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FUNCTIONAL FOODS IN THE EUROPEAN UNION: AN OVERVIEW OF THE SECTOR'S MAIN ISSUES

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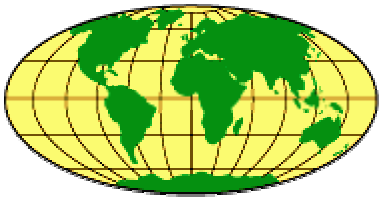

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An Overview of the Sector's Main Issues

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SUMMARY

In Europe the demand of functional foods varies remarkably from country to country, on the basis of the alimentary traditions, the enforced legislation and the different cultural heritage that people have acquired. The opportunities of expansion on the market seem to be quite favorable and the interest of the consumers is rather high.

But the diffusion of these products in the community area is slowed down by some obstacles. One of main ones is the lack of an official law-recognized definition for these references, necessary in order to clearly assign these products to the food sector rather than to the pharmaceutical one.

In a such situation, we note that nowadays it is impossible to carry out a complete survey of this world, due to the lack of homogeneous and trustworthy statistical data and to the confused definition of the sector. In fact, every country adopts his own national legislation and includes in this class different products.

The variable meaning assumed by the term "functional food" in the EU member states, can also hinder the free trade even within the EU boundaries. In fact, pursuing the safeguard of human health, each partner can block the admission of a product, even if it comes from an other EU member country.

This lack of clarity at the production phase is reflected in a difficult control at the consumption phase. The disinformation of the trade operators and, consequently, of the consumers can involve some risks for these last ones due to not only to the deficiency of benefits, using functional foods, but also possible damages to the health. Ambiguous definition and gaps of knowledge about the composition and the effects of these products, in fact, can interfere with an aware choice of purchase and an organized development of the sector.

JEL Classification: Q13, Q18, L65, L66

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1. INTRODUCTION

The presence on the market of products enriched with nutrients and foods conducive to good health is not a new event, however, a recent development is the identification of genuine categories, such as nutraceuticals and functional foods, into which they are grouped; then, in its initial stages is also the related research work.

The diffusion of these products and growing consumer success have both been encouraged by the socio-economic trend typical of industrialised countries in recent years. Rises in income and an increase in disposable funds have indeed made it possible for people to look after their own wellbeing, having already satisfied their basic needs. Obviously this has influenced every aspect of the consumer's lifestyle including eating habits. The choice of a particular food is no longer connected with the need to demonstrate a certain social and economic status (as for example shown by the increase in sales of red meat about 40 years ago) but depends on the desire to be in good health both physically and mentally and to avert the risk of illness. This concept sometimes broadens into a vision of curing one's own body, not in the restricted medical sense of the word but conceived as the replenishment of certain substances and restoration of functions which people feel have been lost due to time, work and stress and which they would like to regain.

Population growth has seen a substantial increase in the proportion of "old" people and consequently the average age has risen while the birth rate has fallen. Accompanying the increase in age there has been greater recourse to products for maintaining and improving one's health and these are not necessarily pharmaceuticals[1]; on the contrary, the preference shown for non-chemical therapies, self-medication and medicines alternative to conventional treatments has, without doubt, stimulated the health food sector.

From the standpoint of the consumer then, a real change has been experienced in regard to the relationship with food with the addition of another variable to be considered at the moment of making choices as to what to buy, the health aspect.

Beginning with these considerations it was decided to focus the paper on the functional foods sector.

2. OBJECTIVES

The present paper sets out to examine the functional foods sector in the European Union. Firstly, the legislation in force will be analysed in order to clarify what is meant by this term and which foods belong or do not belong to this category. At the same time any gaps in the regulations will be brought to light. Having chosen the European Union as the subject of research it will be necessary to analyse primarily the legislative measures of the European community which in this case, as is well-known, prevail over any national legislation to the contrary.

Then the matter will be more thoroughly discussed with some references to the legislation of some member countries of the EU. Once the parameters of the existing laws have been clarified, an attempt will be made to define the category of functional foods

[1] Furthermore, it must be considered the influence on this choice due to the increase of the medicinal products sale prices.

and to clearly understand what special features distinguish them and make them different from other food products. In this regard, numerous references will be made to nutraceuticals and we will try to discover the relationship between the two types of references, which are often considered as the same thing. In connection with this, it should first be said that no official documents defining one or other category exist, so we rely on the opinions and studies of operators and experts, not only from Europe but also from other countries where the use of these references has produced excellent results in sales.

Finally the European Community market will be examined both from the standpoint of quantity and in terms of a qualitative analysis of supply and demand. As we go deeper into the subject it will be seen that each member country is distinguished by some special features, also because these products are very often linked to eating habits and at the same time to the requirements of good health which vary from one region to another of the European Union. Nevertheless, an attempt will be made to give an overall picture even if up to the present it is still difficult to carry out a complete investigation due to the scarcity of detailed information available and the confusion which still typifies some aspects of the sector.

