

## Myth Busting Document:

# Food Processing, Whole Foods And The Role Of Sports Nutrition

European Specialist Sports Nutrition Alliance (ESSNA)



### Executive Summary

Public debate surrounding whole foods versus processed and so-called “ultra-processed foods” (UPFs) has intensified in recent years, often leading to confusion and oversimplification regarding the role of food processing in supporting health, safety, and physical performance.

For athletes and physically active individuals, specialised sports nutrition products can play an important and, in some circumstances, essential role in helping meet nutritional and physiological demands that are difficult to achieve through conventional foods alone. These products are specifically formulated using food processing techniques to deliver nutrients in precise forms, quantities and timings that support performance, recovery, hydration and overall health.

In light of the European Commission’s ongoing work to assess the risks and benefits associated with food processing and UPFs, this paper aims to clarify misconceptions, highlight scientific uncertainties, and emphasise the importance of evidence-based policymaking that reflects the distinct nutritional requirements of athletes and active consumers.

ESSNA supports policy approaches that evaluate foods based on their nutritional quality, function and scientific evidence rather than the degree of processing alone.

## The Nutritional Needs of Athletes and Active Individuals

### Myth: A whole-food-only diet is always sufficient and optimal for athletes and the active population

Athletes and highly active individuals represent a population with distinct physiological and nutritional requirements. In many sporting contexts, specialised sports nutrition products provide practical and scientifically validated solutions to support hydration, energy delivery, recovery and nutrient intake. These products are intended to complement, rather than replace, balanced diets based on whole foods.

While whole foods form the foundation of a healthy diet, a whole-food-only approach may not always meet the specific demands of athletes (Close et al., 2022).

Key challenges include elevated energy and nutrient requirements; difficulty obtaining sufficient quantities of specific nutrients; gastrointestinal tolerance during exercise; and timing constraints around training and competition.

Sports nutritionists (Close et al., 2022) have identified multiple scenarios in which a diet composed solely of “whole foods” may not be sufficient to support an active lifestyle and high-performance sports, with risks ranging from impaired performance to injury and/or severe dehydration.



01

During high-intensity or endurance exercise, rapid nutrient delivery is often essential. Food sources for some nutrients may be difficult to consume close to, during or soon after exercise. Whole foods can be impractical in some contexts due to slower digestion and risk of gastrointestinal discomfort. For example, an electrolyte gel during a marathon is often consumed for quick carbohydrate and electrolyte absorption to reduce the risk of dehydration and support sustained energy.

02

Achieving optimal intake of certain nutrients through conventional foods alone can be challenging, particularly when athletes have elevated energy and protein requirements, restrictive dietary patterns, limited eating opportunities, or demanding training schedules (e.g. Sharman et al., 2025). This is not limited to the prevention of nutrient deficiencies. In many cases, athletes require precise quantities and timing of protein, carbohydrates and other nutrients to support adaptation, recovery and performance outcomes.

For example, consuming sufficient high-quality protein through whole foods alone may be impractical in some situations due to appetite, convenience, digestion, or volume constraints. Similarly, some nutrients relevant to performance and health, including omega-3 fatty acids and vitamin B12, are naturally abundant only in foods that some athletes may avoid, such as animal-based products.

Sports nutrition products and fortified foods can help provide reliable, measurable and convenient nutrient delivery that supports athletes in meeting evidence-based nutritional targets.

03

Tested sports nutrition products may also provide reassurance in high-performance environments where athletes require consistency, traceability and precise nutritional composition. Third-party testing programmes can help reduce the risk of inadvertent ingestion of prohibited substances, which is particularly important for elite athletes subject to strict anti-doping requirements (Maughan et al., 2018).

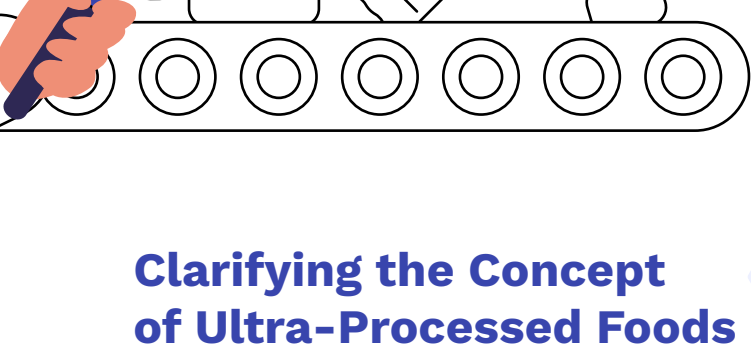
## Supporting Diverse Dietary Patterns, Including Plant-Based Diets

Processing plays an important role in supporting plant-based diets among athletes.

