# food-Drink & innovations

ingredients - processing - packaging - supply chain - dairy - bakery - confectionery - ice creams - sweets - snacks

Volume - 5 / Issue - 1



Inventicon invites all esteemed food companies to partake in the 10th Food Quality and Safety Congress 2024 to be held on February 22-23, 2024, in Delhi.

Join us, as it's an unmissable opportunity for food industry leaders, experts, and companies to converge, exchange insights, and explore the latest advancements in ensuring the highest standards of food quality and safety.

For further details, write to

asan.bano@inventiconasia.com

or call
+91 70215 96919 / +91 022 5002 3215

Register Now <a href="https://bit.ly/3vrruHj">https://bit.ly/3vrruHj</a>



Scan to download program agenda and attendee list



#### **THOUGHT LEADERS:**



Ashish Savita, Head R&D (NDC), Devyani Food Industries Ltd.



Dr. Vivek Srivastav, Senior Vice President-Innovation, Business Strategy & Scientific Affairs, Zeon Lifesciences Ltd.



Dr. Rajeev Prasher, Head of Quality, Kandhari Beverages Pvt. Ltd. (Coca Cola India FBO)



Kriti Soni, Head of Research & Development, Kapiva Ayurveda



Mamta Arora Budhiraja, Senior Manager- Scientific Regulatory Affairs (India and India region), PepsiCo India Holdings Pvt. Ltd.



Mani Misra, Corporate Nutritionist-Scientific Regulatory & Nutrition Affairs, Mother Dairy Fruit & Vegetable Pvt. Ltd.



Narendra Singh Shah, Lead Process & Technology, Perfetti Van Melle India Pvt. Ltd.



Neerja Hajela, Head Science & Regulatory Affairs, Yakult Danone India Pvt. Ltd.



Ranjeet Kaur, Lead Scientific & Regulatory Affairs, Mars Wrigley India



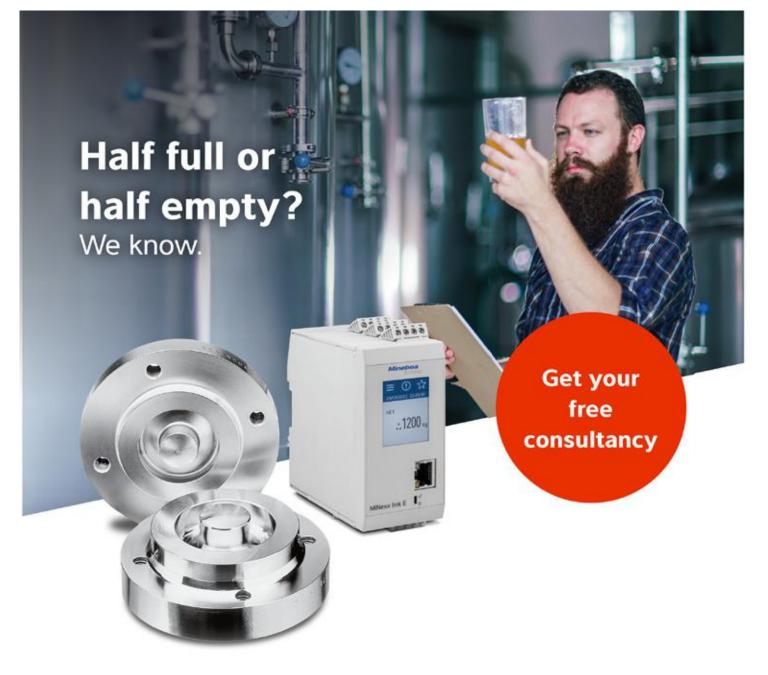
Sandeep Bansal, AGM- Scientific & Food Regulatory , Quality Operations and Compliance, Pernod Ricard India Pvt. Ltd.



Varsha Mishra, Deputy Director, Quality Council of India



Virendra Landge, Director Scientific & Regulatory Affairs, India, Coca-Cola India Pvt. Ltd.



## Vessel weighing made easy

With over 150 years weighing technology experience, we are the experts who can offer you perfect tank and vessel weighing solutions for your individual projects. Whether you need accurate level monitoring, high-precision dosing processes or hygienic solutions, get the complete weighing system from a single source. Why not also take advantage of our project consulting, engineering services, know-how transfer, training and a trouble-free installation.







www.anuga-india.com Bombay Exhibition Centre MUMBAI, 28-30 August 2024



# ENGAGE, EXPERIENCE, EVOLVE

India - The Land Full of Business Opportunities for





**Key Highlights of 2023 Edition** 













**Contact Us:** 

For Sales Inquiries

Vaishali Thakker M. +91 99871 23821

E. v.thakker@koelnmesse-india.com

For Marketing & Alliances

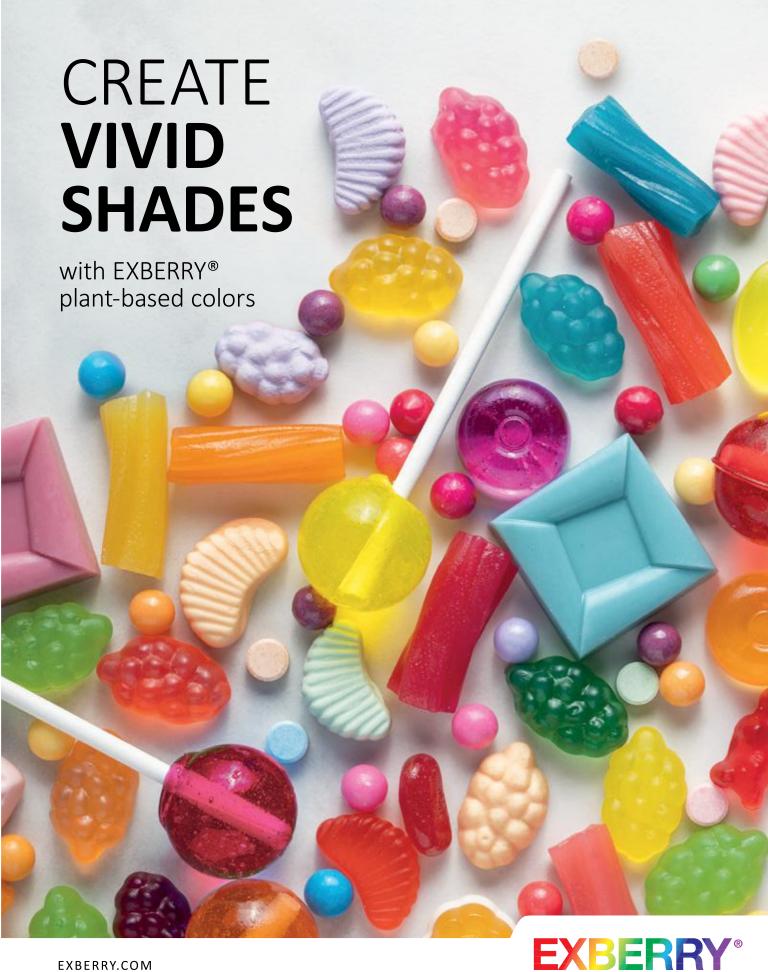
Priya Datar M. +91 98670 04675 E. priya.datar@koelnmesse-india.com Scan to Book **Your Space** 



View 2023 **Post Show Report** 







# From the Editor's Desk

Dear Readers, we are delighted to present to you the January 2024 edition.

As we step into a promising new year, our January 2024 edition is dedicated to shedding light on transformative trends and groundbreaking innovations in the world of food and technology. This edition explores into the dynamic landscape of Functional Food Ingredients, explores the revolutionary rise of Food Robotics Solutions, unravels the technological marvels in Meat Processing, and embarks on a journey through Industry 4.0 and Industrial Internet of Things (IIoT) Integration, transforming food supply chains.

In the guest for healthier living, consumers are increasingly turning to functional food ingredients. This section of our magazine takes a deep dive into the sources, benefits, and the evolving trends in the world of functional foods. From superfoods to bioactive compounds, we explore the science behind these ingredients and their impact on our well-being.

The future of food is being shaped by robotics, from precision farming to automated kitchen processes. Our feature on Food Robotics Solutions explores how robotics is not only meeting the surge in demand for food production but also enhancing efficiency, precision, and sustainability in the entire food supply chain. Furthermore, the meat processing industry is undergoing a technological revolution, transforming the way we produce and consume meat. This edition explores the latest innovations in meat processing technologies, from cultured meats to advanced preservation methods, offering a glimpse into a future where meat production is both sustainable and technologically advanced.

The integration of Industry 4.0 and the Industrial Internet of Things (IIoT) is revolutionizing food supply chains. In this section, we take you on a journey through the smart factories and connected processes that are shaping the future of food production and distribution. From predictive maintenance to real-time data analytics, discover how technology is optimizing the entire food supply chain.

In this edition, we strive to provide you with insightful information that not only captures the current landscape but also anticipates the future trends in the food industry. Thank you for joining us on this enlightening journey through the intersection of food and technology. We hope you find inspiration and knowledge that will fuel your curiosity and passion for the ever-evolving world of food.

Thank you for your continued support, and we hope you enjoy reading this edition as much as we enjoyed bringing it to you. Happy reading!

Your valuable feedbacks on this edition of webzine is requested.

Prakash Mishra

Thanks you Prakash Mishra Editor - Food - Drink & Innovations











#### **IMPRESSUM FOOD DRINK & INNOVATIONS**

Founder & Editor Prakash Mishra

**Supporting Editor** Aakansha Singh

Director

Sarthak Mishra info@fooddrinkinnovations.com

**Manager Advertisement** Vikash Kumar sales@fooddrinkinnovations.com

Admin & Subscription Deepti Shah fooddrinkinnovations@gmail.com

> Designer Rahul Vishwakarma

**Accounts Manager** Rohan Singh

> **Legal Adviser** Vishwas Pandey



#### JANUARY - 2024

References at the end of the article can be used for further reading. Responsible for selection of news under the PRB act, all right reserved. All material published in this webzine, views, ideas and comments are made to ensure that they are correct and FOOD DRINK & INNOVATIONS holds no responsibility for any errors that might occur.

This webzine is published only online by

#### PLUS TECHNOMEDIA & SERVICES

Mumbai, Maharastra info@fooddrinkinnovations.com fooddrinkinnovations@gmail.com Phone - +91-9625985795 www.fooddrinkinnovations.com

# 20% IN ENERGY IS A GOOD START.



Your KHS system for efficient water bottling.



