Portfolio for the Nutrition industry

Nutritional lipid solutions for all stages of life

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Bunge nutrition

Your expert partner in lipid solutions

Oils and lipids play a vital part in improving and maintaining healthy infant and adult diets. While science is constantly growing our understanding of the role of lipids in nutrition and health, informed consumers are increasingly looking for healthier and tastier choices. Bunge is committed to bringing together consumer demands and science to improve diets across all stages of life.

Bunge is the oils and fats business of Bunge, and one of the world's leading suppliers of nutritional lipids and specialty ingredients.



Unmatched global presence Fully controlled supply chain



Full range of seed and tropical oils

With more than 200 years of lipids expertise and as the inventor of OPO, Bunge is a pioneer in quality infant nutrition ingredients. Its global team of nutrition experts serves customers with a portfolio that caters to the full breadth of needs in the infant, medical, and sports nutrition industries. Building on the company's global footprint and integrated sustainable supply chains, the nutrition team is dedicated to ensuring consistent quality and worldwide availability of its lipid solutions.

Leading innovation and technical expertise Strict contaminant control

Overview



Bunge nutrition operations

200 years of connecting farmers to homes

Since 1818, Bunge's expansive network has been feeding and fueling a growing world, creating sustainable products and opportunities for more than 70,000 farmers and the consumers we serve across the globe. Bunge is a leading global producer and supplier of plant-based specialty oils and fats for the food manufacturing and nutrition industry.

Portfolio for the nutrition industry

Complete lipid solutions for infant, medical and sports nutrition

Lipids are a core ingredient in healthy diets and essential sources of energy. The right nutritional balance can only be achieved through a careful selection of oil and lipid ingredients. Our portfolio includes oils from multiple plant sources, nutritional lipids and specialty ingredients to support balanced diets for all stages of life.

Our portfolio delivers benefits in the following application areas:

- Term and pre-term infants with or without special medical needs
- Young and adult individuals with special nutritional needs either at home or at the hospital
- Professional or amateur athletes optimizing their physical performance
- Elderly individuals seeking a healthy nutritional balance or improved energy intake

Our nutrition portfolio includes:

XtraCare oils

- A full range of seed and tropical oils available for customers to blend in-house
- Oil blends to match customer specifications
- Organic options available

NuliGo nutritional lipids

- Structured MLCTs (medium- & long-chain triglycerides)
- Deliver medium-chain fatty acids to muscle

Betapol nutritional lipids

- Betapol infant nutrition OPO and OPL provide the highest SN-2 palmitate level in the market (up to 70%)
- Portfolio includes custom oil blends, powdered blends and low melting point variants
- Organic options available



XtraCare[™]

XtraCare oils

Complete range of oils and custom blends for multiple nutrition applications

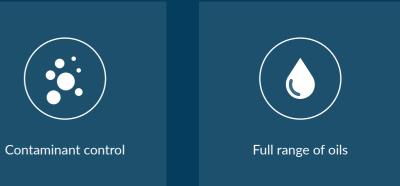
Bunge is one of the few companies to offer a combination of quality oils, contaminants control and blending capabilities on a global scale. Our customers can, therefore, liaise with a single partner of choice instead of multiple providers for a reliable and trustworthy supply of lipid solutions.

We offer a full range of oils for customers to blend in-house or as ready-to-use blends.

Xtracare oils portfolio

Oils	C
• Soy*	•
• Sunflower	•
 High oleic sunflower 	•
Canola/rapeseed*	•
• Corn*	•
• Palm	
Palm kernel	
• Coconut	
• Flaxseed	
Safflower	
*GM and non-GM available	





Global presence

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- Sunflower
- High oleic sunflower
- Canola/rapeseed
- Palm
- Coconut

Betapol®

Betapol nutritional lipids

Solutions for the best start in life

All mothers want to give their babies the best start in life, preferably with breast milk. When breastfeeding is not an option, choosing the best infant formula is key for healthy growth and development.

milk contains only 3-4% fat, fat makes up to 50% of a baby's essential role in nutrient absorption and gut health.

