

Supplement Trends and Market Opportunities Report



Who Is Plant Science?



Turn-Key Manufacturer

We are your partner from research and development all the way through finished good production. Streamlining and solidifying sourcing creates increased buying power with our suppliers.



Trend Innovator

Rather than just following trends we will help you develop, formulate, and validate products that create trends.



Customer Service

We consider our relationship with our clients as a true partnership. We are highly selective of who we work with, enabling us to give the greatest amount of attention to each part.

Our management team is at your service



**Justin
Plant**
Managing
Partner



**Parker
Dunn**
Quality
Manager



**Perrin
Gerber**
Product and
Partnership
Manager



**Preston
Smith**
Supply Chain
Manager

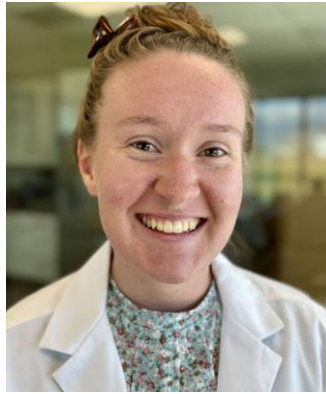


**Grant
Barber**
Accounting
and Finance
Manager



**Elliott
Evans**
Manufacturing
Manager

Innovation is the goal of our Research and Development team



Jaylee Bastian
Research & Development Scientist
Food Science B.S.



Brayden Rasmussen
Research & Development Scientist
Food Science B.S.



Ibrahim Sagara
Research & Development Scientist
Biotechnology, B.S.



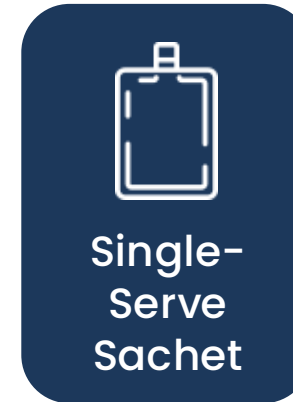
Ethan Lichtenberg
Research & Development Scientist
Food Science B.S.

High-Capacity Capabilities for Powder and Liquid Supplements

POWDERS



LIQUIDS



These machines provide the highest efficiency. Each machine is custom built to our specifications by the finest manufacturers in Europe. We are able to produce significantly more finished goods per hour for competitive unit pricing.



Our machine operators have years of experience and are specifically trained in procedures with mentor partnerships. This training provides critical knowledge of safety, cleaning, ingredient blending, flow, consistency, and set up of substrate materials.

Production Capacity Powder



Blister Pack



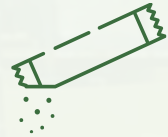
Monthly Utilization

3.2M

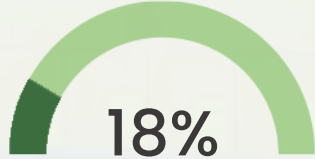
Total Monthly Capacity

180K

Daily Units



Stick Pack



Monthly Utilization

28.2M

Total Monthly Capacity

1.6M

Daily Units



Encapsulation



Monthly Utilization

47M

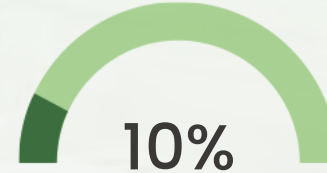
Total Monthly Capacity

950K

Daily Units



Capsule Bottling



Monthly Utilization

2.2M

Total Monthly Capacity

72K

Daily Blending Cap.



Blending



Monthly Utilization

166K

Total Monthly Capacity

9,600 KG

Daily Blending Cap.

Production Capacity Liquid



Single-Serve
Sachet



30%

Monthly Utilization

1.4M

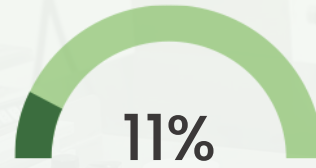
Total Monthly
Capacity

48K

Daily Units



Bottling



11%

Monthly Utilization

300K

Total Monthly
Capacity

10K

Daily Units

Plant Science Facilities

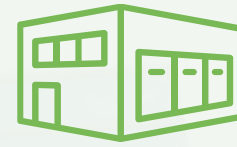


New Headquarters

730 N. 2800 W.
Lindon, UT 84042

45,000 sq. ft.