From the preform to the packaged PET bottle, our lines not only considerably save on energy but also on materials and maintenance costs. One such system is our compact InnoPET TriBlock Aqua M, which forms, labels, and fills single-serve bottles especially efficiently. At a rate of up to 82,000 bottles per hour it also saves time. This is what we call efficiency right down the line! khs.com/water

# Contents

#### **SPOTLIGHT**

















#### **INGREDIENTS**



- 27 Nestlé's plant-based alternative to foie gras makes festive return
- 30 Enhancing Confectioneries with Natural Hues
- 32 Functional Food Ingredients: Sources, Benefits, and Consumer Trends
- 34 Loryma launches plant-based egg substitute for baked goods
- 34 Oterra and Ecoflora Cares join forces to build a world of responsibly sourced naturally colored foods in Blues and beyond

36 - From Oven to Occasion: Godrej Food Trends Report unwraps the pastry and cake trends in India

# PRINTING / PACKAGING / PROCESSING & AUTOMATION



- 39 Navigating the Tides of Change: Adapting to Shifts in Customer and Industry Behavior
- 40 Optimize quality control with next-generation, realtime industrial liquid process monitoring technology
- 44 Sustainable, automated and digital solutions for the food industry
- 45 Adaptation of brewing technology enables production of vegan food alternatives
- 46 The Surge in Demand: Food Robotics Solutions Anticipated to Attain a Market Value of US\$ 7.8 Billion by 2033
- 48 Further addition for Nature MultiPack
- 49 Cosmo First (erstwhile Cosmo Films) launches Metalised Capacitor Grade BOPP Films
- 50 Innovations in Meat Processing: A Technological Revolution

#### INTERVIEW



28 - Interaction with Mr. Ajay Shetty, the Founder and CEO of Salud



42 - Interaction with Dr. Ashish Agarwal, Co-Founder & CTO of WRMS

#### **SUSTAINABILITY**



- 52 Alfa Laval and Bisviridi partner to revolutionize biofuel production from organic waste
- 54 CCL Container Introduces Aluminum Wine Bottles

#### **SAFETY & REGULATIONS**

- 57 QR code on test reports fortified rice, fortified rice Kernel & vit premix for FRK
- 57 Printing 'date of mfg', 'unit sale price' on packaged items becomes mandatory from Jan 1
- 58 Govt took many pro-active steps to control prices of food items

### **SUPPLY CHAIN MANAGEMENT (SCM)**



60 - Revolutionizing Food Supply Chains: A Journey through Industry 4.0 and Industrial Internet of Things (IIoT) Integration





**TAKE YOUR** BUSINESS **PROMOTIONS** ONLINE

Advertise with us

**GET OUR MEDIA INFORMATION KIT** 2024



## **Cornitos launches "Roasted** Pistachios salted" with Shells!

ornitos, the trailblazing Indian Nachos brand, is venturing into new horizons with the expansion of its product portfolio. Introducing the snack of the season - Roasted Pistachios Salted. In every handful, you'll find a rich source of healthy fats, fiber, protein, antioxidants, and a bounty of essential nutrients, including the powerhouse vitamin B6. This innovative addition brings the authentic flavors of pistachios to the forefront in a wholesome and snackable manner, providing you the perfect guilt-free indulgence during your snack time.

Dive into a realm of indulgence where each pistachio is masterfully roasted to preserve its natural essence and deliver a gratifying crunch. The inclusion of the shells elevates the experience, turning every bite into a delightful adventure. Brimming with nutrients,



these salted pistachios redefine guiltfree snacking, striking a harmonious

balance between delectable taste and wholesome health benefits.

On the launch of Roasted Pistachios Salted, Mr.Vikram Agarwal, Managing Director of Greendot Health Foods Pvt. Ltd., said, "Embarking on a mission to redefine the snacking landscape, we are excited to introduce Roasted Pistachios Salted, a compelling invitation to a world where indulgence seamlessly intertwines with well-being. Our strategic approach revolves around communicating the unparalleled health benefits of these meticulously roasted pistachios, positioning them as a versatile and guilt-free snack for our consumers. By accentuating the rich array of nutrients, we aim to tap into the modern health-conscious living, offering not just a snack but a flavorful journey towards a balanced lifestyle."

Let the irresistible combination of flavors and nourishment transport you to a world where snacking becomes not just a treat but a truly delightful and health-conscious experience. Price: Rs. 470 for 170g.

# Naturals, announces the launch of a special festive delight - Tilgul

aturals, renowned for crafting lip smacking artisanal ice-creams, is thrilled to announce the launch of a special festive delight - Tilgul. Soaked with the spirit of Makar Sankranti, Tilgul is a tribute to tradition, taste and togetherness. Tilgul's unique flavour combines milk, sugar, peanuts, cashews, sesame seeds, jaggery and a hint of cardamom powder, crafted meticulously by culinary artisans. Its indulgent flavour promises to captivate taste buds with its rich blend of wholesome ingredients and exquisite taste, as it embodies the essence of Makar Sankranti.

What sets Tilgul apart is not just its exceptional taste but also its exclusivity. Available for a limited time span of 25



days starting January 5th, this flavourful creation promises to add an extra layer of sweetness to your festivities. Whether you're seeking a nostalgic

taste of tradition or a new experience to cherish with your loved ones, Tilgul is the perfect companion during the festivities.

Amp up your celebrations by visiting the nearest Naturals store and experience the delightful Tilgul flavour. Share the joy of Makar Sankranti with family and friends, and don't forget to add the significant saying, 'Tilgud ghya aani godh godh bola' with it. With a commitment to quality and innovation, Naturals brings an array of delightful offerings that resonate with every celebration. Now, let the flavours of Makar Sankranti come alive with their exclusive Tilgul treat!

What: Naturals Tilgul Flavour When: Starting 5th Jan, 2024 for 25 days Where: Pan-India Naturals Outlets

# McDonald's India Collabs with Mondelez to Introduce Cadbury Gems-Topped Desserts

cDonald's India (West and South) has partnered with Mondelez to unveil a collection of indulgent desserts, marking a significant foray into the retail sector. In a joint endeavor to elevate the indulgent desserts experience, McDonald's has introduced an exclusive assortment of irresistible treats featuring the iconic Cadbury Gems - McFlurry with Gems, Sundae with Gems, Chocolate Shake with Gems, and Strawberry Shake with Gems.

This captivating limited-time offering combines McDonald's culinary expertise in crafting delectable and convenient treats with Mondelez's cherished Gems, a brand that holds a special place in the hearts of Indians across generations. Infused with the goodness of chocolate, the McFlurry with Gems and Sundae with Gems boast a velvety vanilla softserve base, coated with a chocolate dip and hot fudge sauce respectively, adorned with a generous sprinkling of Gems. A treat that promises to delight taste buds and infuse every bite with a burst of joy. The Strawberry Shake and Chocolate Shake with Gems strike a perfect balance between creamy and crunchy textures.

Arvind R.P., CMO of McDonald's India (W&S), expressed excitement about the



partnership, stating, "We are thrilled to collaborate with Mondelez to introduce these innovative and playful treats to our dessert-loving fans. Gems have been a childhood favorite for many Indians, and we believe this collaboration will create a delightful experience for all. With this unique and playful twist to our iconic McFlurry and other desserts, we are set to provide our customers

an enjoyable treat that will not only satisfy their sweet tooth but also offer noveltv."

Nitin Saini, VP-Marketing at Mondelez India, added, "We are delighted to unveil a symphony of flavors with exclusive Cadbury Gems-Topped Desserts with McDonald's India. This collaboration brings together the iconic Cadbury Gems and McDonald's expertise in crafting delightful treats, promising a delectable experience for dessert enthusiasts. We are excited to contribute to the sweet memories and moments that these treats will undoubtedly create for them."

The partnership between McDonald's India and Mondelez underscores their shared commitment to providing consumers with unforgettable taste experiences. Discerning dessert enthusiasts can now relish the perfect blend of rich flavors, smooth textures, and enticing visual appeal.

The McFlurry with Gems, Chocolate Shake with Gems, Strawberry Shake with Gems, and Sundae with Gems will be available for a limited period on McDelivery, takeaway, on the go, as well as for dine-in and Drive-Thru across McDonald's restaurants in West and South India.

# Magnolia Bakery and Country Bean Coffee

# Introduce the 'World Famous Banana Pudding' Coffee

ust in time for the holidays, Magnolia Bakery and Country Bean Coffee are teaming up to redefine the coffee experience with the launch of the limited-edition 'World Famous Banana Pudding' Coffee. This exciting collaboration seamlessly blends the delightful flavours of Magnolia Bakery's famous Classic Banana Pudding with the exceptional quality of Country Bean Coffee - renowned for its innovative line of instant-flavoured coffee. This newest coffee edition will be accessible through

Country Bean's official website and Magnolia Bakery's stores in Bangalore & Hyderabad starting from 1st December 2023 for a limited time.

Drawing inspiration from the enduring charm of Magnolia Bakery's 'Classic Banana Pudding, this fresh coffee blend has hints of vanilla wafers, fresh bananas, and velvety vanilla pudding. This harmonious fusion is complemented by the rich and aromatic notes of Country Bean Coffee's premium 100% Arabica coffee



beans. The collaboration merges indulgence and sophistication that is sure to captivate coffee enthusiasts and dessert lovers alike.

# **ITC Sunfeast unveils industry**first 100% paper based packaging



TC Sunfeast Farmlite, a range of wholesome biscuits from ITC Foods, has launched its new offering Sunfeast Farmlite Digestive Biscuit Family pack in 100% outer paper bag packaging. An industry first innovation in packaging, this move establishes the brand as a trendsetter in the biscuit category.

Sunfeast Farmlite, is the first brand to embrace 100% outer paper packaging in the industry. The ergonomics of design aspects have been carefully curated, making the paper packaging consumer-friendly, visually appealing and convenient. This latest innovation aligns with the brand's effort towards reducing plastic and encouraging consumers to make sustainable choices in their everyday purchases.

Ali Harris Shere, Chief Operating Officer, Biscuits and Cakes Cluster, ITC Foods Division said, "We believe that we have to be not only agile, consumer focused and innovative, but also purpose driven. The launch of first-ever outer bag made from 100 percent paper is a significant step towards the brand's commitment to promote sustainable packaging. Consumers too are increasingly becoming more conscious of responsible choices, and we are committed to providing them with products in packaging that are sustainable. This is an industry-first initiative and plans are underway to adopt this packaging for other biscuit products in due course of time."

The Sunfeast Farmlite Digestive Family Pack with the new 100 percent outer paper bag packaging will initially be available on Flipkart with the 800g SKU and will soon be accessible on other e-commerce/quick commerce platforms and supermarkets.

# **Loverboy Debuts First Zero-Sugar, Full-Flavor Non-Alcoholic Sparkling Teas**

The premium RTD brand is giving fans a new, better-for-you way to enjoy two of its best-selling tea flavors, Lemon Iced Tea and White Tea Peach, without the alcohol







overboy, the pioneer and innovation leader in premium sparkling hard teas, spritzes and canned cocktails, is ringing in 2024 with non-alcoholic versions of two of its original, top-rated sparking tea flavors. Non-Alcoholic White Tea Peach and Non-Alcoholic Lemon Iced Tea - full-flavor, made with zero sugar and super low in calories and carbs - are now available to order on DrinkLoverboy.com.