3. DEFINITIONS AND LEGISLATION

3.1 Definition of the product and the sector

No official definition exists for the terms 'nutraceutical' and 'functional food' but they are now commonly accepted and associated with enriched foods that are connected with the health and wellbeing of the individual. This connection is very often rather vague and knowledge of the more detailed aspects of the effects they cause is often very patchy.

Nutraceuticals is a term that was coined by the American market, the first country together with Japan where the use of these references has become widespread. The word derives from combining elements of the words 'nutrients' and 'pharmaceuticals' and the intended meaning is quite evident, even if these terms encompass very different product categories. In this paper, although related to the situation in the European Union, we will use a definition of nutraceuticals taken from the Nutrition Business Journal (www.nutritionbusiness.com, 1998), one of the most authoritative American magazines in the field; the NBJ describes the nutraceuticals as

> «...all consumable food, beverage and supplement products purchased predominantly for health reasons, including the prevention and cure of disease... ».

Thus we are dealing with a category containing an extremely wide range of products (Figure 1) lacking precise boundaries and which includes

> «...natural and organic foods, supplements, functional foods, some lesser evil foods (foods with unhealthy ingredients taken out such as fat, sugar, caffeine, salt, etc.) and some market standard foods (foods consumed predominantly for health reasons such as cranberry and prune juice, a certain percentage of foods frequently purchased for health reasons like orange juice, yogurt, fish, fruit and herbal tea and former functional and

lesser evil foods that have become the market standard like enriched flour, iodized salt and low-fat milk)» (www.nutritionbusiness.com, 1998).

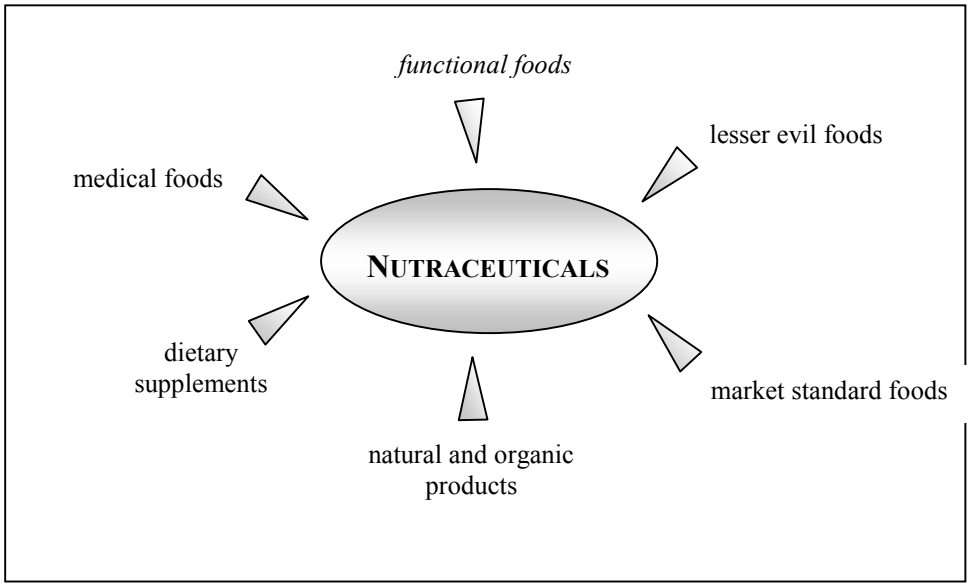

Figure 1. Nutraceuticals categories. Source: Our elaboration on Nutrition Business Journal informations.

Consequently, the difference between a nutraceutical in general and a conventional food as seen on the shop counter is not always easy to see.

It would be useful at this point to explain what is meant by medical foods and their difference from functional foods, since reference is very often made to the legislation of the former in order to regulate the latter. **Medical foods** are products prescribed by medical doctors when a patient has special nutritional needs for the prevention or treatment of a particular condition of health. As they are very similar to medicines they cannot be sold over the counter in stores and supermarkets (FDA, 1997). This definition, taken from the Food and Drug Administration, however turns out to be suitable also for the concept of this category in the European Union and more importantly makes it possible to identify the most evident distinctive traits of this commodity group and thus the need for a medical prescription. Furthermore, in Italy, they must be sold exclusively in pharmacies, prepared at the moment by doctor on the basis of the patient's requirements. Thus, they aren't foodstuffs used like a daily constituent of a "normal" diet, as it happens instead for functional foods.

