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OVERVIEW OF DIETARY SUPPLEMENTS MARKET TRENDS IN EUROPEAN UNION

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ABSTRACT

Diet and physical exercise are universally acknowledged as important factors in preserving health and avoiding illness. Dietary supplements are now widely thought to play a function in health promotion. Many people, including adults and children, use vitamins or other nutritional supplements. In additional to vitamins, nutritional supplements contain minerals, herbs or other botanicals, amino acids, enzymes, and a range of other substances. Tablets, pills, candies, and powders, as well as beverages and energy bars, are all available. Europeans regard food supplements as things that boost their health and well-being. Throughout their lives, health professionals will recommend dietary supplements to their patients. The EU rules on diet and health claims have forced supplement makers to incorporate micronutrients in their health claim substantiation offerings. The Europe food Supplements market is growing at a CAGR of 5.49%. This article mainly summarizes the food supplements, their importance, regulations and the market analysis from 2019-2030.

Keywords: Food supplements, Europe, Diet, Market, Health, Regulations

INTRODUCTION

In European union dietary supplements considered as food supplements. European food safety authority (EFSA) definition Dietary supplements square measure supposed

to correct organic process deficiencies, to keep up Associate in Nursing adequate intake of sure nutrients, vitamins or to support specific physiological functions **[1]**. "Health Supplements" means Nutraceutical, dietary, or food supplement products. This health supplements have been in use since many years to maintain, enhance and improve the healthy function of human body. Dietary supplements (DS) contains vitamins, minerals, amino acids, fatty acids, enzymes, probiotics and other bioactive substances consumed as single or in the form of combination. Today, taking dietary supplements (DS) is also widely regarded as a health-promoting activity. Based on the legal or nutritional sciences, dietary supplements lack a clear and uniform definition. Nutritional supplements are now deemed dietary goods and are thus accessible not just in drugstores, but also in supermarkets and internet retailers. Most of the people do not differentiate between drugs and DS by often administering different groups of preparations and ignoring possible interactions between the substances they contain. The dietary supplements use in Europe is limited and increasing day by day **[2]**.

For many years, dietary supplements were only foods intended to balance nutrition or meet special nutritional needs. A healthy diet requires an adequate food supply of energy in the form of macronutrients (proteins, fats, carbohydrates and total calories), as well as an adequate intake of essential nutrients, including vitamins, trace elements, minerals, acids, essential fats and essential nutrients, amino acids. A person's need for various nutrients is related to his energy needs, age, height and weight. They will vary due to physiological factors such as whether or not the individual is increasing, and whether or not a woman is pregnant or breastfeeding. Lifestyle factors such as level of physical activity, stress, smoking and alcohol consumption can also influence nutritional needs **[3]**.

Some specific examples of supplements:

1. Vitamin D tablets
2. Vitamin B12 powders
3. Calcium pills
4. Nutrilite (Amway Products)

About EU

Food supplements are considered as food, it is the responsibility of the manufacturer, importer, supplier or distributor to ensure that a food supplement placed on the market is safe. There are around 27 European Member States, and member states may seek notification of a dietary supplements placement on the market in their jurisdiction for monitoring purposes. The competent authority of the Member State may monitor

the product's usage in that region after it is on the market. In the EU, there are currently no binding maximum and minimum values for the components in food supplements. The highest values will be determined in partnership with the European Commission, Member States, and other relevant parties, according to Directive 2002/46/EC. Due to the intricacy of the situation and the diverse opinions expressed by the parties involved, this procedure is still ongoing, and no final decision has been made. The European Commission's efforts to establish maximum limits for vitamins and minerals in dietary supplements and fortified foods are aided by EFSA's efforts to define acceptable upper intake levels (ULs) of particular micronutrients for certain demographic groups **[1]**.

