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EDITORIAL

Erice Manifesto 2022: On the Surveillance of Potential Harms Caused by Food Supplements in Europe

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The aim of this manifesto is:

- to enhance the awareness on a safe use of food supplements;
- to promote the creation of a common European monitoring system;
- to inform citizens and health professionals about the potential risks associated with the consumption of these products;
- to stimulate the reporting of possible harm (adverse events).

Food supplements are widely used in Europe with the intention of maintaining or improving wellbeing. Their sales are rapidly increasing in all European countries [1]. A very recent survey explored how and why EU consumers are using food supplements. More than 13,200 adults in 14 EU countries were interviewed. Eighty-eight percent of respondents said they had used supplements at some point in their lives, while 93 % of this group had done so in the previous 12 months [2].

In Europe, food supplements are under the General Food Regulation (Regulation (EC) No 178/2002). Of note, food supplements contain nutrients (e.g., minerals and vitamins) or other substances such as herbal extracts. They are not medicinal products, and their use is not intended to treat or prevent diseases by exerting a pharmacological effect, but to support specific physiological functions claiming a physiological effect. Within European law, there are no commonly accepted standards with regard to their composition. Except for vitamins and minerals, only some European countries have adopted a list of ingredients allowed or prohibited in food supplements. Such lists of components (plants, herbal extract enriched in active components, algae, for example) are needed, as well as an indication of safe upper limits. The European Food Safety Authority can only provide an

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opinion on the so-called tolerable upper intake levels for vitamins and minerals or health claims (i.e., health benefits substantiated by scientific evidence), without influence on relevant specific approval and/or authorisation at national or European level.

There are no common European standards defining the obligations of regulators and manufacturers regarding safety before and after products are made available to the public. Those concerns have been assessed by the European Economic and Social Committee [3], but there is yet no follow-up by the European Commission. Despite the lack of harmonisation, all food supplements are currently available across Europe owing to free cross-border movement and their promotion on the internet.

Food supplements often contain many ingredients and sometimes potentially pharmacologically active substances; for example, herbals, that can be associated with unpredictable and undesired effects. These adverse reactions may affect any consumer, although some special populations are at higher risks, e.g., children, elderly, people with chronic conditions, pregnant and lactating women. Some of these risks may be linked to accidental contamination, substitution of plants, intentional adulterations with drugs, improper use or even interaction with drugs or other food supplements [4]. However, as these are foods, no risk should be tolerated without investigation including thorough evaluation. Moreover, the benefit-risk balance does not apply for foods, unlike for drugs.

Voluntary systems for the reporting of adverse reactions thought to be caused by food supplements are the only available tools to draw attention to the risks associated with these products once they are on the market and used by large numbers of consumers. Some European countries already have dedicated surveillance systems for adverse reactions due to food supplements. In other countries they are being developed. Unfortunately, only a limited number of adverse reactions to food supplements are reported and recorded in these systems. As these products are perceived as "natural" and safe by consumers and health professionals, there is an underestimation of their potential risks. Health professionals and consumers are, therefore, strongly encouraged to feed these systems by reporting any adverse events. In this view, health professionals should always investigate the use of food supplements by their patients, and, on the other hand, consumers should be informed about the importance of this safety information every time they are purchasing these products, so that they can themselves play an active role in reporting.

From a research perspective, the regulatory status of food supplements, as well as the lack of a clear pathway to submit suspected adverse reactions in some European countries further challenge the ability to timely detect safety signals by regulators and researchers. Recent research experience underlined the added value and the need for accessing multiple databases (including spontaneous reporting systems collecting adverse drug reactions) as a complementary approach to comprehensively address the safety of these products [5, 6].

There is an urgent need to implement dedicated, coordinated and centralised vigilance systems all across Europe in order to expand the network for sharing information and for rapid identification of safety issues. A common supranational Nutrivigilance system of notification, managed by European public institutions would harmonise data collection, promote better synergy with regulators and impact on clinical practice and patient's safety. Even if the implementation of such a system may seem complex, the added value in terms of public health deserves the effort to be made. European food supplement regulations should, therefore, be modified according to properly conducted risk assessments, to ensure the safety of the formulations.

In a public health perspective, it is necessary to increase the awareness of health care professionals and consumers about the potential risks associated with food supplements. We advocate for effective, tailored and independent communication and educational programmes involving academia, scientific societies, regulatory bodies and consumers. This concerted effort will finally promote a safe(r) use of food supplements in Europe.

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