Plant-based diets may present challenges in achieving adequate intake of vitamin B12, iron and omega-3 fatty acids, as well as protein in sufficient quality and quantity.

Through processing techniques such as protein isolation and fortification, manufacturers can improve amino acid profiles, increase protein density, and deliver essential micronutrients. This enables athletes to meet nutritional needs while adhering to dietary preferences.

## Safety, Regulation, and Quality Assurance



Sports nutrition products in the EU are regulated under General Food Law (Regulation (EC) No 178/2002), ensuring a high level of consumer protection. Health and Nutrition Claims on products are strictly regulated under Regulation (EC) No 1924/2006 to ensure claims on ingredients are accurate and based on scientific evidence.

Members of ESSNA sign our Code of Practice and adhere to strict safety and labelling standards.

Sports nutrition products also provide practical solutions in situations where food hygiene may be uncertain, and athletes are travelling internationally.

## Clarifying the Concept of Ultra-Processed Foods

### Myth: Ultra-processed foods have a universally accepted definition

There is currently no universally agreed-upon definition of ultra-processed foods. The widely cited NOVA classification system has been criticised for ambiguity in classification criteria; limited reproducibility; insufficient consideration of nutrient composition and food function (Gibney et al., 2017).

This results in the grouping of nutritionally distinct products, such as confectionery, whole grain fortified bread and specialised sports nutrition products, under the same category, despite major differences in purpose and health impact.

Recent scientific reviews emphasise that the degree of processing alone is not a reliable indicator of nutritional quality or health impact (Cavero-Redondo et al., 2026).

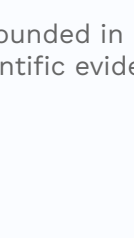


## Implications for Policy and Public Health Guidance

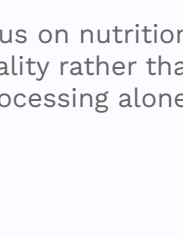
A broad classification of UPFs that does not consider nutritional composition, intended use and consumption patterns risks unintended consequences, including limiting access to beneficial and functional foods. Policy approaches that classify foods primarily according to processing level risk unintentionally discouraging the use of specialised sports nutrition products that provide demonstrated functional and physiological benefits for athletes and active individuals. Products designed to support endurance, hydration, recovery or targeted nutrient delivery should not be assessed in the same way as discretionary foods with fundamentally different nutritional purposes and consumption patterns.

ESSNA welcomes the European Commission’s approach to ultra-processed foods and its recognised need to better understand the complex relationship between processing and health outcomes in the Vision For Food and Agriculture, published in February 2025 and entrench any forthcoming measures in science-based assessments.

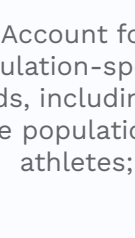
### ESSNA calls for any forthcoming policy approaches to processing to:



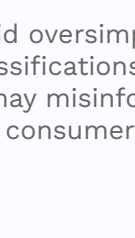
Be grounded in robust scientific evidence;



Focus on nutritional quality rather than processing alone;



Account for population-specific needs, including the active population and athletes;



Avoid oversimplified classifications that may misinform consumers.

## Conclusion

Food processing is an essential component of modern food systems and, in the context of sports nutrition, enables the development of specialised products designed to support physiological performance, recovery, hydration and health.

Sports nutrition products are not intended to replace balanced diets based on whole foods. Rather, they complement conventional diets by helping athletes and active individuals meet nutritional requirements that can be difficult to achieve consistently through ordinary food alone.

As the European Commission advances its work in this area, it is essential that policy decisions reflect scientific nuance and recognise the distinct role and function of specialised sports nutrition products. Approaches based solely on the degree of processing risk oversimplifying complex nutritional questions and may unintentionally discourage products that provide clear benefits to physically active populations.

## About ESSNA

The European Specialist Sport Nutrition Alliance (ESSNA) is the trade association representing the sports and active nutrition sector in the EU and UK, as well as within the industry and media.

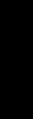
Our members include brands large and small, specialised manufacturers, suppliers, and distributors.

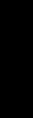
The organisation was founded in 2003 to promote a positive policy environment for sports nutrition products, safeguard the reputation of the industry and promote healthy living.

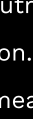
Today, ESSNA is widely recognised as the voice of the responsible sports and active nutrition sector in Europe and beyond.

For more information, please visit [www.essna.com](http://www.essna.com)

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