Loverboy leaned into its two original, fan-favorite flavors for its first nonalcoholic teas to give its millions of fans a taste-alike, alcohol-free, better-for-youingredients option that doesn't skimp on flavor or sparkle. Both made with organic brewed tea, White Tea Peach and Lemon Iced Tea each weigh in at a skimpy 10 calories per can.

"Our new Non-Alcoholic White Tea Peach and Non-Alcoholic Lemon Iced Tea flavors are made for people who like to keep the party going...in moderation... and maintain a healthy lifestyle," says Kyle Cooke, Loverboy's CEO and founder. "While top non-alcoholic beers clock in upwards of 12g of carbs and 50 calories per can, and RTD mocktails regularly exceed 8g of sugar per can, we're staying true to the Loverboy taste our fans love with clean ingredients, no sugar and minimal carbs."

With the new line comes the return of

an old friend, Carl Radke, to serve as Loverboy Advisor. Radke, who leads a sober and wellness-focused lifestyle, will provide strategic counsel and promotional support to show how Loverboy Non-Alcoholic Sparkling Teas can fit into a well-rounded, healthy lifestyle. He was integral to the development of Loverboy's first nonalcoholic products.

"It's great to be back in the fold, and to be involved with superior products that support sober lifestyles and my own healthy living journey," said Radke. "Whether you're sober curious, just want to cut back or choose to abstain from alcohol, non-alcoholic beverages shouldn't derail a healthy lifestyle by

replacing alcohol with sugar carbs and calories just to ramp up taste."

As an exclusive offer for fans eager for a first taste, the first 50 people to buy a pack of Loverboy Non-Alcoholic Sparkling Tea will be invited to join a virtual happy hour with Kyle and Carl in Dry January.

Both Loverboy Non-Alcoholic White Tea Peach and Non-Alcoholic Lemon Iced Tea are now available in 12-packs for \$32.99 only on DrinkLoverboy.com. Look out for additional retail availability in the spring. For more information on Loverboy, visit https://drinkloverboy. com/collections/non-alcoholic and follow @DrinkLoverboy on Instagram.

# Saucy Affair Unveils Delectable "No Onion No **Garlic**" Range, Redefining Culinary Creativity

aucy Affair, the innovative culinary brand known for its bold and flavorful sauces, is excited to introduce its latest masterpiece - the "No Onion No Garlic" product range. Crafted to meet the needs of a diverse audience, this collection brings forth a tantalizing selection of sauces that are perfect for those who prefer to savor their meals without onion and garlic.

The "No Onion No Garlic" range by Saucy Affair features a delightful quartet of sauces that promise to elevate your culinary experience. From the smoky allure of BBQ Mustard Mayo to the spicy kick of Schezwan Ketchup, and the rich indulgence of Cheesy Cheddar sauce to the classic Tomato Basil Sauce, this collection caters to a wide spectrum of tastes, ensuring there's something for every palate.

"We understand the importance of catering to diverse dietary preferences without compromising on flavor. Our 'No Onion No Garlic' range is a testament to our commitment to providing unique and delicious options for all our customers," says Krupa Doshi - Founder of Saucy Affair.

Introducing the Saucy Quartet: BBQ Mustard Mayo: Dive into a world of



flavor with the perfect blend of smoky barbecue and zesty mustard. This sauce is an irresistible companion for grilled delights, sandwiches, and more.

Schezwan Ketchup: Get ready to spice things up with a Saucy Affair's twist on the classic ketchup. The Schezwan Ketchup delivers a bold and fiery flavor, adding a kick to your favorite snacks and meals.

Tomato Basil Sauce: Experience the essence of roasted tomatoes and aromatic basil in every spoonful. This versatile sauce compliments pasta, pizza, and a variety of dishes, bringing a burst of Mediterranean goodness to your table.

Cheesy Cheddar Sauce: Indulge in the creamy richness of cheddar cheese with a hint of smokiness. Ideal for dipping, pouring, or smothering, this sauce adds a cheesy twist to your favorite comfort foods.

Why "No Onion No Garlic"?: The "No Onion No Garlic" range is crafted not only for those with dietary preferences but also for anyone looking to explore diverse and exciting flavors. Saucy Affair believes in creating products that cater to various tastes without compromising on quality or innovation.

Availability: The "No Onion No Garlic" range by Saucy Affair will be available at leading supermarkets, gourmet stores, and online platforms starting 27th December 2023. Each sauce is packed with natural ingredients, free from artificial preservatives, colors, or flavors.

# Expanding access to affordable, nutritious, and tasty plant-based meat alternatives



xpanding access to nutritious and sustainable food is more important than ever. Today, many people do not have access to an adequate and diverse diet that provides enough protein and micronutrients.

With this in mind, Nestlé is actively exploring the use of plant-based ingredients to bring nutritious proteins to consumers in an affordable and sustainable way. The company recently launched Maggi Soya Chunks, a tasty, affordable, plant-based meat alternative that enables consumers in Central and West Africa to add high-quality protein to their everyday food. Made from soy, each pack provides enough protein for up to eight people, with less

saturated fats and cholesterol, at lower cost when compared to animal protein. To help address the main micronutrient deficiencies in the region, they are fortified with iron and zinc.

"We're focused on using more plantbased ingredients as part of our efforts to deliver affordable, nutritious products that contribute to closing the protein gap that exists for many consumers. Our soya chunks are not only delicious but serve an excellent choice for families looking to enhance their daily diets with increased protein and essential micronutrients in an affordable way," says Céline Worth, R&D Program Manager for Affordable Nutrition at Nestlé.

The soya chunks have a taste, texture, and functionality that is close to meat, making them a versatile protein source for a variety of family meals such as rice dishes, stews, and spaghetti.

The product comes in a shelf-stable format, making it accessible to a wide range of consumers, including those in areas where there is a limited cold supply chain. During cooking, the chunks become hydrated and develop the tasty meat like texture.

Shivani Hegde, Global Category Lead for Affordable Nutrition, Food Strategic Business Unit at Nestlé added "The launch of Maggi Soya Chunks is another key step in our endeavor to offer our consumers convenient, enjoyable and sustainable food solutions that are nutritious, accessible and affordable."

By leveraging its global reach and innovation capabilities, Nestlé is well placed to deliver novel concepts for affordable nutrition. The company is also exploring products that combine the goodness of milk and plant-based ingredients, thus bringing the best of both worlds to consumers. One example is the recent launch of Nido Milk & Soya, an affordable and nutritious instant powdered beverage that is made with a blend of milk and soy and contains essential nutrients such as protein, fiber, iron and calcium.

## Radico Khaitan enters Hyderabad Airport Duty-Free; launches last three bottles of Rampur Signature Reserve Indian Single Malt Whisky left globally

Other brands including Rampur Asava Indian Single Malt Whisky, Rampur Double Cask Indian Single Malt Whisky, Jaisalmer Indian Craft Gin and Gold Edition and Royal Ranthambore Heritage Collection are also now available at Hyderabad Airport Duty-Free

adico Khaitan, a pioneer in the Indian IMFL industry, proudly announces the exclusive availability of the last three bottles of globally renowned Rampur Signature Reserve

Indian Single Malt Whisky at Hyderabad Airport Duty-Free.

Rampur Signature Reserve, part of Rampur franchise's limited-edition collection, underwent a meticulous aging process in American Standard Oak Barrels, enduring the rigors of numerous Indian summers. The Master Maker, with precision, selected and set aside four

distinct casks, subsequently transferring them to specially chosen PX Sherry Butts from Jerez, Spain, for the final maturation phase.

Sanjeev Banga, President-International Business, RadicoKhaitan, expressed enthusiasm, stating, "At Radico Khaitan, we consistently set industry standards. To mark 75 years of Rampur Distillery, we launched a super luxury variant of Rampur Indian single malt whisky in the International market. These are individually numbered bottles strictly on allocation basis. Each bottled is individually numbered and carries the signature of Dr Lalit Khaitan, Chairman and the Rampur Master Maker. We are thrilled to bring the last 3 bottles to



our home country to mark a tribute to the origin."

Banga extended a warm invitation to whisky enthusiasts, collectors, and travelers to indulge in the unparalleled quality of Radico Khaitan's products and explore the diverse range of

premium spirits available at the duty-free. In addition to the exclusive Rampur Signature Reserve, Radico Khaitan has also placed a selection of their premium brands at the Hyderabad duty-free. This includes the distinguished Rampur Asava Indian Single Malt Whisky, the rich and complex Rampur Double Cask Indian Single Malt Whisky, the acclaimed Jaisalmer Indian Craft Gin and Gold edition, and the regal Royal Ranthambore Heritage Collection Whisky.

This announcement signifies a celebration of the finest in Indian craftsmanship and underscores Radico Khaitan's steadfast dedication to producing premium spirits.

# **Benefits of Evocus Black Alkaline** Water are Now Clinically Proven

vocus, a pioneering name in the beverage & wellness industry, is proud to announce the remarkable and clinically proven benefits of its revolutionary product, Evocus Black Alkaline Water. Backed by scientific research, this innovative black alkaline water has emerged as a game-changer in the world of hydration and wellness. Evocus Black Alkaline Water is alkaline water infused with essential minerals and 8+ pH. With a range of benefits that have been clinically validated, it has quickly gained recognition as an essential addition to a healthy lifestyle.

Backed by science, this innovative drink redefines well-being with a spectrum of clinically proven benefits:

- 4X Hydration: Provides 4X hydra-
- Regulates bladder and Bowel Function: 40% more effective in regulating bowel movements, fecal properties, and urinary frequency
- Improved Digestive Health: Reduced constipation and bloating
- Enhanced Gut Health: 30% improvement in reducing bloating, heartburn, heavy stomach, & abdominal pain
- Effective Detoxification: This



alkaline water supports the body's natural detox process in terms of Digestive health, Energy level, Emotional expressions, Physical fitness and Skin texture facilitating the elimination of toxins and promoting internal cleansing.

- Boosted Energy and Physical Fitness: Consuming 1 liter daily helps you with an active lifestyle
- Enhanced Sleep Quality: Clinical studies reveal a 55% improvement in sleep quality.
- Reduces Fatigue: Improvement in 100% of participants on reduction in tiredness and weakness, after consumption for 30 days.
- Boosts Immunity: Reduces frequent illness and fights infections.

