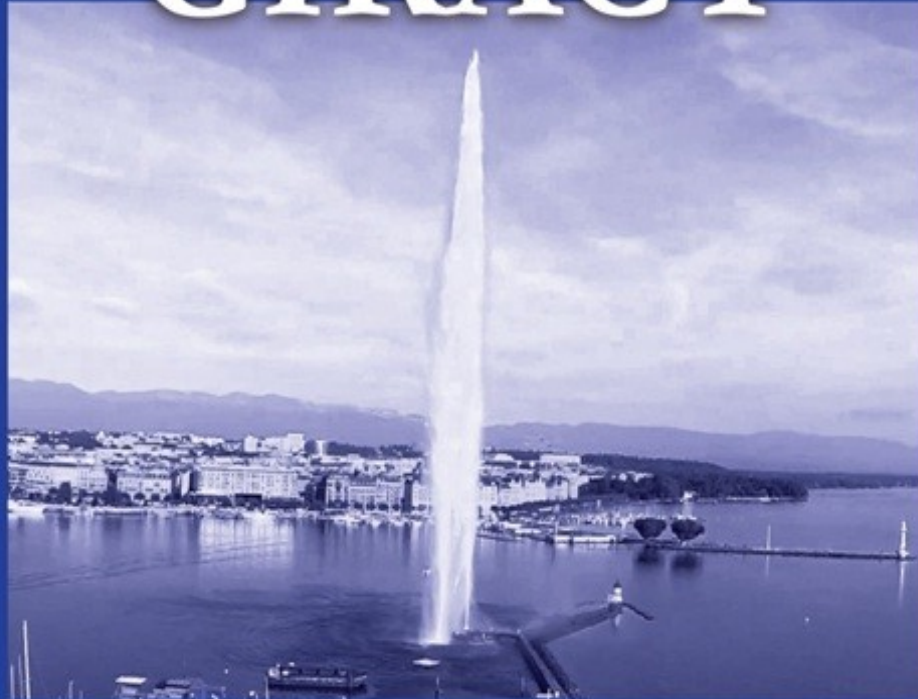


GIRACT



Geneva
SWITZERLAND

www.giract.com

Plant & Animal Derived Protein Ingredients in Food, Pet Food and Animal Feed 2014 - 2020

Market Insights

April 2015

GIRACT Geneva Switzerland

Key Product Trends

- The Global Protein ingredients market is forecast to grow at a CAGR of 4% through 2014–2020
- The global cereal protein market is relatively mature with supply amounting to over 900kt
- Soy protein market is dominated by China, which controls close to 70% of the world's soy protein production and consumption
- The demand for whey proteins, especially WPC80 and WPI, are growing rapidly in infant formula and functional foods in developing countries
- The production and consumption of MPC have witnessed significant growth in the last 5 years
- Among non-dairy animal derived proteins, gelatin is by far the most widely used ingredient and finds applications in dairy products, processed meats and confectionery
- Though algal protein production has kicked off in Europe, manufacturers feel that further process development is imperative for its sustenance in the future

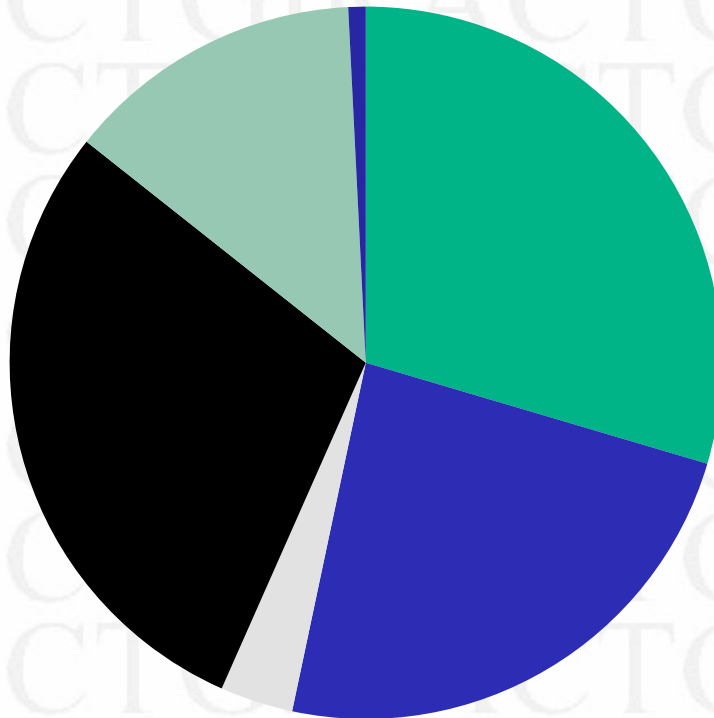
Global Demand Overview

Category	Measure
Global Demand 2014 (kt)	
Global Demand 2014 (mio USD)	
Global Demand 2020 (kt)	
CAGR (2014–2020)	
Past to Future growth comparison	
Prices (USD/Kg)	
Pricing trend	
Regulatory Scenario	
Manufacturer base	
Product differentiation	
Market stage	

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Demand by Protein Ingredient Group

Plant protein ingredient consumption continues to exceed that of animal protein ingredients