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Reduced constipation





fat and invented an OPO nutritional lipid derived from plant oils. We called it Betapol. Unlike the structure of triglycerides containing palmitic (P) and oleic (O) acids in vegetable oils, triglycerides in mother's milk. It has also proven clinically



Betapol nutritional lipids

Betapol Plus: the next generation OPO

Following the success of Betapol, in 2019 we revolutionized the market again with Betapol Plus, the next generation OPO. It is designed to match mother's milk fat more closely, with the highest levels of OPO/SN-2 palmitate available in the market.

Typical structure in conventional vegetable oil blends

Today, our next generation Betapol Plus offers the best alternative to reach the naturally-occurring 60-75% SN-2 palmitate levels found in mother's milk. Betapol Plus blends offer up to 60% SN-2 palmitate and Betapol Plus base provides 70% or more.

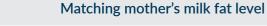
Human Milk Fat & Betapol

Betapol Select adapts to the natural variations in mother's milk

Our expertise in lipids and research in infant nutrition made us understand that mother's milk contains macronutrients and micronutrients that not only vary diurnally within feeds but also regionally. This regional change is influenced by the mother's origin and diet. Research proves that the fat composition of milk from Chinese mothers contains a higher level of linoleic acid compared to other regions. Our Betapol Select mimics the fat composition of Chinese mother's milk by introducing an OPO-OPL combination.

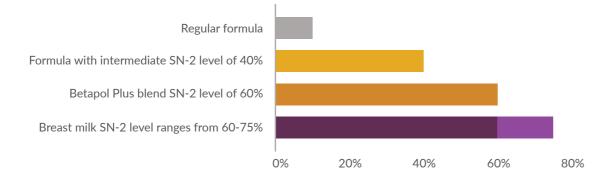
Betapol nutritional lipids portfolio

Fat composition
OPO
OPO
OPO
OPO
OPO-OPL
OPO-OPL
OPO-OPL-OPLn



Difference in fat structure

POP



OPO

SN-2 palmitate level

Breast milk fat and Betapol have palmitate in SN-2 position

Organic options available

Organic
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S New!



NuliGo ->

lininol

NuliGo lipids: a nutritional game-changer

The innovative functional ingredient that delivers quick and sustained energy directly to muscles.

Ideal ingredient for the Sports Nutrition and Active Aging categories





Athletes and fitness enthusiasts Energy | Performance | Endurance

Older adults Strength | Stamina | Recovery

Perfect for today's nutritional products

NuliGo lipids improve the functionality and marketability of your formulations.





Powdered drinks



Mathieu van der Poel

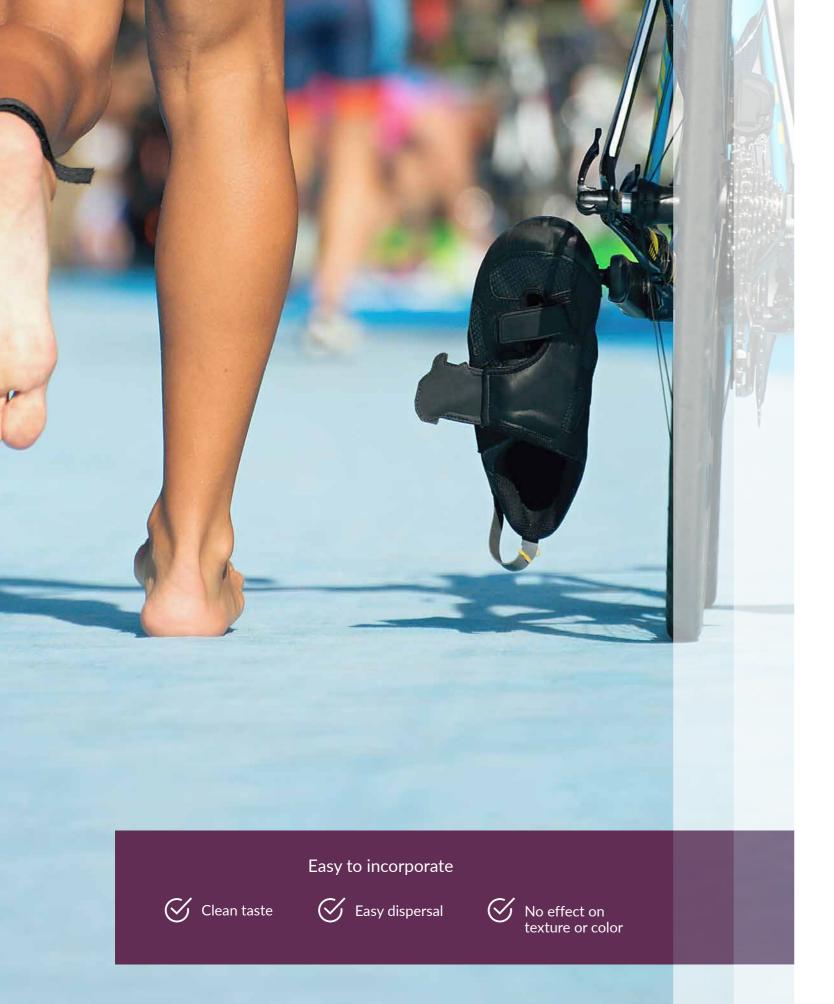
2023 Road World Championship Elevating performance of elite athletes with LiFT, powered by NuliGo.