Functional foods represent a narrower category of products which includes all foods enriched with ingredients that can improve benefits to health. Depending on the author, the definition of functional foods may cover a greater or lesser range of meaning: in the first case the class includes, besides enriched foods, also food supplements and therefore nutrients administered in concentrated form (in capsule form for example); in the second case we are limited to considering only genuine foods, excluding pills, powders or tablets which in themselves do not constitute a meal.

According to FLEP[2] Working Group on Functional Foods (2001)

> «functional foods are everyday foods that contain added ingredient such as probiotics in bio-yogurts and fermented milk drinks (...) and other ingredients specifically designed to give food a positive health benefit».

In reality one could say that every food capable of providing vitamins, fibre or any nutrient may belong to this group. What makes the difference however is that the composition of the functional product must be 'enriched' and the positive effect must be superior (or different) from that of the starting ingredients. The work group mentioned is carrying out studies in order to consider a complete precise definition of the sector but several experts maintain that perhaps it is not necessary to create a category ad hoc for functional foods: it could be sufficient to enact clear laws to regulate what may or may not be shown on labels (and thus most importantly any connection between human health and the effects of the food) and the product would automatically fall into a class.

The absence of a genuine commodity class, in Europe, may find an explanation also in the difficulty of precisely identifying a single type of these products which often belong to different classes and food types. Thus it is a question, more than anything, of an "across the classes" group of nutritional products, brought together by some common features but often with other, very different properties of their own (for example, functional foods are present in both the drinks and solid foods sectors, there are functional snacks and sauces and so on, for every moment of the day). Furthermore, consideration must be given to the fact that many of the foods which companies would like to market now as functional foods are often no more than products already on the market to which an ingredient has simply been added in order to enhance certain functions.

3.2 Regulation

An analysis of the legislation underlying the functional foods sector or, more generally, related to the group of nutraceuticals, proves to be rather difficult. In the European Union there is in fact no specific body of legislation for these products to date. On the other hand its constitution would be somewhat complex. The primary need is to establish definition of such references unequivocally.

3.2.1 Commodity definition

Functional foods are products that are removed from the term 'food' as understood in the more traditional sense and in many aspects are more akin to the field of pharmaceuticals and/or cosmetics, thus they maintain a certain ambiguity in their nature. One just has to think of the functions, for example, of a cosmetic product, how to improve one's appearance or protect the health of one's skin and maintain it in good condition; these are decidedly similar to the advantages claimed for foods containing antioxidant substances. The difference lies mainly in the way in which they are used and the benefit gained but the underlying active ingredient is very similar.

[2] European Food Law Enforcement Practitioner's Forum, an organization of food control in the Ue, that established a Working Group about the case of functional foods.

According to European law however they are still only food products and cannot for any reason claim therapeutic or curative properties. Indeed this is a property belonging only to medicines. The food product must not be promoted in any way as a treatment for the prevention of pathologies or for the restoration or the modification of a physiological function of the human body. This is a principle that the EU has also hammered home in the latest document regarding the subject[3] and it is a rule that all the legislation governing this sector have in common in the different countries in which functional foods are to be found.

Thus in the absence of common EC legislation, the European members rely on the national laws of each country. This however can lead to substantial differences in the way products are regarded on crossing frontiers; sometimes legislation assigns a product to a certain category in one country but to a different category in other European partners thus creating considerable difficulties in trade.

3.2.2 Composition

As regards the composition of a functional food, the legislation concerning the ingredients permitted vary somewhat from one country to another in terms of dosage, origin and source of raw materials, treatments or processes to which they may or may not be subjected, etc. In this regard two examples can be mentioned: the first concerns the legislation covering probiotics (lactic acid bacteria, in particular) and the second concerns the regulations for fatty acids (Geiser, 1999). For most European partners the addition of lactic acid bacteria[4] to a substance is freely permitted; in Denmark however, approval must be requested each time they are used, while in Italy they come under the law for dietetic foods intended for special diets (legislative decree n. 111 of 1992[5]) and, consequently must respect the laws in force for that production sector, which is very close to medical foods. The use of fatty acids is also allowed by many EU members but, while in Belgium their use must always be followed by a notification in regard, Denmark and Finland permit their use only if naturally occurring and in France they can be added only to dietetic foods. European community legislation must however overcome these inconsistencies.

When the constituents (such as antioxidants, carotenoids, isoflavonoids, etc.) of a functional food are derived from officinal plants or other botanical species, the absence of sufficient legislation becomes even more acute. In most EC countries there is no pertinent legislation and each case has to be judged on its own merits; Belgium and the UK are exceptions; in the former country the use of these substances is allowed in accordance with an existing list in which the species and the extracts that may or may not be used are catalogued; in the UK the only constraint is that their "safety" is guaranteed.