Protein Ingredients Covered

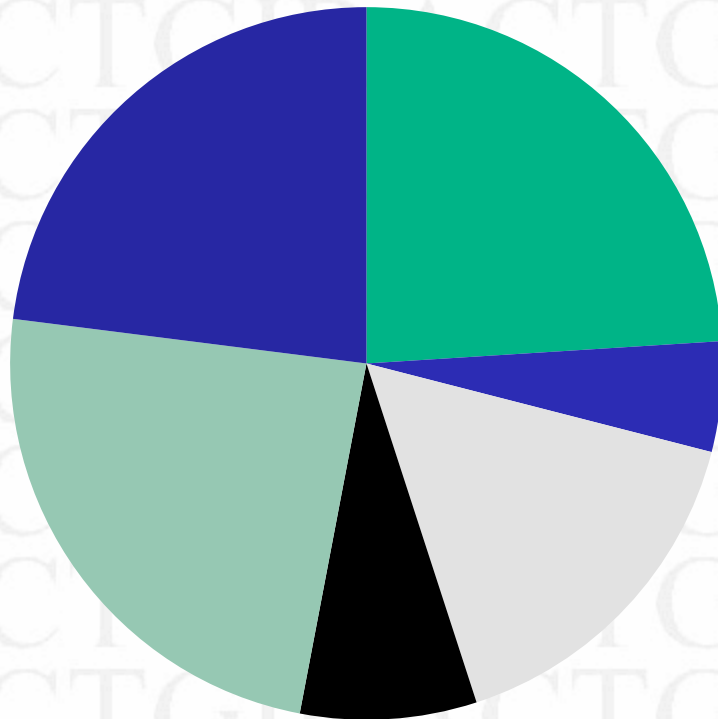
- Wheat
- Dairy
- Soy
- *Other Animal Proteins
- *Other Plant Proteins
- All Others

*Detailed volume estimates by ingredient, end user sector and by key country are available in the report

Source: *Giract, based on database analysis and interviews*

Demand by End Use Sector

Bakery/Breakfast cereals and Animal Feed sectors account for about 50% of the pie



Applications Covered

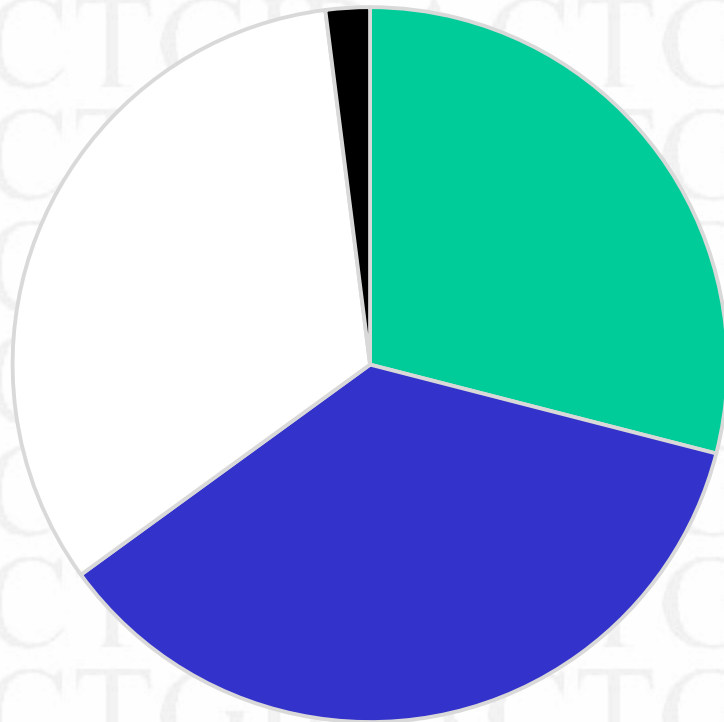
- Animal Feed
- Dairy
- Functional Feed
- Bakery/Breakfast cereals
- Processed Meat
- *Others

*Detailed volume estimates by ingredient, end user sector and by key country are available in the report

Source: *Giract, based on database analysis and interviews*

Demand by Region

Europe leads the protein ingredient market with a share of ~40%



Regions Covered

- EU28
- *North America
- *APAC
- *Others

*Detailed volume estimates by ingredient, end user sector and by key country are available in the report

Source: Giract, based on database analysis and interviews

End-User Comments – Examples

Sector	Region	Comments
Infant Formula Producer	US	“Sensitive formula contains milk protein isolate for babies with specific problems ... Total Comfort formula contains whey protein hydrolysate”
Dairy Producer	France	“In the long term, plant proteins can replace animal proteins in most applications, except dairy... replacement of gelatine in applications such as confectionery would, however, be difficult”
Dairy Producer	China	“Soy proteins being associated with traditional consumption is the key factor driving demand in the market”
Ice Cream Producer	US	“Dairy proteins deliver good performance structurally in the products and have high acceptance from consumers. They have a neutral taste and good emulsification properties. Further, they interact structurally with other ingredients, for example, it is not possible to make a cheese from soy protein which is as good as one from dairy because of the casein specific action”
Infant Formula Producer	ANZ	“MPC and MPI have casein, unlike WPC and WPI, are included in nutrition intended for older babies. MPI is used in liquid feeds and pediatric enteral nutrition for protein fortification with high quality amino acid composition similar to milk.”
Dairy Producer	Switzerland	“Quality and price are the selection criteria for a protein ingredient supplier. Application support is important, however, the company prefers European suppliers as it is easier to get quick service from them.”

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