





# **Product Description**

Eggs include food products composed primarily of eggs from domesticated poultry. Product types include fresh eggs, egg mixes, egg whites, and powdered eggs.

## **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.

# **Sustainability Insights**



## **Animals**

## **Animal Welfare**

Egg producers should engage in 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 egg-laying hens.



# **Managing the Supply Chain**

### **Antibiotics**

Therapeutic use of antibiotics has been shown to have positive effects on animal health and welfare, but care should be taken to prevent antibiotic resistance. To ensure responsible use, producers of laying hens should follow label instructions exactly. Producers should also consult veterinarians to implement antibiotic monitoring programs, plans, and systems to optimize animal welfare and health while minimizing antibiotic resistance in animals and humans, as well as impact on the environment.

#### **Fertilizer and Nutrients**

Improper management and use of fertilizers can lead to local water pollution and release greenhouse gases. Feed producers and producers of egg-laying hens should use a nutrient management plan to improve the efficiency of fertilizer and manure use for feed production, and use precision agriculture, which applies only the amount of fertilizer needed. Where appropriate, feed producers could plant vegetative buffer zones around streams to help prevent water pollution via nutrient runoff.

#### **Pollution**

Manure releases greenhouse gases and other emissions, in particular ammonia for chickens, that pollute air and water. Producers of egg-laying hens can use technologies in barns that clean the pollution out of the air and manure management plans to reduce impacts from manure.

## **Supply Chain Transparency**

Addressing many of the environmental and social challenges within an agriculture supply chain requires cooperation among companies at different stages of the supply chain. Final product manufacturers should determine the locations of farms that produce their supply 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.



## **Use of Resources**

## **Climate and Energy**

Final product manufacturing, processing, poultry farm operations and feed production all require significant amounts of energy. The burning of fossil fuels to produce this energy, as well as the production and use of fertilizers, result in greenhouse gas emissions. Producers of egg-laying hens, processors, and final product manufacturers can reduce these impacts by measuring and tracking energy use, performing preventative maintenance on equipment, and replacing inefficient equipment. Additionally, feed producers and producers of egg-laying hens can minimize impacts associated with feed production by implementing a nutrient management plan, using precision agriculture to apply fertilizers, and using low-energy irrigation systems. Producers of egg-laying hens can also optimize feed yield and feeding of chickens.

## Water

Feed production for egg-laying hens can use a significant amount of water and contribute to freshwater depletion, which is problematic in water-stressed regions. Feed producers 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.



## **Workers and Communities**

#### **Workers**

Workers may be exposed to dust, chemicals, or other industrial hazards. To help ensure worker health and safety and labor rights, egg producers 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.