At this point we shall briefly examine the situation of the legislation in force regarding this group of products in Italy. In effect, the situation is similar to that of the other European partners, with a legislation that does not refer to functional foods or nutraceuticals with precision, nevertheless two general laws covering the sector can be

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[3] *Nutrition and functional claims - A response from the National Consumer Council to consultation on the European Commission's discussion paper,* (SANCO/1341/2001)

[4] In this case are Lactobacillus and Bifidobacteria strains.

[5] Legislative Decree n. 111 of 27 January 1992 "Implementation of the directive 89/398/CEE relating to foodstuffs intended for particular nutritional use".

named. One is the basic law for the food sector, n. 283 of 1962, updated and amended several times, regarding the "Hygiene regulations in the production and sale of foods and drinks". It regulates the production and marketing of substances intended as foodstuffs and requires the inspection of the various phases by the competent health authorities.

The second law, briefly mentioned earlier, is Legislative decree n. 111 of 1992 "Implementation of Directive 89/398/EEC, relating to foodstuffs intended for particular nutritional uses". This category includes, among others, foods enriched with nutrients such as carbohydrates, proteins or vitamins for example, or with other kinds of substances including those derived from plants. These foods however are intended to produce particular metabolic alterations and the public must be informed by means of special labels which display the word 'dietetic' or similar terms. These laws then do not have a precise effect on the matter but until EC legislation is passed and implemented they will comprise one of the main reference points for the national sector.

Recently (April 2002), the Decree of the President of the Italian Republic n. 57/2002[6] has been approved implementing the Directive EC n. 21/1999 about dietary foodstuffs intended for special medical uses in which their classification[7] and labelling are specified.

3.2.3 Communication of health benefits

Another burning issue, still poorly regulated, concerns claims. The claim is defined by the BEUC (Bureau Europeen des Union de Consommateurs) as

> «...any message, reference or presentation, whatever the means of transmission (including trademarks) stating, implying or suggesting that a foodstuff has special characteristics, properties or effects linked to its nature, composition, nutritional value, method of production or/and processing or any other quality...» (SANCO/1341/2001).

Various types are recognised (nutrient, health, etc.) by the contents of the message but none of them is well-defined in reality. Moreover, the meaning attributed to each of them tends to vary from one institution to another[8]. The need for clarity in this regard is not of particular interest to the consumers for whom recognition of the various categories of claims is of secondary concern, but it is necessary to define their terminology legally in order to orchestrate the procedures of different countries so that the consumer can trust the veracity of a claim at the time of choosing what to buy.

There are two pertinent laws in this regard in the European Union: Community Directive n. 496 of 1990 which is the basis for regulating nutritional labelling, currently under revision, and Directive n. 13 of 2000 regarding the presentation and advertising of foodstuffs. Neither of the two however specifically deals with claims for foodstuffs (SANCO/1341/2001).

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[6] Official Journal n. 85 of 11 April 2002.

[7] Dietary foodstuffs intended for special medical uses are divided in three classes:
- complete food from a nutritional point of view with a standard formulation of the nutrients;
- complete food from a nutritional point of view with a formulation of the nutrients right for a specific disease;
- incomplete food from a nutritional point of view with a standard formulation of the nutrients or right for a specific disease.

[8] Eg. The definition of "nutrient function claim" in the Codex Alimentarius is quite similar to the definition of "health claim" in the UK's Joint Health Claims Initiative (SANCO/1341/2001).

The attention given to claims is considerable as these represent the main channel for conveying information between the producer and the consumer. This is true especially when they are used to express a connection between the food and human health but it is precisely this relationship that must be defined in a way that is not misleading in the description of its effects. Thus a major problem for which the European Union is trying to find an answer is the agreement of the legislation of the various partners regulating these matters. The activities of the European Commission also arise from the fact that, following a consumer survey, it became apparent that almost all consumers wished to be informed completely and clearly concerning the effects, whether positive or negative, of a given product in order to be able to make correct informed choices. Some European countries, the Netherlands, Spain, Finland, UK, Belgium and Sweden, have already formed their own sets of regulations in this regard, while France and Denmark are in the process of doing so (Geiser, 1999). Other member countries, including Italy, have not yet started such an update process.

It is therefore a matter of great importance as it will affect the field of advertising and that of contact with the public. The question that has yet to be answered is: what terms can be used to communicate the references to a possible influence of a food component on health? The answer is still not forthcoming and this leaves the consumers exposed to possible risks. One thing is certain, medical claims are prohibited in the case of foodstuffs and references to treatment, cure or prevention of diseases (understood in the medical sense of the word) must be avoided and the National Consumer Council maintains that this prohibition must be upheld and respected (SANCO/1341/2001).