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Individuals focused on well-being Lifestyle | Nutrition | Activity



Go Further, Faster, Longer

NuliGo nutritional lipids are innovative functional ingredients that deliver energy directly to muscles. Ideal for the sports nutrition and active aging categories, NuliGo lipids support:

Muscle health | Muscle building | Muscle maintenance | Muscle recovery

Consumers are drawn to NuliGo because it gives them:



Energy to keep going, whether they're exercising or leading an active life



Less stiffness and soreness after exercise



The ability to become—and stay—strong

How it works

NuliGo nutritional lipids provide energy in a completely unique way. First, they travel via circulation straight to the muscle. Once there, NuliGo's balanced energy supply supports endurance and frees up amino acids for protein synthesis.

Better protein synthesis with less protein degradation means stronger muscles for longer.

NuliGo nutritional lipids are what consumers have been waiting for

Consumers are excited about all that NuliGo lipids can deliver for them. In our consumer panels, they tell us that NuliGo lipids "cover so many issues" that are top of mind for them and they call the approach of direct-to-muscle energy delivery a "great idea."

Available formats





Powder (70% oil content)



Sustainabilty

Responsibly grown ingredients that support our customers' values around the world

We serve our customers best by sourcing responsibly produced and traceable raw materials from partners we know and trust. The oils, fats and specialty ingredients we provide are responsibly grown, making sure they support the commitments you have made to your customers and stakeholders.

Active monitoring of palm oil supply chain Agroideal - growing soybeans sustainably

Centerfield - promoting supply chain transparency and sustainable agriculture

We currently monitor over 27 million hectares of forest for any change in land use. Land-use monitoring and planning tool, built in collaboration with industry stakeholders, that supports companies and farmers in the soybean value chain to promote sustainable agriculture practices.

A partnership between growers, food companies and Bunge in the U.S. with the goal to collect farm-level data to promote supply chain transparency and sustainable agriculture. Centerfield crops include: high oleic soy and canola, conventional and non-GMO corn and non-GMO soy.







- Our approach to sustainability is robust in delivering demonstrated support and impact at the supplier,
- landscape, social and labor levels. We quantify and verify the sustainability of our supply base to ensure traceability and transparency at all levels.

Since 2017, we have been actively monitoring Peninsula and Sabah, Malaysia, using satellites.

Quality

Safeguarding quality from seed to customer

Over the years, we have taken increasing control over every aspect of our supply chain from seed to customer. Our focus on quality and safety covers all areas of our company.

We work relentlessly to optimize each aspect of our operations, from our analytical capabilities to our contaminant control and engineering solutions. To protect your valuable brands, we keep to the highest quality and food safety standards, aiming to meet and exceed your expectations.

> Our method to analyze 3MCPDe is a certified industry standard (ISO/NEN)1.

1 Zwagerman, R. and Overman, P. (2019), Optimized Analysis of MCPD- and Glycidyl Esters in Edible Oils and Fats Using Fast Alkaline Transesterification and 13C-Correction for Glycidol Overestimation: Validation Including Interlaboratory Comparison



