



The Global Market For Plant Proteins - Competition With Dairy 2017-2021

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1. Introduction

2. Production of plant proteins

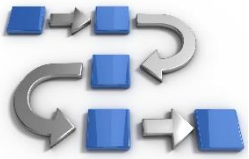
3. Key players and applications

4. Consumer product trends

5. Market outlook and future market trends

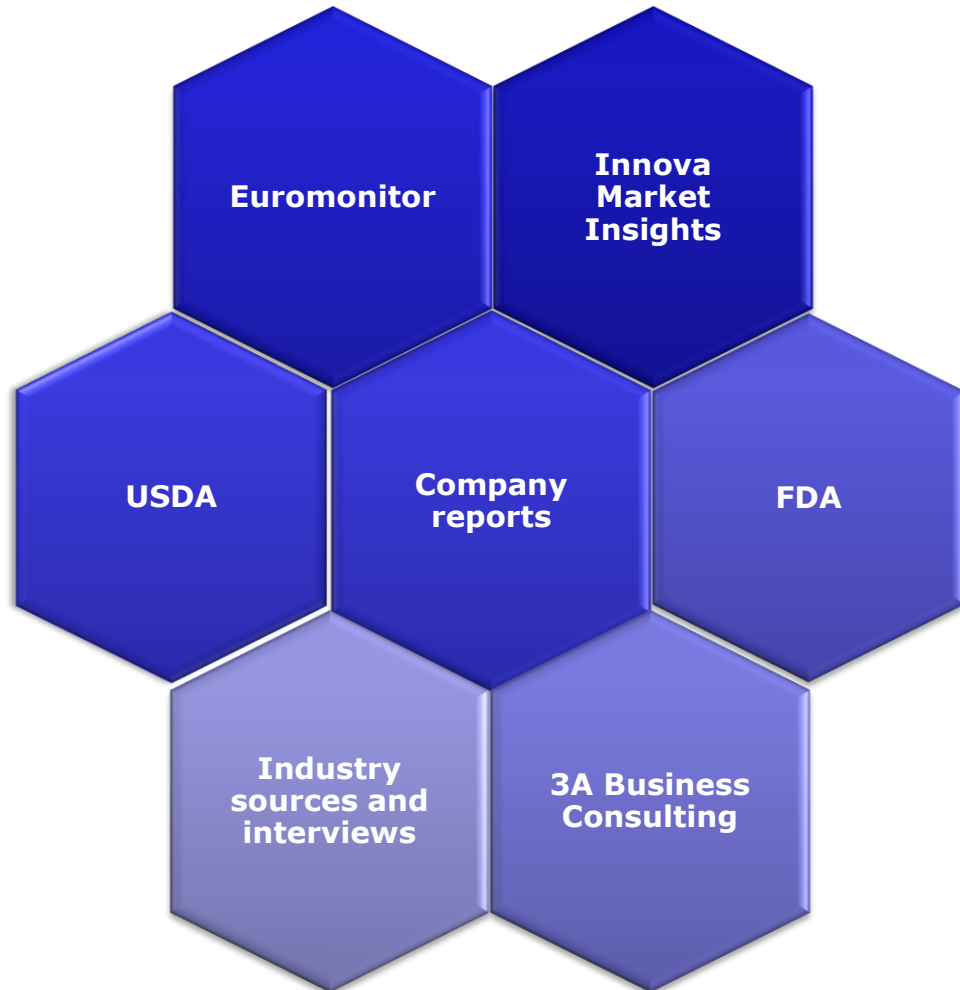
6. Conclusions and threat to dairy

7. Appendix



Methodology for Research - Data Sources and Abbreviations

The building input blocks of this report:



Abbreviations:

CAGR	Compounded Annual Growth Rate
EUR	Euro
LATAM	Latin America
MEA	Middle East and Africa
MPC	Milk Protein Concentrate
MPI	Milk Protein Isolate
MT	Metric Tonne
NA	North America
PoPI	Potato Protein Isolate
PPC	Pea Protein Concentrate
PPI	Pea Protein Isolate
RoW	Rest of World
RPC	Rice Protein Concentrate
RPI	Rice Protein Isolate
RTD	Ready-To-Drink
SPC	Soy Protein Concentrate
SPI	Soy Protein Isolate
USD	US Dollar
WhPH	Wheat Protein Hydrolysate
WhPI	Wheat Protein Isolate
WPC	Whey Protein Concentrate
WPI	Whey Protein Isolate



Market Research Approach



- SPC
- SPI
- Wheat Gluten
- WhPI
- Textured WhP
- PPC
- PPI
- RPC
- RPI
- Potato protein
- WPC
- WPI
- MPC
- MPI
- Casein
- Caseinates

- Global
 - Europe
 - North America
 - Latin America
 - Australasia
 - Asia Pacific
 - Middle East
- CAGR 2012-2016
- CAGR 2017-2021