Mr. Aakash Vaghela, Founder at Evocus,

expressed his excitement about the revolutionary product, stating, "With Evocus Black Alkaline Water, we are embarking on a journey to redefine wellness and take it to the global level. Indeed water with the right amount of minerals and an alkaline pH is all you need for a healthier lifestyle. Immerse yourself in the remarkable advantages of Evocus Black Alkaline Water, backed by clinical evidence."

The clinical research is registered under CTRI (Clinical Trials Registry India) bearing registration no CTRI/2022/10/046499 which is a joint initiative of DST, WHO and ICMR.

For a more comprehensive understanding of product details and its benefits, please visit www.drinkevocus.com and Use the coupon code "CLINICALLY PROVEN" to avail of flat 25% off delivery across India. Evocus Back water has become increasingly popular in India, thanks to its unique features and health benefits, which have attracted a growing number of health-conscious consumers, Bollywood celebrities, cricketers, Olympians, and the like. The brand is available across major retail stores and e-commerce platforms like Amazon, Zepto, Blinkit, Swiggy Instamart, Milk Basket, Big Basket, and on Evocus's website www.drinkevocus.com and offline in major grocery stores, 5-star hotels and fine dines across India making it easily accessible to consumers. (\*as per odds ratio analysis)

# Hershey India Introduces the Jolly Rancher Two-**Much with Their Latest Campaign**



ershey India introduces a delightful new chapter to its confectionery range with the launch of Jolly Rancher Two-Much. This lollipop promises a delightful explosion of sweet and tangy flavors in every single pop, all while sparking imaginative joy. Hershey India unveils Jolly Rancher Two-Much,

the latest addition to its lollipop lineup, with a communication approach focused on fun, humour, and imagination.

Ankit Desai, Marketing Director, Hershey India said, "Jolly Rancher is a beloved global confectionery brand and has received a lot of love over the years. The brand is known for its bold fruity flavors that sparks imagination and fun. Our objective with this launch is to bring double the joy to consumers, allowing them to tap into their imagination while savouring the best of sweet and tangy flavours in a single, delicious pop. Jolly RancherTwo-Much takes lollipop indulgence to new heights, offering a memorable and playful twist to the world of confectionery."

The film opens with a young storyteller teleporting his audience to an imaginary battleground scene from 500 years ago. With imaginative flair, he skillfully weaves a captivating tale of the genesis of Jolly Rancher Two-Much. As his friend listens in awe, the narrative unfolds with a delightful mix of amusement and scepticism, culminating in shared laughter and an abundance of fun. The ad film is a testament to the brand's commitment to sparking imagination and uncontrollable, contagious laughter among its target audience.

### Coca-Cola extends partnership with the International Cricket Council (ICC) for eight years



he International Cricket Council (ICC) and Coca-Cola are thrilled to announce an eight-year global partnership encompassing ICC World events across all three formats, up until the end of 2031.

The official signing ceremony which took place at ICC's Headquarters marked a historic milestone for the partnership and demonstrated Coca-Cola's commitment to sports. This eight-year partnership as a Global Partner of the ICC, confirmed the collaboration as one of the longest-ever associations formed by the ICC with a single brand, spanning a total timeline of 13 years (2019 -2031).

The relationship will see The Coca-Cola Company's brands becoming exclusive non-alcoholic beverage partners. The agreement includes all men's and women's events at the pinnacle of the sport including the ICC Cricket World Cups, ICC T20 World Cups, and ICC Champions Trophies through to the end of 2031. During the course of the partnership,

there will be both a major international men's and women's event every year as well as a World Test Championship Final every two years.

ICC Chief Commercial Officer, Anurag Dahiya said, "I am thrilled to welcome back The Coca-Cola Company as an ICC Global Partner as we enter a landmark eight-year partnership, which unites one of the world's leading brands with the second largest sport in the world. This long-term collaboration ushers in a new commercial era, filled with exciting prospects for the sport. With the Men's T20 World Cup in the USA and West Indies, and the Women's edition in Bangladesh just around the corner, we're poised for unprecedented global growth and engagement. This partnership not only celebrates our sport's expansion but also promises innovative opportunities to enhance our fans' experience worldwide."

Bradford Ross, VP Global Sports and Entertainment Marketing & Partnerships at The Coca-Cola Company, stated, "In alignment with our rich history of global sports partnerships, the collaboration with ICC reinforces our commitment to refreshing sports fans and elevating their entertainment experiences. Sports holds immense power to unite people, and this partnership provides us with a unique opportunity to blend our brand affinity with the fervor for the world's cricketing game. We endeavor to continue to delight consumers with our diverse portfolio and create unique experiences for fans."

During the recent ICC Men's Cricket World Cup India 2023, Thums Up and Limca Sportz were the exclusive beverage and sports drink partners, activating a host of online and offline fan engagement activations. Additionally, Sprite took center stage with its captivating 'Thand rakh' campaign, aimed at elevating and sustaining the enthusiasm of cricket fans throughout the biggest World Cup ever.

Coca-Cola has been globally committed to supporting local sporting events and organizations around the world. The Coca-Cola Company has an eight-decade-long association with the Olympics. Moreover, for over four decades, it has been associated with the FIFA, T20 World Cup, and using the power of sports to bring people together and transform lives. The recent association of ThumsUp with the Olympics and Paralympics in India is a testimony to the Company's belief in sports and its enduring journey towards making a refreshing difference.



# **7UP® Onboards Ranbir Kapoor as the Newest** brand Ambassador of super duper refreshment in India

UP®, a beverage brand renowned for its refreshing and effervescent appeal, onboards Bollywood Megastar, Ranbir Kapoor, as the distinguished new face of the brand. This collaboration is poised to bring together the refreshing spirit of 7UP® and the charismatic charm of Ranbir Kapoor - creating a perfect synergy that is set to unfold in the summer of 2024. Ranbir Kapoor along with 7UP®, will be seen further elevating the brand's new 'Super Duper Refresher' positioning in India.

Ranbir Kapoor's association with 7UP® is yet another step by the brand towards creating a refreshing narrative that resonates with the audiences across the country. The collaboration is aimed at further deepening brand love and connect and set the stage for a super duper refreshing summer with 7UP® in India.

Shailja Joshi, Category Lead, Cola & Flavours, PepsiCo India, said, "7UP has long been a driving force of refreshment in India, enchanting consumers with



its quirky narratives and iconic TVCs. The Super Duper Refresher positioning, introduced earlier this year, has resonated with consumers nationwide, uplifting spirits and setting a new standard for refreshing experiences. As we culminate this remarkable year, it gives us immense pleasure to unveil Ranbir Kapoor as the newest addition to the 7UP family. His magnetic charm and widespread appeal perfectly align with the ethos of 7UP. and we cannot wait to create magic on-screen together in the upcoming summer season."

Bollywood megastar Ranbir Kapoor shared his excitement for the association. "I am absolutely thrilled to join the 7UP family. There is a certain vibe to 7UP as a brand especially the positioning of super-duper refresher as this is actually something I personally relate to. A collaboration as exciting as this is a great way to start the new year, and I can't wait for my fans to see me in an all-new avatar."

Ranbir joins Rashmika Mandanna and Anirudh Ravichander in the star-studded line-up of 7UP's ambassadors in India and will feature in 7UP®'s new Super Duper Refresher TVC that is set to take over traditional and digital platforms across the country soon.

# Innovation meets delight with The Brooklyn Creamery's new Mini Ice Cream Protein Bars, the first of their kind in India!



ntroducing a delightful revolution in health-conscious treats, The Brooklyn Creamery is thrilled to unveil India's first stickless ice cream bars that are better for you! Our Mini Ice Cream Protein Bars are a fusion of nutrition and taste, breaking away from the norm of

traditional protein bars. Experience the perfect balance of health and indulgence with our three irresistible flavors: Chocolate Peanut Caramel, Chocolate Hazelnut, and Cookies & Cream. Each mini bar is a guilt-free delight, with just 125 calories, 5g of protein, and

absolutely No Added sugar. Packaged conveniently in sets of four and priced at just Rs.499, these treats are now available for hassle-free home delivery through Swiggy and Zomato.

Romil Ratra, CEO at The Brooklyn Creamery, shares, "The launch of our Mini Ice Cream Protein Bars perfectly aligns with The Brooklyn Creamery's mission to Treat You Better, all while maintaining the exceptional taste you love." Indulge in a healthier treat that doesn't compromise on flavor! All while you #FlexYourSweetTooth



# ANUTEC - INTERNATIONAL FOODTEC INDIA BECOMES ANUGA FOODTEC INDIA!



India's Global Gateway To Cutting-Edge Technology For the Food & Beverage Industry

Highlights of 2023 edition



22,447+
Trade Visitors



500+ Exhibitors



130+
International
Exhibitors



25,524 m<sup>2</sup> Exhibition Space



43+ Country Representation

Contact Us:

For Sales Inquiries

Ayesha Salve M. +91 98203 71460 E. a.salve@koelnmesse-india.com For Marketing & Alliances

Priya Datar M. +91 98670 04675 E. priya.datar@koelnmesse-india.com Scan to Book Your Space

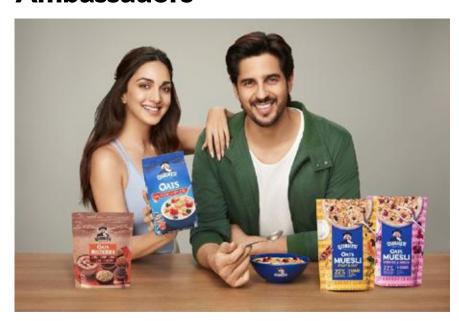


View 2023 Post Show Report





# **Quaker Welcomes Celebrity Power Duo** Kiara Advani and Sidharth Malhotra as Brand **Ambassadors**



uaker, a trusted name and pioneer in the oats segment, proudly announces the addition of celebrity power couple, Kiara Advani and Sidharth Malhotra, as its newest brand ambassadors. This momentous collaboration signifies the fusion of Quaker's 145-year legacy in advocating the 'goodness of oats' worldwide with the contemporary influence and appeal of Kiara and Sidharth.

The brand has been dedicated to delivering their valued promise of bringing oats to more people in more delicious ways and has pioneered innovative ways to uphold this commitment. As a modern nutrition brand offering a diverse range of oats-based options, Quaker continues to redefine how oats are embraced. establishing them not just as a breakfast choice but as versatile ingredients for a variety of tasty and nutritious meals.

Relaying her excitement, Kiara Advani, commented, "Oats have been a constant part of my diet, a delightful addition that I truly love. They're my morning and evening essential, a wholesome choice with nutritious energy. Partnering with Quaker resonates with my belief in maintaining a balanced lifestyle without compromising on taste. I'm excited to collaborate with Quaker to highlight how oats, with their inherent goodness, effortlessly elevate everyday meals, making conscious eating both convenient and delicious." "Teaming up

with Quaker feels like the perfect match, as oats have long been my go-to to get an energized start to the day. When it comes to a speedy, wholesome meal, they are my top pick; quick to make and filled with goodness. I look forward to showcasing how these versatile oats seamlessly fit into anyone's schedule, transforming mindful eating into a delightful journey." expressed Sidharth Malhotra.

