



In Conversation with

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How is your work related to gummies industry?

Research and Development (R&D) plays a crucial role in the development of gummies. Here are some of my works as an R&D person for gummies:

- -Developing new gummy products: R&D scientists are responsible for the development of new gummy and confectionary products, processes, and systems.
- -Translate product specifications into holistic, multi-sensorial, and effective products that are able to be manufactured meeting target costs.
- -Designing experiments: Design and execute experimental work to test hypotheses at bench top, pilot plant, and plant level and obtain valid results consistent with project objectives.
- -Analyze data to provide a relevant interpretation, draw valid conclusions, and make recommendations based upon the results.
- -Creating healthier gummies: R&D teams can develop healthier versions of existing products by incorporating protein or finding healthier ingredient substitutions.
- -Creating gummies using natural ingredients, without added sugars or additives.
- -lmproving efficiency.
- -Technical plans for projects, ensure technical validity of data, resolve technical issues, and provide balanced risk assessment to influence project direction.
- -Managing the planning and execution of gummy processes.
- -Ensuring that the processes follow technology, regulatory, quality, and safety requirements for gummy manufacturing.

How are gummies manufactured? What are the raw materials? What is the process?

Gummies are manufactured using a starch molding process. First, the candy is made, then it is filled into starch-lined trays. The filled trays are then cooled.

The manufacturing process of gummy candies starts with compounding. The right quantity of gummy raw materials is physically poured into the large mixer and blended together until the mixture is homogeneous.

The direct materials mixed together to make gummy are glucose syrup, flavoring, citric acid, sugar, starch, food coloring, and gelatin

The manufacturing process involves several steps, including:

- -Compounding: The manufacturing process of gummy candies starts with compounding. The right quantity of gummy raw materials is physically poured into the large mixer and blended together until the mixture is homogeneous.
- -Cooking: The mixture is then cooked in a large kettle until it reaches the desired temperature.
- -Depositing: The cooked mixture is then deposited into starch molds using a depositor
- -Cooling: The filled trays are then cooled to allow the gummies to set



- -Drying: The gummies are then removed from the molds and dried to remove excess moisture.
- -Polishing: The dried gummies are then polished with a mixture of beeswax and carnauba wax to give them a shiny appearance.
- -The raw materials used in gummy manufacturing include gelatin, starch, pectin, glucose syrup, flavoring, citric acid, sugar, food coloring, and water.
- -The manufacturing process may vary depending on the type of gummy being produced and the equipment used.

Can you comment on the changing trend of plant-based sources of production of different products and in the gummies industry well.

The trend of plant-based sources of production is growing in the gummies industry. Consumers are increasingly interested in plant-based products due to health and sustainability concerns, changing dietary habits, and the availability of gummy supplements in different flavors and active ingredients.

The plant-based gummy supplements market is expected to grow at a CAGR of more than 8%. Manufacturers are boosting the production of plant-based gummy candies, and the trend of veganism and vegetarianism is fueling innovations in this area.

The Gummy Project Inc. is launching low-sugar, plant-based, gluten-free gummy products in Canada. Plant-based gummies are considered a healthier and more sustainable alternative to gelatin gummies, which are derived from animal products.

The consumption of plant-based products is aimed at all consumers who want to include vegetarian or vegan products in their diet. Overall, the trend of plant-based sources of production is gaining momentum in the gummies industry due to changing consumer preferences and increasing awareness of health and sustainability concerns.

Can you comment on the regulatory scenario related to development of gummies in India?

It is important to note that the regulatory environment for food and dietary supplements in India is governed by the Food Safety and Standards Authority of India (FSSAI). The FSSAI is responsible for regulating and supervising the manufacture, storage, distribution, sale, and import of food products in India. The FSSAI has established regulations and guidelines for the manufacture and sale of food products, including dietary supplements, to ensure their safety and quality.

Manufacturers of gummies in India must comply with these regulations and guidelines to ensure that their products are safe for consumption. It is important for manufacturers to stay up-to-date with any changes in the regulatory environment to ensure compliance with the latest regulations and guidelines.

Are clinical trials required before marketing gummies?

Clinical trials are required before marketing gummies, especially if they are marketed as dietary supplements. Clinical trials are conducted to evaluate the safety and efficacy of a product and to ensure that it meets regulatory requirements. The clinical trial process involves several stages, including preclinical testing, phase I, phase II, and phase III trials, and post-marketing surveillance. In India, the regulatory environment for food and dietary supplements is governed by the Food Safety and Standards Authority of India (FSSAI).

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It is important for manufacturers to conduct clinical trials to ensure that their products meet regulatory requirements and are safe for consumers.

What is the scenario of gummies industry in India and globally?

The gummies industry is growing globally, and India is no exception.

The increasing demand for functional and fortified gummies, the availability of gummy supplements in different flavors and active ingredients, and the growing popularity of plant-based and vegan gummies are some of the major factors driving the growth of the global gummy industry.

