

food MARKETING & TECHNOLOGY

इंडिया



Say Goodbye to stitching

Introducing the HP 108mm Printhead

Unmatched print quality
Lightning-fast speed
Extended throw distance

Perfect for direct secondary coding & customization

To know more:
sptsindia@hp.com



Our cones make
everything better



HYDERABAD | BANGALORE | AHMEDABAD

BIG DRUM
INDIA Pvt. Ltd.

Sales & Corporate Office

Plot No. 10, IDA Uppal, Ramanthapur Main Road,
Hyderabad 500 039, Telangana, India.

Tel.: +91 40 2720 5293/ 94

info@bigdrumindia.com

www.bigdrumindia.com

Contact us today, for your free sample

monte

Feed them what they love!



Design by THE SUSHMA

BLUECRAFT AGRO PVT. LTD.

CORPORATE OFFICE

10, Abhishree Corporate Park, Nr. Swagat Bungalows
BRTS Bus Stand, Ambli - Bopal Road, Ambli,
Ahmedabad - 380 058

+91-2717454547 | marketing@bluecraftagro.com

 Bluecraft Agro Private Limited

BLUCIDEX® MALTODEXTRIN

FUNCTIONALITY

Thickening | Texturizing | Binding





We are elated to bring our Ice Cream Special Edition for the October Edition of Food Marketing & Technology Magazine. The ice cream industry represents a dynamic and rapidly evolving segment of the food and beverage sector. This special edition focuses on the latest trends, innovations, and technological advancements that are shaping the future of frozen desserts.

Consumer preferences are evolving, with increasing demand for healthier alternatives, functional ingredients, and premium experiences. Manufacturers are responding with innovative formulations, new flavours, and improved processing techniques that balance quality, safety, and taste.

Furthermore, this edition will traverse through the scientific aspects of ice cream manufacturing- High-pressure processing, batch vs continuous freezing, active and intelligent packaging, and more, to get a more comprehensive understanding of the sector.

Sustainability and efficient distribution have become critical components of industry growth. From eco-friendly packaging to streamlined logistics, businesses are adopting strategies that enhance product integrity while addressing environmental concerns.

This edition also highlights the key players and emerging brands driving transformation in the ice cream sector. Their strategies, innovations, and success stories provide valuable insights for stakeholders across the value chain.

The two-tier GST structure has brought significant reforms and changes in the F&B Industry. In this edition, we explore the nuances of these changes along with the specific implications on the ice cream sector and its impact on the supply chain.

Overall, this edition serves as a comprehensive guide, offering actionable knowledge and strategic perspectives to professionals engaged in the ever-expanding ice cream market

Cooling Down with a Hot Topic

This summer in Europe has been possibly more mixed than usual. Many hot days have alternated with rain. Many people see this as a result of climate change, but that is a topic for another day and place.

Hot weather in Europe brings a number of trends to the forefront. One is a range of refreshing beverages in new forms and flavours. The other is ice cream. Let's concentrate on the latter.

Ice cream is almost always a good idea. There are so many varieties and combinations that we can try something different almost all of the time. Whereas vanilla, chocolate and strawberry are the more traditional favourites, the addition of cookies, nuts and well-known chocolate bar pieces are enhancing enjoyment, brand loyalty and - no doubt - profit. Sales are increasing and total consumption is growing.

In restaurants, chefs can be more adventurous, using liquors as a bonus treat and a hot-cold temptation as a way of tantalising tastebuds. We speak from recent experience!

There will always be attempts to give ice cream a more healthy perception. By its very nature, ice cream is a luxury product, with indulgence more highly favoured than wellness. A recent trip to Italy felt like Heaven, in the form of a dark chocolate and peppermint cone, with sprinkles. The moment was so perfect we were afraid to try anything else for fear of losing that emotion.

Can ice cream be improved? So much is a question of personal preference. Different fruits or nuts, light or dark are all an individual choice. Ice cream as a dessert with cake is a further option. If we could change one thing? It would certainly be more practical if the pleasureable moment could last a little longer. If ice cream would melt more slowly on a hot day, the joy would continue and the sticky drippy mess could be postponed for a while.

Ice cream will always be a reward. An indulgence for sure and a comfort food, it comes in many combinations for a delightful cold shock in the midst of a hot moment.

Linda Brady Hawke

Benno Keller
keller@harnisch.com

Ian D. Healey
healey@harnisch.com

MAKING PROCESSED TOMATOES SAFE FOR YOU

- Increase in product shelf life
- Retention of natural taste, color and flavour
- Ease of transportation



Technology Expertise for Turnkey Processes



Hot break process



Evaporation



Aseptic sterilization
and filling

HRS Process Systems Ltd

3rd Floor, Kalpataru Infinia, F. P. No 21, Old Mumbai-Pune Highway,
Wakdewadi, Shivajinagar, Pune 411005, Maharashtra, India
Ph. +91 20 66047894/95, +91 20 25663581/82 | info@hrsasia.co.in
www.hrsasia.co.in



APRI / ISO 9001 Certified Company

Contents

October 2025

8

News

Ingredient



- 14 The Rise of Indian Flavours in Modern Coffee Culture
- 17 Protein-Enriched Ice Creams: A New Trend in Functional Indulgencey
- 20 Pomegranates: Nutrition, Innovation and Sustainability

Processing

- 22 Scooping Success: Analysing Growth, Trends and Opportunities in India's Ice Cream Industry
- 26 Batch vs Continuous Freezing in Ice Cream
- 28 High Pressure Processing for Ice-cream Mixing



Packaging

- 32 Active and Intelligent Packaging of Ice Cream



Industry Insight

- 36 Experiential Ice Creams: How India's Consumers are Redefining Indulgence with Everyday Joy, Global Flavours, and Regional Pride
- 39 From Luxury to Everyday Delight: Ice Cream's Journey After the GST Reduction
- 42 GST Two-Tier Structure: Changes in India's F&B Industry

46 Supplier's List

49 Upcoming Events



Hygienic flow meter with IO-Link Completes the food digitalisation portfolio

Eliminate blind spots in your digital process!

Equipped with IO-Link, the newly released **SM Foodmag magnetic-inductive flow sensor** from ifm takes the flow measurement of liquid and creamy foods to a new level. It is the first of its kind to enable digital data transmission from the process, removing the last blind spot from the F&B production process.

Key benefits and features

- **Efficient:** Provides flow rate, total volume, temperature and conductivity.
- **Hygienic:** Rated with IP67 and IP69K.
- **Accurate:** Error-free connection to data infrastructure.
- **Robust:** Has undergone rigorous pressure, shock, temperature and condensation testing.
- **Easy set-up:** App-based menu and guided installation.
- **Expert support:** Our team of experienced F&B product engineers will ensure you get the maximum benefit from this digital solution.

Need help with digitalisation?

Let us assist. We draw on a wealth of global expertise to provide you with the best local support.

ifm electronic India Private Limited

Plot No. P-39/1 MIDC Gokul Shirgaon Kolhapur 416234

+91 231 2372770 | info.india@ifm.com | www.ifm.com/in



TNA Solutions to showcase pellet fryer and intelligent integrated systems at PACK EXPO Las Vegas

TNA Solutions will showcase its tna conti-pro PEL 3 fryer for pellet and extruded snacks at PACK EXPO Las Vegas 2025, stand W-2350, alongside a line-up of intelligent integrated distribution and packaging systems. As the complete solutions partner to the food industry, TNA enhances manufacturers' resilience and growth, and these exhibits reflect this commitment, delivering seamless production flow, maximized efficiency, and reduced waste.

The North American demand for extruded and pellet-based snacks is continuing to expand, with the extruded snack segment alone being valued at \$9.36 billion USD in 2024 and forecast to grow at a 3.27% CAGR through 2033. Manufactured in the United States and featured at an expo for the first time, the tna conti-pro PEL 3 offers a high-performance, low-oil-volume solution that supports quality, efficiency, and operational flexibility. Its four-belt configuration ensures even frying and comprehensive de-oiling, with precise temperature control and continuous oil filtration helping to maintain consistent product quality and minimize waste.

Alongside the fryer, TNA will present the tna roflo® HM3 horizontal motion conveyor, engineered for gentle, consistent product transfer that minimizes breakage while offering flexible distribution to multiple packaging lines. Also featured will be the Perfect Pair – the tna robag® 3e vertical form, fill and seal system coupled with tna auto-splice 3 film-splicing technology to eliminate manual roll changes and maximize uptime.

BL Agro signs MoU with (MoFPI) to Set Up World-Class Agro-Processing Plant; Plans to Invest `1,660 crore



BL Agro, India's leading FMCG player inked a Memorandum of Understanding (MoU) with the Ministry of Food Processing Industries (MoFPI), Government of India, today, which is a strategic and investment B2G partnership to build an export-oriented integrated agro-processing hub, advancing India's food security and global trade leadership.

The MOU was signed between Mr Ashish Khandelwal, Managing Director, BL Agro Group and Hon'ble Shri Preet Pal Singh, Joint Secretary, Ministry of Food Processing Industries, Government of India, in the presence of Shri A.P. Das Joshi, Secretary and Shri Shyam Singh Negi, Senior Economic Advisor, Ministry of Food Processing Industries (MOFPI), GoI, here on the second day of World Food India 2025 at Bharat Mandapam, Delhi.

As a part of this MOU, BL Agro will be investing Rs. 1,660 crore (USD 200 Mn) over the next 5 years in establishing a large-scale green field integrated agro-processing project in Bareilly, Uttar Pradesh. This would include setting up of a fully automated rice milling unit for premium basmati rice varieties, a 500 TPD edible oil

extraction and refining plant under the renowned Bail Kolhu and Nourish brands, advanced packaging lines, sugar storage and sourcing solutions, and 40,000 MT grain storage capacity to support food security and exports.

Construction will begin in 6 months with Phase I completion targeted for 2027. The unit would be generating over 3,500 direct and indirect employment opportunities, significantly boosting rural livelihoods and driving inclusive economic growth.

Speaking on the occasion, **Ashish Khandelwal, Managing Director, BL Agro Industries Ltd, said,** "This collaboration with MoFPI reflects BL Agro's commitment to building world-class agro-processing infrastructure in India. The partnership between BL Agro and MoFPI is designed to enhance food security, increase exports and also create sustainable value chains for farmers and rural communities. We would be integrating circular economy practices into our operations—such as utilizing by-products in cattle feed and renewable energy systems. This would set new benchmarks in sustainable food processing."

Ultra Premium Extra Virgin Olive Oil Enters Indian Market With the Launch of Coração do Vale

Leads Brand Connect, a leading advertising and brand marketing company engaged in promoting and marketing of various Indian and International brands, today announced the launch of Coração do Vale, Portugal's premium extra virgin olive oil, in India at World Food India 2025. Coração do Vale is exclusively sourced from the famed olive groves of Baixo Alentejo—the cradle of Portuguese olive-growing traditions.

Coração do Vale was inaugurated by Shri Chirag Paswan, Ministry of Food Processing Industries, at World Food India 2025. Also present at the event were Eng. João Moura, Secretary of State for Agriculture, Government of Portugal, H.E. João Ribeiro de Almeida, Ambassador of Portugal to India, Eng. Altino Álvares, Executive President, PIBhub – Portugal India Business Hub (Chamber of Commerce), and Dr. Diolinda Silva, Executive Director, Portugal Foods – Portugal's National Agro-Food Cluster.

The premium olive oil will redefine gourmet indulgence for India's discerning consumers, chefs, and celebrities. Coração do Vale introduction to India is also a symbol of cultural offering as oil remains the soul of every Indian meal, used in celebration and in remembrance. Leads Brand Connect is bringing Coração do Vale to India through an MOU it has signed with Lagar do Vale, a prominent olive oil producer based in Baixo Alentejo, Portugal. The MOU will also deepen trade ties between India and Portugal that dates back to the 15th century.

SUPERIOR EXTRUSION SYSTEMS FOR TEXTURED PLANT-BASED PROTEINS

With Wenger, you make plant-based products that your customers love to eat.

Whether you're a start-up firm that is commercializing a new product, or an established processor looking to expand your portfolio, our world-class team helps you develop textured proteins and the processes to produce them at scale. No one has more expertise with dry and wet extruded texturization than Wenger.

Let's work together.
Contact us at info@wenger.com.



Wenger.com



DP World Launches Dedicated Warehouse Facility for Mondelez India in Cochin

DP World today inaugurated a dedicated warehouse facility for Mondelez India in Cochin, further strengthening Mondelez India's supply chain and distribution capabilities across Kerala.

The state-of-the-art facility, designed and operated by DP World, provides over 4,000 pallet positions, comprising 2,200 positions for dry goods and the remainder configured for ambient storage at 18–25 degrees Celsius. This fully integrated warehouse solution combines advanced infrastructure, warehousing services, and skilled manpower to ensure Mondelez India's products reach consumers reliably, efficiently, and in compliance with the highest quality standards.

The inauguration took place at Ernakulam, Kerala in the presence of senior delegates from both Mondelez India and DP World.