- Expanded R&D Labs
- Pilot-Run Manufacturing
- Liquid Manufacturing
 - Gel Packs
 - Bottles
 - Blending
 - Receiving



Building One

1444 S. 500 E., STE 150
American Fork, UT 84003

38,000 sq. ft.

- Powder Manufacturing
 - Stick Packs
 - Pouches
 - Capsules, Bottle & Blister Cards
 - Bulk Fill
- Procurement Offices
- Quality Management Offices
- Assembly

Expansion: Increasing Capacity, Redundancy and Scalability



New Facility Added

We're adding more floor space to accommodate new production lines and streamline operations, ensuring ability to handle increased demand with ease.



Equipment Redundancy

(Two Additional Stick Pack Lines) Doubling stick pack production enables us to deliver faster turnarounds and mitigate any disruptions, providing added security for your supply chain.



New Capsule Bottling Line

Our enhanced bottling capabilities will increase efficiency and product variety, giving clients more flexibility to bring innovative products to market.



Expanded Liquid & Bottle Capacity

With increased capacity for Gel Pack and liquid products, we're better equipped to support your growth with scalable solutions for gel packs and bottle-filling needs.



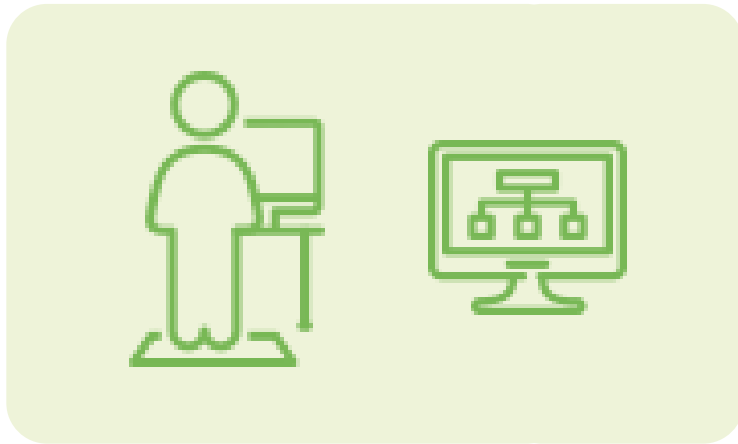
R&D Pilot-run Manufacturing

This allows for small pilot runs for test markets and distributor samples. It allows you to evaluate the market and formula before moving to full-scale manufacturing.

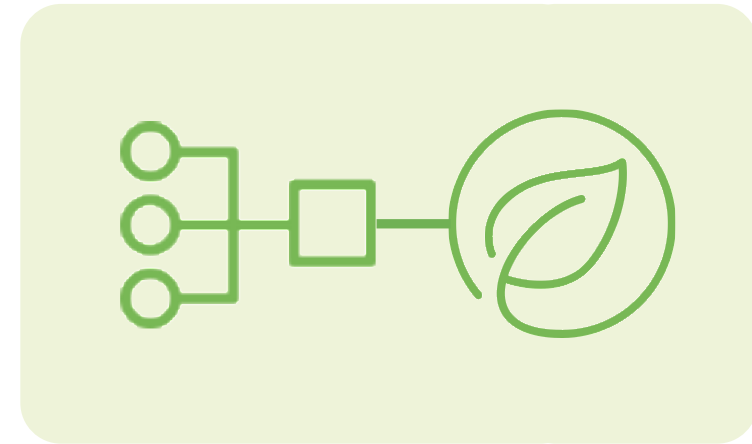


This expansion isn't just about adding square footage or new equipment—it's about strengthening our partnership with you. By enhancing our production capabilities and reinforcing supply chain reliability, we're positioning ourselves to be your trusted partner for years to come.

Supply Chain Integrated Systems



Integration of systems for higher level ERP and MRP. This plans inventory replenishment with full MRP functionality and improves cycle time on finished goods.



Fully integrated supply chain partners to streamline orders and reduce logistics costs and time.

Quality Control and Management



Strict quality control procedures and management is maintained.

These procedures include:

- Testing
- Cleaning
- Certifications
- Inspections



Plant Science is committed to meeting and exceeding manufacturing quality standards identified in our certifications.



Value of Time-to-Market



Understanding the product lifecycle is valuable to market position and growing consumers.