- Top plant protein manufacturers
- Top plant protein users

- Consumer segments
- Dairy alternatives
- Product trends
- Consumer trends

- Application/ volume usage of plant proteins
 - Dairy alternatives
 - Sports nutrition
 - Infant nutrition
 - Clinical nutrition
 - Weight management
 - Animal feed/pet food



Global soy protein market size and trends and major producers of soy protein

Production volume by ingredient, 2016



Plant protein market sizes, trends and major producers

Soy ingredient	Price range
Soy flour	USD xxx per MT
Soy protein concentrate	USD xxx per MT
Soy protein isolate	USD xxx per MT

Company	Estimated share of nutritional markets
	
	

- Headquartered in France, with **EUR 3.3 bio.** in annual sales, Roquette is the world's major producer of pea protein, marketed under the **Nutralys brand**
- In January 2017, Roquette announced a **USD 300 mio. investment** in what they report will be the world's biggest pea protein plant, located in Gimling (Manitoba), where 30%, or 4,300 jobs, were created in 2016. Production of pea protein takes place. Production of pea protein in 2019
- In June 2017, Roquette announced a further **EUR 40 mio. investment** in its Vic-sur-Aisne (France) plant to expand production of pea protein
- By 2019, the **Manitoba** and **Vic-sur-Aisne** plants will have a combined pea processing capacity of around **250,000 MT annually**, according to Roquette
- In addition to pea protein, Roquette also markets **wheat protein hydrolysates** under the **Nutralys** brand as well as **corn** and **potato protein** under other brands

Roquette protein brands

Pea, Wheat, Potato, Corn and Algae Protein	
Product	Application(s)
NUTRALYS PEA F	Food and nutritional
NUTRALYS PEA S	Food and nutritional
NUTRALYS PEA XF	Clinical, sport and weight management nutrition
NUTRALYS PEA T	Bakery
NUTRALYS PEA T	Extender and analog
NUTRALYS WHEAT W	Bakery/cereal,
NUTRALYS WHEAT F	confectionery, dairy, pet,
VITEN wheat gluten	sports nutrition
VITEN wheat gluten	Bakery and fish food
GLUTALYS corn protein	Calf milk-replacer
TUBERMINE potato protein	Animal feed
Algility chlorella	Animal feed, fermentation
	Functional foods and weight management

Detailed company profiles and product portfolios

Source: Roquette

Global protein production - plant and dairy proteins

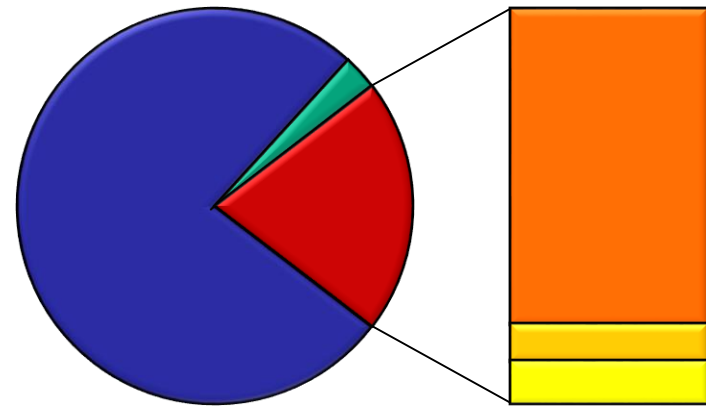
Global dairy and plant protein volumes 2016