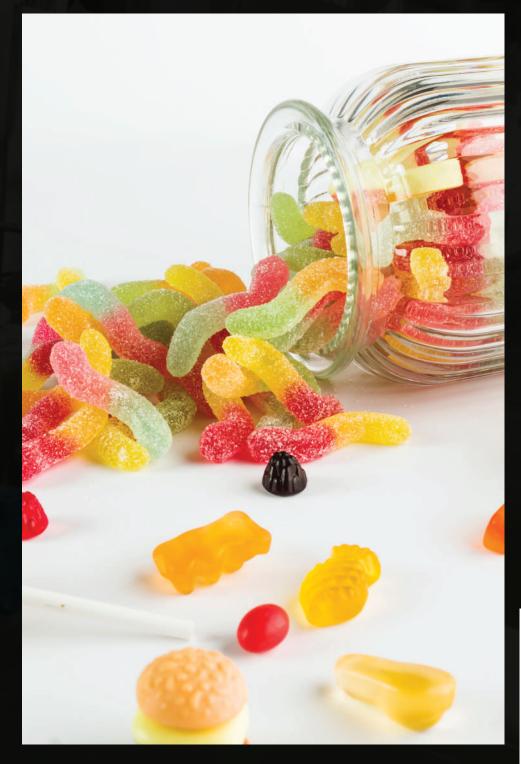
In India, the gummies market is anticipated to grow at an impressive rate in the projected period on account of growing disposable income and increasing health consciousness among the population.

The rising innovation and diversification of gummy products, the increasing penetration of e-commerce platforms, and the rising demand for gummy vitamins and supplements are some of the factors contributing to the growth of the gummies market in India.

The nutraceutical segment is expected to dominate the gummies market in India through 2028. The rise of gummies to fame in India can be attributed to their adaptation in the multivitamins and nutraceuticals spaces, which turned out to be a game-changer.

Overall, the gummies industry is growing in India and globally, driven by changing consumer preferences and increasing awareness of health and wellness concerns.

Can gummies replace tablets/capsules especially in a country like India



where cost and awareness are major constraining factors?

Gummies can be an alternative to tablets and capsules, especially in a country like India where cost and awareness are major constraining factors. Gummies are becoming increasingly popular in India, especially since the advent of COVID-19, and their adaptation in the multivitamins and nutraceuticals spaces has turned out to be a game-changer.

Gummies are easy to consume, and their added flavorings make them more palatable than capsules or tablets. They are ideal for those who have difficulties swallowing capsules or tablets.

Gummies are also popular among both toddlers and adults due to their easy swallowability. The increasing penetration of e-commerce platforms in India has boosted the growth of the gummies market by making these products more accessible to consumers.

Therefore, gummies can be a viable alternative to tablets and capsules, especially in a country like India where cost and awareness are major constraining factors.

Where is the use of gummies more in nutraceuticals or nutricosmetics?

Gummies are becoming increasingly popular in both sectors due to their ease of consumption, accurate dosing, and excellent shelf-life stability. Gummies are also available in appealing flavors, and unpleasant tastes can be masked out, making them potentially low in sugar or even sugar-free.

The use of vitamins and other supplements in a sweet gummy form has risen significantly over recent years. Nutraceutical gummies are agar-agar or gelatinous sugar-based formulations possessing phyto-components having functional nutrition. The Indian nutraceuticals market accounts for roughly 2% of the global nutraceuticals market.

Overall, gummies are a popular medium for both nutraceuticals and nutricosmetics due to their ease of consumption, accurate dosing, and excellent shelf-life stability.





In a country like India, who are the major manufacturers of gummies? How are these companies surviving in a market wherein the awareness related to the product is limited? How are these companies marketing their products?

Some of the major manufacturers of gummies in India include Power Gummies, Hindustan Unilever Limited, Azveston Healthcare Pvt. Ltd., Kapiva ayurveda, Boli Naturals LLC, Ferrara Candy Company, Bayer AG, Makers Nutrition LLC, Nutra Solutions USA, Ernest Jackson, and Sofitel.

These companies are surviving in a market where awareness related to the product is limited by leveraging the increasing penetration of e-commerce platforms in India, making their products more accessible to consumers.

Rising disposable income has also contributed to the growth of the gummies market in India by increasing consumer purchasing power, creating demand for premium and innovative products, and facilitating access to a wider range of gummy options

These companies are marketing their products through various channels such as e-commerce platforms, pharmacies, and social media platforms.

They are also leveraging the rising popularity of gummies among millennials, who opt to take these gummy vitamins due to variables such as busier schedules, increased disposable incomes, higher understanding of preventive healthcare measures, and maintaining better health.

Overall, major gummies manufacturers in India are surviving in a market where awareness related to the product is limited by leveraging the increasing penetration of e-commerce platforms and marketing their products through various channels such as social media platforms.

Which region/state in India are generating the highest demand for gummies and why?

There is no clear information on which region or state in India is generating the highest demand for gummies. However, the India gummies market is anticipated to grow at an impressive rate in the projected period on account of growing disposable income and increasing health consciousness among the population

The increasing popularity of candy gummies, along with the rising demand for gummy vitamins and supplements, is fueling the growth of the gummies market in India

The rising profile of gummies in India can be attributed to their adaptation in

the multivitamins and nutraceuticals spaces, which turned out to be a game-changer, especially since the advent of COVID-19 Therefore, the demand for gummies is increasing in India due to rising disposable income, increasing health consciousness, and the growing popularity of candy gummies, gummy vitamins, and supplements. However, there is no clear information on which region or state in India is generating the highest demand for gummies.

How do you foresee the future of gummies in India?

The future of gummies in India looks promising. The increasing popularity of candy gummies, along with the rising demand for gummy vitamins and supplements, is fueling the growth of the gummies market in India.

The immunity-boosting mantra that swept through the world during the pandemic also had its roots in India, causing a sharp rise in the demand for gummies.

Moreover, gummies are easier to incorporate into diets, making them an easier addition to our daily routine

Key players across the country are working on developing vitamin gummies that can address multiple issues at once and provide tremendous health benefits.

Therefore, the future of gummies in India looks bright, with increasing demand for gummies due to their ease of consumption, growing health consciousness, and the rising popularity of candy gummies, gummy vitamins, and supplements.







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