Products have a life cycle A newly released product with novel research and nutrients has a higher perceived value. This value allows for better margins and the opportunity to increase market share. The longer the novel product is on the market competitors will catch up, thus moving the product to a commodity phase. This phase reduces margins and the opportunity to influence new market share. At this phase of the lifecycle the unit price becomes a major factor for the consumer's purchase decision.



Plant Science has created a proprietary model that reduces the time to market for new products. This model includes on-site R&D, procurement validation, and rapid manufacturing. This proprietary model is designed for rapid delivery, which increases the benefits of the early phase of the product lifecycle.

Consumer Packaging Experience



Packaging is powerful. It can evoke emotions with a consumer, establish corporate values, brand benefits, and build loyalty.

The top 3 reasons for purchases are:



Sustainability



Convenience



Safe & Resealable



Packaging design can be used to promote nostalgia, excitement, luxury, and lifestyle. The experience begins when unboxing the order. The unboxing becomes the “store” experience. By creating unique and pleasing packaging encourages customers to share the unboxing experience.



Packaging also delivers the message of the company and its values. Using environmentally sustainable and recyclable packaging establishes and reinforces the corporate commitment to the planet’s ecosystems.

Plant Science has custom pack-out services for unique boxing and packaging.

The Power of Samples to Grow Sales



Research has shown as high as 81% of consumers will try a new product after receiving a free sample. This is a powerful mechanism to build relationships, drive loyalty, and encourage repeat customers. Product sampling removes the risk factor with trying a new product. The rule of reciprocity is another factor that contributes to the success of free samples. People feel obligated to return the favor.

Ways to incorporate free samples:



Setup a landing page on the website for customers to request a free sample.



Free samples are given in exchange for social media posts and reviews.



Free samples included with an existing product order. Also include a promocode for savings on the first order.

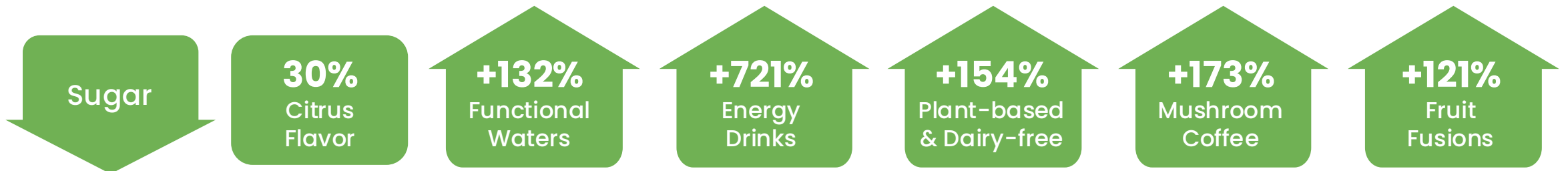
This fosters the idea of consumer appreciation and loyalty.

Flavor Demographics and Trends



Flavor trends are changing rapidly, partly due to the rise of social media, making it even more important to know the demographic and region of the target consumer. **Flavor is the overwhelming decision factor at 75% for the consumer's initial purchase.** Convenience with on-the-go packaging is essential for retention. Trends are strongly toward functional, good tasting beverages. It is more important than ever to stay ahead of the moving flavor trends.