European Legislative Framework

"Food products whose aim is to supplement the normal diet and which are concentrated sources of nutrients or other substances with a nutritional or biological effect, alone or in combination, marketed in dose form namely capsules, pastilles, tablets, pills and other related methods, sachets of powder, capsules of liquids, drops dispensing bottles and other similar forms of liquids, marketed in dose form namely granules, cherry flavors, tablet devices, sedatives and other similar types, marketed in dose form namely **[4]**. The principal directive regulating supplements, Directive 2002/46/EC, strives to provide a high level of protection for consumers by establishing ingredient limitations and labeling requirements for supplements supplied in the European Union **[5]**. Food supplements are considered foodstuffs, which is an essential consideration. This means that regulations that apply to foodstuffs also apply to food supplements, unless the food supplements legislation clearly states otherwise. Because it focuses solely on vitamins and minerals, the Directive is a first step in the harmonization process **[6]**.

THE FOLLOWING ARE SOME MORE DIETARY GUIDELINES:

European Community Regulation (EC) No. 178/2002 (General Food Law)

The 'General Food Law Regulation,' or Regulation (EC) No.178/2002 of the European Parliament and of the Council of the European Union as it is formally called, is the cornerstone of European Food Law.It establishes general principles and standards of food legislation, as well as the European Food Safety Authority and procedures in food safety matters **[6]**. The EU General Food Law establishes food safety principles and criteria for all food items, including supplements **[5]**.

1. **Novel Food: Regulation (EC) 2015/2283**

Food that had not been consumed to a considerable degree by humans in the EU prior to the 15th of May 1997, when the first Novel Food Regulation went into effect, is defined as novel food. These foods might be freshly developed, novel foods, foods made using new technology and industrial procedures, or foods that are or have been historically consumed outside of the EU.

Novel sources of vitamin K (menaquinone) or extracts from existing foods (Antarctic Krill oil high in phospholipids from Euphausia superba), agricultural goods from distant nations, or food created from new manufacturing procedures (UV-treated food) are examples of Novel Food (milk, bread, mushrooms and yeast) **[7]**.

The following standards for innovative foods are outlined in the regulation: **[5]**

- General safety requirements
- Methodology for determining new foods
- Authorization procedures
- Notification requirements
- Risk management requirements

2. **Specific Groups: Regulation (EC) 609/2013**

Food with a medicinal purpose that is intended for newborns and young children is covered under Regulation (EC) 609/2013. Milk and cereal-based supplements are also mentioned. The regulation specifies both compositional and informational requirements, including: **[5]**

- Food classification
- Nutritional requirements
- Documentation requirements
- Labeling requirements
- Precautionary requirements

4. **Food Additives: Regulation (EC) 1333/2008**

Colorants, perseverant, and artificial sweeteners are among the additives covered under Regulation (EC) 1333/2008. The rule specifies the requirements for each authorized addition and includes provisions for: **[5]**

- The acceptable food additives list
- Food additives that have been utilized in the past
- Food additive labeling regulations

EU Food Supplement Marketing Authorization Procedures

The National Authorization Procedure, Decentralized Procedure, Mutual Recognition Procedure, and Centralized Procedure are all alternatives for a sponsor seeking market authorization for a novel medicine in Europe. The number of nations planned to commercialize the medicine, the timetable for

approval, and the budget adjustments are all factors to consider **[8]**.

1. Centralized Procedure

The European Union-wide system for medical authorization, under which a single application, a single examination, and a single authorization are used throughout the EU **[9]**. In the Centralized Procedure, the applicant submits a marketing permission application to the EMEA and obtains a single European approval that is valid in all 27 EU countries. The applicant should notify the EMEA of their plan to submit an application at least seven months before the deadline. In a pre-submission meeting, applicants might meet with the EMEA to discuss any procedural or regulatory difficulties **[10]**. The evaluation period lasts around 120 days.