Key Highlights of the Facility

- Integrated Operations:** Consolidates warehousing, infrastructure, and manpower under one roof, reducing reliance on multiple vendors, cutting lead times, and ensuring consistent service quality.
- Agility & Responsiveness:** Enables Mondelez India to manage seasonal demand surges and respond swiftly to evolving consumer and market requirements.
- Enhanced Supply Chain Strength:** Ensures safe, compliant, and efficient movement of products, reinforcing Mondelez India's commitment to delivering its much-loved brands to consumers across Kerala.

Suresh Ramani, Chief Commercial Officer- Logistics – DP World India Subcontinent, said, "At DP World, we are committed to building advanced logistics solutions and world-class assets that simplify supply chains and unlock growth for our valued customers. We are excited to inaugurate this new warehouse in Cochin for Mondelez India which is a true testament of our ability to design infrastructure that is safe, compliant, and efficient at scale.

This launch strengthens DP World's warehousing network across India, which now exceeds 5 million sq. ft. across 60+ locations. By integrating warehousing, port terminals, rail freight, freight forwarding, and express logistics, DP World continues to build resilient, integrated supply chain solutions that support India's economic growth.

SEW LOGISTICS AUTOMATION

Inspired by Nature, Engineered for Precision

At SEW-EURODRIVE, we're inspired by the remarkable engineering in nature and strive to bring the same smart design and precision to our products.

Just as expert coordination is in bees' DNA, our motion control solutions work in programmed harmony with your warehouse and logistics processes with minimal energy use.

Our Industry 4.0 solutions – designed to deliver precision, dynamic control, intelligence and energy savings for Automated Storage and Retrieval Systems (ASRS), sorters, and conveyors – are fully customisable and built to German standards. And with expert support across India, we ensure uninterrupted logistics handling.

Precision: It's in our D.N.A.

Bees are nature's synchronisation experts. These industrious creatures coordinate their movements to organise their hives quickly and precisely, ensuring the smooth operation of their bustling ecosystem.



SEW-EURODRIVE LOGISTICS AUTOMATION SOLUTIONS:

Automated Storage and Retrieval Systems (ASRS)
Vertical and Horizontal Sorters | Gantry Cranes
Automated Guided Vehicles (AGVs) | Rail Guided Vehicles (RGVs)
Vertical Roller Conveyors (VRCs)

☎ +91 96866 24322 ✉ marketing@seweurodriveindia.com
www.seweurodriveindia.com

JBT Marel Inaugurates Global Production Centre in Pune to Strengthen Food Processing Innovation



JBT Marel, a global leader in food processing technology, today inaugurated its Global Production Centre (GPC) in India, marking a major milestone in the company's commitment to serving the Indian and Asia-Pacific markets with world-class solutions in food processing and packaging.

JBT Marel India Pvt. Ltd., Vivan Kohli Industrial Estate, Old Mumbai Pune Highway, Naigaon, Taluka - Maval, Vadgaon, Pune the new facility was inaugurated by Brian Deck, CEO JBT Marel, Augusto Rizzolo, Vice President and President Regions and Integration, Bob Petri, Vice President and President Met and Prepared Foods and Jack Martin, Vice President and Chief Supply Chain Officer

Other dignitaries present at the occasion included Manuel Kaufmann, Senior Director, DF & H APAC, Per Friberg, Senior Director, Prepared Foods; and Vikram Mulmule, Vice President, South Asia, Shivendra Singh, Operations Manager, South Asia Subcontinent, JBT Marel.

The GPC is designed to expand production capabilities and showcase cutting-edge processes that meet the growing demand for efficient and sustainable food processing in the region. Purpose-built to expand production capabilities, the GPC showcases processes designed to meet the rising demand for efficient, innovative, and sustainable food solutions across the region. The Global Production Centre in India is a proud milestone for the company and reinforces its commitment to driving innovation in food processing. This facility would bring global expertise closer to customers in South Asia and position India as a key hub for advanced solutions that can serve the wider Asia region."

Speaking at the ceremony, Augusto Rizzolo, EVP and President, Regions and Integration, said: "The Global Production Centre in India is a proud milestone for us and reinforces our commitment to driving innovation in food processing. This facility not only brings global expertise closer to our customers in South Asia, but also positions India as a key hub for

advanced solutions that can serve the wider Asia region."

India's food processing industry is one of the largest in the world, contributing nearly 12% to manufacturing GDP and employing over 8 million people. Rising consumer demand for packaged and ready-to-eat foods, combined with government initiatives such as Make in India and the Production Linked Incentive (PLI) Scheme for Food Processing, is rapidly positioning the country as a global hub for innovation.

JBT Marel's new GPC is strategically located to support this growth by providing advanced, sustainable solutions for Indian companies while also serving as an export base for the Asia region.

With this launch, JBT Marel reaffirms its purpose to "Transform the Future of Food" and strengthen its focus on innovation, sustainability, and customer-centric growth in one of the world's most dynamic food markets.

Mintel Most Innovative 2026: Recognizing the CPG Products Redefining the Future

Mintel Most Innovative returns for its second year, celebrating the very best in consumer packaged goods (CPG) innovation. This global recognition spotlights brands that are redefining categories, setting new standards, and inspiring the industry to think bigger and bolder. Submissions for the 2026 awards are now open!

This comes at a pivotal moment: only 35% of global CPG launches in 2024 were genuinely new products, a decline from 46% in 2014 and 75% in 1996*. Innovation over the

last 30 years is marked by brands increasingly relying on incremental updates to stay agile, even as true innovation is urgently needed in a market defined by constant change.

Previous winners showcased bold moves that reshaped their categories: Häagen-Dazs expanded beyond frozen for the first time with Vanilla Bean Cultured Crème, a dairy, gluten-free yoghurt that took a calculated risk and opened new growth opportunities for the brand. In beauty, Izzy's Zero Waste Dew-Bomb Glowly Hydra Milk set a

new benchmark for sustainability, rethinking every stage of the product cycle while delivering on-trend, high-performance skincare.

"Innovation isn't just about launching something new; it's about creating meaningful change that resonates with consumers and has the potential to influence business, culture, and even society at large," said Matt Nelson, Global CEO at Mintel. "The most impactful products don't emerge in isolation. They are grounded in deep insight and a clear vision of what's next."

CREATE PRODUCTS WITH NATURAL FLAVOUR, COLOUR & FUNCTIONALITY

SCAN ME TO LEARN MORE



Using our unique processing technologies:

- 🔥 **Spinning Cone Column**
Gentle extraction of flavour from juice, mash or slurries
- 🔥 **Centritherm® evaporator**
Gentle evaporation of heat-sensitive or viscous products

Ask us how at sales@flavourtech.com



The Rise of Indian Flavours in Modern Coffee Culture

■ By Rajat Agarwal*

A quiet revolution is brewing in India, a nation historically loyal to its cup of chai. This isn't a rebellion against tradition, but a flavourful renaissance, an awakening to the rich tapestry of possibilities that coffee offers. And at the heart of this transformation is a distinctively Indian palate, weaving its magic into the global coffee narrative.

A New Brew Awakens

For generations, the Indian coffee experience was largely defined by the comforting ritual of South Indian filter coffee, a cherished tradition with its own unique brewing artistry. While this classic continues to hold its own, a new wave of coffee culture is sweeping across the country, moving beyond the instant coffee aisle and into a realm of artisanal craftsmanship, single-origin beans, and, most excitingly, a vibrant fusion of indigenous flavours.



This evolution is not just a matter of changing tastes; it's a reflection of a larger cultural shift. Indian buyers today, especially millennials and Gen Z, refuse to be mere spectators of what the outside world hands them. Instead, they dive in, looking for moments that feel both worldly and genuinely Indian.

The statistics back up the buzz. India's cafe market is climbing fast and is expected to cross \$1.23 billion by 2032, growing at about c10% each year. Consumption alone, which jumped from 84,000 tonnes in 2012 to

over 91,000 tonnes in 2023, confirms the rise. More telling, the speciality segment is growing by roughly 15 percent annually, proving people crave richer, finer coffee moments.

The rising thirst for good coffee in India has opened the door for a fresh bunch of home-grown brands and neighbourhood cafés. Instead of copying overseas menus, these trailblazers tinker, test, and draw inspiration from India's own spices, fruits, and milks. The outcome is a charming mix of drinks that feel both comfortable and surprising—a

CUP FILLING AND SEALING MACHINE



NIHIRA FOOD ENGINEERING LLP
Plot No. 185, Sector No. 07, PCNTDA, Bhosari,
Pune - 411026, Maharashtra, India.
T: + 91 20 66350099 M: + 91 97675 14222
E: santosh@nihira.in, santoshkarale@yahoo.com
W: www.nihira.in

The paramount objective of the cup filling machine is to adeptly handle a wide array of filling options, including single/multi-layered liquids and intricate combinations of two liquids or products with particulates, all while meeting the high production demands with utmost efficiency, precision, and adherence to strict quality standards.



Organic and Non GMO ESSEMM® SOYA LECITHIN

ESSEMM[®]
ISO 22000-2018 Certified

Featuring among the top player in India with more than 25 YEARS of experience and rapidly expanding globally, Shiv Maheshwari Oil & Chem Pvt Ltd is the leading exporter and manufacturer of high quality NON GMO Lecithin branded as ESSEMM®.

Our Product List:

- ESSEMM Soya Lecithin Food Grade
- ESSEMM Soya Lecithin Hydrolyzed
- ESSEMM Soya Lecithin Feed Grade
- ESSEMM Acetylated Soya Lecithin
- ESSEMM Hydroxylated Soya Lecithin



Certifications:



**FOOD SAFETY AND STANDARDS
AUTHORITY OF INDIA**
Inspiring Trust, Assuring Safe & Nutritious Food
Ministry of Health and Family Welfare, Government of India



Shiv Maheshwari Oil & Chem Pvt Ltd

Survey No 152/A5/1 & 152E, Automotive Park, IDA Kallakal,
Manoharabad Mandal, Medak Dist., Telangana - 502336 INDIA



nod to coffee's flexibility and to the country's lively kitchen.

Flavours Rooted in Tradition, Brewed for the Future

Imagine sipping on a spiced turmeric latte, its warm, earthy notes of turmeric and cinnamon complementing the robustness of a single-origin Arabica. Picture a jaggery-infused cold brew, where the deep, caramel sweetness of traditional Indian jaggery provides a wholesome alternative to refined sugar. Or consider the subtle fragrance of cardamom or the fiery kick of ginger finding their way into an espresso shot, creating a sensory experience that is unmistakably Indian.

These are not just passing trends; they are a celebration of provenance and a nod to age-old wellness practices. Ingredients like saffron, nutmeg, cloves, and even a bright twist of citrus are folding into drinks, building the kind of deep, lively taste Indian tongues long for. And this mix is about much more than spice. Gems from the delicate bloom of Himalayan rhododendron to the earthy heft of local grains to modern-day specialisations like Barista's fruit

fusion frappes – Cranberry Mocha Frappe, Orange Zest Frappe - are sliding into the modern Indian coffee cup as though they always belonged there.

Brewing Communities and Conversations

The boom in direct-to-consumer (D2C) coffee brands has opened the gates even wider for this flavour movement. Skipping the usual shop route lets these roasters talk straight to drinkers, walk them through roast profiles and brewing tricks, and share the story that made each blend special. This direct engagement fosters a sense of community and allows for a more personalised coffee journey, where consumers can explore and discover profiles that truly appeal to their individual tastes.

Furthermore, the at-home brewing culture, which has seen the market for home coffee equipment grow at a staggering 6% CAGR, has empowered coffee enthusiasts to become their baristas. Armed with a plethora of brewing gear and access to a wide variety of flavoured and single-origin beans, they are experimenting with their own concoctions, further

fuelling the demand for unique and high-quality Indian coffee.

The journey of Indian coffee has come full circle. From the ancient hills of the Western Ghats, where coffee has been cultivated for centuries, to the bustling, contemporary cafés of urban India, the bean is being reimagined. This is more than just a beverage trend; it is the confident assertion of a modern Indian identity on the global stage. As the world continues to embrace diverse and authentic culinary experiences, the unmistakable Indian accent in the global coffee symphony is only set to get stronger, spicier, and more aromatic. And for coffee lovers everywhere, this promises a future filled with exciting and flavourful discoveries.



About the author:
* Rajat Agarwal, CEO, Barista Coffee

Protein-Enriched Ice Creams: A New Trend in Functional Indulgence

■ By Muskan, Dietitian

Introduction

The global health and wellness market has undergone a dynamic shift in recent years, with consumers demanding products that combine indulgence with nutritional value. Among the latest innovations capturing the attention of health-conscious individuals and fitness enthusiasts alike is protein-enriched ice cream - a dessert that promises both taste and function. This trend reflects a broader movement toward functional foods that support muscle health, satiety, and overall wellness without compromising on pleasure.

As a dietitian with over a decade of experience in clinical nutrition and food science, I've observed firsthand how consumer behaviors have evolved from restrictive dieting to smarter eating. This evolution sets the stage for high-protein desserts like these to become a permanent fixture in modern dietary patterns.