Current Flavor Trends



Plant Science provides demographic flavor testing

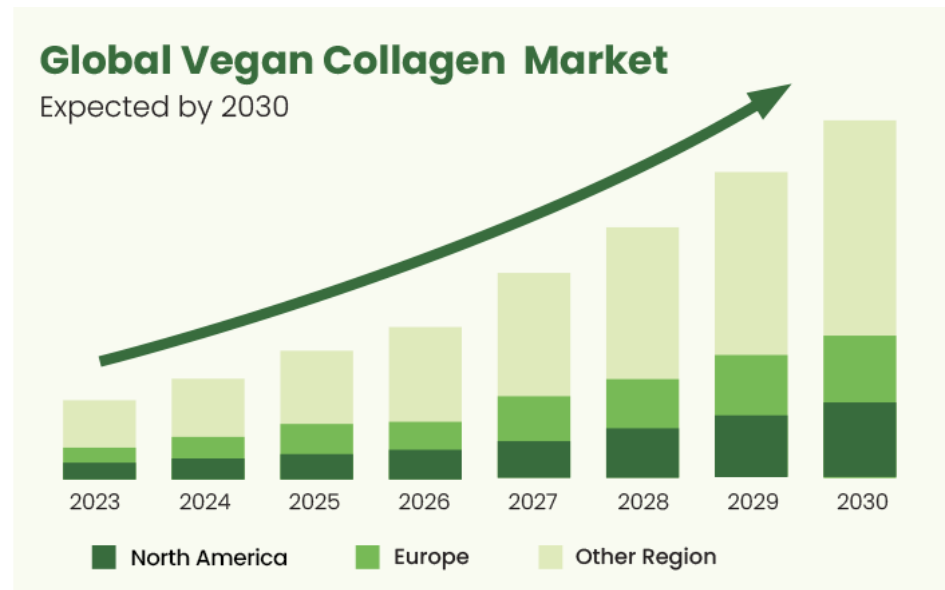
GenZ growing market in flavors like pineapple, black berry, and raspberry. Citrus remains the most classic flavor preference at 30%. Flavors include: calamansi tangerine, yuzu, blood orange, and pomelo.



Collagen

Collagen types I, II, and III are vital proteins needed for human connective tissues, such as skin, tendons, and joints. Numerous studies support the efficaciousness of collagen. Formulations combined with vitamin C & D and minerals are essential for collagen absorption.

Collagen growth rate continues to increase with a 56% growth in sales in 2021. Projected growth of collagen is 25% CAGR to 2030. Vegan diets coupled with aging population is driving growth in this supplement sector.



Source: Database Market Research



Weight Loss and Management

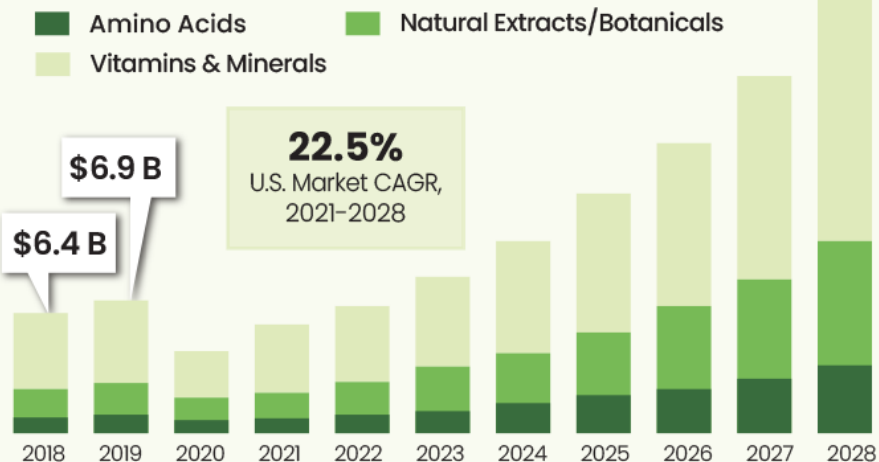
Weight loss and management continues to be a growing market with increasing obesity rates in developing countries. The World Health Organization (WHO) estimates 2.8 million individuals die every year as a result of obesity. This is coupled with 115+ million individuals who suffer from obesity-related diseases.

The U.S. weight loss supplement segment is projected to grow at 22.5% CAGR to 2028. The COVID lockdowns have resulted in a significant decline in dietary and lifestyle habits resulting in an accelerated market projection.

Research studies support efficacious weight loss supplements include gut health, proteins, and metabolic enhancement. An effective system of supplements produces better results than a single supplement. A system combining all elements of diet and lifestyle change produce better long-term results and improved health.

U.S. Weight Loss Supplements Market

Size, by ingredient, 2018-2028 (USD Billions)



Source: grandviewresearch.com.