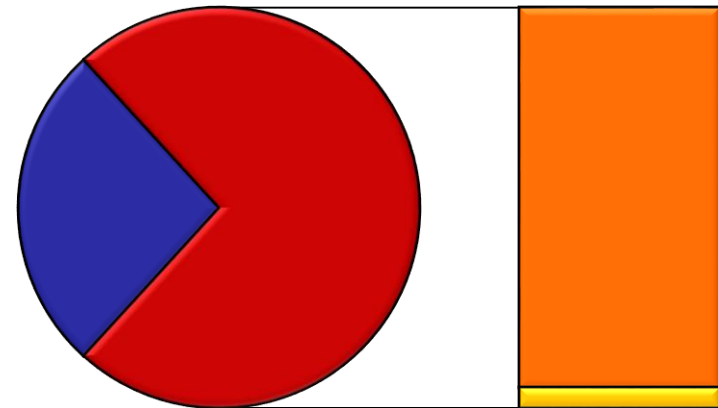
Source: 3A Business Consulting

Plant and dairy protein application volumes and trends

Soy protein isolate applications



Soy protein concentrate applications

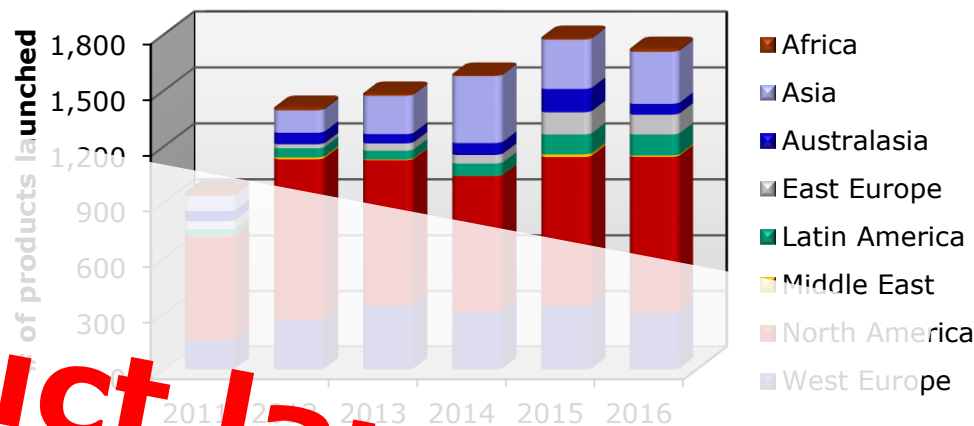


New product launches / consumer product trends

- Whey Protein Concentrate (1)

Historic development

- Between 2011 and 2016, **8,937 new products** containing whey protein concentrate were launched
- North America** was the most active region, accounting for **more than half** of product launches containing WPC
- The number of products launched with WPC between 2011 and 2016 grew with **8.9% CAGR** and **16% annually on average**



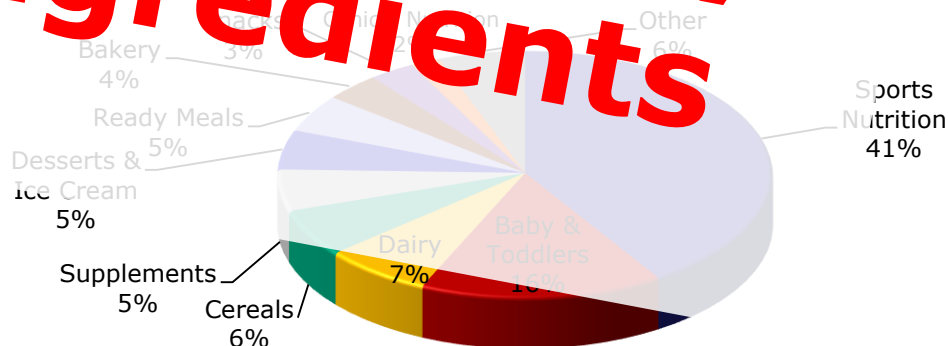
Most active companies

- The most active companies in terms of product launches with WPC are **Myprotein** and **Nutricia**, followed by **Nestle**
- The 10 companies launching products collectively account for **21%** of product launches with WPC between 2011-2016



Major application segments

- The **sports nutrition segment** has seen the most new product launches with whey protein concentrate followed by **infant formula**
- Several product launches with WPC is also seen in a wide range of food categories as well as in **supplements** and **clinical nutrition**



Source: Innova Market Insights

New product launches with plant and dairy protein ingredients

New product launches / consumer product trends

- Whey Protein Concentrate (2)



Company: Myprotein

Date: April 2016

Category: Sports nutrition

Ingredients: Whey protein concentrate (96%), emulsifier, flavoring, sucralose



Company: Iovate

Date: January 2016

Category: Sports nutrition

Ingredients: Protein blend (micellar whey, **whey protein concentrate**, whey protein isolate, whey protein isolate 97% whey protein hydrolysate)



Company: Nutricia

Date: November 2016

Category: Baby formula/milk

Ingredients: Lactose, fructo-oligosaccharides, milk hydrolyzed whey protein concentrate, vegetable oils, galactooligosaccharides etc.



Company: Dymatize

Date: February 2016

Category: Sports nutrition

Ingredients: Whey protein, protein blend (**whey protein concentrate**, milk protein isolate, whey protein isolate, whey protein hydrolysate etc.)



Company: Abbott

Date: January 2016

Category: Baby formula/milk

Ingredients: Skimmed milk, lactose, vegetable oils, **whey protein concentrate powder**, maltodextrin, GOS, phospholipid etc.



Company: Kraft

Date: October 2016

Category: Cheese

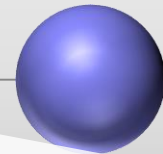
Ingredients: Milk, water, whey, **whey protein concentrate**, canola oil, maltodextrin, salt, sodium phosphate etc.

New product launches with plant and dairy protein ingredients



CAGR 2012-2016

**Historic and forecasted
growth of respective
dairy and plant
proteins**



Final assessment of competition between plant and dairy proteins

Sports Nutrition



Weight Management



Dairy & Dairy Alternatives



Global Plant Protein Report – project management and costs

Team

3A Business Consulting team:

- Managing partner - Tage Affertsholt
- Junior consultant – Daniel Pedersen

Time

Report available in PDF format – in total approx. 100 slides – from February 2018

Cost

EUR 4,700