The Science Behind Protein-Enriched Ice Cream

1. What Makes It Different?

Traditional ice cream is rich in fat and sugar but generally low in protein. Protein-enriched versions differ primarily in formulation. They typically contain:

- Whey protein isolate or concentrate
- Milk protein concentrate
- Casein or plant-based protein sources (pea, soy, etc.)



Image Source: Freepik.com

- Reduced sugar (via sugar alcohols or non-nutritive sweeteners)
- Lower fat content

These substitutions aim to strike a balance between macronutrient optimization and maintaining desirable sensory qualities such as creaminess and flavor.

2. Protein Quality Matters

It's not just about quantity, but quality. Many brands use complete protein sources such as whey or casein, which provide all nine essential amino acids. These proteins are particularly beneficial for:

- Muscle repair and growth (especially post-exercise)
- Satiety and appetite regulation
- Metabolic support

For plant-based options, combinations like pea and rice protein are often used to create a

complete amino acid profile.

Health Benefits:

- 1. Satiety and Weight Management:** Protein is well-documented to increase satiety, reducing hunger and potentially lowering overall caloric intake. Replacing high-sugar snacks with a protein-rich alternative may aid in weight management, particularly in individuals prone to nighttime snacking or cravings for sweets.
- 2. Post-Workout Recovery:** For athletes and recreational exercisers, a high-protein ice cream offers a convenient and enjoyable post-workout recovery option. A serving that provides 15–20g of high-quality protein can support muscle protein synthesis, especially when consumed within the anabolic window after training.
- 3. Metabolic and Blood Sugar Support:** Compared to traditional ice cream, many high-protein

versions have lower glycemic impact due to reduced sugars and higher protein content. This can help support more stable blood sugar levels, which is particularly beneficial for individuals managing insulin resistance or type 2 diabetes.

Limitations and Considerations

While the concept is promising, not all protein ice creams are created equal. Here are a few important considerations:

- 1. Sugar Alcohols and GI Distress:** Many products use erythritol, xylitol, or maltitol to lower sugar content. While generally safe, these can cause gastrointestinal discomfort in sensitive individuals, especially when consumed in excess.
- 2. Caloric Density:** Some protein ice creams market themselves as "healthy" yet still contain over 300 kcal per serving. Portion control remains key, especially for individuals with weight loss goals.
- 3. Artificial Ingredients:** To replicate the creamy texture of traditional ice cream, some brands rely heavily on emulsifiers, stabilizers, and artificial flavors. While not inherently harmful, these may not align with consumers seeking a clean label product.

Who Should Consider Protein Ice Cream?

Protein-enriched ice cream can be a beneficial option for:

- Athletes and active individuals looking for a delicious recovery snack.
- Older adults at risk of muscle loss (sarcopenia) needing higher protein intake.



Image Source: Freepik.com

Business Implications: A Scoop of Opportunity

The protein-enriched ice cream trend isn't just a win for health-conscious consumers--it's also a ripe opportunity for businesses across the food and wellness industry. As the boundaries between indulgent treats and functional foods continue to blur, forward-thinking companies are capitalizing on this demand by investing in product innovation, strategic partnerships, and targeted marketing.

1. Expanding Market Demand:

The functional food market is projected to surpass \$275 billion globally by 2030, and protein-enriched products are a significant driver. Ice cream brands that pivot toward protein enhancement are tapping into multiple lucrative demographics at once: fitness enthusiasts, busy professionals, aging populations, and even health-aware parents seeking better-for-you options for their kids. Companies have already set the stage, showing that health-focused frozen desserts can not only gain shelf space in major retailers but also compete alongside traditional brands. These early adopters have proven that there's consumer willingness to pay a premium for added nutritional value—especially when flavor and texture are not sacrificed.

2. Brand Differentiation & Innovation:

In a saturated dessert market, offering a high-protein option creates clear product differentiation. Beyond just boosting protein, brands can leverage additional functional ingredients—like probiotics for gut health, adaptogens for stress reduction, or MCT oils for cognitive support—to further appeal to niche wellness segments.

- People with weight management goals who want a satisfying dessert alternative.
- Individuals with increased protein needs due to medical conditions (e.g., recovering from surgery).

Market Trends and Future Outlook

The rise of protein ice creams parallels broader trends such as:

- Clean eating and macro tracking
- High-protein diets (e.g., keto, paleo, high-protein Mediterranean)
- Plant-based alternatives

According to industry reports, the global protein ice cream market is projected to grow significantly in the next five years, with increasing innovation in dairy-free, low-carb, and organic varieties. Expect to see more functional inclusions such as collagen, probiotics, and adaptogens in the near future.

Moreover, the rise of **personalized nutrition** is encouraging brands to create targeted SKUs, such as: **Keto-friendly** protein ice cream, **plant-based and vegan** high-protein options, **low FODMAP** versions for sensitive digestive systems

3. Omnichannel Retail and DTC Growth:

With growing demand, protein-enriched ice cream brands are seeing increased traction not only in physical retail (e.g., Whole Foods, Target) but also through direct-to-consumer (DTC) channels. The ability to ship frozen products nationwide—paired with compelling e-commerce strategies and social media engagement—has lowered the barrier for niche brands to enter the market and connect with their target audience more directly. Subscription models, limited-time flavor drops, influencer partnerships, and macro-friendly meal bundles are just a few business strategies being explored to build loyalty and boost lifetime customer value.

4. Private Label and Co-Branding Potential:

As demand grows, there's an emerging space for private label opportunities and co-branded products—for instance, gym chains or fitness influencers partnering with food manufacturers to launch branded high-protein treats. Similarly, health-focused meal delivery services may begin to include protein ice creams in curated snack boxes, offering added convenience and cross-promotional value.

5. Regulatory and Labeling Considerations:

As functional claims increase (e.g., “supports muscle growth” or “low glycemic impact”), brands must also navigate evolving regulatory frameworks and consumer

skepticism. Transparent labeling, third-party certifications, and clear protein sourcing are becoming critical factors for gaining consumer trust and maintaining compliance in global markets.

Final Thoughts

Protein-enriched ice creams represent a promising fusion of indulgence and nutrition. When chosen wisely, they can support muscle maintenance, appetite control, and overall dietary adherence—without sacrificing taste. As with any processed product, moderation is essential. Consumers should prioritize options with at least 10–15g of protein, low added sugars,

and clean, simple ingredients. These products can complement a balanced diet but should not replace whole food protein sources like lean meats, dairy, legumes, and eggs.

From a business perspective, this category is more than just a passing fad—it reflects a broader shift toward functional, health-forward snacking. With rising consumer interest in high-protein, low-sugar alternatives, the market for protein ice creams is expanding rapidly. Brands that successfully balance nutrition, taste, and transparency are well-positioned to capture a growing share of the wellness-driven food sector. In both dietary habits and product innovation, this is a trend with strong staying power.

Profitable Ideas for Wafers and Cones



Waffle Baking Machine - "RS TT2" Series



Web: www.rndwafers.com

Meet us at:



Stall No.C16 Hall No. 2

R & D Engineers

A-41, IDA Kukatpally, Phase II,
Road No.4, Hyderabad - 500 037.
INDIA, M:+91 9959000380,
E-Mail : info@rndwafers

Venue:
Yashobhoomi India International
Convention & Expo Center,
Sector 25 Dwarka, New Delhi

Date : 6th to 8th Oct 2025

Pomegranates: Nutrition, Innovation and Sustainability

■ By Karthika. R¹, Dr. Dakshayani.R², Dr.R. Jagan Mohan³

Introduction

Pomegranate has been cultivated in India, South East Asia and tropical continents for thousands of years. Previously, pomegranate was not cultivated for table fruit, but rather as a beautiful plant with ornamental value, for its red, orange, or creamy yellow blooms. Pomegranates were also mentioned in ancient scriptures and used as blessings in ceremonies. Pomegranate (*Punica granatum* L.) is a crop from the Punicaceae family that thrives in tropical and subtropical climates. It has been cultivated by humans from ancient times. Its name derived from the Latin *Malum granatum*, which means "granular apple". India is the second largest producer of pomegranate cultivation among the other developing countries. Pomegranate has a long history of utilization in traditional Chinese medicine, as well as in a variety of clinical practices among Tibetans, Uyghurs, Miaos, and other linguistic backgrounds. The global pomegranate market is segmented by product, category, application, and geography. The global pomegranate market size was worth around USD 6.18 Billion in 2024 and is predicted to grow to around USD 13.11 Billion by 2034 with a compound annual growth rate (CAGR) of roughly 7.2% between 2025 and 2034. The report analyses the global pomegranate market's drivers, restraints/challenges, and the effect they have on the demands during the projection period. In addition, the report explores emerging opportunities in the pomegranate industry.



Structure and Nutritional Composition

Pomegranate is a balausta fruit, which is an enormous by a exocarp and mesocarp thick colored peel. The white mesocarp develops chambers (locules) that hold edible arils with seeds inside. Pomegranate juice (PJ) can be extracted from the red arils, which make up 45-52% of the overall fruit weight. The seeds account for 12-20% of the fruit and are utilized to produce seed oil, which is high in unsaturated fatty acids. Finally, the peel (40-55% of the fruit) is considered waste and is typically discarded or transported to compost or biogas producing plants. However, pomegranate peel has recently sparked interest in the extraction of bioactive components. Indeed, in recent years, many procedures have been established to use pomegranate peel or seeds and extract their active components.

Pomegranate Processing

Improper harvesting and handling during transport often cause bruising and cracking, leading to microbial invasion and decay. Storage at suboptimal temperatures can induce chilling injury symptoms such as husk scald, pitting, and surface browning. High water loss during storage and marketing results in shriveling, weight reduction, and poor consumer acceptance.

Washing helps to minimize pesticide residues on the surface of fruits. The purpose of washing is to investigate the effectiveness of various non-toxic washing agents. Pesticide residue levels steadily decreased throughout washing processes. Sorting and grading pomegranates into distinct quality categories enables producers to adjust marketing and packaging methods to specific customer segments. This method comprises

Table 1: POST HARVEST TREATMENTS

	Key Effect
Pre-conditioning	Reduces chilling injury during storage
Intermittent warming	Prevents fungi at 0°C but increases chilling injury risk
Controlled atmosphere	Slows respiration, delays senescence, reduces fungal growth
Modified atmosphere	Extends shelf life, reduces water loss
Polyamines (PAs)	Reduce chilling injury, minimize weight loss
Oxalic acid (OA)	Reduces chilling injury, boosts antioxidants, maintains quality
Gamma irradiation	Up to 1 kGy safe; effective for disinfestation but lowers anthocyanins

categorizing pomegranates based on size, maturity, and quality. Mechanical, steam, chemical, and hand peeling are the most popular peeling methods. Processing enhances both the economic and nutritional value of pomegranates. By converting fresh fruit into juice, concentrates, arils, powders, and extracts, the industry extends shelf life and creates new market opportunities. Efficient processing, including thorough cleaning, de-seeding, juicing, and preservation, ensures product quality, safety, and consumer satisfaction.



Post-Harvest Challenges

Pomegranates are highly perishable fruits, and significant post-harvest losses occur due to mechanical damage, microbial spoilage, and physiological disorders. Improper handling during harvesting and transportation leads to bruising and cracking of fruits, making them more susceptible to decay. Chilling injury (pitting, husk scald) develops during cold storage at low temperatures, reducing fruit quality. High water loss during storage and marketing results in shriveling, weight loss, and reduced consumer appeal.

Utilization of Pomegranate Waste

Waste from pomegranates, which primarily consists of peels, seeds, and pomace, can be utilized effectively for producing products with more economic value. Bioactive substances found in the peel, including polyphenols and tannins, are utilized in natural preservatives, cosmetics, functional meals, and nutraceuticals. Seeds serve as a source of edible oil rich in punicic acid, with applications in dietary supplements, skincare, and even biodiesel production. By-products of pomace and juice can be utilized as natural colorants, vinegar, compost, animal feed, and drinks. Thus, pomegranate waste offers significant potential for sustainable

utilization and value addition instead of disposal.

Conclusion

Pomegranate processing is essential for increasing the fruit's economic and nutritional worth. By converting fresh pomegranates into juice, concentrates, arils, powders, and extracts, the processing business not only increases the fruit's shelf life but also creates new market prospects. Efficient processing processes, such as thorough cleaning, de-seeding, juicing, and preservation, product quality, safety, and consumer satisfaction. Furthermore, advances in processing technology and by-product usage, such as antioxidant extraction from peels and seeds, help to promote sustainability and reduce waste. To summarize, pomegranate processing is an important part of the agro-industry, increasing the fruit's usability, market reach, and economic value.

About the authors:

¹M. Tech Student, ²Senior Research Fellow, ³Dean (Student Welfare), National Institute of Food Technology, Entrepreneurship and Management, Thanjavur.