2. Decentralized Procedure

The approval process for medications in more than one European Union member state runs in parallel. It can be utilized for drugs that don't need to go through the centralized approval process and haven't been approved in any other Member State **[11]**. When no marketing permission has been given in the European Community, this approach is used to gain marketing authorizations in many Member States. If a marketing licence is required, the applicant must apply to the appropriate authorities in each Member State.. The applicant has the option of naming a nation as the Reference Member State (RMS). The RMS is chosen based on a variety of factors, including workload, past experience, interests, and the RMS's approval of the dossier **[12]**. The evaluation period lasts around 120 days.

3. National Procedure

It applies to pharmaceuticals that are beyond the scope of the centralized procedure or that were approved before to the founding of the EMA and fall within the national procedure's authorization (NP). It is beneficial to producers seeking market permission in certain EU member states. Applications are examined by the relevant authorities of each EU member state in this procedure. Each EU member state has its own national procedure **[12]**.

4. Mutual Recognition Procedure

A pharmaceutical product must have already gained marketing permission in one EU nation to be eligible for the mutual recognition procedure. In all EU nations, basic arrangements for executing the mutual recognition mechanism outlined in Directive 2001/83/EC have been made. A mutual recognition request can be sent to one or more EU nations. All EU nations must be notified, and all applications must be similar. The nation responsible for reviewing the

application, also known as the Reference Member State, informs the other Concerned Member States. The product will subsequently be decided by the Reference Member State **[13]**.

The RMS delivers the Assessment Report, or changes any existing one, within 90 days after receiving a valid application, and sends it together with other papers to the CMS(s) and the applicant. Following receipt of the Assessment Report and confirmation of the application by each of the CMS, the RMS starts the clock (s). The CMS(s) acknowledge the RMS's decision within 90 days. The CMS(s) competent authorities make a decision and award marketing permission thirty days after the procedure is completed. As a result, if the MRP ends with a favorable agreement, each CMS will receive a nationwide marketing authorization (s) **[10]**.

Food and feed safety warnings from RASFF

RASFF – the rapid Alert System for Food and Feed – is a critical instrument for ensuring the flow of data to facultative quick reaction whenever dangers to public health are discovered inside the organic phenomena **[14]**. The Rapid Alert System for Food and Feed (RASFF) is a warning system run by the European Commission that allows Member States to share information on recognized dangers. It includes food, food contact items, and animal feed. This effective data-sharing technology enables Member States to respond to a security issue faster and more effectively than ever before **[15]**. It first opened its doors in 1979. Due to critical information supplied, RASFF may result in product recalls. RASFF is a solid system that has grown through time and continues to show its value in protecting food safety in the EU and beyond **[14]**.

RASFF's portal

The RASFF portal includes a searchable online database that is interactive. It makes summaries of the most current RASFF alerts available to the public, as well as the option to search for information on any previous notification **[14]**.

MARKET TRENDS

In 2020, the European dietary supplement market was worth USD 14,995.3 million, and it is expected to grow at a CAGR of 5.49 percent over the next five years (2021-2026) **[16]**. The industry is being pushed by a fast growing senior population in several European nations, as well as increased consumer awareness of preventative healthcare treatments and practices.

Because of the growing consumer preference for natural products and products with fewer chemical components, demand for natural, vegan, and clean-label supplements is on the rise **[17]**. The dietary supplement market in

Europe has grown in several regions as a result of the COVID-19 epidemic, since the majority of European consumers have increased their interest in general health and wellbeing. The breakout of the corona virus pandemic in Poland in March 2020, for example, had a substantial influence on Poles' purchasing habits, which resulted into increased product sales volume. The largest sales growth was seen in the health sector, such as nutritional supplements and over-the-counter medications, from February to March **[18]**.

