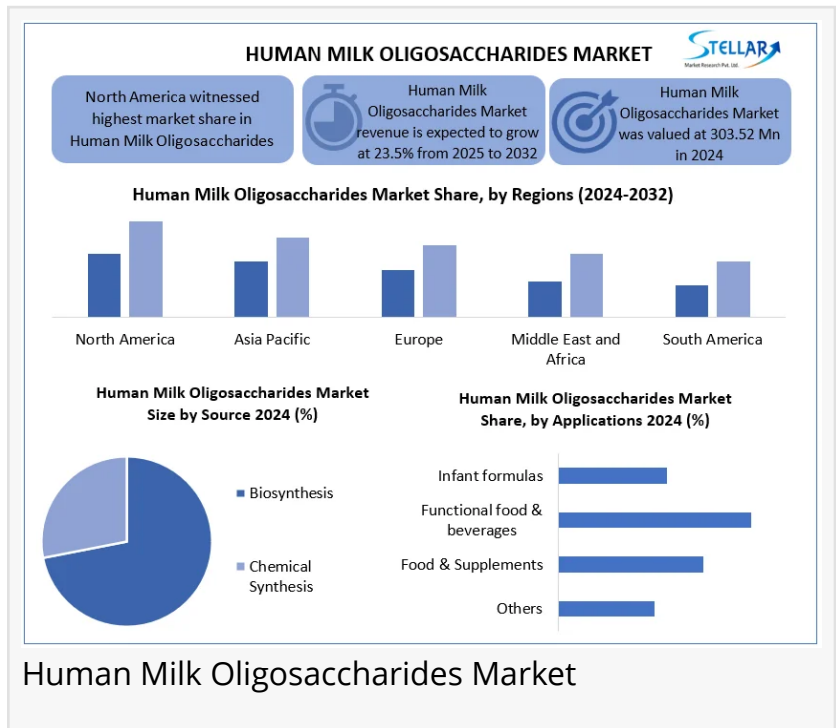


Stellar Market Research examines the growth rate of the Human Milk Oligosaccharides Market during the forecast 2025-2032

Human Milk Oligosaccharides Market revenue is expected to grow at a CAGR of 23.5% from 2025 to 2032, reaching nearly USD 1642.57 Mn by 2032.

CHICAGO, NY, UNITED STATES, June 16, 2025 /EINPresswire.com/ -- The [Human Milk Oligosaccharides Market](#) (HMO) is estimated to grow with a compound annual growth rate (CAGR) of about 23.5% over the forecasted period. The Human Milk Oligosaccharides Market was valued at USD 303.52 million in 2024 and is expected to reach USD 1642.57 million by 2032. The Human Milk Oligosaccharides Market is being driven by a growing demand for premium infant nutrition and HMO health benefits (gut, immunity). Technology is advancing production while applications are expanding beyond formulas. The important growth factors are the change in regulations around HMOs and the expansion of knowledge around HMOs.



“

HMOs rewrite the future of infant nutrition by mimicking nature’s best, nurturing stronger guts, smarter brains, and safer starts.”

Dharati Raut

Human Milk Oligosaccharides Market Overview

The Human Milk Oligosaccharides (HMOs) market is developing rapidly based on the realization of their importance in infant health and for the development of infants guts and immune systems, which drive demand for infant formulas that replicate breast milk. Aside from infant nutrition, HMOs are increasingly being used in functional foods and beverages, and dietary supplements for adults, based on the emerging trend of consumers

interested in gut health. Technological improvements in the cost-effective production of HMOs

are also contributing to industry growth. North America and Europe are the world's largest markets for HMOs, followed by Asia, which is rapidly growing. The high cost of production is still a primary challenge for manufacturers.

