth rate of over 3% is expected for Western

[1]Available online at http://www.ats-sea.agr.gc.ca/eur/pdf/6095-eng.pdf

[2] Western Europe, for the purposes of this report, consists of: the United Kingdom, Turkey, Germany, France, Italy, Spain, Belgium, Portugal, the Netherlands, Greece, Sweden, Norway, Austria, Denmark, Switzerland, Ireland, and Finland.

Europe over the next five years (Euromonitor). Table 7 below shows projections for the market for packaged foods by country.

TABLE 7: PACKAGED FOOD MARKETS IN WESTERN EUROPE BY COUNTRY (US$ millions)						
Country	Market Size 2005	Market Size 2010	Market Size 2015	Growth 2005-2010	Growth 2010-2015	Share 2010
Western Europe	**568,626.5**	**587,573.6**	**607,431.0**	**3.3%**	**3.4%**	**100.0%**
Germany	101,908.9	103,601.6	104,216.4	1.7%	0.6%	17.6%
France	88,663.1	90,551.7	93,339.9	2.1%	3.1%	15.4%
Italy	83,909.3	87,920.0	92,022.1	4.8%	4.7%	15.0%
United Kingdom	81,414.4	85,132.7	89,079.9	4.6%	4.6%	14.5%
Spain	44,802.5	46,701.8	46,748.4	4.2%	0.1%	7.9%
Turkey	35,026.8	35,048.0	36,584.0	0.1%	4.4%	6.0%
Netherlands	19,935.7	20,813.2	21,942.9	4.4%	5.4%	3.5%
Belgium	16,041.0	16,910.5	17,472.5	5.4%	3.3%	2.9%
Sweden	14,233.7	14,752.2	15,246.7	3.6%	3.4%	2.5%
Switzerland	13,822.7	14,620.2	15,383.1	5.8%	5.2%	2.5%
Norway	10,530.6	12,128.9	13,409.3	15.2%	10.6%	2.1%
Austria	11,237.4	11,422.7	11,890.0	1.6%	4.1%	1.9%
Greece	11,078.3	11,031.8	11,895.7	-0.4%	7.8%	1.9%
Finland	9,416.0	9,764.2	10,405.3	3.7%	6.6%	1.7%
Denmark	9,647.0	9,732.3	9,425.2	0.9%	-3.2%	1.7%
Portugal	8,097.5	8,294.3	8,637.5	2.4%	4.1%	1.4%
Ireland	6,698.4	7,052.0	7,484.7	5.3%	6.1%	1.2%
Source: Agriculture and Agrifood Canada (2012), Packaged Food in Western Europe, Market Indicator Report, retrieved from http://www.ats-sea.agr.gc.ca/eur/pdf/6095-eng.pdf, based on Euromonitor data						

Market Segmentation

When the packaged food sector is reviewed by segment, impulse and indulgence food was the leading market segment in Western Europe in 2010, with 39% of packaged food sales and a value of almost US$245 billion, followed by meal solutions, and nutritional food and staples. Among the major market segments were bakery products, dairy products, and chilled processed food, which amounted to US$345 billion. Meal solutions grew by 7% over the past five years, benefiting from increasing consumer demand for convenience across Europe. Table 7 below shows the details of trade in various market segments for Western Europe.

TABLE 8: PACKAGED FOOD MARKETS IN WESTERN EUROPE BY SEGMENT (US$ millions)						
Segment	Market Size 2005	Market Size 2010	Market Size 2015	Growth 2005-2010	Growth 2010-2015	Share 2010
Impulse and Indulgence Food	239,926.6	244,911.1	251,315.4	2.1%	2.6%	38.8%
Bakery	142,355.7	142,586.6	143,394.2	0.2%	0.6%	22.6%
Confectionery	55,082.1	56,291.5	58,409.8	2.2%	3.8%	8.9%
Ice Cream	23,201.9	24,144.6	25,689.3	4.1%	6.4%	3.8%
Sweet and Savoury Snacks	17,840.2	20,228.9	21,984.8	13.4%	8.7%	3.2%
Snack Bars	1,446.7	1,659.5	1,837.3	14.7%	10.7%	0.3%
Meal Solutions	201,766.3	215,787.1	228,279.5	6.9%	5.8%	34.2%
Chilled Processed Food	74,731.1	82,575.1	88,748.8	10.5%	7.5%	13.1%
Frozen Processed Food	33,414.7	34,132.0	35,611.3	2.1%	4.3%	5.4%
Ready Meals	28,835.2	30,586.8	32,451.4	6.1%	6.1%	4.8%
Canned/Preserved Food	26,595.4	27,706.0	28,718.1	4.2%	3.7%	4.4%
Sauces, Dressings and Condiments	19,974.0	21,411.6	22,732.9	7.2%	6.2%	3.4%
Dried Processed Food	13,830.8	14,791.7	15,138.8	6.9%	2.3%	2.3%
Soup	4,385.1	4,583.9	4,878.2	4.5%	6.4%	0.7%
Nutritional Food and Staples	168,108.8	170,942.6	174,092.9	1.7%	1.8%	27.1%
Dairy	118,991.2	119,879.7	122,040.9	0.7%	1.8%	19.0%
Oils and Fats	24,436.3	24,603.2	24,705.3	0.7%	0.4%	3.9%
Pasta	8,565.7	9,639.1	9,727.1	12.5%	0.9%	1.5%
Baby Food	7,476.0	7,827.7	8,090.1	4.7%	3.4%	1.2%
Spreads	6,911.9	7,339.9	7,785.8	6.2%	6.1%	1.2%
Meal Replacement	1,116.3	956.8	971.3	-14.3%	1.5%	0.2%
Noodles	611.4	696.2	772.4	13.9%	10.9%	0.1%
Total	**609,801.7**	**631,640.8**	**653,687.8**	**3.6%**	**3.5%**	**100.0%**

Source: Agriculture and Agrifood Canada (2012), Packaged Food in Western Europe, Market Indicator Report, retrieved from http://www.ats-sea.agr.gc.ca/eur/pdf/6095-eng.pdf, based on Euromonitor data

The German Market for Packaged foods

In 2010, Germans spent 10% of their consumer expenditure on food, or $2,126 per capita. Germany's packaged food market is the largest in Europe and is valued at US$104 billion. It is a mature market, with lower growth than the Western European average. The top five retailers (Aldi Einkauf, Rewe Mkt, Unilever, Rewe International, and Ferrero) control 25 percent of the market.