Scooping Success: Analysing Growth, Trends and Opportunities in India's Ice Cream Industry

India's ice cream industry has undergone a remarkable transformation over the past few decades—from a largely seasonal and unorganised segment to a thriving market marked by innovation, intense competition and growing consumer demand. Traditionally associated with summer indulgence, ice cream has steadily evolved into a year-round treat, supported by rising incomes, urbanisation and a youthful demographic that increasingly seeks convenience and novelty in food choices.

Moreover, the industry has seen increasing penetration not only in urban centres but also in Tier-II and Tier-III cities. Companies are responding with tailored products, regional flavours, improved distribution models and digital-first marketing strategies that resonate with India's diverse consumer base. Furthermore, the country's position as the world's largest milk producer gives its domestic ice cream manufacturers a natural competitive edge. However, the industry also faces structural challenges—chief



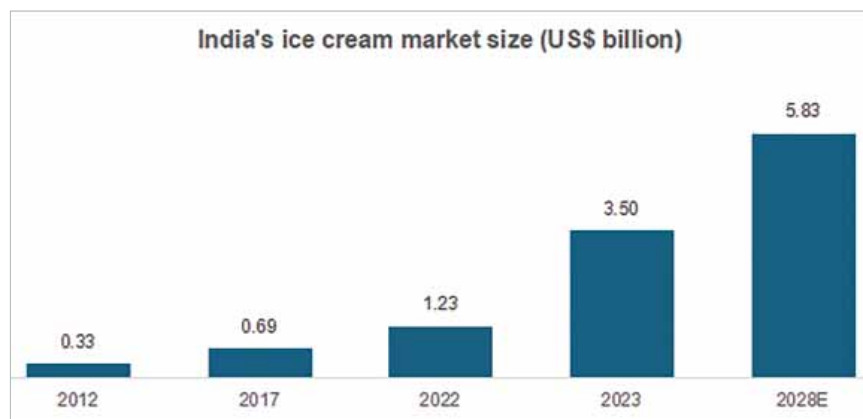
among them being cold chain logistics, high product perishability and heavy dependence on seasonal sales. Additionally, the market is witnessing growing fragmentation, with regional brands, artisanal players and health-focused startups intensifying the competitive landscape alongside long-standing national players such as Amul, Kwality Wall's and Vadilal.

In recent years, innovation has become a cornerstone of industry growth. Consumers today are drawn

to new flavour profiles, health-conscious formulations (such as vegan and sugar-free options) and experiential formats such as ice cream cafés and dessert parlours. Digital platforms, too, are playing a significant role in influencing buying behaviour, enabling e-commerce delivery and helping brands create deeper engagement with consumers.

India's ice cream market dynamics

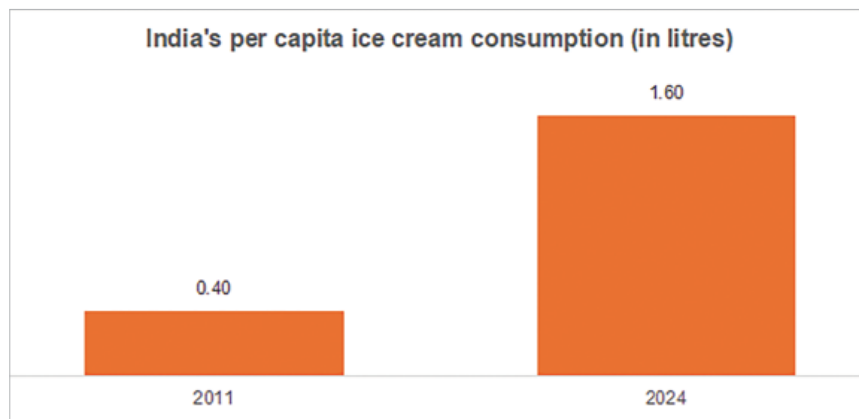
With rising demand, new product development and an expanding customer base coming together to create a dynamic and competitive market, India's ice cream sector is at an exciting juncture. The country's ice cream market, estimated at Rs. 30,000 crore (US\$ 3.50 billion) in 2023, is projected to grow to Rs. 50,000 crore (US\$ 5.83 billion) by 2028. The industry has changed from being largely controlled by a small number of businesses and seasonal consumption to a complex ecosystem with a wide range of segments, strong regional economies and quick innovation.



Source: Upstox, E-estimated

India's per capita ice cream consumption has experienced a steady and promising rise over the past decade, growing from just 400 millilitres in 2011 to around 1.6 litres in 2023. Although this figure remains significantly lower than in developed markets such as New Zealand (28.4 litres) or the United States (over 20 litres), it reflects a strong upward trajectory that highlights increasing consumer demand and market penetration. This growth is primarily driven by a combination of factors—rising disposable incomes, rapid urbanisation, a burgeoning middle class and evolving food habits that embrace indulgence and convenience.

The expansion of organised retail, cold chain infrastructure and digital commerce platforms such as Zepto, Swiggy Instamart and Blinkit has made ice cream more accessible throughout the year and across a wider geographic spectrum. Additionally, the introduction of a variety of product formats—ranging from affordable impulse buys to premium artisanal tubs—has helped cater to diverse consumer preferences. The industry is also seeing rising demand from Tier-II and Tier-III cities, indicating that consumption is no longer confined to metropolitan hubs. As brands continue to innovate in flavours, formats and health-focused alternatives, India's per capita consumption is expected to rise



Source: Hindu Business Line

further, unlocking vast potential in this underpenetrated market.

Key players: Organised vs. Unorganised

India's ice cream industry is broadly divided into organised and unorganised segments, each playing a distinct role in catering to the country's diverse consumer base. The organised segment, which includes major brands such as Amul, Kwality Wall's, Vadilal, Havmor and Baskin Robbins, accounts for nearly 60–65% of the total market and is steadily expanding. These players benefit from established cold chain logistics, widespread distribution networks, consistent quality and strong brand visibility. They offer a wide variety of flavours and formats, from economy cups to premium tubs, and are increasingly tapping

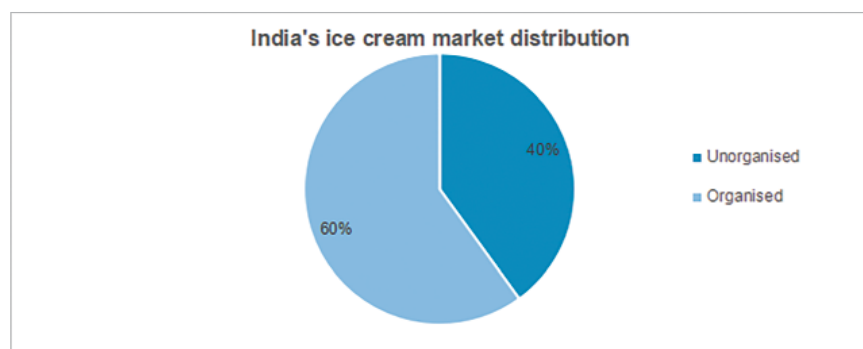
into quick commerce and modern retail channels to boost accessibility.

In contrast, the unorganised segment, comprising local vendors, small-scale manufacturers and traditional frozen dessert sellers (such as kulfiwalas), holds about 35–40% of the market share. These players often operate with limited refrigeration and distribution infrastructure and primarily serve price-sensitive customers in rural and semi-urban regions. While they offer affordability and localised flavours, the lack of standardisation and hygiene controls can be a limitation.

However, the gap is narrowing. With rising consumer awareness, infrastructure development and shifting preferences toward branded and hygienic products, the organised segment is rapidly gaining ground. The trend suggests a gradual consolidation of the market, with organised players poised to dominate the future of India's ice cream landscape.

Opportunities and Outlook

India's ice cream industry stands at an exciting crossroad. Having moved beyond an urban market into a symbol of lifestyle and innovation, the sector is ripe with opportunities that could significantly reshape its



Source: News Articles

trajectory over the next decade. From exploring untapped geographies to leveraging health trends and cultural soft power, ice cream brands have ample room to grow and diversify.

Unlocking the rural ice cream economy

While urban markets are saturated with national and international players, rural India remains underpenetrated despite comprising nearly 65% of the population. Lack of infrastructure, awareness and cold chain logistics have historically deterred expansion into these regions. However, with improving road connectivity, rising rural incomes and increasing aspiration levels, rural India presents a high-growth, low-competition opportunity.



Localised flavours, value-for-money SKUs (such as ice cream cups or sticks at Rs. 10 each) and energy-efficient freezers can help brands make inroads. Rural-focused marketing, especially via mobile vans and village fairs, can create lasting brand recall. Companies that invest early in these markets can secure first-mover advantage in what may become the next consumption frontier.

Health and wellness: From indulgence to guilt-free delight

The demand for health-forward ice cream options is rapidly rising, particularly among millennials, Gen Z and working professionals. Consumers are seeking products that align with dietary needs—be it low-sugar, low-calorie, high-protein, probiotic, keto-friendly or plant-based options.

This has led to the rise of specialised brands such as Get-A-Way, White Cub and Minus 30, which are carving out loyal consumer bases with functional offerings. For mainstream players, this represents a chance to diversify portfolios and enter the

“better for you” category. Fortified ice creams with added vitamins, fibre or natural sweeteners such as stevia also offer potential in both urban and semi-urban segments. With growing health awareness, this is a long-term trend rather than a short-term fad.

Exporting Indian flavours to the world

India's rich culinary heritage offers a unique export opportunity in the form of indigenous flavours such as saffron, cardamom, mango, rose, gulkand, filter coffee and kulfi-style desserts. As global consumers become more adventurous and culturally curious, there's room for Indian ice cream brands to tap into ethnic and fusion dessert categories abroad.

Target markets include the Indian diaspora across the US, UK, Canada, Middle East and Southeast Asia, as well as broader audiences via gourmet retail and restaurant partnerships. With proper shelf-life innovation, temperature-controlled exports and branding around “Made in India with Authentic Flavours,” ice cream could become an unlikely soft



power ambassador, much like yoga or Bollywood.

Experiential retail and tourism tie-ins

The growing trend of experiential consumption offers a fresh avenue for ice cream brands to enhance visibility and customer engagement. Boutique ice cream cafés, dessert bars, live counters and themed food trucks are increasingly popular among younger consumers and tourists seeking shareable, Instagram-worthy experiences.

Collaborations with travel hubs, malls, resorts and cultural festivals can convert ice cream into a multi-sensory indulgence. There's also potential for destination-based flavours that reflect regional heritage, tying into India's push for domestic tourism and cultural branding.

Summing up

India's ice cream industry is undergoing a remarkable transformation—from a seasonal business to a dynamic, year-round, consumer-driven segment. Backed by rising per capita consumption, shifting consumer preferences, premiumisation and increasing penetration into Tier-II, Tier-III and rural markets, the sector is poised for sustained growth. With a market valued at over Rs. 30,000 crore (US\$ 3.5 billion) and expected to register a CAGR of 13–15% in the coming years, the future looks not only sweet but also strategic.

Challenges such as high perishability, distribution costs, regulatory complexities and price competition persist, but they are equally catalysts for innovation. Brands investing in cold chain modernisation, health-forward product lines, hyperlocal and global flavours and experiential retail formats are gaining significant traction.

The evolving Indian consumer—health-conscious, digitally connected and experience-oriented—is reshaping how ice cream is produced, marketed and consumed. Opportunities in exports, functional foods, rural outreach and tourism tie-ins add further dimensions to this growth story.

As India heads toward becoming one of the largest ice cream-consuming

nations globally, the industry stands on the cusp of its next revolution. For stakeholders who can blend tradition with innovation, and scale with sustainability, the scoop ahead is rich with possibility.

Source - India Brand Equity Foundation
<https://ibef.org/>

SUBSCRIBE

STAY AHEAD OF THE COMPETITION



AVAILABLE ON
www.fmtmagazine.in or www.fmtmagazine.in

For Enquiry email at info@fmtmagazine.in

Batch vs Continuous Freezing in Ice Cream

■ By Rishu Riya¹ and Animesh Raj²

INTRODUCTION

Ice cream is more than just a dessert; it's a time machine of memories, a comfort blanket, and a celebration of childhood. It always feels right no matter whether it's a hot summer day or a chilly winter evening. But have you noticed how one scoop feels thick and creamy, while another feels light and airy? That difference lies in how they are frozen. One is like a slow dance, the other a sprint. The ice cream industry mainly uses two different methods: batch freezing and continuous freezing, which influence its ice crystal size, texture, and how well air mixes in. Both are significant in the ice cream industry, but they differ in scale, texture, and purpose. Freezing of ice cream affects more than just its temperature. It decides if ice cream is smooth and creamy or icy and firm. This occurs because freezing controls ice crystal formation and the amount of air mixed in. In ice cream terms, this air is referred to as "overrun." If there's not enough air, the ice cream becomes dense. If there's too much air, it turns too fluffy.