To know the most attractive segments, click here for a free sample of the report:

https://www.stellarmr.com/report/req_sample/human-milk-oligosaccharides-market/2667

Human Milk Oligosaccharides Market Dynamics

Drivers

Increasing Demand for Premium Infant Nutrition

The Human Milk Oligosaccharides (HMOs) market is expanding rapidly. A major driver behind this growth is the demand by parents for premium infant formulas that have a composition similar to breast milk. HMOs are important for gut health, immunity development, and cognitive development in infants. There is a growing awareness by parents about the importance of this in infant nutrition, and scientific strides in producing HMOs have led to the adoption and application of HMOs in functional foods and as supplements. Globally, this is a trend that is being further supported by favourable regulations to create optimal market conditions to see continual growth.

Growing Awareness of HMO Health Benefits Beyond Infancy

An increasing scientific understanding of the benefits of HMOs for adult health is a primary driver, and the momentum is growing. HMOs are known to promote a healthy gut microbiome, support immune function, and reduce inflammation in adults, outside of infants. Emerging research indicates that HMOs are efficacious, even at low doses, and there are several benefits, such as increased SCFAs and immune-related metabolites. This ever-growing amount of knowledge is driving more demand for HMOs to be included in adult functional foods, adult functional supplements, or even to be used under clinical nutrition, particularly in line with a more proactive consumer approach to health.

Technological Advancements in HMO Production

Technical advances in HMO production are a large driver of the market. For example, things like microbial fermentation and enzymatic synthesis help facilitate the large-scale and cost-effective manufacture of HMOs, like 2'FL. Recent news indicates that brands have continued to raise investments in HMO technology, provide new developments in yeast-based production, and refine their undenatured enzymatic production, as well as alternative plant-based approaches. These advances enhance accessibility and affordability of the many different types of HMOs that can be offered in a wider array of products.

Restraint

Complexity of Synthesis

The synthesis of HMO is still a complicated task due to the complexity of the molecular structures and the need for precise stereospecificity. Although microbial fermentation and enzymatic synthesis advances have been made, the need for specialized enzymes and the extensive purification of those enzymes is costly and limits commercially available sources of HMO. For example, recent news shows that Kyowa Hakko Bio is continuing to enhance enzymes and tests into plant biomass to produce HMO, showing that they are still in the research and development stage to overcome this sustained, costly hindrance.

Innovations and Developments

Technological innovation is a key factor propelling the Human Milk Oligosaccharides Market forward. Notable advancements include:

Chemoenzymatic Synthesis: HMOs can be synthesized using chemoenzymatic techniques which incorporate both chemical and enzymatic approaches for complex saccharides, such as fucosylated and sialylated HMOs. Commercial application at industrial scales is limited by the cost of enzymes and sugar nucleotides, but promising advances are being made to lessen these burdens.

HMObiotics: Organisations like Health & Happiness (H&H Group) are leading the research around optimal combinations of HMOs and prebiotics, dubbed "HMObiotics," to discover new health benefits for consumers of all ages.

Human Milk Oligosaccharides Market Segmentation

By Type

By Type, the Hernia Mesh Devices Market is further segmented into 2'-fucosyllactose, 3'-fucosyllactose, 3'-Sialyllactose, and 6'-Sialyllactose. 2'-Fucosyllactose (2'-FL) is the most dominant category in the Human Milk Oligosaccharides market, accounting for 30-45% share due to its large natural abundance in breast milk (75% of mothers across all ethnicities) and established benefits for infant immunity and gut health. Recent notable developments include DSM-Firmenich receiving regulatory approval in April 2025 for the use of 2'-fucosyllactose at levels up to 1.2 g/L in an Indian infant formula and IFF obtaining regulatory approval in October 2023 for the use of 2'-FL in the infant formula market in China, helping to substantially increase the global reach of 2'-FL.

Human Milk Oligosaccharides Market Regional Analysis

North America: North America leads the HMO market due to the demand for premium infant nutrition, presence of key companies (e.g., DSM-Firmenich, IFF, Abbott), a robust R&D environment, and favorable regulatory conditions. In July 2023, the FDA approved six more HMO ingredients, enabling market expansion. This region continues to build its lead position based on the focus for health awareness and investments beyond.