In part as a result of retail consolidation, increasing number of manufacturers are producing health and wellness products to pursue higher profit margins. Meal solutions were the largest subsector of the German packaged food market in 2010, accounting for 37% of the market, followed by impulse and indulgence food, and nutritional food and staples. Between 2005 and 2010, the meal solutions segment experienced the highest growth at 5%, while impulse and indulgence food was the only subsector to decline. Among the market segments, bakery products, dairy products, and chilled processed food accounted for half of the packaged food market, with a combined value of US$55 billion. Table 9 below shows further details.

The French Market for packaged foods

Food expenditures accounted for 10% of consumer expenditure in France, or US$2,869 per capita, in 2010. In this year, France's packaged food market was worth over US$90 billion, the second-largest in Europe. Western European neighbours Spain, Belgium, and Germany were the top suppliers. In 2010, multinationals dominated this fragmented sector, whose top five manufacturers (Lactalis, Galec, Carrefour, Nestle France, and Danone) hold a market share of only 16%. Overall, the market grew by only 2% between 2005 and 2010, a growth rate below the Western European average. In recent years, the French have shown a rising interest in environmentalism and health and wellness, as is shown by the increasing popularity of organic food and sustainable food manufacturing processes.

Meal solutions were the leading subsector in 2010, accounting for 36% of the market, followed by impulse and indulgence food, and nutritional food and staples, as shown in Table 10 below. In the French market meal solutions was the only subsector to experience growth over the past five years. Among the market segments, bakery products, dairy products, and chilled processed food share 60% of the sector. Chilled processed food grew by 16% in 2010, while dairy products and bakery products declined. All three segments are relatively mature markets.

The Netherlands market for packaged foods

The turnover of the Benelux food retail industry for 2011 is estimated at € 56.3 billion. For 2012, turnover is expected to increase by 2.5 percent. The retail market is fairly consolidated with the top three food retailers in the Netherlands have a market share of 64 percent while in Belgium the leading 3 retailers have 72 percent of the market. Sustainable food (including organic products) is one of the most important growth markets in food retail. The market share for private label products continues to go up in both Belgium and the Netherlands. The demand for convenient, healthy and new innovative products continues to be strong.

TABLE 9: PACKAGED FOOD MARKETS IN GERMANY BY SEGMENT (US$ millions)						
Segment	Market Size 2005	Market Size 2010	Market Size 2015	Growth 2005-2010	Growth 2010-2015	Share 2010
Impulse and Indulgence Food	40,930.8	40,162.5	38,854.4	-1.9%	-3.3%	36.2%
Bakery	21,488.7	21,015.3	19,904.9	-2.2%	-5.3%	18.9%
Confectionery	12,937.5	12,258.0	11,626.1	-5.3%	-5.2%	11.1%
Ice Cream	4,159.5	4,065.9	4,099.3	-2.3%	0.8%	3.7%
Sweet and Savoury Snacks	2,174.2	2,663.0	3,077.3	22.5%	15.6%	2.4%
Snack Bars	170.9	160.3	146.8	-6.2%	-8.4%	0.1%
Meal Solutions	39,220.8	41,224.2	43,427.3	5.1%	5.3%	37.2%
Chilled Processed Food	13,253.5	13,952.3	14,516.5	5.3%	4.0%	12.6%
Frozen Processed Food	8,354.9	8,787.8	9,209.3	5.2%	4.8%	7.9%
Canned/Preserved Food	5,317.4	5,473.2	5,752.8	2.9%	5.1%	4.9%
Ready Meals	4,501.0	5,006.3	5,531.5	11.2%	10.5%	4.5%
Sauces, Dressings and Condiments	4,153.0	4,493.2	4,856.9	8.2%	8.1%	4.1%
Dried Processed Food	2,861.7	2,794.7	2,880.7	-2.3%	3.1%	2.5%
Soup	779.3	716.7	679.6	-8.0%	-5.2%	0.6%
Nutritional Food and Staples	28,549.7	29,528.2	29,875.0	3.4%	1.2%	26.6%
Dairy	19,559.3	20,167.0	20,478.1	3.1%	1.5%	18.2%
Oils and Fats	4,409.3	4,612.1	4,445.9	4.6%	-3.6%	4.2%
Spreads	1,748.1	1,847.5	1,827.0	5.7%	-1.1%	1.7%
Pasta	1,508.4	1,588.0	1,729.5	5.3%	8.9%	1.4%
Baby Food	1,081.4	1,139.9	1,208.4	5.4%	6.0%	1.0%
Meal Replacement	220.0	150.9	164.7	-31.4%	9.1%	0.1%
Noodles	23.2	22.8	21.4	-1.7%	-6.1%	0.0%
Total	**108,701.3**	**110,914.9**	**112,156.7**	**2.0%**	**1.1%**	**100.0%**

Source: Agriculture and Agrifood Canada (2012), Packaged Food in Western Europe, Market Indicator Report, retrieved from http://www.ats-sea.agr.gc.ca/eur/pdf/6095-eng.pdf, based on Euromonitor data

TABLE 10: PACKAGED FOOD MARKETS IN FRANCE BY SEGMENT (US$ millions)						
Segment	Market Size 2005	Market Size 2010	Market Size 2015	Growth 2005-2010	Growth 2010-2015	Share 2010
Impulse and Indulgence Food	33,461.0	33,245.4	33,354.2	-0.6%	0.3%	34.1%
Bakery	22,523.3	21,792.3	21,554.8	-3.2%	-1.1%	22.3%
Confectionery	7,191.1	7,442.5	7,676.6	3.5%	3.1%	7.6%
Ice Cream	2,163.4	2,286.4	2,411.1	5.7%	5.5%	2.3%
Sweet and Savoury Snacks	1,427.4	1,575.7	1,575.6	10.4%	0.0%	1.6%
Snack Bars	155.8	148.5	136.1	-4.7%	-8.4%	0.2%
Meal Solutions	32,092.1	35,059.8	38,415.8	9.2%	9.6%	35.9%
Chilled Processed Food	12,206.9	14,187.1	16,188.4	16.2%	14.1%	14.5%
Ready Meals	5,084.2	5,411.9	6,001.9	6.4%	10.9%	5.5%
Canned/Preserved Food	5,013.5	5,251.8	5,555.6	4.8%	5.8%	5.4%
Frozen Processed Food	4,907.8	5,118.6	5,290.8	4.3%	3.4%	5.2%
Sauces, Dressings and Condiments	2,421.6	2,563.7	2,696.1	5.9%	5.2%	2.6%
Dried Processed Food	1,698.1	1,730.1	1,848.3	1.9%	6.8%	1.8%
Soup	760.0	796.6	834.7	4.8%	4.8%	0.8%
Nutritional Food and Staples	29,768.9	29,312.0	29,321.4	-1.5%	0.0%	30.0%
Dairy	21,754.6	21,486.6	21,464.4	-1.2%	-0.1%	22.0%
Oils and Fats	3,465.8	3,117.2	2,919.3	-10.1%	-6.3%	3.2%
Baby Food	1,742.4	1,752.1	1,798.6	0.6%	2.7%	1.8%
Spreads	1,309.6	1,438.9	1,533.0	9.9%	6.5%	1.5%
Pasta	1,317.9	1,376.2	1,472.3	4.4%	7.0%	1.4%
Meal Replacement	172.1	134.7	127.6	-21.7%	-5.3%	0.1%
Noodles	6.5	6.3	6.2	-3.1%	-1.6%	0.0%
Total	**95,322.0**	**97,617.2**	**101,091.4**	**2.4%**	**3.6%**	**100.0%**

