+357 96 030922
info@marketpublishers.com

Oral Proteins and Peptides Market Forecasts to 2030 – Global Analysis By Product Type (Oral Peptides and Oral Proteins), Drug Type, Dosage Form, Biological Target, Mechanism of Action, Application, End User and By Geography

https://marketpublishers.com/r/O92207E05AFEEN.html
Date: April 2025
Pages: 150
Price: US$ 4,150.00 (Single User License)
ID: O92207E05AFEEN

Abstracts

According to Stratistics MRC, the Global Oral Proteins and Peptides Market is accounted for $7.9 billion in 2024 and is expected to reach $25.9 billion by 2030 growing at a CAGR of 21.9% during the forecast period. Oral proteins and peptides are large, biologically active molecules made up of amino acids that are meant to be taken by mouth to treat a variety of health problems. Unlike small-molecule medicines, they have problems such as low intestinal absorption and enzymatic breakdown. Technological developments in drug delivery, such as permeability enhancers and nanoparticle encapsulation, increase the bioavailability of drugs. Non-invasive substitutes for injections, these treatments are used to treat autoimmune diseases, diabetes, and osteoporosis while still having therapeutic efficacy.

According to the International Diabetes Federation, approximately 537 million adults globally were living with diabetes in 2021, with projections reaching 783 million by 2045.

Market Dynamics:

Driver:

Growing geriatric population

The growing geriatric population significantly drives the oral proteins and peptides market, as older individuals often require effective, easy-to-administer treatments for

+357 96 030922
info@marketpublishers.com

chronic conditions. As the aging population increases, particularly in countries like China, Japan, and India, there is a higher incidence of age-related diseases such as diabetes, gastrointestinal disorders, and bone diseases, creating substantial demand for oral protein and peptide therapies. This demographic shift contributes to market expansion, with the global market projected to grow as elderly patients typically prefer non-invasive oral administration over injections for improved compliance and quality of life.

Restraint:

Low bioavailability

Low bioavailability presents a significant challenge for the oral proteins and peptides market, limiting the effectiveness of these therapeutics. Most orally administered peptides have a bioavailability of less than 2% and short half-lives of under 30 minutes due to degradation in the gastrointestinal tract and inability to cross the epithelial barrier. These molecules typically have high molecular weights, low lipophilicity, and charged functional groups that hamper absorption. Additional factors affecting bioavailability include susceptibility to systemic proteases, rapid metabolism, opsonization, conformational changes, and destruction of labile side groups, necessitating advanced delivery technologies to overcome these limitations.

Opportunity:

Expanding therapeutic applications

Expanding therapeutic applications represent a significant opportunity in the oral proteins and peptides market as these formulations find new uses beyond traditional indications. The market is witnessing growth in applications for various conditions, including acromegaly, celiac disease, chronic idiopathic constipation, enteric hyperoxaluria, and inflammatory bowel disease, alongside established uses for diabetes and hormonal disorders. This diversification of applications is driving innovation and expanding the potential market size substantially.

Threat:

Adverse side effects

Adverse side effects pose a significant threat, potentially limiting adoption and

+357 96 030922
info@marketpublishers.com

commercial success. The complex nature of protein and peptide therapeutics increases the risk of unexpected reactions when administered orally. The modifications required to enhance bioavailability and stability may alter the safety profile of these molecules. Additionally, the high development costs associated with ensuring safety and efficacy—with biological drug development taking 10-15 years and requiring substantial capital investment—create barriers to market entry, particularly for smaller players.

Covid-19 Impact:

The COVID-19 pandemic initially disrupted the oral proteins and peptides market through supply chain challenges and postponed non-emergency treatments. However, it ultimately accelerated innovation in drug delivery technologies as healthcare systems sought more patient-friendly treatments that could be administered at home. The pandemic highlighted the importance of oral formulations that reduce hospital visits, particularly beneficial for immunocompromised patients with chronic conditions. This shift in treatment preferences has created lasting momentum for oral protein and peptide therapeutics.

The insulin receptor segment is expected to be the largest during the forecast period

The insulin receptor segment is expected to account for the largest market share during the forecast period due to the rapidly growing global diabetes prevalence. According to the International Diabetes Federation, approximately 537 million adults were living with diabetes in 2021, with projections reaching 783 million by 2045. This enormous patient population creates substantial demand for oral insulin formulations that offer a non-invasive alternative to traditional injections. Companies like Novo Nordisk and Oramed Pharmaceuticals are developing innovative oral insulin formulations that overcome enzymatic degradation and poor absorption challenges, driving significant investment and market growth in this segment.