The interest shown by the European Commission is quite substantial and has given rise to numerous studies and projects concerning this matter. Furthermore, a discussion featuring public health, including the question of functional foods, as one of the main subjects of debate was started in 1998 within the European Council. Of the various opinions expressed by the partners in this regard, the prevailing viewpoint was that of the Swedes, in which the consumer must be informed essentially in regard to two main aspects in order to be able to exercise an informed choice:

- the real relationship between the food (and its uptake over a period of time) and a health condition and
- the nutritional composition of the product.

On conclusion of the discussion a group of experts in functional foods and their connection with health was constituted. They were asked to produce a series of guidelines clarifying the main topics inherent in this sector.

The need for common legislation within the territory of the European Union and the penetration of the consumer market by these foods, also in European countries, have spurred the Community institutions to give greater consideration to the subject: the need has become apparent for the consumers to be protected and for the sector to be reorganised. The issues that must be worked out are of various kind, firstly the fundamental question if all foods are suitable for the addition of other nutrients. In particular, the attention of the EU Institutions is focused on the whole of vitamins and minerals like ingredients eligible to enrich a foodstuff. They have been studied in 1992 in a report about their energetic and nutritional contribution. On this subject a task force has been created in the aim of developing research, collecting data and, above all, establishing safety standard for the consumption of these supplements (Geiser, 1999).

Without doubt the European Union is lagging behind the USA and Japan as regards legislation for functional foods and health claims. The Food and Drug Administration[9] has established how the latter are to be expressed and which of them need or need not to be subjected to controls. Japan is in the forefront with a law that is very clear about this and which defines the category of functional foods in the greatest detail. These products are made to come under the law for the improvement of nutrition, article 12, in the category of "foodstuffs intended for particular nutritional uses" and in the subcategory of "foodstuffs for specific health purposes"[10]. Furthermore, 12 classes of ingredients useful to health which these products can contain are defined, such as oligosaccharides, alcohol sugars, peptides and proteins, isoprenoids and vitamins, minerals, glucosides, alcohols, choline, lactic acid bacteria, polysaturated fatty acids and others. Japanese law subdivides functional foods into two categories: FOSHU[11], introduced in 1991, (food for specific health use) and the other functional foods. As regards the former, after being subjected to a formal process of approval, and if this concludes with the assent of the Ministry of Health, the logo of the ministry is placed on their packaging and the company has the official permission to include any effects on and relationship with health in the markings on the packaging. Functional foods that do not undergo this procedure do not have the possibilities mentioned but the decision whether or not to opt for a 'foshu' is at the discretion of the company.

In the European Union, the difficulty of arriving at a single legislation for functional foods which is able to regulate the market (in the broadest accepted meaning of the term) is certainly daunting. It is a process that will have to deal with the desires of each individual country, their eating habits and their respective prerogatives for safeguarding the health of the population. In general, we are dealing with matters in which each partner would like to maintain some degree of autonomy of action. However, the confused and foggy situation which exists at present is surely counterproductive, not only for the consumers who are not adequately protected, but also for the sector itself which is not able to develop in a well-defined direction.

4. THE MARKET

Investigation of the magnitude and value of the functional foods market in the EU is very complicated, mainly because of the scarcity of complete updated information available. This is due primarily to the problem of identifying clear boundaries for the group of products, a fact that creates confusion when compiling statistics. The data and the information available often give values that are in stark disagreement. Indeed, the group examined may change each time depending on what foods one believes should be

[9] The Food and Drug Administration: in the USA is the Authority that must support the public health also through the control of foodstuffs on the market. Regarding functional foods, FDA must intervene also for what concerns ingredients and claims.

[10] Law for the Improvement of Nutrition, art. 12: category of "Foodstuffs intended for special dietary uses" with five subcategories: 1) foodstuffs for sick persons; 2) powder milk for pregnant and milking-at-breast women; 3) powder prepared, milk for infancy products; 4) foodstuffs for elderly persons; 5) foodstuffs for a specific healthy use.

[11] The category of foshu includes all types of enriched or strengthened foodstuffs like medical foods, dietary supplements, therapeutic products, dietary foods, strengthened ones, for sport, particularly foodstuffs for allergies and others.

counted as functional and non functional. To favour clarity of information, each result should be accompanied by an explanation of the methods used to obtain it. It should also be noted how from one country to another of the EU the different systems of legislation make it impossible to draw up a homogeneous list of products and consequently how the values counted in one member state are compared to those calculated in another without taking into account the possibility that different reference points may exist. In this chapter we will therefore try to cling to only a few official sources and rely on the uniformity of the results.

4.1 The demand

Among the causes of the development of the **demand** for functional foods there is certainly the fact that today's consumer is increasingly aware of the connection between food and health[12].