Source: Agriculture and Agrifood Canada (2012), Packaged Food in Western Europe, Market Indicator Report, retrieved from http://www.ats-sea.agr.gc.ca/eur/pdf/6095-eng.pdf, based on Euromonitor data

The food markets of the Dutch Caribbean

The term "Dutch Caribbean" refers to the five islands of the Netherlands Antilles (Curaçao, Bonaire, St. Maarten, Saba, and St. Eustatius) and Aruba. Geographically the islands are divided into two separate groups. Aruba, Bonaire and Curacao (also known as the "ABC Islands") are located just off the coast of Venezuela. St. Maarten, Saba, and St. Eustatius (also known as Statia) are located in the northeastern Caribbean. Aruba seceded from the Netherlands Antilles in 1986 and now in an important new development, the Netherlands Antilles are in the process of further political change. Despite these changes, all the islands of the Dutch Caribbean retain close ties with the Netherlands.

The islands of Aruba, St. Maarten and Curaçao have fairly developed retail sectors with large, modern stores. Seattle-based Cost-U-Less operates a warehouse club store in both St. Maarten and Curaçao. Similarly, San Diego-based PriceSmart operates a warehouse club in Aruba. A Dutch supermarket chain, Albert Heijn, has also recently opened a store in Curaçao. In addition, there are several locally-owned supermarkets in each of the three islands. The four major stores in Aruba are located next door to each other just outside the capital city of Oranjestad.

Aruba has experienced rapid growth in the tourism sector over the last decade. American tourists account for the lion's share of all stop-over visitors to the island and there is a high demand for "American-style" products. St. Maarten has a more international import profile than Aruba and the population in Curaçao is more European oriented. Recent reports indicate Curaçao receives only 15% of its stop-over tourists from the United States, as opposed to Aruba and St. Maarten where U.S. visitors account for 67% and 54% of total stop-over tourists, respectively. The best product prospects in the Dutch Caribbean market include beer and wine and non-alcoholic beverages, frozen chilled and processed meats, cheese, fresh and processed vegetables and fruits, bakery products, sweet & savory snacks and pet food.

Main Distribution channels

Table 11 shows the dominant retail chains in Western Europe. Table 12 shows the grocery sales in the top 5 countries by various retail channels. Hypermarkets have recently become the dominant retail force in terms of sales and this is projected to continue into the future. Discounters have shown significant growth in recent times and high growth in this channel is projected for the future.

i. Hypermarkets and superstores

Hypermarkets and superstores are among Western Europe's most predominant retail formats, including the operations of well-established players such as Carrefour, Auchan, Tesco, Metro Group or Schwarz Group. With the emerging dominance of these players, substantial pressure was created for both supermarkets and neighborhood stores, which led many to close down. A reduction in store numbers led government officials to impose legal growth limits on hypermarkets to stabilize the market. Competition- based legal restrictions have increasingly been placed on both hypermarket openings and large-scale mergers. As a result, the convenience store format has become popular for mass market retailers. Table 11 below shows the dominant Western European retail chains.

Hypermarkets and supermarkets dominated packaged food sales in France, Germany, Italy, Spain, and the United Kingdom in 2010, and accounted for over 60% of the market. However, discounters grew significantly between 2005 and 2010 as they capitalized on consumer price sensitivity to promote private label products and capture greater market share. These three retail channels compete heavily against each other and have engaged in intense price competition in recent years. In turn, small grocery retailers, specialty retailers, and other grocery retailers have lost market share, and are expected to decline further over the next five years.

TABLE 11: DOMINANT RETAIL CHAINS IN WESTERN EUROPE	
Company	Description
Carrefour	A French-based operator of hypermarkets, supermarkets and discount stores.
Metro Group	A German-based company that largely relies on its cash and carry outlets (which target the hotel, restaurant and institutions sector), but also manages networks of hypermarkets and consumer electronics stores.
Tesco	A British market leader with several foreign operations outside Western Europe.
Schwarz Group	Owner of the fast-expanding Lidl and Kaufland chains.
Auchan	Another French multi-format specialist.
Edeka	A German market leader that has increasingly been focusing on its home market operations.
Source: AgriFood Canada/ Planet Retail	

TABLE 12: GROCERY SALES IN THE TOP FIVE COUNTRIES BY RETAIL CHANNEL
(US$ millions)

Retailer	Sales 2010 - Value	Sales 2010 - Share	Growth 2005-2010	Projected growth 2010-2015
Hypermarkets	314,177.0	31.4%	17.7%	4.8%
Supermarkets	308,098.4	30.8%	9.3%	3.5%
Discounters	133,120.6	13.3%	22.8%	10.7%
Small Grocery Retailers	128,525.3	12.8%	4.9%	-2.6%
Specialty Retailers	105,779.0	10.6%	-0.4%	-5.5%
Other Grocery Retailers	11,997.9	1.2%	1.5%	-1.9%
Total	**1,001,698.2**	**100.0%**	**11.5%**	**3.1%**
Source: AgriFood Canada/ Euromonitor				

ii. Discount stores

Discount stores first emerged in Germany, where strong players, such as Aldi, were first launched. Other retailers using the discount format are Schwarz Group's Lidl, Edeka's Netto, Rewe's Penny and Carrefour's Dia. With a strong presence in both Germany and Austria, discounters have increasingly spread across Europe. Major chains, having originally focused on hypermarket or supermarket formats, are now experimenting with the discount format; the list of prominent names includes, but is not limited to, Wal-Mart, Leclerc, Auchan and Tesco. In this sector, German-based Aldi and Lidl, as well as Netto (Edeka), and Penny (Rewe), continue to expand across Europe at remarkable speed, while Carrefour's Dia concept has also become a leading operator in its area. It is important to mention that contrarily to discount formats in most Western European countries, in Germany, discounters are trend-setters and offer a wide range of products from organics to premium lines and bakery goods. Aldi's strength in Germany has allowed it to set prices in some categories within the marketplace. It is not uncommon for wealthy German consumers to shop at Aldi, whereas, this is not so common in other Western European nations.