1. Batch Freezing

The traditional way of making ice cream is to freeze in batches. In this method, a certain amount of liquid mix is placed in a batch freezer. While stirring, the freezer cools the mix. This process helps extract heat, break ice crystals, and add some air to the mix. When the mix is the right texture, the batch is taken out and put away. Ice cream made with this method is thick, rich, and creamy. Compared



Fig 1. This method of making ice cream is known as batch freezing.

to industrial ice cream, batch-frozen products contain less air, which enhances their stronger flavors. Small businesses and artisanal brands often used batch freezing to provide their clients a unique experience. This way gelato shops make fresh ice cream every day. However, it does have some limitations, for large-scale production, it is time-consuming and expensive because each cycle can only produce a certain amount. Also, quality may be a little different from batch to batch depending on the skills of the operator. But it remains a fan favourite for those who like its uniqueness, variety, and authentic taste.

2. Continuous Freezing

Large factories and ice cream companies around the world use the continuous freezing method. In this system, the ice cream mix flows continuously into a machine that cools and mixes it rapidly. Air is added in a controlled manner, which creates a lighter, more uniform texture. The main benefit of continuous freezing is efficiency. Every hour, factories are able to produce thousands of liters of ice cream with consistent quality and flavor. Because the whole process is automatic and machine-operated, which allows ice cream to be packaged immediately after freezing, which makes it easy to store and transport. However, continuous freezing also has some limitations. The higher air content may result in ice cream that feels less creamy than batch-frozen options. And this method is known for its uniformity and production speed, so there is less possibility to experiment with unusual flavors or textures. However, freezing must continue to meet the global demands of the market.



Fig 2. This method of making ice cream is known as continuous freezing.



3. Comparison of Methods

Both freezing methods are the most important steps in making ice cream.

- **Size:** Batch is mainly used by small and local brands for small production, while continuous is used by large industries and companies for large production at once.
- **Texture:** Batch produces creamier, denser, and more variety of textured ice cream, while ice cream made from the continuous method is lighter and fluffier.
- **Flexibility:** Batch has very high flexibility; it lets you try new things creatively, while continuous focuses on making things the same for the long run.

Conclusion

Both methods are important in the making of ice cream; each represents the two different sides of ice cream making in the global market. Whether it's a gelato scoop or a supermarket tub, the taste of rich, creamy, and freshly made ice cream from batch freezing is evident in its magic. On the other hand, a well-packaged tub of ice cream from a supermarket was made using the continuous method.

Both methods are crucial for the ice cream industry. One supports global supply and affordability, while the other preserves individuality and uniqueness. Together, they ensure that ice cream remains a favorite for everyone, whether enjoyed in small scoops or large tubs.



About the authors:

* Rishu Riya¹ and Animesh Raj²
^{1,2} Department of Biotechnology
 Gautam Buddha University, Greater Noida (U.P-201312)
 *Corresponding author email:
 ruchiverma0715@gmail.com

References

1. Goff, H.D. & Hartel, R.W. (2013). *Ice Cream*. Springer.
2. Clarke, C. (2012). *The Science of Ice Cream*. Royal Society of Chemistry.
3. Arbuckle, W.S. (2017). *Ice Cream* (7th ed.). Springer.
4. Muse, M.R. & Hartel, R.W. (2004). *Ice cream structural elements that affect melting rate and hardness*. *Journal of Dairy Science*, 87(1)pp, pp.1–10.

High Pressure Processing for Ice-cream Mixing

■ By Gargi Sharma¹ and Anshika Gupta²

Abstract

High pressure processing (HPP) is reshaping how the dairy industry approaches ice cream mix preparation, offering a non-thermal, clean label method that improves texture, safety, and shelf life. The technology applies intense isostatic pressure typically up to 600 MPa to pre-packaged or bulk food, enabling unique modifications to product structure and microbiological safety while preserving nutritional and sensory qualities.

Introduction

HPP uses hydrostatic pressure uniformly transmitted by chilled water, impacting dairy proteins and fat globules without the adverse effects of heat. This preserves flavors and nutrients that are often degraded in thermal processing. For ice cream mixes, HPP can be applied between 200 and 600 MPa for as little as one second, with changes in casein micelle



structure and water-binding ability at the core of its functional benefits. Scientific findings emphasize how HPP fragments casein micelles, reassembling them into a dense protein network on decompression, thereby increasing mix viscosity. Such protein reorganization occurs at pressures above 400 MPa and even short treatment times can create observable changes in mix viscosity, meltdown resistance, and creaminess. HPP can also enhance the foaming and emulsification contributions of whey proteins when incorporated into low-fat ice cream, increasing overrun (air incorporation) and stability while achieving a smoother, creamier texture even with reduced fat or additives. In ice cream, HPP's primary advantage is texture enhancement: products show increased resistance to melting, better mouthfeel, and a softer, creamier sensation. Studies

reveal that ice cream mixes treated at 400-500 MPa, even for just one second, become notably more viscous, requiring less reliance on added stabilizers or emulsifiers. This facilitates the production of low-fat or stabilizer-free ice creams that still maintain consumer-preferred body and mouthfeel. The pressure-induced network formation among milk proteins can also contribute to a slower meltdown, firmer body, and smoother product consistency. Beyond sensory characteristics, HPP is extremely effective at reducing pathogenic and spoilage microorganisms in dairy, including in high-water-activity products like cream. Research shows that treatment at 450 or 600 MPa for as little as 5 to 15 minutes can render cream and ice cream mixes microbiologically safe for at least 15 to 51 days longer than conventional pasteurization. This reduces



MANAGED BY



Haier
More Creation, More Possibilities
Presents

ORGANISED BY



www.indianicecreamcongress.in

THE ONE & ONLY ICE CREAM INDUSTRY EXHIBITION IN SOUTH ASIA

SCAN HERE TO REGISTER
AND GET YOUR FREE VISITOR'S PASS



6TH 7TH 8TH OCTOBER

300+
EXHIBITORS

20000+
VISITORS

20+
COUNTRIES

13TH
EDITION



A UNIQUE SHOW FOR:

Ice Cream Machinery & Automation | Ingredients & Raw Materials
Allied Industry & Services | Packaging Machinery |
Latest Technologies | Cold Chain | Deep Freezers

OFFICIAL MEDIA



MEDIA PARTNER



Yashobhoomi, India International Convention & Expo Centre,
Sector 25, Dwarka, New Delhi.

reliance on chemical preservatives and fits demand for “clean label” ingredients, and it adds considerable value to logistics and supply chain management.

Benefits:

HPP not only affects proteins but also alters fat crystallization, accelerating the desired solid fat content and reducing required aging time in the mix. The technique can depress the freezing point of water (e.g., to -22°C at 210 MPa), allowing sub-zero food processing without damaging ice crystal formation a key benefit for texture retention in premium frozen desserts. Foaming and overrun are also enhanced, as the pressure changes in protein structure lend better air-holding capacity. Studies and commercial trials demonstrate HPP’s feasibility for both packaged and bulk processing, and the capital expenditure for equipment is increasingly offset by ingredient savings, shelf life extension, marketing opportunities, and reduced wastage. HPP-treated ice cream mixes can be used immediately or stored for longer, improving manufacturing efficiency and flexibility.

- The adoption of HPP in the ice cream sector parallels rising global interest in natural, sustainable, minimally processed food.
- HPP dramatically increases the viscosity of ice cream mixes, resulting in thicker, creamier products, even when fat and protein content are reduced.
- The process enables a smoother, softer texture and higher resistance to melting, providing a more enjoyable consumer experience.
- By disrupting casein micelles and fostering a proteinaceous network,



HPP mimics and even surpasses the effects of conventional stabilizers and emulsifiers meaning manufacturers can reduce or eliminate these ingredients without sacrificing quality.

- HPP preserves natural flavors, vitamins, and other sensitive nutrients far better than traditional thermal pasteurization, providing a more “natural” tasting and nutritionally intact product.
- HPP is commercially scalable industrial equipment is widely available and suitable for both in-pack and bulk processing, giving manufacturers flexibility in how they integrate the technology

Conclusion

High pressure processing is forging a path for cleaner, more natural, and higher-quality ice cream production. It enables substantial

reductions in fat and additives, provides robust safety margins, improves product consistency, and aligns with contemporary consumer expectations. Continued research into pressure-protein interactions and commercial scalability suggests HPP will become a standard in the next generation of ice cream innovation.



About the author:

Gargi Sharma¹ and Anshika Gupta²
^{1,2}Department of Biotechnology
 Gautam Buddha University, Greater
 Noida (UP-201312)
 Corresponding author email:
 ruchiverma0715@gmail.com

References

- Ganesan, et al. “High-Pressure Processing and its Impact on Dairy Products.” *Food Science and Technology: An International Journal (FSTJ)* 1.1 (2016): 30-47.
- Huppertz, T. et al. “Effects of high pressure treatment of mix on ice cream mix and ice cream.” *International Dairy Journal* 21.12 (2011): 896-902.
- Machado, F., et al. “High Pressure and Pasteurization Effects on Dairy Cream.” *Foods*. 2023 Sep; 12(19): 3765.
- Siddiqui, S. A., et al. “Impact of high-pressure processing on the bioactive and functional properties of milk and dairy products.” *Foods*. 2024 Mar; 13(6): 1035.
- Dhineshkumar, V., et al. “High pressure processing technology in dairy processing.” *Asian Journal of Dairy and Food Research*



India's Most Comprehensive **FOOD & DRINK TECH EXPO**

Connect with professionals, explore opportunities and experience the latest innovations in the sector.

20-22 | **TRIPURA VASINI-PALACE GROUND**
JANUARY 2026 | **BENGALURU, KARNATAKA, INDIA**

25000+
Visitors

300+
Exhibitors

35+
Countries

3000+
B2B
Meetings

6
Concurrent
Expos

Focussed Pavilions: Cold Room & Logistics Pavilion • Green Pavilion.

Concurrent Expos

Visitor
Registration

Exhibitor
Enquiry



Organised by



For Participation & Partnership

+91 95008 35447 | +91 93802 20533

mktg@synergyexposures.com • www.fdpxpo.com

* Admission only for trade visitors above 18 years only



Active and Intelligent Packaging of Ice Cream

■ By Shweta Rana¹ and Priya Arya²

1. Active and Intelligent Packaging of Ice Cream

Ice cream is the most widely consumed frozen dessert by people of all ages. With cream, sweetness, and flavors, ice cream is a popular dessert but also a very sensitive food product when it comes to packaging. Ice cream is also exposed to temperature fluctuation, microbial spoilage, and loss of quality during storage and transport. Everyday packaging materials like cartons, plastic containers, and paper tubs only protect physically but nothing beyond that in terms of extended shelf life and safety. Active and intelligent packaging technologies compensate for this absence of capability with state-of-the-art innovation for extended shelf life, safety, and enhanced consumer experience.

2. Learning Active Packaging

Active packaging refers to packaging that, besides maintaining the product stability, also interacts with the product in a way that its quality is improved or guaranteed. Active packaging, in the case of ice cream, controls moisture, inhibiting oxidation and microbial growth. Active packaging systems employed in frozen dessert are:

- 1. Antimicrobial Films** – Chemical or natural antimicrobial additives in films, which monitor microbial growth, and are perfect for preventing contamination during handling and storage.
- 2. Moisture Regulators** – Ice cream has been found to form ice crystals due to temperature fluctuations. Moisture-absorbing sachets or films repel water vapor and give a smooth finish.

- 3. Oxygen Scavengers** – Oxygen causes fat-flavored rancidity to foods such as chocolate or nut flavor. Oxygen scavengers maintain product freshness by removing extra oxygen.

- 4. Flavor and Odor Control** – Absorbers or releasers in some packages keep flavor by preventing off-odors.

All of these combined, active packaging enables shelf life and ice cream extension to the consumer's hand in best condition.

3. Intelligent packaging

Intelligent packaging tracks product condition and communicates product quality, safety, or freshness information. It is a smart system with feedback for the manufacturer, retailer, and consumer in

Hakdrams & BIKAJI

PRESENTS



Taste The Future OF MITHAI & NAMKEEN INDUSTRY

SUPPORTED BY



ORGANISED BY



19 20 21 DECEMBER, 2025

Hall No- 2 & Hall No.1 (C&D), Yashobhoomi, Sector 25, Dwarka, New Delhi

WORLD MITHAI NAMKEEN CONVENTION & EXPO 2025



HIGHLIGHTS OF WMNC 2025 EXPO

60000+ VISITORS > 600+ STALLS
> THE ULTIMATE B2B EXPO

FOR MORE INFORMATION ABOUT REGISTRATION & PARTICIPATION, PLEASE CONTACT

Scan here to register and get your free visitor's pass

+91 8291 918 484 | wmnc@advanceinfomedia.com | www.wmnc.in

PARTNERS



OFFICIAL MEDIA



MEDIA PARTNER



contrast to regular cold-keeping ice cream. Some examples of smart packaging technologies that are appropriate for use on ice cream are:

- 1. Time-Temperature Indicators (TTIs):** Ice cream has to be stored consistently at -18°C or below. TTIs indicate color change if product has been stored or shipped in unsafe temperatures.
- 2. Freshness Sensors:** Provide indication of chemical change with respect to microbial spoilage and inform the consumer as to whether or not ice cream is safe for consumption.
- 3. RFID Tags:** Enable companies and retailers to monitor packages along the supply chain, for instance, in real-time location, temperature, and product history information.
- 4. QR Codes and Digital Labels:** Consumers can scan QR codes to verify ingredients, storage conditions, and best-before dates in products.