In her remarks on the announcement of Kiara and Sidharth as brand ambassadors, Sravani Babu, Associate Director and Category Lead - Quaker, PepsiCo India, said, "With Kiara Advani and Sidharth Malhotra joining the Quaker family, their vibrancy, relatability, and commitment to a balanced lifestyle complement Quaker's ethos perfectly. Kiara's vivacious energy and Sidharth's active lifestyle resonate with today's generation, making them influential advocates for a wholesome way of living. Their shared values align seamlessly with Quaker's mission, enhancing the brand's endeavour to inspire individuals to embrace oats as a delicious and beneficial dietary inclusion. Together, Kiara and Sidharth bring not only star power but also an authentic passion for wellness, making them ideal ambassadors to further champion the 'goodness of oats' message."

The new brand ambassadors will play a pivotal role in forthcoming campaigns and launches, engaging audiences in the oat-a-licious journey.

#### **HUSKY**

Break free from the mercy of fluctuating market conditions and convert to a reliable PET package

Contact Us



# **ITC Fabelle Chocolates introduces** '5 Taste Sensations

abelle Chocolates announces the introduction of '5 Taste Sensations', an assortment of five chocolate pralines, each chocolate indulgence in a distinct flavour profile - sweet, salty, bitter, sour and spicy crafted through pairing of unique flavouring ingredients with exotic Australian Macadamia nuts.

In a one-of-a-kind collaboration with the Australian Macadamia Society, and the expertise of acclaimed Australian Master Chef and TV Presenter, Andy Allen, the all-new '5 Taste Sensations' not only embodies a symphony of flavours but it transcends chocolate experience for the Indian consumer's palate. This exquisite assortment not only represents the pinnacle of fine taste but also aims to acquaint Indian consumers with the remarkable Australian Macadamia nuts. The versatility of these nuts as an ingredient offers limitless opportunities to pair with diverse Indian food and beverage products.

'Fabelle5 Taste Sensations' promises to tantalise taste buds and awaken senses in ways unexplored by conventional chocolate creations.

- Sweet: Enliven your palate with a pristine white chocolate creation, embracing the richness of milk chocolate mousse and caramelised Australian Macadamia nuts.
- Salty: Indulge in a delicate interplay of velvety milk chocolate encasing Australian Macadamia nuts, infused with French sea salt and com-



plemented with a luscious choco cheese mousse.

- Bitter: Immerse yourself in the allure of dark chocolate housing roasted Australian Macadamia, dipped in pure cocoa liquor for a decadent experience.
- Sour: Embark on a delightful journey through a fusion of fruity Ruby chocolate, roasted Australian Macadamia nuts, dark mousse and a hint of invigorating lemon conserve.
- Spicy: Ignite your taste buds with a milk chocolate shell delicately drizzled with dark chocolate, filled with Australian Macadamia infused with tantalizing spices and Ancho chilli, creating an unforgettable flavour profile.

This collection was unveiled by Aus-

tralian Master Chef Andy Allen; Mr Rohit Dogra, Chief Operating Officer - Chocolates, Coffee, Confectionery & New Category Development Foods Division, ITC Limited and Jacqui Price -General Manager Marketing, Australian Macadamia Society along with Chef Abinas Nayak - winner of the Masterchef India Season 6, Guntas Sethi - EU Food Ambassador in India and Saloni Kukreja - a homechef influencer. This collection was unveiled by Australian Master Chef Andy Allen; Mr Rohit Dogra, Chief Operating Officer - Chocolates, Coffee, Confectionery & New Category Development Foods Division, ITC Limited and Jacqui Price - General Manager Marketing, Australian Macadamia Society along with Chef Abinas Nayak - winner of the Masterchef India Season 6, Guntas Sethi - EU Food Ambassador in India and Saloni Kukreja – a homechef influencer.



# **Cornitos Unveils Crusties Featuring Corny The Chimp In New Packaging**



tep into a world of snacking sophistication with Cornitos - the beloved Made in India snack brand that has just unveiled a captivating packing to its timeless favorite Crusties. This pack comes wrapped in an innovative packaging featuring mascot - Corny the Chimp that redefines the snacking experience. Beyond the familiar taste, this packaging is a visual masterpiece, seamlessly marrying glamour. Cornitos' unwavering dedication to

innovation and functionality is vividly displayed in this visually striking packaging overhaul. The redesigned packs, reminiscent of the vibrant and enthusiastic character of Corny, are a bold symbol of the brand's commitment to delivering a visually appealing and top-quality snacking experience. This tasteful upgrade provides an attractive solution for snack enthusiasts, aligning perfectly with Cornitos' dynamic and exciting approach to snacking.

Manoj Singh, Head of Marketing at Cornitos said, "In our pursuit of excellence, we're thrilled to unveil the all-new packaging for Cornitos Crusties priced at an enticing INR 10 per pack. We've combined innovation, functionality, and glamour, ensuring that each pack is a visual delight for our consumers. As we embrace this new chapter, Corny the Chimp takes center stage, charming snack enthusiasts and adding a playful touch to our packaging that's hard to resist. To meet and exceed our consumers' expectations, we have increased the product quantity along with enhanced flavour. "

Now available at your nearest store, Cornitos Crusties in their fresh avatar invite you to indulge in a snack that goes beyond the ordinary. With each bite, savor the delight of responsible snacking and relish the joy of unwrapping a pack that's visually enchanting. Cheers to a new era of snacking - where taste and creativity take center stage!

# Sweeten your festive season with delectable delights from Epigamia

o sweeten this festive season, Drums Food International's flagship brand, Epigamia, has recently launched a new category of ready-to-eat puddings and indulgent milkshakes. The pudding comes in two classic flavours - chocolate and caramel. The milkshakes. toured as the "Ultimate Luxury Milkshake" come in 3 yummy flavours - Cookies & Cream, Belgian Chocolate and Vanilla Coffee. These new desserts offer a premium, creamy blend that prioritizes flavours without any artificial ingredients or preservatives as it caters to those who enjoy a rich dessert.

Rahul Jain, Co-Founder and CEO,



Epigamia, said, "We are enthused to introduce new flavours in the milkshake and pudding category right around the festive season. This is a time for making treasured memories and indulging in delectable delicacies. The newly introduced products are designed to elevate special occasions. Therefore, we are happy to introduce these exquisite treats that encapsulate the holiday spirit."

For this holiday season, Epigamia suggests indulging in the decadent ready-to-eat puddings as they are poised to be the star of any festive occasion. Whereas, these handy bottled Milkshakes will elevate festive moments, foster shared joy and connections among guests, and

create a delightful holiday ambiance. These indulgent treats, new readyto-eat puddings and premium bottled milkshakes for this festive season will be available at leading retail stores and online platforms across India.

# **Farmers tell the story** of 'seed to plate', this Kisan Diwas, at Simpli Namdhari's retail outlets

s a part of Simpli Namdhari's Choose Goodness campaign, farmers raised awareness on cultivating fruits and vegetables ato customers, offering them a unique perspective into how food makes its way to the table.

Simpli Namdhari's, the leading 100% vegetarian omnichannel retailer, organised a unique event at its Hebbal and Yelahanka stores to celebrate Kisan Diwas. As a part of its Choose Goodness campaign, launched to educate customers about choosing healthy food including fruits and vegetables, Simpli Namdhari's invited farmers from Bidadi to interact with customers. Farmers created awareness about the journey of food from the germination of seeds to crops bearing fruit and the myriad alleys it navigates to ensure a steady supply to the city's supermarkets. With a strong focus on spreading awareness among customers, the event aimed at having farmers tell their story as the anchors to the food security of Indian customers.

Kisan Diwas presented a distinctive opportunity for customers to engage with the farmers at Simpli Namdhari's, to gain valuable insights into the cultivation of fresh fruits and vegetables, and their importance to customer health and lifestyle. Farmers shared their best practices with customers, offering home gardening enthusiasts ideas and tricks in nurturing plants. The awareness building campaign aimed at helping increasingly health-conscious customers of where their food comes from and also create a better understanding of farmers and their central role in the seed-to-plate journey.

Farmers also helped customers understand the nuances of sowing seeds in an in-store activity where customers planted seeds at the Yelahanka and Hebbal stores. Customers were given seed bags to help foster a deeper connection between their interaction with the farmers and their personal home gardening journey.

The journey of food from seed to plate goes through multiple processes. From sowing to germination and successful yields, and the fragmented supply chains that result in fruits and vegetables being shelved in retail outlets, a lot is lost in translation. With the vision of cultivating futures that elevate the well-being of farmers, the environment, and customers, Simpli Namdhari's took the unique opportunity of Kisan Diwas to help customers connect with farmers, and spread awareness about the importance of understanding agricultural processes and its contribution to society.

#### Kisan Diwas Video Campaign

Additionally, Simpli Namdhari's launched a video campaign to educate customers about the journey farmers take in cultivating the future of India. The video juxtaposes the journey of a mother from conception to delivery along with the life of farmers, who are responsible for nourishing crops. The video aims to communicate how farmers are responsible for building India's future, much like mothers play a crucial role in creating life.



## Lavazza and Paris Baguette Collaborate on an Exquisite New Signature Coffee Blend to Brew at Home

he new Paris Baguette
Blend, crafted by Lavazza
is Rainforest Alliance
Certified and the first retail
packaged coffee offering to
be available at Paris Baguette
locations nationwide

Lavazza, a leading name in the coffee industry, and your neighborhood bakery café, Paris Baguette, are delighted to announce the expansion of their strategic partnership with the introduction of the Paris Baguette Blend. This collaboration will introduce Paris Baguette's first-ever packaged coffee available for in-café purchase and builds upon the existing successful alliance between the two brands, combining Paris Baguette's commitment to quality and Lavazza's unparalleled expertise in crafting exceptional coffee.

The Paris Baguette Blend, crafted by Lavazza, is a whole bean coffee offering that is sourced from Rainforest Alliance Certified coffee farms. Produced to support environmental sustainability, the premium Arabica Coffee blend is made with RFA certified sustainably grown, 100% Arabica beans and delivers on Lavazza and Paris Baguette's shared



promise of continually nourishing communities, spreading joy, and giving back.