Discount and fixed price stores expanded rapidly in 2009 as consumers sought value. This format will remain significant in 2010 even as economic conditions improve. The key challenge for discounters will be to retain consumers in a changing economic climate, for example, introducing premium lines and upgrading stores. In reaction to the force of the discount format over the recessionary period, mainstream grocers were forced to react with their own discount initiatives, for example, introducing new economy private label ranges and fixed price promotions/ranges. These sales strategies prevented discounters from, as anticipated, making large gains in market share in key markets such as the U.K.

iii. Cash and Carry

Western Europe's cash and carry sector is dominated by German-based Metro Group, which continues to serve large numbers of independent grocery stores and restaurants through its nearly 400 outlets across the region (Planet Retail). Metro has developed several sub-formats that are targeting different consumer groups, including a fresh food dominated version for the restaurant sector. Other leading players in the cash and carry business include Baugur (through its U.K.-based Booker chain), Rewe (Selgros), and U.K.-based Bestway (Batleys, Bestway). Table

iv. Buying groups

According to Planet Retail, most independent retailers that continue to exist in Western Europe are organized in buying groups, such as Edeka, Rewe, Intermarché, or the numerous co-operative societies active in the region. It is difficult, in the Western European market, for independent traders to compete on price with the larger companies. For this reason, traders tend to join buying organizations, except in the very small upmarket niches. Alidis/Agenor are two buying centers working under common European distribution companies: Centros Commerciales Ceco S.A (Eroski), Zentrale AG & Co (Edeka) and ITM Entreprise S.A (les mousquetaires). Head offices for these buying groups are located in Geneva. Members of these centers were, in 2009, present in nine countries and represented 18500 points of sale. Agenor/Alidis has created additional international buying power for distribution companies such as ITM, and is one of the largest independent buying groups in Europe.

v. Private labels

Retailers are increasingly engaging directly with shoppers through private label development. Private labels refer to the development by retailers of their own brands of merchandise. The two main benefits of private label development are to drive loyalty and gain higher margins. Ongoing investment in the quality, marketing and positioning of private labels poses a serious threat for brands seeking exposure to the consumer through retail space in Western Europe, especially as retailers look to rationalize their overall assortment. What's more, private label products are now available in various ranges, for example, economy, regular, and premium, giving large multiples a competitive advantage over smaller competitors and strengthening their position against industrial brand suppliers.

Planet Retail advises that the retail share of private label lines has risen significantly over the past number of years, reaching 89% of the entire product range for certain retailers. Retailers using private labels have higher bargaining power, while the overall capacity of manufacturers and suppliers of branded goods to negotiate is declining. The evolution of private labels triggers concerns about the decrease in consumer choice and the possible decline in opportunities for brand development and innovation, however private labels are growing in importance and is likely to consume more shelf space and market share in the future. Many retailers are cutting back on complex arrays of branded goods to replace them with a simpler range of higher margin private label products. Several mainstream grocers launched new private label economy lines in 2009 to compete with discounters. Some of the larger players in Europe to have been promoting their own private labels, including Carrefour with its discount line, Tesco with its "discounter" line and Wal Mart with its "Great Value" line, all of which could become major threats to, or opportunities for suppliers. Even up-market retailers such as Waitrose of the UK have followed the trend.

German distribution channels

Discounters, supermarkets and hypermarkets made up 80% of grocery retail sales in Germany in 2010, with all of them experiencing double-digit growth over the past five years (Table 13). With 36% of the market, discounters dominated grocery retailing and continue to expand, aided by consumer price sensitivity and the popularity of private label products. In recent years, there has been heavy price competition between discounters and supermarkets. Overall, the top five retailers (Edeka Zentrale, Lidl Dienstleistung, Aldi Sud, Rewe Markt, and Aldi Nord) account for half of grocery retail sales.

TABLE 13: GROCERY SALES IN GERMANY BY RETAIL CHANNEL (US$ millions)

Retailer	Sales 2010 Value	Sales 2010 Share	Growth 2005-2010	Growth 2010-2015
Discounters	83,153.4	35.7%	16.7%	11.0%
Supermarkets	60,018.2	25.8%	10.7%	10.4%
Hypermarkets	44,417.1	19.1%	14.2%	8.5%
Small Grocery Retailers	27,120.0	11.6%	8.0%	0.4%

Specialty Retailers	15,284.9	6.6%	-0.3%	-5.9%
Other Grocery Retailers	2,891.9	1.2%	2.1%	4.5%
Total	**232,885.6**	**100.0%**	**12.1%**	**8.0%**
Source: Euromonitor				

French Marketing Channels

In 2010, hypermarkets and supermarkets dominated grocery retailing in France and had a combined market share of over 75% (Table 14). However, between 2005 and 2010, discounters and specialty retailers experienced substantial growth at 24.9% and 19.2%, respectively. The emergence of discounters coincided with the increasing price sensitivity of consumers during the economic downturn. Overall, the top five retailers (Carrefour, ITM Entreprises, Galec – Centre Distributeur Edouard Leclerc, Auchan France, and Systeme U Centrale Nationale) accounted for over 60 % of grocery retail sales in 2010.