Because of the presence of a big target population in the region, the adult segment dominated the market in 2016. The children category, on the other hand, is expected to grow at the quickest rate, with a CAGR of 7.5 percent during the projection period, owing to an increase in the number of product releases for children and babies, as well as an increased population of malnourished children. According to the European Commission, malnutrition affects 51 million children under the age of five, and it is one of the primary causes of mortality in this age group, accounting for 45.0 percent of fatalities **[19]**. Italy, Germany, and Russia are the top three European nations in terms of food supplement markets. Eastern European markets, on the other hand, are quickly expanding. Italy, Germany, Russia, the United Kingdom, France, Poland, Norway, Finland, Belgium, and Spain are the top ten European markets for food supplements, according to Euro monitor statistics **[20]**.

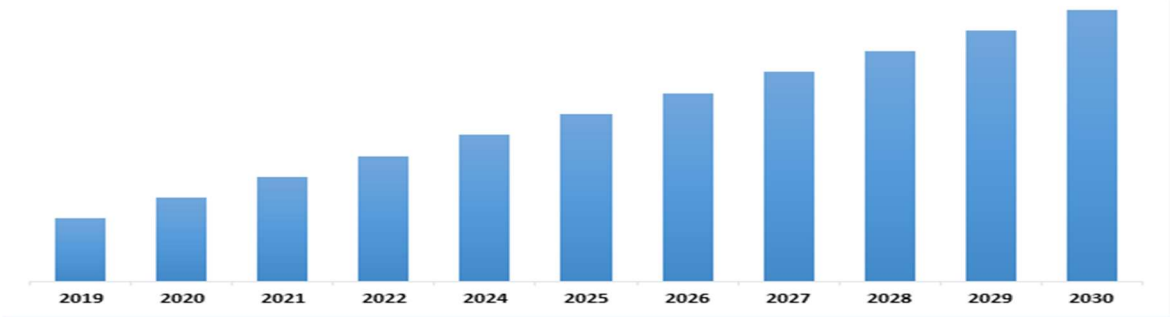

Figure 1: Europe Dietary Supplements Market Size, 2019-2030 [21]

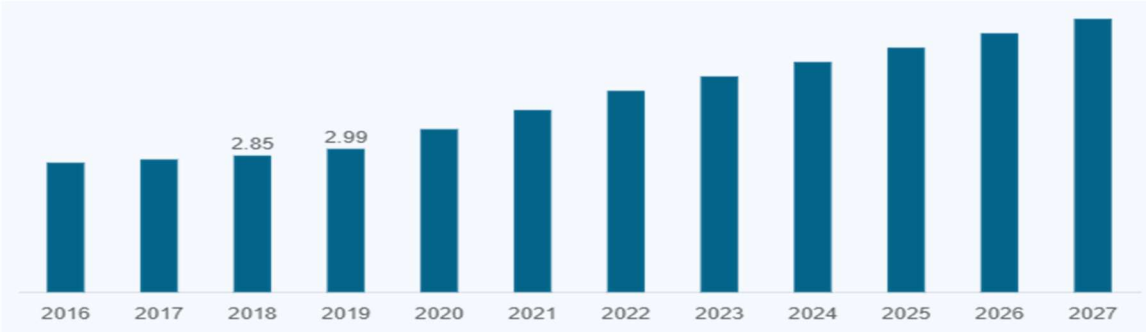

Figure 2: Italy Dietary Supplements Market Size, 2016-2027 [17]

CONCLUSION

Food supplements, often known as dietary supplements, are designed to provide nutrients that may not be ingested in appropriate amounts. However, our bodies only require a specific quantity of each vitamin to operate, and bigger levels are not always better. Despite the very fact that supplements will profit some people's health, they're not acceptable for everybody.

In reality, mistreatment some supplements, particularly in giant amounts, isn't coun seled for a few folks. The work of the European Food Safety Authority (EFSA) and its Panel on Nutrition, Novel Foods, and Food Supplements is generally controlled by EU legislation or special requests from the European Commission. As a consequence of the pandemic's impact, there has been an upsurge in demand for supplements on the market. Several firms are dominating the market due to their aesthetically pleasing, adaptable, and unique services, which might assist end-users in the form of authorized supplements.

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