"We are excited to deepen our partnership with Lavazza, a brand synonymous with excellence in the coffee industry," said Eric Galkin, Vice President and Head of Supply Chain at Paris Baguette. "This collaboration represents a natural progression of our shared commitment to quality ingredients and innovation. Our customers can now enjoy the elevated and delicious flavors of Paris Baguette and Lavazza at home with a coffee blend that harmoniously complements our diverse menu of freshly baked pastries, cakes, and more." The Paris Baguette Blend, crafted by Lavazza offers a robust, full-bodied flavor that is perfectly balanced with sweet, chocolate undertones. It is available for purchase at participating U.S. Paris Baguette locations, offering customers the opportunity to savor the delightful fusion of the bakery's signature treats with Lavazza's premium coffee.

"At Lavazza, we are proud to join forces with Paris Baguette to introduce the Paris Baguette Blend, crafted by Lavazza," shared Jonathan Lehr, Marketing Director for Lavazza North America, Inc. "This collaboration not only introduces a remarkable coffee blend to the market but also serves as a testament to our shared values and the belief that businesses can make a positive difference in the world."

For more information on Lavazza, visit www.lavazzausa.com or @lavazzausa. For more information on Paris Baguette, please visit www.parisbaguette\_usa.

# Godrej Agrovet honours Indian Farmers on Kisan Diwas with #KisanSeHumHai



n the occasion of Kisan Diwas 2023, Godrej Agrovet Limited, one of India's largest diversified agri-business, released a brand film to thank Indian farmers. The film, titled #KisanSeHumHai, is a heartfelt tribute to recognize the integral role our farmers play in feeding the nation.

Conceptualized and executed by the Corporate Brand and Communications team at Godrej Industries Limited and Associated Companies along with Creativeland Asia, the film showcases appreciation that Godrej Agrovet has towards the Indian farmers and its pledge to help uplift the farming families.

On the launch of the brand film this Kisan Diwas, Balram Singh Yadav, Managing Director, Godrej Agrovet Limited, said, "At Godrej Agrovet, we stand shoulder-to-shoulder with our farmers who ensure that our nation is well-fed.

The film is a sincere acknowledgment of the hard work and selfless nature of farmers. Being the backbone of our nation, their well-being is not just our goal, it's our foundation. Hence, on behalf of the entire team of our company, I extend our gratitude to them and salute their dedication."

Representing the collective voice of the leadership team, all of them pledged steady support to farmers in various domains.

Burjis Godrej, Executive Director emphasized the company's objective to meet farmers' needs which is the core purpose and passion of the company. Rajavelu N.K., CEO - Crop Protection

Business, highlighted how company ensures every seed sown by the farmer flourishes to make thriving nation and also uplift the farming families. Sandeep Kumar Singh - CEO, Animal Feed Business, focused on animal care, watching over livestock thereby sustaining India's protein needs. Bhupendra Suri, CEO - Godrej Jersey, the dairy business of Godrej Agrovet Limited, celebrated the spirit of dairy farmers who take care of country's nutrition while the company ensured their cattle's well-being and support for their journey to prosperity. Sougata Niyogi, CEO - Oil Palm Business, highlighted company's efforts to champion sustainable oil palm farming in the country thereby reducing India's dependency on oil palm imports and

most importantly safeguarding farmers'

Anu Joseph, Co-Founder and Creative Vice-Chairman. Creativeland Asia, said. "Godrej Agrovet wanted to express their gratitude to men and women who grow the food that's put on our table. So, we wrote an ode to farmers on Kisan Diwas. And what can be better than the team at Agrovet themselves narrating it." The Godrej Group has consistently worked directly with farmers, providing support for better returns through knowledge, superior technologies, and innovative processes. At Godrej Agrovet, the team has been at the forefront of innovation since 1991, striving to improve farm productivity and help feed our nation.

# Bisleri Ropes in Iconic Star Deepika Padukone as it's Global Brand Ambassador

isleri, India's leading mineral water brand has roped in Global Indian Icon Deepika Padukone as its firstever global brand ambassador in the new campaign Bisleri #DrinkItUp. The campaign is a fresh and never seen before take on hydration infusing excitement and fun. The ad film showcases Padukone grooving to a snappy and modern take on the iconic song 'Jhoom Jhoom Jhoom Baba' while relishing the pure refreshment of the original beverage, 'water'.

Commenting on getting onboard Deepika Padukone as the brand ambassador, Jayanti Chauhan, Vice Chairperson, Bisleri International Pvt. Ltd, said, "Bisleri is synonymous with hydration. Our new campaign Bisleri #DrinkItUp is embracing the fun and excitement of visualising hydration in an iconic style with Ms. Deepika Padukone for the first time ever. We are thrilled to have Ms Padukone as our first global brand ambassador as her work and values align with our brand philosophy. With her we are able to show our brand evolving with modern times. We are confident that everyone will love this campaign and enjoy hydrating with Bisleri."

Deepika Padukone, known for her versatility as an actor and her commitment to excellence, expressed her enthusiasm



as the global ambassador of Bisleri, "I am delighted to be associated with a brand as iconic as Bisleri. I have always believed in the importance of hydration as a key step in our commitment to a healthy lifestyle and overall wellbeing and the Bisleri #DrinkItUp campaign celebrates iust that."

Tushar Malhotra, Head of Marketing, Bisleri International Pvt. Ltd., adds, "The Bisleri #DrinkItUp campaign is a significant step to contemporize the brand, increase brand love and have exciting conversations with our consumers."

The Bisleri #DrinkItUp campaign has been shot by Nirvana Films and directed by ace director Prakash Verma while Bisleri's association with Deepika Padukone was managed by Wavemaker and GroupM ESP.

The integrated campaign will be promoted across various platforms, including television, digital, Out-of-Home media, delivery vehicles, influencer engagement, OTT platforms, and much more. Padukone will also be part of all Bisleri product packaging. Through these diverse touchpoints, we aim to offer consumers an immersive and engaging experience.

Link to the TVC: youtu.be/ki5jDm4D-MAs



# Nestlé's plant-based alternative to foie gras makes festive return

ans of plant-based foods in Belgium, Spain and The Netherlands will be able to add a treat to their festive tables this year. Nestlé's Garden Gourmet is bringing back Voie Gras, its alternative to foie gras, for a limited time only. The animal-friendly alternative was a hit during a successful seasonal launch in Spain and Switzerland last year, and Nestlé's R&D chefs and product developers have worked to further improve the recipe and taste for 2023.

Voie Gras is made using miso paste, and sea salt with a soy base. It has an authentic texture, flavor and appearance that works in all kinds of dishes - hot or cold, sweet or savory. Its versatility means you can combine it with your favorite ingredients to make many recipes - from a canape or terrine starter to a delicious sweet-savory dessert.

Marjolijn Niggebrugge, European Business Head of Plant-Based Meal Solutions at Nestlé, says: "Garden Gourmet is all about offering food where taste feels good. Voie Gras is a great-tasting seasonal option to delight consumers who continue to look for plant-based alternatives, while paying attention to the environment and animal welfare."

Voie Gras comes in a glass jar and can be found in the chilled aisle next to other



Garden Gourmet plant-based alternatives. It is developed and produced at Nestlé's R&D center in Singen, Germany, where culinary experts, product developers and scientists work on innovative products for Nestlé's food business including chilled, frozen, and shelf-stable plant-based meat alternatives

Torsten Pohl, Global Head of R&D for Nestlé's food category says, "Following a successful pilot launch last holiday season, we are excited to bring back Voie Gras. Our teams worked hard to improve the recipe, taste, and shelflife, bringing us even closer to animal-based foie gras. Additionally, through leveraging the flexibility of our R&D production lines, we are now capable of

producing it on a larger scale, enabling us to support a second seasonal launch this year."

The expertise of Nestlé's R&D teams really underpins the ability of the company to keep offering new and exciting plant-based options for Garden Gourmet as well as other brands, across product categories. Recent Garden Gourmet launches include a range of alternatives to white fish fillets and nuggets, along with new vegetable-based burgers (sweet potato and kimchi).

This demonstrates Nestlé's dedication to offering people a variety of plantbased food and beverages that complement their daily diets, and that are good for them and good for the planet.





Ajay Shetty, Founder and CEO, Salud

In an exclusive conversation with Mr. Ajay Shetty, the Founder and CEO of Salud, he discusses Salud's products and offerings, provides insights into the current Ready-to-Drink (RTD) market, analyzes the competitive landscape, and unveils Salud's unique selling propositions (USP). Mr. Shetty also highlights the crucial aspects of quality and hygiene within Salud's operations while shedding light on the company's strategic expansion plans.

Please provide a brief note on Salud and its products and offerings.

Salud Beverages is a global lifestyle brand, which is making a mark in the ready-to-drink and craft spirit's space. Known for its offerings like 'Salud Fiesta' and 'Salud Strong Cranberry,' the brand caters to various age groups. Its latest creation, the Invigorating Agave and Cranberry Gin Refresher, are joyful blends of grenadine, herbs and botanicals.

Salud is currently available in five domestic states and exported to three foreign markets. Salud is strategically expanding into 12 new Indian markets for ready-to-drink products. Its premium gin collection, Salud Cusp London Dry Gin, has earned acclaim, reflecting the brand's dedication to excellence.

Salud aims to meet the escalating demand for premium beverages in the Indian alco-Bev market. With six SKUs in the spirit-based ready-to-drink market, Salud plans to introduce three more this year. Specifically targeting tier 2 and 3 audiences in North India, the recently launched "Salud Viking," a unique mead-based drink with 15 per cent ABV, underscores the brand's commitment to quality and innovation. In addition to drinks, Salud provides a full lifestyle experience that includes merchandise, music and NFTs, demonstrating its commitment to innovation and technological advancements.

Could you tell us about the current RTD market, the competition and Salud's USP.

Salud Beverages operates within the dynamic ready-to-drink and craft spirits market, catering to a diverse customer base. The expanding market for convenient alcoholic beverages, coupled with a heightened demand for premium options, characterises the industry's current landscape. Craft and artisanal beverages are gaining widespread popularity, reflecting a consumer openness to exploring diverse flavours and styles. The rising interest in health and wellness is driving the popularity of low- and non-alcoholic alternatives, influencing consumer preferences.

In the competitive landscape where both established and emerging players vie for consumer attention, maintaining a robust brand image, ensuring product quality and adeptly navigating industry trends are essential. Salud distinguishes itself by its unwavering commitment to delivering imaginative and high-quality drinks, making its diversity of products a key differentiator.

Salud's strategic focus on meeting the discerning needs of its customer base positions the brand prominently in the ever-evolving ready-to-drink and craft spirits' market. As the industry undergoes rapid changes, Salud's dedication to innovation and customer satisfaction sets it apart, ensuring a leading presence in this dynamic market.

Could you tell us about the recent trends in Salud's segments and how its products are aligned.