Table 14 Grocery Sales in France by Retail Channel (US$ millions)

Retailer	Sales 2010 – Value	Sales 2010 - Share	Growth 2005-2010	Growth 2010-2015
Hypermarkets	116,798.7	43.8%	14.3%	1.8%
Supermarkets	87,826.7	33.0%	1.8%	3.8%
Specialty Retailers	21,743.4	8.2%	19.2%	4.5%
Discounters	19,104.1	7.2%	24.9%	-2.4%
Small Grocery Retailers	18,385.4	6.9%	-3.9%	-11.3%
Other Grocery Retailers	2,647.0	1.0%	26.3%	5.9%
Total	**266,505.4**	**100.0%**	**9.6%**	**1.5%**
Source: Agrifood/ Euromonitor				

Marketing channels in the Dutch Caribbean

With nearly 4 million tourists visiting the islands annually and no significant domestic food production, the islands rely heavily on food imports. The retail food market is estimated at approximately US$300 million. An estimated 50% to 60% of imported foods are channeled thru the retail sector, which is composed of an estimated 300 to 350 retail outlets, and the remaining 40% to 50% thru the food service sector. In the larger markets of Aruba, St. Maarten, and Curaçao approximately 70% of the retail food business moves thru the major stores (supermarkets, super centers, club warehouses, etc.), 25% thru small independent grocers, and about 5% thru convenience stores, gas marts and kiosks. In the smaller islands of Bonaire, St. Eustatius, and Saba where there are less large stores, the majority of the retail food business is handled by small independent grocers. The larger retailers usually buy direct from foreign supplies and source products from local importers/distributors as well.

How consumers buy: critical trends and opportunities affecting processed/ packaged and specialty food

There are a number of general trends which are helping to shape consumer attitudes in the EU, at the level of products, as well as the retail environment. These include:

- ***Environmental concerns and sustainability***: There is continuing interest on the part of EU retailers in environmental issues and sustainability. This also extends to the food service sector. In addition to being a global trend, sustainability initiatives such as reducing energy usage, waste and packaging are also seen as ways for retailers to reduce costs. Environmental consciousness has also influenced producers to adopt sustainable manufacturing processes.
- ***Growth in private labelling and generic alternatives:*** branded products are, more than ever, feeling a strong competitive pressure from lower-priced alternatives. Although in principle, branded products have a definitive and automatic competitive advantage in their ability to innovate; generic and private label options often offer essentially the same product at a lower price. This is attractive to customers in a recessionary environment.
- ***Value-driven consumerism*** is expected to continue, driving further innovations in private labelling, in particular green, organic and ethical food products. The demand for premium goods remains substantial.
- ***Ethical Consumerism*** is expected to continue, sustaining the green movement and the marketing of products based on value propositions and benefits, centred on such terms as: ecological, sustainable, fair trade, biodegradable, food miles, vegetarian, organic, animal welfare, etc.
- ***'Shopper Centricity'*** describes the focus of the highly competitive environment resulting from the tendency of consumers to become much more sophisticated and selective in their shopping habits in the face of an abundance of choice. It may essentially be defined as the ability to offer the right assortment to the right customer, meeting their needs at the right time. Leading retailers are often forced to discount merchandise heavily in order to maintain customer loyalty. However ongoing discounting can eventually result in deflation as consumers become accustomed to promotions. These factors have recently encouraged retailers to think of more sustainable, long-term, customer-centric strategies which place the shopper at the core, even at the expense of short-term profit. These include loyalty programmes and cross-marketing initiatives.
- ***Targeted and customized product mixes*** are one component of the shopper-centric strategy. With the growth in private labelling, retailers increasingly have the ability to offer a targeted and customized product mix to their price-focused and value-focused consumers. In order to customize product assortments, retailers tailor their store by location, based on the results of market studies involving demographics and affluence levels. The feedback in these studies often dictates the type of retailers that will open (i.e. value-based, mainstream or upscale) and the merchandising mix features in a particular region. .
- ***Range Rationalization:*** Retailers are aiming to improve the relevance of their offerings by delisting SKUs that are not "top-selling", in order to create cleaner, more convenient stores, but also to drive down costs through inventory reduction. Range rationalization leads retailers to replace secondary or peripheral brands with higher margin private labels, improve in-stock positions, and reduce replenishment costs. This allows retailers to leverage greater power over vendors by requesting

additional support, such as in-store and out-of-store marketing. Retailers are also increasingly demanding insight, both at the shopper and category levels, from suppliers. By offering supporting data on consumer behaviour or offering information relating to the product category that will drive sales, suppliers can position themselves for a sustained competitive edge in the eyes of the retailer.

- ***Changing demographics and new retailing formats***: Aging populations, smaller household sizes, and concerns about obesity have encouraged packaged food manufacturers to introduce smaller retail formats and a larger variety of health and wellness products as well as convenience foods. Discounters and hypermarkets have greatly expanded their market shares, mostly at the expense of smaller retailers. Grocery retailing is shifting towards more affordable and convenient formats in order to attract consumers.

Opportunities

The economic downturn has increased unemployment, reduced household incomes, and lowered consumer confidence in Western Europe. Growth in the packaged food sector is generally expected to be stifled by declines in consumer expenditure. However, growth opportunities exist for private labelling and the offering of premium products, based on the switch by some consumers to better value products. As hypermarkets, supermarkets and discounters expand throughout Western Europe, they present opportunities for packaged food manufacturers to supply private label products. Consumers are increasingly health and eco-conscious, and have demonstrated a willingness to pay premiums for products with such attributes and for higher quality products in general. Therefore, manufacturers should market activities to be specialized and premium products in their pursuit of higher profit margins.

Snack foods

Food consumption in the EU is dominated by fresh foods and produce. However, the EU market has seen an increase in demand for prepared and pre-packaged convenience goods. Due to fast paced lifestyles, snack food is one of the fastest growing sectors. Snack bars, snack mixes and energy bars continue to be a driving force in the snack market in Europe and steady growth is anticipated well into the future. Trends for organic, fortified, and functional products have shaped the emergence of high-value snacks including energy bars and cereal bars, which have high future potential market value.

Frozen Foods

Customers' attitudes toward frozen foods have transformed significantly in Europe since the 1990s, driven by an improvement in living standards, and an increasing need for convenience. Frozen processed foods continue to gain popularity based on their easy and convenient preparation and the fact that they can be stored for an extended period of time. Consumers have become more price-conscious and are coming to appreciate the value that frozen foods can offer. The segment faces strong competition from chilled prepared foods, which are increasingly being perceived as offering superior taste and quality compared to their frozen equivalents. As a result, manufacturers of frozen foods have been forced to improve their offerings in order to attract consumers. Despite being small in size, children's meals is one of the fastest growing segments in the frozen processed food market. In some countries, such as France,

consumers perceive that the nutritional content of frozen products is inferior to that of chilled or fresh foods, and believe that unnecessary amounts of fat, sugar or salt are often added to some frozen products. Italian consumption of frozen processed food is moving towards the levels of other European countries. However, the majority of consumers prefer fresh products, which are available throughout the year, particularly when it comes to meat and vegetables. Although Spanish consumers are renowned for their commitment to healthy food and the Mediterranean diet, American-style fast food (and associated frozen offerings) is very popular among children and teenagers in the country.