4. Advantages of Active and Intelligent Packaging for Ice Cream

- 1. Extension of Shelf Life** – Oxygen control, water, and microbial growth are controlled by active packaging in order to increase the ice cream freshness life.
- 2. Quality Preservation** – Intelligent sensors detect storage errors, preventing consumption of ice cream that has gained off-taste or off-texture.
- 3. Food Safety** – Both technologies reduce the risks of contamination and spoilage, crucial in the case of milk products.
- 4. Consumer Confidence** – Clever packaging is more transparent, and consumers can test freshness and quality.
- 5. Sustainability** – Materials used are recyclable or biodegradable, and that is where green objectives kick in.

5. Applications in the Real World

Nestlé has tried smart packaging with QR code for

supply chain management and consumer interaction. Unilever, manufacturer of Magnum and Cornetto, is working on active packaging to slow down the growth of ice crystals during shipment. Japanese and European start-ups are putting biosensors in ice cream containers to notify when foods have been exposed to abusive temperatures.

6. Challenges

There are challenges despite the benefits:

- ❖ **Cost:** Smart and active packaging is expensive as compared to the conventional types, limiting usage by small companies.
- ❖ **Consumer Awareness:** The majority are uninformed about smart packaging and may not be utilizing the full potential of its capabilities.
- ❖ **Regulatory Approvals:** Active packaging with chemicals (e.g., oxygen scavengers) must undergo rigorous safety tests before they can be marketed.

7. Future Prospects

The future of ice cream packaging is with the application of nanotechnology, biodegradable polymers, and electronic sensors. Biodegradable film and antimicrobial packaging materials based on nanomaterials are also becoming popular as a sustainable substitute. Smart packaging systems will eventually be economically viable to apply and can be applied by premium and mass market ice cream products alike.

Conclusion

Intelligent and active packaging can bring a paradigm shift to the ice cream industry with the potential of safety, quality of product, and

consumer confidence driving rises. With safer and better-quality frozen treats being in greater demand, business houses will implement such solutions in increasing numbers. Cost and awareness is certainly a barrier, but ongoing innovation and consumer outreach will lead to greater take-up. In the not-so-distant future, it will not just be the taste of ice cream, but it will also be about trust, security, and transparency.



About the author:

Shweta Rana¹ and Priya Arya²
1,2Department of Biotechnology
Gautam Buddha University, Greater
Noida (U.P-201312)

*Corresponding author email:
ruchiverma0715@gmail.com

References

1. Robertson, G. L. (2016). *Food Packaging: Principles and Practice*. CRC Press.
2. Kerry, J., & Butler, P. (2008). *Smart*

Packaging Technologies for Fast Moving Consumer Goods. Wiley.

3. Realini, C. E., & Marcos, B. (2014). *Active and intelligent packaging systems for a modern society*. *Meat Science*, 98(3), 404–419.

MAYONNAISE MAKING PLANT



NIHIRA FOOD ENGINEERING LLP
Plot No. 185, Sector No. 07, PCNTDA, Bhosari,
Pune - 411026, Maharashtra, India.
T: + 91 20 66350099 M: + 91 97675 14222
E: santosh@nihira.in, santoshkarale@yahoo.com
W: www.nihira.in

Model	NFE 100	NFE 300	NFE 500
Capacity/Batch	100 kg	300 kg	500 kg
Power KW	12 KW	22 KW	28 KW
Weight	1100 kg	1400 kg	1800 kg
Dimension (mm)	2000x1000x2000	2500x1500x2100	3000x2500x2100

Features:-

- Precise and effective homogenisation.
- Short batch time
- Maximum yield.
- Simple in operation
- Process parameters are set on touch screen
- CIP Compatible
- Compact in size
- Fully automated



Mayonnaise is an emulsion of oil in water phase, manufacturing process need precise context of dosing of various ingredients and right kind of homogenisation.



Image Source: Adobe Firefly



Experiential Ice Creams: How India's Consumers are Redefining Indulgence with Everyday Joy, Global Flavours, and Regional Pride

■ By Keerthy Pathur*

Walk down any modern supermarket aisle in India or scroll through the trending posts on food reels, and one thing becomes clear: ice cream is no longer just an indulgent treat reserved for birthdays or hot summer afternoons. It has stepped into the role of an everyday dessert companion, a comfort food, and even a cultural storyteller. Today's consumers—spanning families, Gen Z explorers, and nostalgia-driven millennials—are asking for more than just sweetness. They want ice creams that offer experiences, reflect their roots, and match their lifestyles.

This transformation is shaping an entirely new chapter in India's ice cream market. Let's look at the changing buyer personas and how ice cream as a category is being reimagined for them.

The Everyday Indulgents: Ice Creams Beyond Festivities

Riya, a 27-year-old marketing professional in Gurgaon, used to think of ice cream as something to buy on special days or after a family dinner out. Today, her freezer always has a pint—sometimes a chocolate fudge, other times a mango sorbet—because she treats herself after long workdays or

shares it with her flatmates during Netflix binges.

She represents a growing set of urban professionals who see ice cream not as a festive treat but as part of everyday life moments: late-night cravings, weekday rewards, or even post-gym pick-me-ups with lighter, fruit-based options.

Brands are noticing this shift and are creating formats that fit into these moments—single-serve cups for solo indulgence, mini-stick packs for portion control, and grab-and-go tubs for spontaneous sharing. The idea is simple: make ice cream less ceremonial, more habitual.

Concepts taking shape:

- **Espresso Shot Minis:** bite-sized coffee ice creams designed for a quick weekday energy boost.
- **Work-from-Home Sundaes:** pre-packed sundaes in cups, combining creamy base, inclusions, and toppings.
- **Fruit Froyo Sticks:** healthier, refreshing formats ideal for everyday guilt-free snacking.

The Global Explorers: Gen Z and Millennials Seeking Bold Flavours

If everyday consumers look for convenience, Gen Z and young millennials are driving boldness in flavour expectations. For them, ice cream is both a culinary adventure and a social currency—something to photograph, post, and talk about.

Take Aarav, a 21-year-old student in Pune, who insists on trying “weird” flavours whenever he’s out with friends. From Biscoff cheesecake swirls to Korean-inspired honey-butter almond ice creams, he thrives on novelty. His peers across metros echo this craving for global tastes while keeping affordability and fun intact.

This persona is why international inspirations are flourishing in Indian freezers. Japanese matcha, Italian tiramisu, New York cheesecake, and even Middle Eastern rose-pistachio fusions are being reinterpreted in ice creams. The younger consumer doesn’t see ice cream as a childhood-only joy; it’s a playground of cultures, a way to “travel through taste.”

Concepts resonating with this group:

- **Bubble Tea Ice Cream:** chewy tapioca pearls folded into milk tea-flavoured ice cream.
- **Baklava Ice Cream Sandwich:** flaky pastry layers with nut-studded ice cream.
- **Mexican Churro Swirls:** cinnamon sugar ribbons running through vanilla-caramel bases.

The Regional Revivalists: A Slice of Home, Reimagined

For all the excitement about global flavours, there’s an equally strong pull back to roots. Consumers across Tier-1 to Tier-3 cities are rediscovering their pride in regional

tastes and are delighted when brands give these ethnic inspirations a contemporary twist.

Consider Kavitha, a homemaker in Coimbatore, who lights up when she finds *elaneer payasam* (tender coconut dessert) reimagined as an ice cream in her local parlour. Or Rajesh, a banker in Jaipur, who treats his family to kulfi with kesar pista but enjoys when it’s served in modern stick formats that are easy for kids.

This regional revival isn’t about tradition alone—it’s about **familiarity meeting innovation**. Consumers want their memories and culture preserved, but in formats that feel fresh, Instagrammable, and exciting.

Emerging concepts:

- **Thandai Gelato:** festive drink turned into a rich, spiced gelato.
- **Tender Coconut Rose Sorbet:** a South Indian favourite given a modern fusion twist.
- **Filter Coffee Brownie Sundae:** South Indian nostalgia meets indulgent inclusions.



Image Source: sora.chatgpt



Image Source: sora.chatgpt

Reinventing Vanilla: The Classic Gets Its Spotlight

No discussion of ice cream trends can be complete without vanilla. Long dismissed as “basic,” vanilla is now staging a remarkable comeback. Consumers are beginning to demand variety within vanilla itself—a shift sparked by premium D2C brands and gradually making its way into mainstream portfolios.

Today’s consumers want to know: Is it **Pondicherry Vanilla**, with its rich, woody depth? Or is it **Madagascar Bourbon Vanilla**, creamy and floral? Or maybe a **Smoky Old-Fashioned Vanilla** that evokes cocktail culture?

This resurgence shows that vanilla isn’t plain—it’s a canvas. Each variant brings mood, storytelling, and uniqueness. The revival of vanilla reflects a broader market truth: consumers want even their classics to come with layers of novelty, craft, and narrative.

Concepts consumers are excited about:

- **Mood-Driven Vanillas:** from calming lavender-vanilla to energising espresso-vanilla.

- **Craft Cocktail Vanilla:** old-fashioned or mojito-inspired vanilla bases.
- **Regional Vanillas:** Pondicherry vanilla ice cream highlighting India’s own terroir.

What It All Means for the Ice Cream Market

Put together, these shifts point to a fascinating evolution:

- **Ice cream is no longer seasonal or occasion-driven.** It’s finding relevance in daily routines, opening new frequency opportunities for brands.
- **The young are global explorers,** demanding bold, borderless tastes that allow them to express individuality and curiosity.
- **Cultural nostalgia is making a comeback,** as regional inspirations are being reimaged for modern sensibilities.
- **Classics are being reinvented,** with vanilla standing as the symbol of how depth and variety can refresh even the simplest of categories.

The future of ice cream in India is going to be **experiential and expressive**. Consumers aren’t just buying cold desserts—they’re buying a piece of identity, an adventure, or a memory. The challenge—and opportunity—for brands lies in how creatively they can blend roots with reinvention, everyday moments with indulgence, and familiarity with discovery.

Ice cream is no longer just about cooling off on a hot day. For India’s new-generation consumers, it’s about tasting the world, remembering home, and experiencing joy—all in a scoop.



About the author:

* Keerthy Pathur,
Head of Marketing, stonefield flavours

From Luxury to Everyday Delight: Ice Cream's Journey After the GST Reduction

■ By Ajay Kumar Dubey*

The Indian ice cream market has just savored a revolution. The sector is no longer subjected to the "luxury" tax and is now considered part of the ordinary man's food category, following the GST Council's decision to cut tax on ice cream from the earlier 18%. For years, high taxes were being shared by manufacturers, distributors, and customers alike. Now, with this tremendous relief, there is a wave of anticipation across the entire value chain – from dairy farmers to shopkeepers and consumers.

This victory comes after many years of sustained efforts by the Indian Ice Cream Manufacturers Association (IICMA). Mr. Sudhir Shah, President of IICMA, along with its members, has been persistently engaging with the government to highlight that ice cream is a product enjoyed to beat the heat, not a luxury item. It is a wholesome dairy product, relished equally by children, families, and senior citizens. Their reasoning, backed by data and ground realities,

finally persuaded policymakers.

At this crucial juncture, the industry also extends its heartfelt gratitude to the Hon'ble President of India, Smt. Droupadi Murmu ji; the visionary leadership of the Hon'ble Prime Minister, Shri Narendra Modi ji; the Finance Minister, Smt. Nirmala Sitharaman ji; and many other respected ministers who consistently lent a patient ear to the industry's concerns and took decisions in the collective interest of all stakeholders.



Image Source: sora.chatgpt



THE BENEFITS OF THE GST CUT

For Manufacturers

The earlier 18% GST had created what was known as an “inverted duty structure.” Companies were paying high taxes on inputs such as milk powder, butter, packaging material, and cocoa but were not receiving timely refunds, which strained their working capital. This imbalance has now been removed with the new 5% GST. As a result, manufacturers can operate with better cash flow, fewer refund delays, and greater certainty. This also frees up more funds for upgrading plants and expanding capacity

For Consumers

For customers, the effect is straightforward: lower prices. A strawberry cone priced at ₹35 earlier can now be bought for ₹30, while a family tub that was sold at ₹250 could now be available for around ₹220. This 10–12% decrease will reduce ice cream prices not just in urban areas but also in Tier-II and Tier-III cities. Cheaper prices mean consumption

is likely to rise, with a shift towards branded or packaged ice creams rather than loose or unorganized options, ensuring greater safety and hygiene.

For Dairy and the Economy

Growth in ice cream sales translates to greater demand for milk, butter, and milk powder. This is encouraging for farmers and cooperatives, as it supplements rural incomes and adds value to milk. More sales also mean more jobs, more logistics, greater cold chain investment, and overall growth for the food industry.