In the European Union the consideration of this relationship varies from one country to another, on the basis of widespread eating habits, public health policies, different cultural heritage and the economic level reached.

In general, the description of the functional food consumer type is rather variable depending on age and the specific functions the product must fulfil. For example, functional foods which act on the physical state of the person are very popular among the youngest consumer classes as they improve their physical capabilities, but at the same time they are also bought by persons over 70 to give energy to a physique that is beginning to suffer tiredness and debilitation. Products having the effect of disease prevention enjoy some success in the middle age class, between 40 and 65 years old (Gilbert, 1998[13]).

Furthermore, consumer choices vary according to the commonest pathologies in a given area: functional foods having the effect of alleviating or helping to prevent certain problems will be sold mainly in countries where these situations arise more frequently and vice versa. Thus, for example, in the United Kingdom diseases related to the circulatory system and to stress are the most widespread (Geiser, 1999) and consequently it is the functional foods which are able to regulate blood pressure, keep cholesterol levels low, etc. that enjoy the greatest success. (The Henley Centre, 2000).

Towards the end of the nineties, a study estimated that the value of the functional foods sector in Europe was around 1.6 billion dollars (Geiser, 1999, with data Leatherhead Food RA, 1998). In reality, this was a partial figure because it did not include all the countries of the EU: for example Italy was excluded. Furthermore, the same source reports a value around 4-8 billion dollars in the case one considers as functionals also the products that contain an ingredient for the human welfare but this is not specified on the label. Nevertheless, in view of the absence of official data to which reference can be made, this figure is the most reliable. The division of this value among some of the partners considered, is shown in figure 2. The United Kingdom, France and Germany represent two thirds of the total market value.

[12] This is one of the explanations can explicate the development of the nutraceuticals demand in general, not only of the functional foods.

[13] The survey is referred to consumers in USA but it can be easily transferred to European consumers.

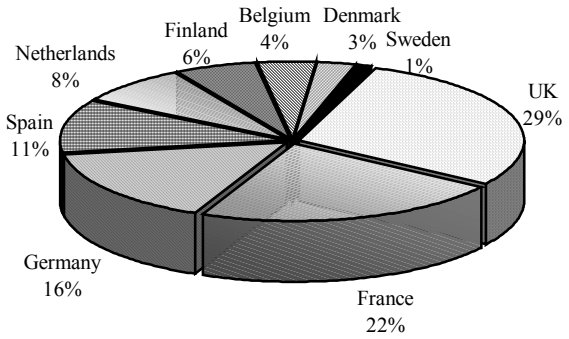

Figure 2. Break-out of the functional foods market in several EU Member States.
Source: Leatherhead Food RA and European Advisory Service Bruxelles.

Beyond the confines of Europe the demand concentrates mainly in the most industrialised countries such as the United States and Japan, but an increase in the demand is anticipated also in new markets that are now developing, mostly in the countries of Latin America and in some Asian countries such as China[14].

Experts have also tried to estimate the possible growth rates of the sector. Some sources foresee annual increases of about 7-8% in the nutraceuticals market in general for western countries (Nutraceuticals International, 1998). A doubt arises however because these growth rates may depend on the meaning of the terms 'functional' or 'connected to health' which are attributed to the foods at the time of the survey and consequently this may affect the size of the group at such time.

Detailed analysis of the commodity classes involved reveals a predominance in functional foods of the dairy sector which includes the food products that best lend themselves to enrichment and to a connection with health (Figure 3) while 23% of the market belongs to spreads followed by bakery products and drinks.

[14] Furthermore, it can't be forgotten that China, as many other Eastern Countries, has ever recognized in its tradition a strong link between the human health and food.

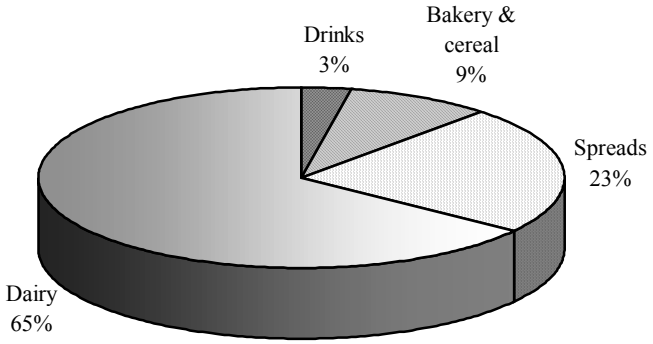

Figure 3. Share of products of the functional foods market in EU.
Source: Leatherhead Food RA and European Advisory Service Bruxelles.