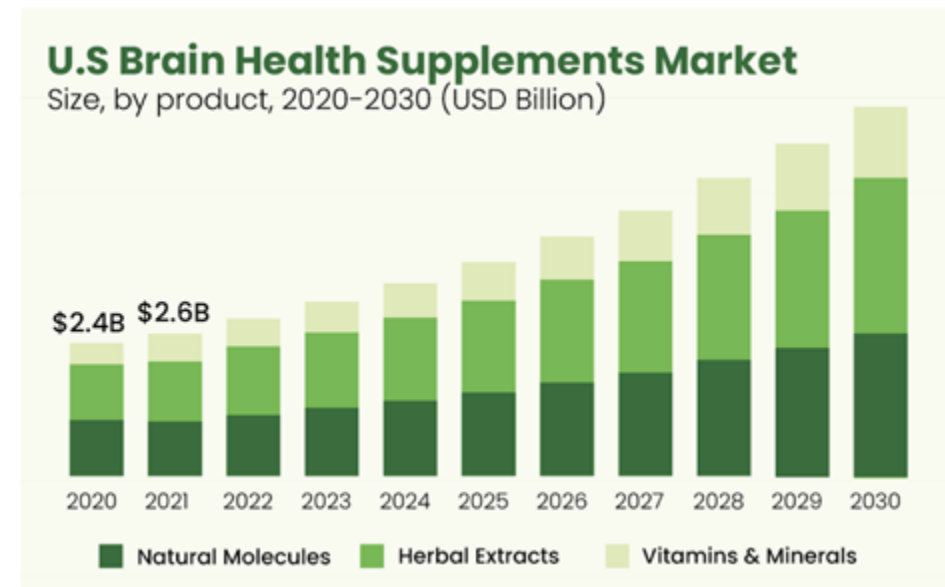


Brain Health

Mental health issues, which broadly includes the lack of focus and attention, anxiety, depression and loss of memory are generating the need for efficacious supplements in the global market.

According to the World Health Organization (WHO) there are 280 billion people suffering from depression. Anxiety disorder is reported to affect over 19% of the U.S. population.

These health issues are projected to grow the mental health supplement market to 13.3% CAGR to 2030.



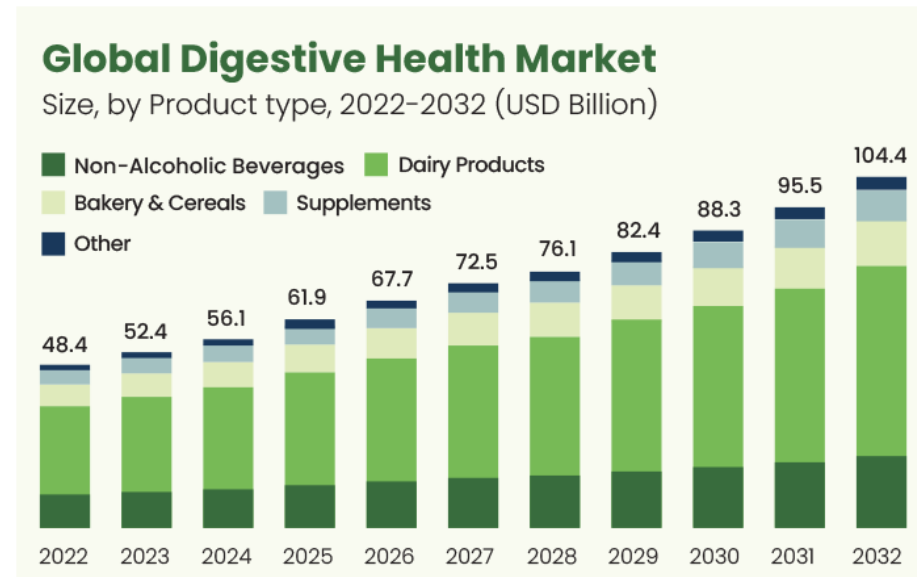
Source: Grand View Research, Brain Health Supplements Market Size, Share and Trends.



Digestive Health

Canada revealed over 13,000 deaths in 2020 were attributed to digestive disease. The global digestive health market is projected to grow 8.2% CAGR to 2032. North America holds the highest market share for digestive supplements at 34%.

A recent survey reported that 85% of global consumers have taken steps to improve their digestive health. Over 50% of these consumers prefer a food or drink format. A combination of pre- pro- and post-biotics are essential for an efficacious supplement.



Source: Globe Newswire.