Guidelines for Implementation

The GST cut is a massive opportunity. However, to ensure success, businesses must manage the transition effectively. Key guidelines include:

Passing on the Benefit: The government expects that the 13% cut will be passed on to consumers. Firms must modify MRPs or offer discounts. Documentation is

required to demonstrate compliance with anti-profiteering rules.

MRP Relabelling: Old stock can be relabelled with new MRPs (permitted up to December 2025) or sold with old labels, provided companies issue public advertisements and official communication indicating revised prices. At least two public notices must be made, along with intimation to Legal Metrology authorities.

Input Tax Credit (ITC): ITC can still be claimed on stock purchased under 18% GST before 22nd Sept. Distributors and retailers holding such stock can adjust the credit or claim a refund. Manufacturers must maintain accurate records.

ERP & IT Systems: Billing systems, HSN codes, and tax rates must be updated quickly. Parallel checks are essential to avoid invoicing errors during the transition.

Contracts & Procurement: Open POs and long-term vendor contracts need revision. Suppliers can issue credit notes for products billed at 18% but received later.

Communication and Education:

Teams, suppliers, wholesalers, and retailers must be educated on new costs and compliance requirements. Customers should be informed through advertisements, posters, and circulars about the revised lower MRPs.

Overcoming the Challenges

Naturally, such a large change also brings short-term challenges. The key challenges and solutions are:

Margin Pressure on Retailers: As MRPs come down, retailers may fear reduced margins. Companies can support them with revised trade schemes, discounts, or promotional offers during the transition.

Relabelling Efforts: Relabelling lakhs of packs may not be feasible. Manufacturers can instead advertise the discounts at points of sale and pass on the benefit directly.

Independent Assurance and Audit:

Independent checks should verify that the benefit is passed on to end-consumers. Organisations must maintain detailed records of revised MRPs and communication efforts to prove compliance.

System Readiness: ERP and IT systems must be upgraded immediately. During the first few weeks, invoices should be tested and cross-checked to prevent errors.

State Credits: Some state-level credits may be reduced following the tax cut. Industry groups need to continue engaging with state governments to protect such schemes.

Why This Change is Revolutionary

This reduction in GST is more than a financial adjustment, it is an acknowledgment that ice cream belongs in the Indian food basket alongside essentials like atta and

dal. It demonstrates that when clear logic and evidence are presented, policymakers listen and act.

This framework guarantees fairness for producers, affordability for consumers, income expansion for farmers, and market growth for allied industries. Most importantly, it paves the way for innovation. Companies can now invest more in developing new products such as no-sugar or low-sugar ice creams, fat-free ranges, high-protein options, and premium lines. New technologies, including extrusion lines capable of mass-producing `5 and `10 products with "no-hand-touch" hygiene, are also emerging.

This reform sets off a virtuous cycle: cheaper prices → higher demand → more production → stronger dairy demand → greater investment → job creation → healthier economic growth.

Conclusion

The reduction in GST on ice cream reflects both recognition and opportunity. It acknowledges that ice cream is no longer just a treat but a mainstream, healthful product. It provides the industry with the chance to grow responsibly, innovate continuously, and bring joy to millions of families, affordably.

The way forward requires diligence and communication, but the destination is clear: a better, safer, more innovative yet still affordable ice cream for India.

About the author:

* Ajay Kumar Dubey
General Manager Sri Srinivasa Dairy
Products Pvt Ltd
Hyderabad (Scoops Ice Cream)
ajay@scoopsindia.com





निर्मला सीतारामन

GST Two-Tier Structure: Changes in India's F&B Industry

The Goods and Services Tax (GST) Council has introduced some reforms in India's indirect tax regime by introducing a two-tier structure that will be effective from September 22, 2025. This is described as one of the most significant GST since its inception in 2017. The framework of the new system will assist in simplifying compliance, resolving classification disputes, and bringing new found clarity for Industries across. For the Food and Beverage (F&B) Industry, the decision brings significant shifts, offering both relief as well as new sets of challenges.

Lower Tax on Packaged Foods: Boost for Growth

One of the biggest growth and relief indicators for the F&B Industry is the reduction of GST rates in a wide range of packaged and branded foods. Everyday products such as fruit

juices, condensed milk, butter, cheese, biscuits, chocolates, dry fruits, pasta, edible oils, and namkeens will now have a reduced GDP of 5% from the earlier 12% and 18%.

This move is expected to directly reduce input costs for manufacturers and distributors, which could either improve margins or translate into lower consumer prices. With the festive season around the corner, industry experts anticipate a sharp rise in sales volumes. For companies in categories such as snacks and dairy, the relief also provides breathing room to innovate and expand product portfolios.

"The GST rationalisation represents an uplifting change for any startup or emerging brand in the F&B industry, as it promises an easier working life. Up until now, the multiplicity of tax slabs has posed serious troubles for the young entrepreneurs

to construct a transparent price structure, to remain in compliance, and to contend with such buying customers who are cost-conscious. Two slabs with 5% for essentials and 18% for anything else enhance the clarity of choice when operating a new venture and deciding on product mix and expansion strategy. Greater transparency reduces compliance costs and gives confidence to investors in scalable F&B models. The product on a lower slab is beneficial for startups, as cheaper products create demand for QSR concepts, cloud kitchens, and packaged foods, whereas premium concepts purchase on the higher slab. Thus, by way of creativity, the reform empowers the ecosystem through ingenuity, credibility, and promising avenues of growth for entrenched players as well as burgeoning entrepreneurs."

Mr Simranjeet Singh, Director, CYK Hospitalities.

Staples Go Tax-Free: Direct Consumer Benefit

Adding to the good news, certain essential foods have been moved to a zero-tax bracket. Products including paneer (chhena), UHT milk, chapati, roti, khakra, and pizza bread will now be tax-free. This measure not only reduces household expenses but also eases the compliance burden on small-scale producers, who were previously struggling with paperwork and thin profit margins.

By removing GST on everyday staples, the Council has signalled its intent to protect the affordability of basic nutrition, ensuring that households across socio-economic segments feel the benefits.

Beverages Face the Heat: 40% GST

On the flip side, the beverage industry has been hit hard. Carbonated soft drinks, sugar-sweetened beverages, and caffeinated energy drinks will now attract a steep 40% GST. Policymakers have justified this hike on health grounds, aiming to curb excessive sugar consumption while bolstering government revenue.

For beverage manufacturers, the change presents a significant hurdle. Companies will have to decide whether to absorb part of the cost increase or pass it on to consumers, risking a fall in demand. Some global players are already considering reformulation of products, reducing sugar content to reposition offerings within healthier segments. While this could align with rising consumer awareness around wellness, it also requires major investment and strategic repositioning.

Clarity Over Classification

One of the most persistent issues under the earlier system was the confusion over classification, with

disputes about whether items such as popcorn, paranthas, or paneer should be taxed differently when packaged versus loose. The two-tier structure eliminates such inconsistencies, creating a uniform and predictable framework.

For retailers and SMEs in the F&B space, this simplification will significantly cut down on litigation, compliance costs, and administrative delays. It will also encourage smoother supply chain operations.

"We welcome the government's bold and progressive GST reforms, which will certainly boost domestic consumption and propel economic growth. Consumption and packaging are directly correlated, and we expect a significant uptick in demand for packaging. With affordability driving growth, we anticipate a surge in smaller and more convenient pack sizes, along with a stronger push for sustainable and recyclable packaging solutions. We see this

*as an opportunity to partner more effectively with FMCG brands by delivering innovative, high-quality, and eco-friendly packaging that reaches millions of households across India."***Mr. Rajesh Bhatia, Group President (Finance & Accounts) and CFO, UFlex Limited**

Reactions from Industry

The broader packaged food sector has welcomed the decision wholeheartedly, citing a boost to affordability, innovation, and expansion. Retailers too are optimistic, anticipating higher consumer demand in the months ahead.

In contrast, beverage players are voicing concern. Industry associations are already in talks with policymakers to seek relief or gradual implementation of the steep 40% slab. Until then, companies may need to explore product diversification, shifting focus toward bottled water, sugar-free alternatives, or dairy-based drinks that remain in lower tax categories.



Consumer Impact

For consumers, the new GST framework is a mixed bag. Essentials and packaged foods are now cheaper, directly benefiting households and likely encouraging higher consumption. However, a sharp hike in sugary drinks could pinch pockets, especially for younger demographics and urban consumers who are the biggest buyers of these products.

Interestingly, this may nudge Indian consumers toward healthier alternatives, a trend already gaining ground. The new regime could accelerate that shift, reshaping demand patterns in the long run.

"The rationalisation of GST for frozen foods and meats is a progressive move that will uplift the entire category. For consumers, it makes nutritious and hygienic options like Godrej Yummiez more accessible, while also promoting smarter food habits by reducing wastage and enabling convenience without compromising on quality.

For the industry, it opens up space for greater innovation, wider distribution, and enhanced consumer trust, creating opportunities for all players to expand and serve a fast-evolving market. These reforms will accelerate the growth of frozen foods as a mainstream choice, benefiting both households and the broader food ecosystem" said **Abhay Parnerkar, CEO, Godrej Foods Ltd (that owns Godrej Yummiez – ready-to-cook frozen foods brand and Real Good Chicken).**

"The new GST reforms mark a pivotal moment for India's FMCG and food processing industries. By rationalising tax slabs and reducing rates, the government is boosting demand, easing compliance, and supporting homegrown brands. At ZOFF Foods, we see this as a timely, progressive move that allows us to scale faster, innovate more, and offer even better value to our consumers, especially with the festive season ahead. It will also help us accelerate market expansion across Tier 2 and Tier

3 cities, unlocking new growth corridors for the sector at large."

Mr. Akash Agrawalla, Co-founder, ZOFF Foods

Conclusion

The GST Council's two-tier structure represents a bold attempt to balance simplification with public health objectives. For the F&B industry, it brings long-awaited relief in the food segment, but also new challenges in beverages. How companies adapt by adjusting prices, reformulating products, or leveraging innovation will determine the real winners and losers in this new tax landscape.

As India heads into the festive season, the reduced rates on packaged foods and essentials are likely to boost sentiment and demand, giving the industry a much-needed lift. The coming months will reveal how effectively businesses and consumers navigate this landmark reform.

Sources: The Indian Express, The Economic Times, and Reuters

Be Informed. Stay Relevant.

Get **FMT Magazine** –
the ultimate guide
to the food and
beverage sector.

**SUBSCRIBE
TODAY!**



www.fmtmagazine.in | info@fmtmagazine.in | +91-9310352414

Unveiling Innovation in Packaging & Processing

Organised by



IPAMA

Indian Printing Packaging & Allied Machinery Manufacturers' Association
(Serving the Industry Since 1988)



2nd edition **IntraPac India** Packaging and Processing 10-13 December 2025

India Expo Centre, Greater Noida, Delhi-NCR



Approved by



MSME

सूक्ष्म, लघु एवं मध्यम उद्यम
MICRO, SMALL & MEDIUM ENTERPRISES

VISITOR REGISTRATION



www.intrapacindia.com

Lanyard Sponsor



BEARING TRADERS (I) PVT. LTD.
ONE STOP BEARING SOLUTION

Conference



Growth • Automation • Connected
• Sustainable • Responsible

Strategic Partner



INDIAN BEVERAGE ASSOCIATION

Supported by



Media Partners

WhatPackaging?

FoodTechBiz

CORRUCCMAN

trade india.

THE PACKMAN

Packaging

IndiFoodDev

LAUNCHABLES

FOOD

PaClick

food

FOOD

99

FOOD

FOOD

FOOD

FOOD

FOOD

FOCUS

FOOD

CPMirror

Food

For further information please contact:

Indian Printing Packaging & Allied Machinery Manufacturers' Association

Plot No. C-54, Sector-62, Institutional Area, Noida (Delhi-NCR) 201307, INDIA
Ph: +91-120-4207076 | Email: gm@ipama.org, admin@ipama.org, info@ipama.org
Website: www.ipama.org

Abhinav Kumar Singh
General Manager – Sales & Marketing
☎ +91-8130797262

Vikram Sharma
Manager – Sales & Marketing
☎ +91-97171199388

Meetika Srivastava
Assistant Manager – Sales
☎ +91-97171199385

Please scan to follow us:





TCPL Packaging Limited

Empire Mills Complex, 414, Senapati Bapat Marg, Lower Parel, Mumbai-400013

Contact Person: **Mr. Vinit Nair** (For cartons & rigid packaging)

Contact Details: +91-98213 99459

vinit.nair@tcpl.in

Contact Person: **Mr. Abhijit Kubal** (For flexible packaging)

Contact Details: +91-86577 67001

abhijit.kubal@tcpl.in

TCPL manufactures folding cartons, printed blanks and outers, litho-lamination, plastic cartons, blister packs and shelf-ready



Andritz Technologies Private Limited

Survey No.389, 400/2A, 400/2C, Padur Road, Kuthambakkam Village, Poonamallee Taluk, Thiruvallur, Tamil Nadu, India, 600124

Contact Person: **Monisha**

Contact Details: +91-73581 07316

monisha.Backiyaraj.external@andritz.com

Process technologies, equipment, plants and automation



Gogia Chemical Industries Pvt Ltd

C-8/3, Block C, UPSIDC Site C, Industrial Area, Greater Noida, Uttar Pradesh-201306

Contact Person: **Deepika Sharma**

Contact Details: +91-98716 91024

deepika@gogia.com



Big Drum India Pvt Ltd

Plot No.10, IDA, Uppal, Ramanthapur Main Road, Hyderabad 500 039, Telangana, India

Contact Person: **Ms. Swathi G**

Contact Details: +91-9000011745,

Swathi@bigdrum.com

Manufacturers of Wafer Biscuit cones or Rolled Sugar cones



Blue Craft Agro

2nd Floor, 9, Abhishree Corporate Park, Nr. Swagat Bungalows BRTS Bus Stand, Ambali – Bopal Road, Ambali, Ahmedabad – 380 058

Contact Person: **Christina D'Souza**

Contact Details: +91-9996972752

christina.dsouza@bluecraftagro.com

Manufactures speciality starches, native starch and starch derivatives from maize



Buhler

13-D,12-D,13-C, and 13-B, KIADB Industrial Area, Attibele, Bengaluru – 562 107, India

Contact Person: **Sandeep**

Contact Details: +91-80 6777 0000 Ext.: 181

sandeep.kc@buhlergroup.com

Bühler offers equipment for the industrial production of biscuits, cakes, crackers, lye products and more.