4.2 Market supply and companies

Companies have seen enormous potential for success in the functional foods market, mainly on account of the message that these products convey: eat something that you like and which, besides feeding you, also benefits your health simply by helping to maintain it; a message that fits well with the consumption growth registered by the market during the last decade. This phenomenon can be understood, for example, from the fact that in food product advertising it is the health aspect of a food that is very often emphasised. The idea is to direct the consumers not only towards a product but also a whole new way of thinking.

Attracted by the positive performance and favourable prospects for development which this sector seems to offer, the number of companies showing interest in breaking into this market is increasing. These are not only food producers but also pharmaceutical companies, sometimes in collaboration with companies involved in agricultural chemistry. The majority belong to multinationals[15]. The professional categories that operate together are therefore different and this is due to the heterogeneous variform nature of the product. It may happen that it is the food sector companies that experience the greatest difficulties, crossing over into areas of a pharmaceutical nature which they are not capable of handling. On the other hand there is the risk that the food may lose its main character with the related attributes of savouriness, desirability and digestibility, only to become a kind of pharmaceutical.

On the basis of information about consumer experiences this development is to be avoided: the product must aim to improve (or maintain) a general state of good health

[15] Several multinationals, in the latest years, have open a specific department for the research and the development of functional foods and nutraceuticals: Nestlè, Kraft, Kellogg, etc..

because it seems that the consumers have rejected foods that resemble medical preparations too much in that keeping healthy by eating is acceptable but one must not deviate too far from the concept of food. Furthermore, references to particular pathologies that are too explicit may frighten the healthy consumer who believes that the food is suitable only for those suffering from a specific pathology (Mellentin and Heasman, 2001).

It is clear that, also from the standpoint of production, the absence of legislation and lack of clarity that are typical of this sector, constitute an obstacle to expansion. In this regard, in Japan and the USA where this phenomenon has reached much higher levels than in the EU, there are numerous service agencies which have the main task of assisting companies wishing to enter this market depending on the type of product and the nature of the company itself, in order to deal with the extensive bureaucratic red tape and/or compliance with legislative constraints. In Europe this kind of service is still rarely found.

4.3 Marketing strategies

The development of some products in the European market provides material for reflection on the market strategies adopted by companies.

In regard to the product, some of them have preferred to operate in the mass foodstuffs market with references typified by a general functionality or at least not too specific, assuming a position not very different from that of conventional foodstuffs. Other companies instead have opted for niche markets: in this case, however, the product must have properties aimed at resolving specific problems and must be able to satisfy the better informed consumer demand that also requires more probing and detailed information on the functional food that are chosen for purchase.

Concerning the information to be provided for the consumer, the benefits obtained from the functional product are generally shown on the label. The terms used may be scientific to varying degrees depending on the interest shown by the consumers in the functions explained by the reference and thus the target market to be aimed at. Some companies have promoted a system of stepwise differentiated information, based on the personal desire of the consumer to be informed. This system begins with the information on the product label (the essentials), progresses to the leaflet inside the packaging (more descriptive), then the leaflets available at the sales outlet and finally the most detailed information provided by the vendor or possibly an internet site depending on the method of purchase. In this way each person is free to obtain information to the desired extent before choosing a product for purchase.

Informations supplied to consumers[16] of functional foods are of vital importance for two main reasons:

- these products are somehow linked to the health of the consumer who must be given the possibility of making a careful purchase;
- the functions performed by functional foods are relatively few if compared to the number of available products, consequently competition is considerably strong:

[16] This calls for well-prepared salesmen. For this reason, it is generally thought that functional foods cannot be considered equal to conventional foods, their sale requires a special attention, mainly those products suitable for particular health conditions.

market shares will be conquered only through an adequate education of the consumer who should be able to value the efficacy of the different products.

Observing, instead, the manoeuvres of companies in terms of pricing strategy, it has become apparent that the products sold at higher prices, with the intention of suggesting superiority over conventional foods, have not been successful in many cases. In contrast, the functional foods sold at prices more or less similar to those of the non enriched foods from which they are derived have been well received. This fact is probably connected to the concept that it is still considered a food in spite of its special properties.

Many experts have highlighted a method which is relatively common to all companies to enrich a product. Once the consumer's primary needs of the moment have been identified and an ingredient has been studied which has a certain success[17], they tend to introduce it in the greatest possible number of references (Mellentin and Heasman, 2001). This is how, in a very short time, a group of new functional foods comes on the market with a functional ingredient common to all of them. The action benefiting health that this ingredient has to perform, concerns what is believed to be the momentary objective of the consumers. At the present time (and probably not only in UK) one of the commonest fears is that of having a heart attack and it is believed that the risks can be reduced by lowering the cholesterol level, thus the market has seen an increase in the supply of products that favour the health of the heart by means of and action involving cholesterol (Table 1).

