

# Vitamins and Supplements

## Sustainability Snapshot



### Product Description

Vitamins and Supplements include preparations intended for human consumption that are made from one or more plant, animal, marine, bacterial, mineral, or synthetic ingredients that are bound and blended and intended to prevent, enhance, or improve health conditions of the human body. Product types include vitamins, minerals, herbs, trace elements, carotenoids, coenzymes, essential fatty acids, amino acids, hormones, probiotics, and protein supplements.

### Mission

The mission of The Sustainability Consortium (TSC) is to improve the sustainability of products when they are made, purchased, and used, with a focus on manufacturers and the retail buyers who decide what products to carry in stores. The information in this document is drawn from our detailed research on known and potential social and environmental impacts across product life cycles. TSC acknowledges that other issues exist, but we have included here those that are most relevant to the decision making of retail buying teams and manufacturers. The topics are listed alphabetically for ease of reading; the order does not represent prioritization or other criteria.



### Animals

#### Animal Welfare

Final product manufacturers should source from animal product suppliers with comprehensive management plans, including certification programs, that ensure animal welfare for farm animals. Plans or programs should include practices that avoid painful procedures; ensure access to adequate housing and proper nutrition; require proper handling, proper transportation and humane slaughter methods; and promote good health in ways that are appropriate for the animal ingredient used.



### Consumers

#### Consumer Health and Safety

Vitamin and supplement manufacturers should formulate products to contain ingredients in accordance with applicable safety standards and should perform any necessary assessments on ingredients and formulations. Manufacturers should list ingredients in accordance with regulatory requirements and communicate proper usage and disposal instructions to consumers in a clear and accessible fashion.



### Managing the Supply Chain

#### Palm Oil

Vitamin and supplement products may contain palm oil, palm kernel oil, or ingredients that have been chemically-derived from these oils. Palm oil production is one of the leading causes of deforestation, which is a significant contributor to climate change. The cultivation of palm oil also impacts climate, land, and water. Improper palm oil production and management may also lead to worker exploitation and threats to worker health and safety. Final product manufacturers should select ingredient suppliers that are working to improve sustainability and adopt standard guidelines from the Roundtable on Sustainable Palm Oil (RSPO) or other certifications.

#### Supply chain transparency

Addressing many of the environmental and social challenges within a vitamin or supplement product supply chain requires cooperation among companies at different stages of the supply chain. Final product manufacturers should determine the locations of the operations that produce their ingredients and engage in initiatives that improve transparency, communication, and data sharing. Suppliers can work together to address common issues, such as energy use, water availability and quality, chemical use, worker health and safety, and labor rights.

## Sustainable Fisheries

Vitamin and supplement products may contain fish oil or other fish-derived ingredients. Harvesting fish and other seafood sources faster than they can grow contributes to resource depletion, reduces biodiversity, and also impacts the climate. Improper management of fish oil and other fish-derived ingredient production facilities may lead to worker exploitation and threaten worker health and safety. Fishing operators can use certifications and implement programs, practices, and technologies to reduce impacts on resources, biodiversity, and the climate. Final product manufacturers should select suppliers that are working to improve sustainability and adopt standard guidelines from certification schemes for fish oil and other fish-derived ingredients.



## Use of Resources

### Climate and Energy

Ingredient production and final product manufacturing require significant amounts of energy. The burning of fossil fuels to produce this energy, as well as the production and use of fertilizers, results in greenhouse gas emissions. Ingredient producers and final product manufacturers can reduce these impacts by measuring and tracking energy use, performing preventative maintenance on equipment, and replacing inefficient equipment. Additionally, ingredient producers can implement nutrient management plans and use precision agriculture or low-energy irrigation to reduce this impact.

### Packaging

Packaging design should be optimized to ensure that packaging performs its essential functions of containment and protection while minimizing use of materials, energy resources, and environmental impacts across the life cycle of the packaged product. Under-packaging and over-packaging can both lead to increased impacts. These impacts may be mitigated by using more energy-efficient manufacturing, creating packaging materials from renewable resources, designing packaging to be recyclable, and encouraging consumer recycling.

### Water

Ingredient production can use a significant amount of water and contribute to freshwater depletion, which is problematic in water-stressed regions. Growers can measure and track water use and use methods such as precision agriculture, which applies only the amount of water needed, or irrigation water management to improve water efficiency. Manufacturers can perform water use assessments throughout their supply chain in order to map water risk in different geographical regions and mitigate impacts associated with freshwater depletion, and should manage potential water pollution coming from their own facilities.



## Workers and Communities

### Community Rights

Local and indigenous people who have traditional rights to land that companies want to develop can be harmed by development that does not consider their rights. Final product manufacturers should work with the local government and community representatives to ensure that traditional rights are respected in land development.

### Workers

Workers, especially women and migrants, may face unfair pay, discrimination, and limited freedoms. They may also be exposed to dust, chemicals, or other industrial hazards. To help ensure worker health and safety, final product manufacturers should have a documented health and safety management plan, including a chemical management plan where needed, and provide safety training and personal protective equipment to workers in their facilities. Final product manufacturers should procure ingredients from suppliers that transparently address worker health and safety and labor rights during ingredient production and processing, and perform audits when needed.