Europe: Europe represents the second largest HMO market, with a share of approximately 25-30%. This is due to the degree of awareness and the supportive Novel Food regulatory framework. Recently, DSM-Firmenich was approved by the UK/EU in September 2024 for a blend of 3-FL and LNFP-I/2'-FL, and Kyowa Hakko was approved for 2'-FL in August 2024 by the EU, advancing product offerings.

Asia-Pacific: Asia Pacific is the third-largest (and fastest-growing) HMO market - success driven by large populations and a growing health consciousness. Recent developments include DSM-Firmenich's approval for 2'-FL and LNnT in China in October 2023 and Nestle's launch of a line of HMO-based formulas for infants in China in November.

To know the most attractive segments, click here for a free sample of the report:

https://www.stellarmr.com/report/req_sample/human-milk-oligosaccharides-market/2667

Human Milk Oligosaccharides Market Competitive Landscape

The global and regional players in the Human Milk Oligosaccharides Market concentrate on developing and enhancing their capabilities, resulting in fierce competition. Notable players include:

DuPont Nutrition & Biosciences (US)
FMC Corporation (US)
Abbott Laboratories (US)
Ingredion Incorporated (US)
Nestlé (US)
Glycom A/S (US)
Danone S.A. (France)
Jennewein Biotechnologie GmbH (Germany)
BASF SE (Germany)
Milei GmbH (Germany)
FrieslandCampina (Netherlands)
Yili Group (China)
Beingmate Baby & Child Food Co., Ltd. (China)

Summary

HMOs are increasingly recognized to support health beyond infant formula and are now used in

adult supplements and functional foods with scientific evidence to support benefits such as maintaining the health of the microbiome and reducing inflammation. In terms of HMOs, 2'-Fucosyllactose (2'-FL) is the leading type of HMO available in the market due to its high natural occurrence in breast milk and broad regulatory approvals in India, China, and the EU.

The key restraints are the complexity and cost to synthesize various HMO structures, although new research and development are underway in continuing to exploit this complexity further with innovations like chemoenzymatic synthesis and "HMObiotics" (HMO-prebiotic combinations).

North America is the largest market based on R&D and the regulatory approval processes that the FDA provides, with Europe and the fast-growing Asia-Pacific region next. Leaders in the market include DuPont, Abbott, DSM-Firmenich, Nestlé, BASF, and Yili Group, all actively developing their capabilities in the HMO space. The market is shifting rapidly as HMOs are part of development and nutrition strategy, both at the early-life stage and through types of accelerated nutrition in adult health.

Related Reports:

Natural Tocopherols Market: <https://www.stellarmr.com/report/Natural-Tocopherols-Market/2620>

Industrial Sugar Market: <https://www.stellarmr.com/report/industrial-sugar-market/2546>

Carrot and Turnips Market: <https://www.stellarmr.com/report/carrot-and-turnips-market/2544>

Vegan butter market: <https://www.stellarmr.com/report/vegan-butter-market/2534>

Fox Nuts Market: <https://www.stellarmr.com/report/fox-nuts-market/2532>

About Stellar Market Research:

Stellar Market Research is a multifaceted market research and consulting company with professionals from several industries. Some of the industries we cover include medical devices, pharmaceutical manufacturers, science and engineering, electronic components, industrial equipment, technology and communication, cars and automobiles, chemical products and substances, general merchandise, beverages, personal care, and automated systems. To mention a few, we provide market-verified industry estimations, technical trend analysis, crucial market research, strategic advice, competition analysis, production and demand analysis, and client impact studies.

Contact Stellar Market Research:

S.no.8, h.no. 4-8 Pl.7/4, Kothrud,
Pinnac Memories Fl. No. 3, Kothrud, Pune,
Pune, Maharashtra, 411029
sales@stellarmr.com

Lumawant Godage
Stellar Market Research
+ +91 9607365656

[email us here](#)

Visit us on social media:

[LinkedIn](#)

[Instagram](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/822612786>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.