CentricSoftware

Centric Software Hong Kong Ltd Unit B, 15/F, OfficePlus @Mong Kok, No. 998, Canton Rd, Mong Kok, Kowloon, Hong Kong SAR, Chin

Contact Person: **Matilda Chan** - Senior Field Marketing Manager, South Asia

Contact Details: 852-98715587

matilda.chan@centricsoftware.com

Develop innovative solutions to plan, design, develop, source, buy, make, price, allocate, sell and replenish products for the food & beverage Industry.



Bunting Magnetics Europe Ltd

Northbridge Road Berkhamsted, Hertfordshire UK HP4 1EH

Contact Person: **Prem Naithani** -Senior General Manager Sales - India

Contact Details: +91 999 992 1043
redditch@buntingmagnetics.com

Experts in Magnetic Separation and Metal Detection Equipment



Flavourtech Pty Ltd

Flavourtech 32 Lenehan Road,
Griffith NSW 2680, Australia

Contact Person: **Shiv Govind Pandey**
Territory Manager - India
Contact Details: +91-9560022943
shiv@flavourtech.com

Flavourtech is a global technology manufacturer, headquartered in Australia, specialising in aroma recovery, extraction and evaporation solutions for the food, beverage and pharmaceutical industries



Heat & Control

Mahindra World City, Plot No 2
8th Avenue, 1st Cross Road,
Chengalpattu Taluk, Kancheepuram District,
Tamil Nadu, Chennai 603004, India

Contact Person: **Babu V/ Tracy**
Contact Details: +61 428 776 386
tanderson@heatandcontrol.com.au

Snacks Processing with Flexibility
and Quality



Art Next Pvt Ltd (Nexibles)

Unit A6C, Lodha Industrial & Logistics Park - II,
Usatane Village, Navi Mumbai, Talaja Bypass
Road, Palava, Maharashtra - 421306 India

Contact Person: **Mr. Prasad Narkhede**
Marketing and Sales
Contact Details: M +8275233546

Our extensive expertise in plastics and flexible packaging solutions enables us to introduce new ideas and superior execution to satisfy the demands of our clients



HRS

HRS Process Systems Ltd
3rd Floor, Kalpataru Infinia, F.P. No. 21, Old
Mumbai- Pune Highway, Wakdewadi,
Shivajinagar, Pune 411 005

Contact Person: **Sourabh Mishra**
Contact Details: +91-9960822253
sourabhmishra@hrsasia.co.in

Food Processing System



ifm electronic India Private Limited

Plot No. P-39/1, M.I.D.C., Gokul Shirgaon,
Kolhapur - 416234 Maharashtra, India
Marketing Department

Contact Person: **Shreyansh Gunde**
Contact Details: 0231-268-5920
shreyansh.gunde@ifm

Sells sensors, controllers, software and systems
for industrial automation and digitalization.



JRS India

Rettenmaier India Pvt Ltd.
816, Lodha Supremus-II, Road No. 22,
Wagle Estate, Thane (W) - Mumbai 400 604
Maharashtra, India

Contact Person: **Meeta Raheja**
Contact Details: +91-7738158615
meeta.Raheja@jrsindia.com

Nutrition for Human



R&D Engineers

A-41, Kukatpally Phase II,
Road No.4 via. I. E, Gandhi Nagar,
Hyderabad - 500 037, T.S, India.

Contact Person: **Rajesh Pamnani**
Contact Details: +91-40-23079121 / 23079878.
Mobile: +91-9573540380
info@rndwafers.com



Chemie Colloids

138, Shivalaya Complex, Una - 362560.
Gujarat.- 362560

Contact Person: **Mr. Ishan Gandhi**
Contact Details: +91-83476 39761
ishangandhi@chemiecolloids.com

We Manufacture Different Grades (Chemie Gel® Series) of CARRAGEENAN, LOCUST BEAN GUM and XANTHAN GUM for different End applications



Stonefield

Plot 9C, Phase 1, Jigani Industrial Area,
Taluk Anekal, Bengaluru - 560105 India

Contact Person: **Keerthy Pathur**
Contact Details: +91- 802 979 5609
keerthy.pathur@stonefield.in

Flavor company, creates ingredients that enhance taste in snacks, ice cream, confectionery, ready-to-eat foods



NIHIRA

Nihira Food Engineering LLP

Plot No-185,Sec-07,PCNTDA, Bhosari,
Pune-411026,India

Contact Person: **Santosh Karale**
Contact Details: +91-9767514222
santoshkarale@yahoo.com

Spout Pouch Filling and Capping Machine



PWS Engineers Private Limited

Post Box - 62 , Panchal Estate , Nr Madhubhan
Resort Anand - Sojitra Road ,
ANAND 388 001, (Gujarat) INDIA

Contact Person: **Mr Nishit Panchal**
Contact Details: +91-98253 19269
yogesh@pwsengineers.com

Ice Cream Cup Filling Machine

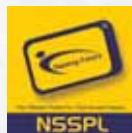


1-2-Taste India Pvt Ltd

Door No 5/5-A, Valluvar Salai, Ramapuram,
Chennai, Chennai, Tamil Nadu, 600089

Contact Person: **Srikanth Robbi /**
Head of Global Marketing
Contact Details: +91-9986699459
srikanth.robbi@12taste.com

Ecommerce platform for Food Ingredients



NSSPL

Block No.225/P, Chhatral-Kadi Road, Nr.
Somany Ceramic Godown, Dhanot-382729,
Ta.Kalol,Dist. Gandhinagar

Contact Person: **Dhrutika Dahia**
Contact Details: +91-98980 57640
dhrutika@nsspl.in

Turnkey Cold Storage Solutions / Potato Processing Solutions / IQF Solutions / Refrigeration System / Frozen Fruits and Vegetables Processing Solutions / Seafood and Dairy Processing Solutions



Shiv Maheshwari Oil & Chem Pvt Ltd

Survey No 152/A5/1 & 152 E, Automotive Park, IDA
Kallakal, Manoharabad Mandal, Medak-502 336

Contact Person: **Avinash Biyani**
Contact Details: +91-9848041945
shivmaheshwari2003@gmail.com

Manufacturer and exporter of high-quality NON-GMO products, including ESSEMM soya lecithin, and linseed oil

Put your brand in the spotlight

**Feature your company here
for just ` 5,000 per month!**

Contact at +91-93103 52414

Mark Your Calendars 

UNWRAPPING UPCOMING EXHIBITIONS LINEUP

2025

S.R NO.	EVENT NAME	DATES	VENUE
1.		6 to 8 October 2025	Yashobhoomi, Dwarka Delhi
2.		13-15 November 2025	Bombay Exhibition Centre (BEC), Mumbai
3.		13-15 November 2025	Bombay Exhibition Centre (BEC), Mumbai
4.		10-13 December 2025	India Expo Centre, Greater Noida, Delhi-NCR
5.		19-21 December 2025	Yashobhoomi, Dwarka Delhi

NOTE: Key numbers at the end of articles can be used as references for reader requests

DISCLAIMER: The views and opinions expressed in *Food Marketing & Technology, India* are solely those of the authors and do not necessarily reflect those of the editors or the publisher. Although all efforts have been made to ensure the complete accuracy of text, neither the editors nor the publisher can accept responsibility for consequences arising from errors or omissions or any opinions or advice given.



SUBSCRIBE

₹ 999/-

For 1 Year Digital

₹ 2,299/-

For 1 Year
Print

₹ 3000/-

For 1 Year
Print and Digital

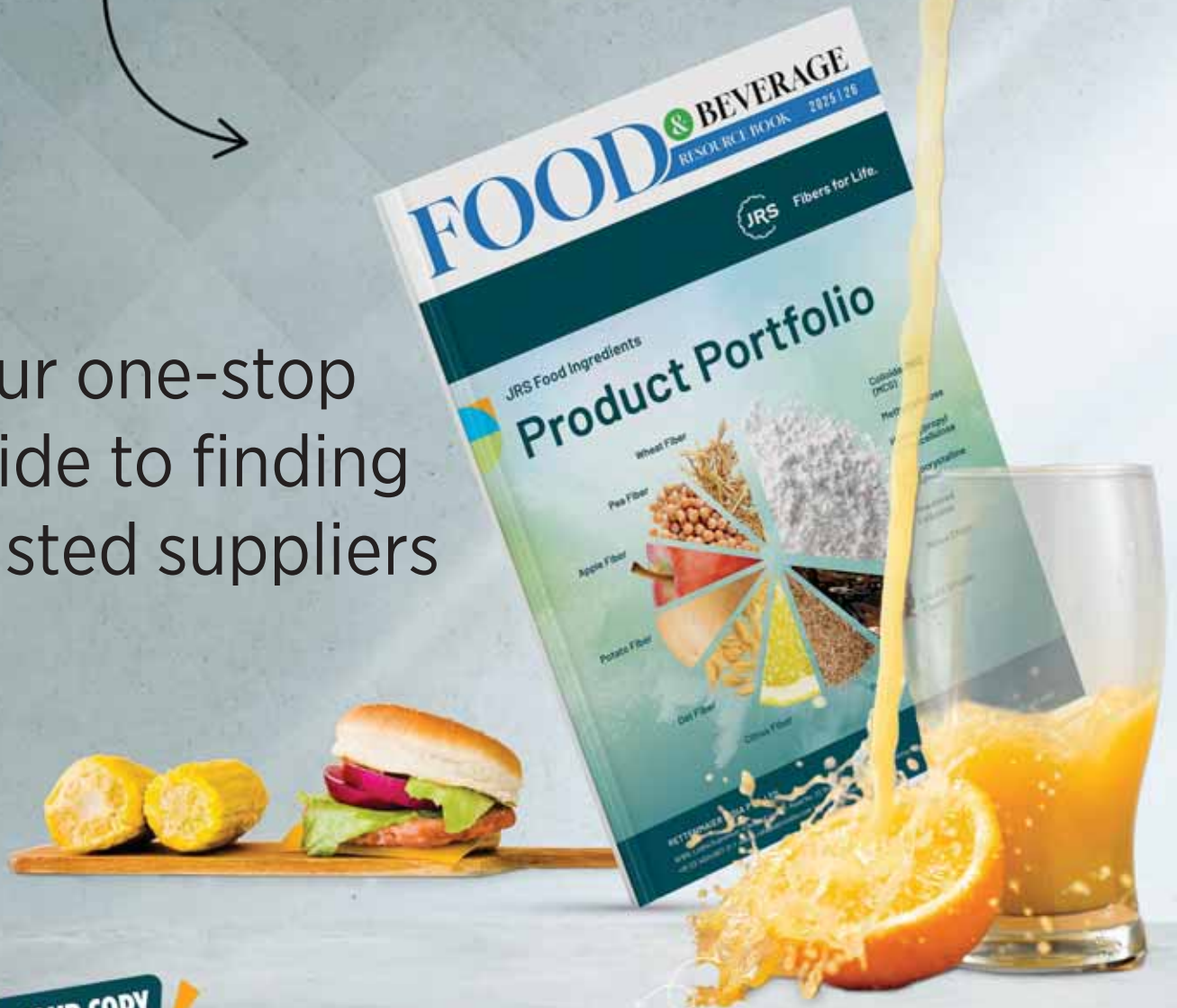


SIMPLIFY SOURCING

WITH THE FOOD & BEVERAGE RESOURCE BOOK

2025 | 26

Your one-stop
guide to finding
trusted suppliers



RNI No. UPENG/2010/38219

GET YOUR COPY
NOW!
@ ₹2,999

Available on
www.fmtmagazine.in

A Product of

food MARKETING & TECHNOLOGY
संस्था

Contact us:

+91-9310352414 | Email ID: bookresource1@gmail.com