In today's market, Ready-to-Drink (RTD) beverages are becoming more and more popular because of their variety, ease of use and appeal for on-the-go consumption. RTDs, which provide a wide variety of flavours and alcoholic and non-alcoholic options, are becoming more and more popular among consumers due to their busy lifestyles and growing desire for hassle-free options. The convenience of having a well-mixed, ready-to-drink beverage without having to prepare it ahead of time or add extra ingredients is a major factor contributing to RTDs' growing appeal in today's market.

India's alcoholic beverage market is expected to grow to USD 64 billion over the next five years, according to a report by the International Spirits & Wines Association of India (ISWAI). It would solidify India's position as the fifthlargest contributor to global market revenues in the near- to medium-term. According to the report, the industry still represents a substantial portion of the country's nominal GDP (INR 3.9 lakh crores, including country liquor) and is predicted to reach a market size of USD 52.4 billion in 2021.

With the advent of RTDs, the beverage industry's traditional definition of convenience has evolved. No longer restricted to basic juices or carbonated soft drinks, consumers can now enjoy a variety of sophisticated and expertly crafted beverages without sacrificing valuable time.

Please shed light on the quality and hygiene aspects.

Throughout all phases of its production, Salud Beverages is dedicated to maintaining the highest standards of quality and hygiene. The brand prioritises premium ingredients and uses strict quality control procedures throughout the entire production process. Using cutting-edge technology and running modern facilities, Salud places a high value on hygienic and clean manufacturing procedures.

The brand's dedication is also shown in the packaging, which is hygienic and meets food safety regulations. Salud does not compromise on its adherence to national and international regulatory standards. Salud's keeps an open and traceable supply chain to guarantee the quality of its ingredients. Its procedures incorporate sustainability, with an emphasis on environmentally friendly packaging.









In today's market, Ready-to-Drink (RTD) beverages are becoming more and more popular because of their variety, ease of use and appeal for on-the-go consumption. RTDs, which provide a wide variety of flavours and alcoholic and non-alcoholic options, are becoming more and more popular among consumers due to their busy lifestyles and growing desire for hassle-free options.

#### Could you tell us about Salud's expansion plans?

To effectively appeal to a wider range of consumer tastes, Salud is diversifying its product lineup by launching three stock-keeping units (SKUs) that are inspired by various spirits. The brand's objective is to solidify its position in key Indian regions, which include Karnataka, Goa, Telangana, Maharashtra, Orissa, Pondicherry, Kerala,

Punjab, Uttar Pradesh and Chandigarh. With products like Salud Cusp London Dry Gin, the premiumisation strategy fits right in with the current trend of consumers seeking out sophisticated and one-of-a-kind beverage experiences.

By putting these strategic components together, Salud Beverages sets itself up as a strong competitor in the beverage market, ready to seize new opportunities and spur further expansion.

# **Enhancing Confectioneries with Natural Hues**



n the tantalizing world of confectionery, where indulgence knows no bounds, the importance of vibrant colors cannot be overstated. From the moment a sweet treat catches your eye, to that first delightful bite, colors play a significant role in setting taste expectations and enticing consumers. This blog post explores the significance of natural hues in confectioneries and how they play a crucial role in enticing consumers and setting taste expectations.

The Sweet Seduction of Vibrant Colors Imagine a candy store, an aisle filled with candies of all shapes and sizes, each flaunting a kaleidoscope of colors. These vivid hues aren't just visually appealing, they trigger our taste buds, creating an anticipation of sweetness and flavor. Colors in confectioneries are not merely a decorative element, they are an integral part of the overall sensory experience.

#### The Significance of Natural Hues in Confectioneries

Colors in confectioneries aren't just about aesthetics, they influence our perception of taste. Bright, appetizing colors make us associate a candy with the flavor we expect. For instance, a vibrant red might suggest a cherry or strawberry flavor, while a sunny yellow hints at citrusy delights.

Today's consumers are more health-conscious than ever before, and they prefer natural ingredients. In response to this trend, confectionery manufacturers are seeking natural alternatives, including food colors. With the shift towards natural ingredients, the confectionery industry faces the challenge of finding natural food colors that are equally vibrant and safe. This is where ROHA steps in.

#### **ROHA's Natural Food Colors**

ROHA boasts decades of experience in crafting natural food colors that meet the highest industry standards. Their expertise ensures that their products are not only visually stunning but also safe for consumption. ROHA derives its natural colorants from fruits, vegetables, and plants. This commitment to using real, wholesome sources ensures that the colors are not only natural but also evoke a sense of authenticity. In an era where

consumers scrutinize product labels, ROHA's natural food colors shine. They offer clean label solutions, assuring consumers that they are making a healthy choice.

#### **Tailored Color Solutions**

Confectionery manufacturers understand the value of standing out in a competitive market. Customized color solutions allow them to create unique and memorable products. ROHA collaborates closely with food companies to understand their brand identity and product requirements. This partnership approach ensures that the colors align perfectly with the brand and product vision.

#### Stability and Consistency

Manufacturing confectioneries at scale presents challenges in maintaining color stability throughout the process. Variations in color can lead to an inconsistent product. ROHA's natural food colors are engineered to remain vibrant and consistent, even in the face of complex manufacturing processes. This ensures that the final product consistently meets consumers' expectations.

#### **Natural Food Colors for** Confectioneries

In embracing the transition to natural hues, the confectionery industry pays homage to tradition while embracing a forward-thinking approach. Our expertise in natural food colors positions us at the forefront of this transformation. By choosing our natural food colors, confectionery manufacturers can enrich their products with visually appealing, safe, and authentic hues, meeting the discerning tastes of today's consumers.

www.roha.com







Explore our food trainings

# Are your food products in line with global food safety best practices?

#### **BSI Training Academy**

It is one of the world's leading providers of food safety, quality, and sustainability training.

- Online virtual training
- In-house training
- On-demand training
- Classroom training



Join our **public** and **in-house** trainings

FSSC 22000

BRCGS Food Safety (Issue 9 - New Jaunch)

ISO 22000

HACCP + GMP

Sustainability

Information security and many more



#### About us

BSI is a Royal Chatered company with heritage of more than 120 years. We enable people and organizations to perform better and share knowledge, innovation and best practice to make excellence a habit - all over the world, every day.









# **Functional Food Ingredients: Sources, Benefits,** and Consumer Trends



A functional ingredient is a bioactive compound that can be used in the manufacture of functional food products. These bioactive compounds can be obtained from a variety of sources such as primary produce, marine sources, microorganisms and inorganic raw materials. Functional ingredients may also be derived from food processing waste providing additional economic benefits to food businesses. Many of these functional ingredients can also be used for the preparation of nutraceuticals. Separation, purification and concentration techniques are often used to recover these compounds. The methods selected are dependent on the nature and economic value of the target compound(s) and the chemical and/or biological structure from which it was sourced. Traditional techniques that have been used include solvent and waterbased extraction, followed by filtration, and then distillation, evaporation, crystallisation or precipitation. However, techniques such as supercritical CO<sub>2</sub> fluid extraction, low-polarity-based extraction, membrane-based and molecular distillation are being used more frequently. These alternative techniques have several advantages in that they can be more efficient and more cost effective. In addition, there is also increasing concern regarding the use of solvents that, despite being food grade, can leave chemical residues. Considering the health conscience target market, these cleaner technologies are considered attractive - particularly as they reduce the use of solvents.

unctional food ingredients have emerged as a pivotal component in the quest for healthier and more nutritionally enriched dietary options. These ingredients offer more than just basic nutrition; they provide specific

health benefits beyond their traditional roles. In this article, we will explore the sources and benefits of functional food ingredients, examine consumer trends, and discuss the future growth and challenges associated with this burgeoning industry.

Veganism has shown remarkable growth over the last couple of years. It is further projected to increase, and consumer demand is projected to shift to plant-based meat and dairy products. The current outbreak of COVID-19 and negative associations with animal-based foods will further shift the consumers to plant-based ingredients. Since a large number of protein ingredients have entered the market for food products, it is further projected to increase. Due to COVID-19, sustainability, low-carbon footprint, and positive health effects offered by plant-based ingredients such as pea protein, pea starch, antioxidants from Brussel sprouts, polyphenols from fig and omega-3, and other functional ingredients from hemp will enable plant-based ingredients to take further precedence over animal-based food. This will further drive revenues and investments in plant-sourced ingredients.

#### **Sources of Functional Food** Ingredients:

Functional food ingredients are derived from various natural sources, including fruits, vegetables, whole grains, herbs, and even certain animal products. The following are some key

#### sources of functional food ingredients:

- Fruits and Vegetables: Many fruits and vegetables contain bioactive compounds such as antioxidants, polyphenols, and phytochemicals. These compounds contribute to the potential health benefits of functional foods.
- Whole Grains: Whole grains, such as oats, quinoa, and brown rice, are rich in dietary fiber, vitamins, and minerals. They can enhance the nutritional profile of functional foods, promoting digestive health and providing sustained energy.
- **Probiotics and Prebiotics: Derived** from fermented foods, probiotics are beneficial bacteria that promote gut health. Prebiotics, on the other hand, are non-digestible fibers that support the growth of these beneficial bacteria. Both are vital functional ingredients for digestive well-being.
- Omega-3 Fatty Acids: Sourced from fatty fish like salmon, flaxseeds, and walnuts, omega-3 fatty acids are known for their anti-inflammatory properties and are commonly included in functional foods to support heart and brain health.

#### Benefits of Functional Food Ingredients:

The incorporation of functional food ingredients into the diet can yield a multitude of health benefits. Some common advantages include:

- Improved Digestive Health: Probiotics and prebiotics promote a healthy balance of gut bacteria, aiding digestion and nutrient absorption.
- Heart Health: Functional ingredients like omega-3 fatty acids and soluble fiber contribute to lower cholesterol levels and improved cardiovascular health.
- Antioxidant Protection: Many fruits and vegetables contain antioxidants that help neutralize free radicals, reducing the risk of chronic diseases and supporting overall well-being.

The global demand for fortified food is expanding at a robust pace. Functional food ingredients such as vitamins, minerals, antioxidants, hydrocolloids, prebiotics, amino acids, plant extracts, and carotenoids are the key ingredients of fortified food. The health-conscious population is rapidly expanding in emerging markets, which will drive the demand for the fortification of food.

Weight Management: Functional foods with high fiber content can contribute to satiety, aiding in weight management and appetite control.

#### **Consumer Trends:**

The global demand for fortified food is expanding at a robust pace. Functional food ingredients such as vitamins, minerals, antioxidants, hydrocolloids, prebiotics, amino acids, plant extracts, and carotenoids are the key ingredients of fortified food. The health-conscious population is rapidly expanding in emerging markets, which will drive the demand for the fortification of food. The nutritional consumption differences across regions contribute greatly to the apparent differences in the health of populations across the countries. Various factors such as increasing instances of chronic diseases and micronutrient deficiencies, growth of the middle class in emerging economies, new government fortification programs, growth of the world's older population in regions such as Europe, and growing interest in health and wellness, owing to COVID-19, is expected to drive the sales of fortified foods, further driving the demand for functional food ingredients market.