Meal solutions

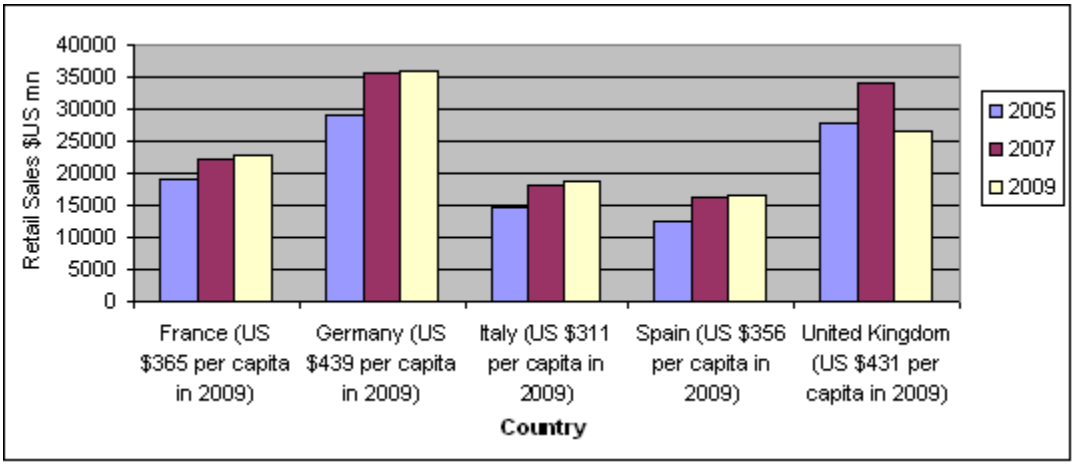
In the recessionary environment, European consumers are cutting back on eating out. Meal solutions in grocery stores offer good approximations of their restaurant equivalents, and with a variety of combinations available, many consumers see these store-bought meals as an attractive option for economizing.

Health and Wellness

In the last decade, consumers have become increasingly aware of the health benefits of food, following educational campaigns by state and private bodies and innovative new product launches. Western European consumers are aging, which has created a large segment of individuals for whom health is a primary concern and, in turn, driving their eating habits. As a result, the health and wellness sector is expected to see a greater diversity of products available in mainstream stores. Organic ingredients are now found in many products, as increased consumer interest in food ingredients and production processes continues to grow. This trend can be partly attributed to concerns about the healthiness of food. While "convenience" and "microwaveable" have been popular claims in the market, "health" and "natural/organic" are now being widely used to draw consumer attention. In fact, "health" and "organic" have emerged as the most popular claims in frozen processed food over the past couple of years. It will be crucial for potential suppliers to pay attention to consumer tastes and preferences with regards to product types, packaging, labeling, etc., to be competitive in this market. Consumers in this market are savvy and well read, and want to be informed about the food and beverages they consume. Health and wellness food and beverages are no longer viewed as niche products in this marketplace, as a result of their wide appeal to a number of consumer groups.

AgriFood Canada analyzes the health and wellness segment as shown in Figure 4 below. The segment is strongest in Germany, with almost double the sales seen in Spain and Italy. France and the U.K. are comparable, both achieving sales between 22 and 26 billion in 2009. Although the U.K. appears to have seen the largest drop in health and wellness sales, a decline was felt across all segments. The U.K. has actually maintained a stable health and wellness sector, in conjunction with overall food and beverage sales, with the percentage of overall sales allocated to health and wellness products being consistent at 22%, between 2005 and 2009.

FIGURE 4: THE HEALTH AND WELLNESS MARKET SIZE IN WESTERN EUROPE ($US MILLIONS)



Source: Agrifood Canada/ Euromonitor International, 2010

Consumers have embraced the concept of nature in their eating habits, focusing on a well-balanced and naturally healthy diet. This behavior has led consumers to cut down on elements such as sugar, salt, fat and cholesterol while encouraging consumption of food that is either made from 100% all natural ingredients or is certified organic. With organic food taking on greater importance, other ethical considerations are also being rolled into the subject of nutrition, such as fair trade, usage of sustainable ingredients and packaging, and minimizing carbon footprint, even though these have no actual "nutritional" impact. There is, however, also a movement toward nutraceuticals, which focuses on adding beneficial ingredients to one's diet to achieve the specific health function claimed by the product. Functional foods represent a key focal point for product innovation and are growing strongly despite recent economic uncertainty. Consistent with the health and wellness trend there are several sub-categories which can be defined to develop marketing campaigns. These are outlined below.

- ***Better-For-You:*** Better-for-you (BFY) products are packaged food and beverages with reduced levels of "less healthy" substances, such as fat, sugar, salt and carbohydrates. Products in this category have nutrient content claims such as 'low fat,' 'sugar free, '30% less sugar,' etc. These are often low-fat/low-sugar/low-carbohydrate versions of standard food products, and sugar-free/ caffeine-free versions of standard drink products.
- ***Food Intolerance:*** Germany has led this category, growing faster than in other Western European countries. These products are made to look and taste like food that normally contains an ingredient that can trigger a food intolerance or allergy. Examples include gluten-free bread or lactose-free milk. The Food Intolerance category is still the smallest within the health and wellness sector.
- ***Fortified and Functional:*** Fortified/functional (FF) products are those to which health ingredients have been added. These ingredients should provide health benefits beyond their nutritional value and/or should constitute a level of added ingredients that wouldn't normally be found in that product. Therefore, healthy products such as 100% fruit/vegetable juices are only included in the FF category if additional health ingredients (e.g. calcium, omega-3) have been added during

production. This category is strongest in the U.K., followed by Germany and France and is expected to continue to grow in the future.