The oral solutions/liquid formulations segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the oral solutions/liquid formulations segment is predicted to witness the highest growth rate due to significant advantages in bioavailability and patient compliance. Liquid formulations can overcome some absorption barriers in the gastrointestinal tract through specialized delivery technologies, including nanoparticles, permeability enhancers, and protease inhibitors. These formulations are particularly beneficial for elderly patients and those with swallowing difficulties. The rapid onset of

+357 96 030922
info@marketpublishers.com

action and potential for precise dosing make liquid formulations increasingly attractive for conditions requiring quick therapeutic responses, driving substantial investment in research and development of novel oral solution technologies.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share. This dominance stems from advanced healthcare infrastructure, high healthcare expenditure, and significant investments in innovative drug delivery systems. The United States accounts for a significant share in the North American market, spending approximately 40% of global pharmaceutical R&D. The region benefits from favorable regulatory policies, with agencies like the FDA expediting approvals for innovative therapies such as oral semaglutide for diabetes, while the presence of key market players further strengthens North America's leadership position.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR driven by rapidly increasing healthcare investments, rising prevalence of chronic diseases, and expanding patient populations. Countries like China, Japan, and India are experiencing significant growth in their geriatric populations, contributing to higher incidences of age-related diseases that require effective therapeutic solutions. Increasing healthcare expenditure across the region, supported by rising disposable incomes and government initiatives aimed at enhancing healthcare infrastructure, is providing substantial market momentum.

Key players in the market

Some of the key players in Oral Proteins and Peptides Market include Novo Nordisk A/S, Eli Lilly and Company, Sanofi, AstraZeneca, AbbVie Inc., Takeda Pharmaceutical Company Limited, Roche Holding AG, Merck & Co., Inc., Pfizer Inc., Novartis AG, Bristol-Myers Squibb Company, Amgen Inc., Biocon Limited, Oramed Pharmaceuticals Inc., Chiasma, Inc., Entera Bio Ltd., Proxima Concepts Limited (Diabetology Ltd) and Rani Therapeutics Holdings, Inc.

Key Developments:

In June 2023, Eli Lilly and Company announced new phase 2 data for orforglipron, its first nonpeptide oral glucagon-like peptide-1 (GLP-1) receptor agonist being studied for

+357 96 030922
info@marketpublishers.com

chronic weight management in participants with obesity or overweighti. The results were shared during an oral presentation at the American Diabetes Association's® 83rd Scientific Sessions and were simultaneously published in the New England Journal of Medicine. Orforglipron met both primary and secondary endpoints for the efficacy estimandii and demonstrated clinically significant weight reductions in adults with obesity or overweight, with at least one weight-related comorbidity (not including type 2 diabetes).

In February 2020, Takeda Pharmaceutical Company Limited announced that it has acquired PvP Biologics, Inc. following the conclusion of a Phase 1 proof-of-mechanism study of investigational medicine TAK-062 (Kuma062) for the treatment of uncontrolled celiac disease. TAK-062 is a potential best-in-class, highly potent super glutenase – a protein that degrades ingested gluten – that was computationally engineered to treat celiac disease, a serious autoimmune disease where the ingestion of gluten leads to inflammation and damage in the small intestine. The Phase 1 study investigated TAK-062's safety and tolerability in both healthy volunteers and people with celiac disease. The ability of TAK-062 to degrade ingested gluten was studied in healthy volunteers. Takeda plans to submit data from the Phase 1 study for presentation at an upcoming medical congress.

Product Types Covered:

- Oral Peptides
- Oral Proteins

Drug Types Covered:

- Semaglutide
- Linaclotide
- Plecanatide
- Calcitonin
- Insulin

+357 96 030922
info@marketpublishers.com

- Octreotide
- Trofinetide
- Voclosporin
- Desmopressin
- Other Drug Types

Dosage Forms Covered:

- Tablets
- Capsules
- Oral Solutions/Liquid Formulations

Biological Targets Covered:

- Guanylate Cyclase-C (GC-C)
- Insulin Receptor
- Oxalate
- Other Biological Targets

Mechanisms of Actions Covered:

- Receptor Stimulation
- Substrate Degradation
- Other Mechanisms of Actions

+357 96 030922
info@marketpublishers.com

Applications Covered:

- Diabetes
- Gastric and Digestive Disorders
- Bone Diseases
- Hormonal Disorders
- Infectious Diseases
- Genetic Disorders
- Other Applications

End Users Covered:

- Hospitals
- Specialty Clinics
- Home Care Settings
- Long-term Care Facilities
- Research and Academic Institutes
- Pharmaceutical Companies

Regions Covered:

- North America
  - US
  - Canada

+357 96 030922
info@marketpublishers.com

- Mexico

Europe

- Germany
- UK
- Italy
- France
- Spain
- Rest of Europe

Asia Pacific

- Japan
- China
- India
- Australia
- New Zealand
- South Korea
- Rest of Asia Pacific

South America

- Argentina
- Brazil

+357 96 030922
info@marketpublishers.com

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:
- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2022, 2023, 2024, 2026, and 2030
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

+357 96 030922
info@marketpublishers.com

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

13 KEY DEVELOPMENTS

14 COMPANY PROFILING

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Oral Proteins and Peptides Market Forecasts to 2030 – Global Analysis By Product Type (Oral Peptides and Oral Proteins), Drug Type, Dosage Form, Biological Target, Mechanism of Action, Application, End User and By Geography

Product link: https://marketpublishers.com/r/O92207E05AFEEN.html

Price: US$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/O92207E05AFEEN.html