Table 1. UK consumers: choice in buying products for health

	Most important	Important
Lower in fat	33%	55%
Lower in sugar	26%	56%
Lower in cholesterol	19%	38%
Lower in calories	15%	30%

Source: The Henley Centre on New Nutrition Business, june 2000

Functional foods can therefore represent an important opportunity for food production in general. In fact, a saturation of the traditional markets can be seen and consequently new possibilities for earnings are being sought by creating different kinds of product. The enrichment of the products makes it possible to start from an already known base on which to build by changing its composition and future market positioning.

The various businesses that operate in the functional foods market, however, also have a need to distinguish their product from those of direct competitors. To achieve this aim there is the tendency to emphasise the scientific aspect and content of the product. By suggesting similarity to medical foods the differentiation may lead to advantages but it means entering a commercial field very different from that of functional foods. Continuing to market the products as functional foods one forgets that the consumer does not look at the scientific background when purchasing a food product but pays much more attention to the brand which explains why functional foods, also the result of thorough (and costly) studies and laboratory research, find themselves in the position of competing with products that are much less effective but which, for example, have a

[17] Mellentin and Heasman (2001) says that this is the "big idea of functional foods", which permits to a food to become "functional overnight".

brand name much better known. It is a contradiction that exists in the market.

The importance of the brand name thus remains crucial. A company will have a great deal of difficulty, or at least this has been the experience of some English companies, breaking into a food market in which their name was not hitherto known (New Nutrition Business, 2000). The process of entering a market is lengthy but easier when the brand name of functional foods is already known for that sector. A company producing enriched yoghurt will probably have it easier if already known for dairy products than if it had been operating in the confectionery sector up to that point. Of course this argument does not imply that the opposite cannot happen.

As regards the **commercial channels** used for the sale of enriched foods it is necessary to make a fine distinction: in the case of a broad definition of the term 'functional foods' which also includes food supplements or if we limit the meaning, which is the case so far, to genuine functional foods. In both cases they can be regularly found in the small and large sales outlets unless they are foods designated for specific medical purposes in which case they are sold exclusively at the chemist's. Furthermore, they are sold in specialised shops, chemist's and sometimes even by herbalist's.

However, if we consider also the supplements, the legislation is rather different from country to country allowing the division of the members into two groups: the more restrictive group (to which Italy belongs) in which the supplements are sold mainly in specialised shops or chemist's, and the more "liberal" countries in which these products, besides their normal appearance in mass markets, can easily be bought by mail order, internet or television.

5. FINAL REMARKS

According to some experts one of the success factors of functional foods is their cross category: they are different from normal foods but do not go so far as to constitute a separate category aimed only at a target of consumers who need them as a kind of "therapy". Their health features are suited to all types of consumer for the fact that they are quite "general" in their functions and have small quantities of active ingredients. In fact these products must be suitable for repeated spontaneous consumption over a period of time, sometimes with daily frequency and not regulated from the quantitative standpoint just as the case is for any food. The interest in this category has been rather lively so far with significant growth rates in both industrialised countries, even if at the initial stage, and developing countries.

There is a need then to find satisfying answers to the problems discussed in order to permit the sector to develop in a rational planned way. Above all, in the matter of their legislative "treatment": the official definition of what constitutes a functional food, or a nutraceutical, would bring about the specification of a single regulation to which reference can be made, ensuring greater safety for the consumer and avoiding the need for production companies to resort to self-regulation methods in order to guarantee a product in the absence of a legislative and institutional action[18]. A solution to the problem of the structure and content of claims would also probably result from this.

[18] In general, the nutraceutical all together show the same problems and questions.

Observing the example of Japan which has regulated the sector with precise legislation, one can understand how they encourage opportunities for success in the market: with the support of the Government they have a decisively higher rate of consumption and they can act without fear of repercussions also in promotion activities since there is clarity concerning what may or may not be done and/or said.

In the same way, the definitive clarification of the nature of these foods could allow the use of one kind of commercial channel, thus making the situation more homogeneous among the various European members. Moreover, with a description of content and cataloguing, there would no longer be a basis for raising non-tariff barriers against free trade. In fact in many instances, a different definition between one member and another of the EU has obstructed the free trade that should be taking place in the Community area.

A need particularly felt by the companies operating in the sector is for studies and research into the question. At the moment the studies are carried out mostly at a private level by the concerns affected. At the institutional level instead, interest is still rather limited even if the matter probably deserves greater attention in view of the market growth experienced by functional foods. Other advantages are to be gained: an informed consumer, and therefore one who has had the material available, is able to choose from the various brands and various references. Recent surveys, among other things, have shown that the proportion of persons with a clear idea of these issues is rather small (Gilbert, 1998), especially if compared with the proportion of those who would be interested in knowing more.

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