- **Naturally Healthy**: This category includes food and beverages that naturally contain a substance or substances that improve health and wellbeing beyond the product's pure calorific value. These products include:
    a. Foods that are naturally high in fiber
    b. Soy products
    c. Sour milk drinks
    d. Nuts
    e. Honey fruit snacks
    f. Granola/muesli bars and fruit bars
    g. Olive oil and olive oil spreads
    h. 100% fruit/vegetable juice and superfruit juice
    i. Natural mineral water and spring water
    j. Cereal/pulse-based drinks and other Asian specialty drinks,
    k. Tea (e.g. naturally healthy tea, green tea, herbal tea)
    l. Malt-based hot drinks and other plant-based hot drinks

  The naturally healthy category is the largest food group in the health and wellness sector for most countries; with the exception of the U.K. Euromonitor International estimates that for Italy and Spain, the market for this category is double that of fortified foods and better-for-you foods.
- ***Organic Foods:*** This category includes food and beverages that are certified organic by an approved certification body, such as the Soil Association in the U.K. Organic production is based on a system of farming that maintains and replenishes soil fertility without the use of impure and persistent pesticides and fertilizers. Organic food and beverages are minimally processed without artificial ingredients, preservatives or irradiation. The use of Genetically Modified Organisms is prohibited. "Certified Organic" means the item has been grown according to strict uniform standards that are verified by independent state or private organizations. Depending on the country, such products are called 'organic', 'biological' or 'ecological'. Organic products have become more popular as they become more accessible to a broad consumer group. The category gained wider availability in retail outlets and benefited from the low prices of discounters, especially during the recession.

  The market share for organic products is still fairly small in comparison to other categories within the health and wellness sector; however, it is a growing category. Euromonitor International estimated that in 2009, organic product sales accounted for small percentages of overall food and beverage sales: France (0.7%), Germany (1.4%), Italy (0.6%), Spain (0.1%), UK (1.6%). With Western Europe's higher income levels and growing demand for health products, this category will be more profitable, as the world steps out of the recession.

Characteristics of Consumer Demand in target markets

i. Expenditure on Food and Beverages

In 2009, consumption of both food and beverage declined in Western Europe, as in most of the rest of Europe. Expenditures on food saw an 8.5% decrease, in comparison to an 8.7% increase in 2008 (Agri-Food Canada). Table 15 below shows the trend of food consumption in Western Europe between 2004 and 2009. Beverages also saw a similar drop in consumption at 8.9% in 2009, following on a 7% increase over the previous year in 2008 as shown in Table 15. The decrease not only reflected what consumers were buying, but where they shop. Price-conscious retail formats, such as hypermarkets and discounters, were outperforming supermarkets and small grocers which could not offer similar attractive prices, regardless of what is actually purchased by consumers.

Table 15: Consumer Expenditures on Food in Western Europe (US$ millions)

	2004	2005	2006	2007	2008	2009
Expenditure on Food	897,311.9	930,578.5	974,136.9	1,102,512.2	1,198,463.2	1,096,213.9
Expenditure on non-alcoholic beverages	88,922.0	92,332.1	96,705.0	108,955.3	116,626.9	106,287.4

Source: http://www.ats-sea.agr.gc.ca/eur/5782-eng.htm

ii. Expenditures on groceries and foodservices and per capita expenditure

Groceries and foodservice sales were also affected by the recent recession, with changes to consumer behaviour observed. In 2009, grocery sales saw an 8% drop; foodservices saw a 9% decline and overall spending on food saw an 8% decline. These indicators are all expected to rebound due to increased consumer spending, since consumers will increasingly look for practicality and convenience and the potential in the Western Europe region is immense due to the size of the market and the wealth of its consumers. Table 16 shows the packaged food consumption per capita for leading EU countries

Table 16: Packaged Food per capita for select EU countries (US$ per Capita)

Country	2004	2005	2006	2007	2008	2009	Average 2004-2009
U.K.	1,397	1,418	1,459	1,617	1,549	1,537	1,496
FRANCE	1,224	1,223	1,241	1,379	1,489	1,344	1,317
GERMANY	938	945	972	1,098	1,207	1,093	1,042
ITALY	1,240	1,265	1,316	1,488	1,635	1,484	1,405
SPAIN	811	836	875	987	1,098	980	931

Source: adapted from Agrifood Canada, based on data obtained in Euromonitor International, 2010, http://www.ats-sea.agr.gc.ca/eur/5782-eng.htm

iii. Packaged Food Expenditures by Type

Agrifood Canada notes that many French and Spanish consumers have abandoned raw, fresh food in favour of more convenience-oriented options, and have increased their interest in chilled and frozen processed foods. Table 17 below shows the forecasted growth for specific categories of processed food between 2009 and 2014. Based on this forecast, immediate growth segments include: snacks, snack bars, ready meals, meal solutions, frozen foods, chilled foods and spreads.

Table 17: Forecasted Growth for Packaged Goods in Major Western European Markets (%): 2009-2014

	ITALY	U.K.	FRANCE	SPAIN	GERMANY	AVERAGE GROWTH
Confectionery	2.9	4.5	2.1	7.9	1.1	3.7
Bakery products	-0.6	3.3	-3.7	-1.8	-4.3	-1.4
Sweet and savoury snacks	1.9	9.0	1.1	18.2	6.1	7.2
Snack bars	20.6	6.0	29.5	11.2	-0.6	13.3
Meal replacement products	-10.4	-18.6	-32.1	4.0	-9.1	-13.3
Ready- meals	-3.4	3.3	20.9	4.0	12.2	7.4
Canned/preserved food	-1.5	11.9	4.0	2.6	-5.7	2.3
Frozen processed food	5.3	5.7	15.5	0.4	16.1	8.6
Dried processed food	8.9	6.8	-0.2	5.8	-6.7	2.9
Chilled processed food	11.2	4.0	17.3	8.7	2.9	8.8
Oils and fats	3.2	10.4	-5.7	-9.2	3.5	0.5
Sauces, dressings and condiments	-1.2	11.6	3.0	6.3	1.5	4.2
Baby food	1.3	8.2	13.9	7.6	-1.4	5.9
Spreads	8.7	10.5	10.0	15.2	-1.9	8.5

Source: http://www.ats-sea.agr.gc.ca/eur/5782-eng.htm

Competition and Key Players

The EU food and drink industry is highly competitive. Table 18 below shows the ranking of top food and drink companies by European food and drink sales for the period 2010 to 2011.