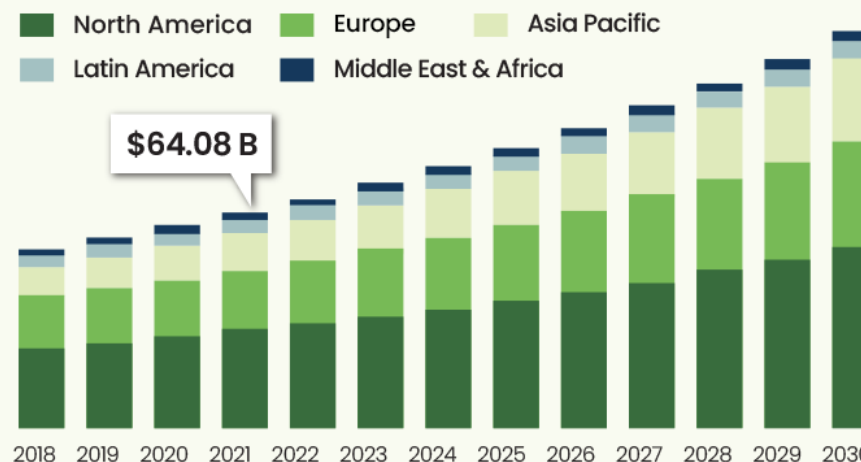
Sleep Aids

Research shows adults are getting less than 7 hours of sleep and poor sleep quality. **20% of Gen Z and Millennials purchase sleep support** compared to 10% of baby boomers.

Efficacious supplements that include Hormone support, Valerian root, Amino Acids, Herbal Extracts, e.g. lavender, lemon balm, and hops, and Magnesium demonstrate supporting sleep are projected to grow at 7.2% CAGR to 2030, representing over 112 billion in sales.

Sleeping Aids Market Size

By region, 2018-2030 (USD Billions)



Source: Polaris Market Research Analysis.



Women's Health

This supplement market overall is projected to expand at a 5.1% CAGR. This includes hormonal aids, nutrition for fertility, menopause, and postnatal support.

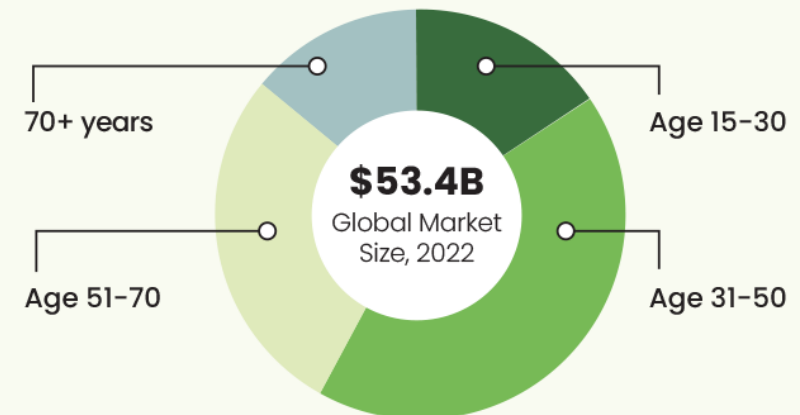
Postmenopause support dominated this market with a 32.6% share. Supplements include calcium, minerals, and vitamins D, B6, & E, Omega-3, Collagen, and Cucumber Extract for bone density and strength.

Postnatal supplements have a lucrative forecast with globally 41.8% of pregnant women suffering from anemia. Supplements supporting anemia are omega-3 fatty acids, iron, vitamin D, folate, riboflavin, etc. The direct sales channels segment held the largest revenue share at 35.1%, likely due to consumer trust factor.

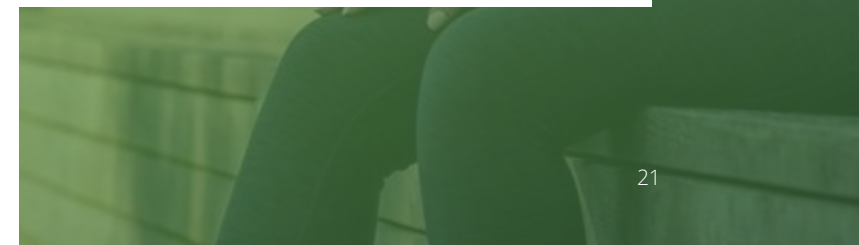


Global Women's Health & Beauty Supplements Market

Share, by age group, 2022 (%)



Source: grandviewresearch.com.





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PLANT SCIENCE

RESEARCH DEVELOPMENT MANUFACTURING