Table 18: Ranking of Top Food and Drink Companies by European Food and Drink Sales (2010- 2011)					
NAME OF COMPANY	**HEADQUARTER LOCATION**	**SALES IN € BILLION**	**NET GROWTH OVER PREVIOUS YEAR (%)**	**EMPLOYEES (x1000)**	**MAIN SECTORS**
Nestle	Switzerland	12.4	4.0	95	*multi-product*
Heineken N.V.	Netherlands	11.0	0.0	36	*beer*
Lactalis	France	9.4	NA	31	*dairy products*
Group Danone	France	9.4	1.9	46	*dairy, waters, baby and medical nutrition*
Associated British Food	UK	8.7	10.1	NA	*sugar, starch, prepared foods*
Unilever PLC./ Unilever NV	Netherlands/ UK	8.2	0.0	29	*multi-product*
Vion	Netherlands	8.0	-2.0	NA	*multi-products, ingredients*
Carlsberg	Denmark	7.6		14	*beer*
Danish Crown	Denmark	7.0	14.0	24	*meat products*
Sudzucker	Germany	6.2	8.0	18	*sugar, multi-product*
FrieslandCampina	Netherlands	5.9	3.5	13	*dairy products*
Oetker Group	Denmark	5.8	13.7	26	*multi-product*
Nutreco	Netherlands	4.7	NA	5	*meat products*
Anheuaser- Busch In Bev	Belgium	4.1	4.6	NA	*beer*
Barilla	Italy	3.9	NA	14	*beverages, confectionery*
SABMiller Plc	UK	3.5	NA	14	*beer*
Diageo Plc	UK	3.1	3.0	3	*alcoholic beverages*
Kerry Group	Ireland	3.0	9.7	23	*multi-product*
Pernod Ricard	France	2.9	2.0	3	*alcoholic beverages*
Bongrain	France	2.8	8.9	14	*dairy products*
Barry Callebaut	Switzerland	1.8	-5.3	3	*confectionery*
Parmalat	Italy	1.2	4.4	2	*milk, fruit-based drinks*
Ebro Foods	Spain	1.0	3.6	NA	*rice, sugar, dairy*
Tate & Lyle	UK	0.6	NA	2	*ingredients, prepared foods*
NA- not indicated					
Source: Food DrinkEurope (2011), Data and Trends of the European Food & Drink Industry 2011, retrieved from http://www.fooddrinkeurope.eu/publication/data-trends-of-the-european-food-and-drink-industry-2011/ in August 2012					

Pricing

Table 19 below shows the average prices in 2011 for selected EU 27 imports from Barbados, versus the pricing of imports from the rest of the world.

Table 19: Average price for EU 27 imports from Barbados vs. rest of the world							
HS Code	Product label	2011 EU-27 Import Value from Barbados (1000 EURO) (A)	2011 EU-27 Import Qty from Barbados (1000kg) (B)	Average price (EURO/kg (C=A/B)	2011 EXTRA EUR27 Total Import Value (1000 EURO) (D)	2011 EXTRA-EUR27 Total Import Qty (1000kg) (E)	Average price (EURO/kg) (F=D/E)
1905	Bread, pastry, cakes, biscuits and other bakers' wares, whether or not containing cocoa; communion wafers, empty cachets of a kind suitable for pharmaceutical use, sealing wafers, rice paper and similar products	145.770	74.700	1.95	488766.36	211174.90	2.31
2103	Sauces and preparations therefor; mixed condiments and mixed seasonings; mustard flour and meal and prepared mustard	103.770	70.80	1.47	429150.09	257368.40	1.67
2105	Ice cream and other edible ice, whether or not containing cocoa	na	na	na	20135.93	5779.90	3.48
1601	Sausages and similar products, of meat, meat offal or blood; food preparations based on these products	na	na	na	6246.90	1132.20	5.52
1603	Extracts and juices of meat, fish or crustaceans, molluscs or other aquatic invertebrates	na	na	na	25084.36	3699.20	6.78
2007	Jams, fruit jellies, marmalades, fruit or nut purée and fruit or nut pastes, obtained by cooking, whether or not containing added sugar or other sweetening matter	12.740	7.700	1.65	79595.68	42907.60	1.86
	na- not available						
Source: Export Helpdesk							

Production Requirements and Supply Chain Issues

Growth in private labelling and increasing consolidation in retail distribution has significantly impacted the ability of external producers to compete within the EU. Increasingly, further integration of producers with the supply chain and building longer term supplier relationships are key features of

doing business in the EU market environment. Management of the supply chain and communication among stakeholders are increasingly conducted according to global standards which, once implemented, effectively reduce the costs of procurement and individual transactions. Innovate with your winning products, by developing new, healthier ways of providing a similar or improved eating or drinking experience.

Conclusion: Critical Success Factors in Developing Export Industries in processed/ packaged and specialty food

In developing export industries in processed and specialty food, there are several basic requirements to enable producers to enter the value chain. Basic optimal conditions include:

- sustainable supply of quality agricultural inputs and other raw materials
- packaging sourced from suppliers compliant with GMP and EU standards
- adherence to packaging and labelling regulations and composition requirements for foods
- adequate transportation infrastructure: roads, ports and airports
- refrigerated cargo facilities to enable maintenance of the cold chain in transport
- sanitary and phytosanitary regulatory systems
- appropriate testing systems to monitor compliance with technical regulations
- ability to target specific niches and develop partnerships with buyers in the target markets; convenience, health and wellness, organic, fair trade, etc.
- trade policies which favour suppliers entering the market on competitive terms
- understanding market needs and requirements in the context of the buyer-driven supply chain; maintenance of open lines of communication regarding demand preferences in products, quality and packaging requirements and fostering buyer involvement at all stages of the chain
- particularly in the case of processing, willingness to meet hygiene requirements, manage food safety and develop on site laboratories for testing of product and staff and support Hazard Analysis and Critical Control Pont (HAACP) analysis
- understanding of the role of investments in new technologies and good quality packaging materials in preserving quality and increasing shelf life and the ability to source these good quality packaging materials economically
- understanding the role of workforce training and development to meet the needs of a more highly developed and competitive value chain
- understanding the role of research and development, innovation and technology as driving forces in new product development
- recognition of the role of economies of scale and by extension, collaboration among small producers in convincing the market of the ability to deliver consistent quality supply on a timely basis
- need for sector-specific collaboration among SMEs in the areas of advocacy, lobby, trade promotion, brand development and integration with global supply chains.

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