Consumers today are increasingly prioritizing health and wellness, driving the demand for functional foods. Key trends in consumer behavior include:

- Focus on Natural Ingredients: Consumers prefer functional foods with minimally processed, natural ingredients, avoiding artificial additives and preservatives.
- Personalized Nutrition: There is a growing interest in personalized nutrition, with consumers seeking products tailored to their specific health needs, preferences, and dietary restrictions.
- Transparency and Traceability:

Consumers are more conscientious about the origins of their food. Brands that offer transparency in ingredient sourcing and production processes are gaining favor.

#### **Future Growth and Challenges:**

The future of the functional food industry looks promising, driven by increasing awareness of health and wellness. However, several challenges may shape the trajectory of this industry:

- Regulatory Hurdles: The regulatory landscape for functional foods is evolving. Companies must navigate stringent regulations to ensure compliance and build consumer trust.
- **Educational Barriers: Overcoming** consumer skepticism and ensuring a clear understanding of the benefits of functional ingredients remains a challenge. Education campaigns may be crucial to building awareness and fostering consumer confidence.
- Cost Considerations: The production and incorporation of high-quality functional ingredients can be expensive, potentially leading to higher product costs. Striking a balance between affordability and quality is essential.

Functional food ingredients are at the forefront of the shift towards healthier dietary choices. As consumers increasingly seek products that provide not just sustenance but also tangible health benefits, the functional food industry is poised for significant growth. Overcoming challenges such as regulatory complexities and consumer education will be key to unlocking the full potential of this evolving sector. As the demand for functional foods continues to rise, the industry must innovate, adapt, and collaborate to meet the diverse needs of an ever-discerning consumer base.

Team Editorial

# Loryma launches plant-based egg substitute for baked goods

New compound replaces the features of egg and milk in vegan dough



ngredients specialist Loryma is expanding its wheat-based portfolio with a functional mix that is free of animal ingredients, as well as artificial colourings, flavourings and preservatives. Vegan, wheat-based Lory® Stab perfectly replicates the technological properties of egg or milk in bakery products, resulting in a convincing visual appearance and au-

thentic mouthfeel. Products made with this base ingredient, such as muffins, sponge cakes, cake bases or lava cakes, have the typical airy texture, light crumb and consistent pore structure.

Combined with other ingredients such as flour, sugar, oil, water and flavourings, the concentrate can be used to make

all types of vegan dough. The result is a viscous mass into which ingredients such as chocolate chunks or fruit can be easily incorporated. The wheatbased mix is neutral in smell and taste, which allows for individual recipes and a wide range of applications, including American muffins, sponge cakes, cake bases, lava and cupcakes, all of which perfectly meet the growing demand for plant-based bakery products. The stabilising and raising components create a loose and elastic crumb structure, which results in the characteristic mushroom-shaped bulge in muffins, for example.

Norbert Klein, Head of Research and Development at Loryma, says: "The light, airy texture and authentic mouthfeel of the finished baked goods perfectly imitate the sensory properties of non-vegan products. Thanks to the balanced cost-benefit ratio, Lory® Stab is an economical and efficient solution for manufacturers who want to broaden their market appeal."

# Oterra and Ecoflora Cares join forces to build a world of responsibly sourced naturally colored foods in Blues and beyond

he Food and Drug Administration just approved the use of Jagua (genipin-glycine) Blue (also known as Jagua or Huito Blue), releasing a wealth of natural color opportunities in blue, green, purple and brown. The pigment is derived from the jagua fruit (Genipa americana) and is responsibly sourced in Colombia, ethically developing small farmers and indigenous communities as suppliers.

The US Food and Drug Administration's (FDA) announcement approving Jagua Blue as a food colorant for a wide range of applications marks a significant achievement for Ecoflora Cares, a Certified B Company. They developed and patented the technology and the production process as well as petitioned for the product's approval. Jagua Blue, a color derived from the fruit of the jagua tree (also known as huito), offers a safe and vibrant, naturally sourced blue color which can be blended with other natural colors to create vivid and stable green, purple and brown shades. This is the first acid-stable natural blue to be approved and is the only Jagua blue that has been reviewed and deemed safe by FDA.

For Ecoflora Cares' co-founder, and Executive Chair Nicolás Cock Duque this is an exciting milestone for the company. "The development of Jagua Blue by Ecoflora Cares has made our dream of coloring the world with our natural blue tangible. We are proud to deliver the spirit of tropical forests while raising awareness to millions of consumers around the world about the importance of its protection and regeneration." Oterra, the world's largest provider of natural colors, will leverage its own scientific and application expertise in an exclusive collaboration with Ecoflora



Cares to introduce and grow this newly approved color additive within the US food and beverages market.

Oterra CEO Mads Winther Dehlsen shares the excitement. "This partnership is an example of our Together towards Natural sustainability strategy put into action. It's answering the food and beverage market's longstanding need for a robust natural blue. Ecoflora Cares' expertise is a perfect match for Oterra's and together we're excited about this unique natural blue that meets the needs of our customers, their consumers and the planet."

Ecoflora Cares has developed sustainable supply chain solutions for this Colombian grown fruit. A Certified B Company and a member of the Union for Ethical Biotrade, Ecoflora Cares works with small farmers and indigenous communities using a positive impact business model. The jagua trees are under agroforestry and silvopastoral plantations as a nature-based solution benefitting society, nature, and climate. In its supplier development program, Ecoflora Cares has provided technical accompaniment, family mentoring and supplier knowledge to the small farmers and indigenous communities who cultivate the jagua.

Utilizing this sustainable and ethically sourced raw material, Oterra and Ecoflora Cares offer food and beverage manufacturers the opportunity to completely revolutionize the use of natural blue colors in their products without having to compromise on product quality, stability, or technical performance. For Oterra's Chief Innovation Office, Luc Ganivet, this is a truly exciting development that will greatly benefit Food and Beverage manufacturers. "Given its high color concentration and its robustness towards heat, light and acidity, Jagua Blue is an easy to use, cost-effective natural blue. It means manufacturers can now create natural shades of green and purple that were previously impossible to achieve without using artificial colors."

For more information on Jagua (Genipin-Glycine) Blue color additive options for FDA-approved applications in the USA such as dairy and non-dairy drinks, yogurt, ice cream, tortilla snacks, ready-to-eat cereal, and candy, visit oterra.com



# From Oven to Occasion: Godrej Food Trends Report unwraps the pastry and cake trends in India



s Christmas and new year festivities take over, Godrej Food Trends Report which explores India's culinary scene, has emphasized greatly on the lasting love for baked treats. Cakes and pastries, once deemed occasional luxuries, are now seamlessly blending into festive traditions, showcasing the nation's diverse culinary choices. The ongoing fondness for baked delights holds its special place in Indian hearts as they are now evolving into cherished indulgences. Thus, skilled bakers' creative contributions have played a pivotal role in transforming this sweet category over time.

One noteworthy trend identified by Godrej Food Trends Report is the growing enthusiasm among home consumers to experiment with pastries and cakes in their own kitchens. This shift reflects a desire for hands-on culinary experiences and a willingness to embrace global offerings. As a result, the variety of pastries being crafted at

home has expanded, with Indian kitchens now featuring an exciting array of both traditional and international flavors.

Godrej Food Trends Report 2023 mentions some of the Pastry and Cakes Trends in India

- Southeast Asian Bakes Approximately 88% of experts affirm that bakeries have become an essential component of culinary ecosystems. Specialized communities of bakers have emerged, including the kandurs in Kashmir, nanbais in Lucknow, Hyderabad, and Delhi, paders in Goa, and paowallas, Parsi, and Irani bakers in Mumbai and Gujarat. Together, these communities contribute to a diverse array of baked goods, encompassing local variations of cakes, pastries, and more.
- Turkish / Middle Eastern Baked items - 88% of the panelists agree that Middle Eastern-inspired de-

lights such as Baklava and Kunefe are gaining popularity. However, for adventurous consumers who enjoy exploring intricate flavor profiles that combine sweetness with spice, umami, and even fermented notes, participating in baking workshops, indulging in mithai walks, and savoring dessert degustation menus provide exciting opportunities for engagement.

European Pastry and Dessert -75% of experts believe that the baking industry should brace the extended and prosperous phase of rapid growth and transformation. There will be more innovation and evolution of established offerings from European and American baking traditions.

Rushina Munshaw Ghildiyal, Managing Director, of Perfect Bite Consulting and Curating Editor of the annual Godrej Foods Trends Report says, "In India, on every special occasion or festival, individuals partake in savoring cultural sweet delicacies. With the arrival of Christmas celebrations, we are observing a delightful amalgamation of traditional and global influences in the pastry and cake landscape. Post covid, especially, home chefs are displaying their creativity and embracing a wide range of flavors into their baked creations. Godrej Food Trends Report indicates that the tradition of enjoying delectable cakes and pastries during the festive season is now stronger than ever."

In the spirit of this festive season, Godrej Food Trends Report encourages all food enthusiasts to explore the joy of baking and savor the delightful variety of pastries and cakes available. Whether it's a classic Christmas fruitcake or an innovative fusion creation, the evolving trends in India's pastry and cake scene promise to make this holiday season extra special.

Godrej Food Trends Report 2023 is available for download at www.vikhrolicucina.com



www.anuga-india.com Bombay Exhibition Centre MUMBAI, 28-30 August 2024



### ENGAGE, EXPERIENCE, EVOLVE

India - The Land Full of Business Opportunities for Food & Beverage Industry





Key Highlights of 2023 Edition













Contact Us:

For Sales Inquiries

Vaishali Thakker
M. +91 99871 23821
E. v.thakker@koelnmesse-india.com

For Marketing & Alliances

Priya Datar M. +91 98670 04675 E. priya.datar@koelnmesse-india.com Scan to Book Your Space



View 2023 Post Show Report







## **Navigating the Tides of Change: Adapting to Shifts in Customer and Industry Behavior**

n the ever-evolving landscape of business, the winds of change are blowing stronger than ever. The dynamics of customer behavior and industry practices are undergoing a profound transformation, reshaping the way businesses operate and interact with their audiences. Let's delve into the key currents steering this transformative journey.



The relentless march of technology has ushered in a new era of digital transformation. Customers, armed with smartphones and high-speed internet. have redefined convenience. From online shopping to virtual communication, businesses are adapting or risk being left adrift. Information, on the other hand is power, and today's consumers wield it skillfully empowered by easy access to information, customers are actively shaping their own narratives. The era of passive consumption is giving way to a more engaged, informed, and discerning clientele.

The rise of e-commerce has sent seismic shocks through traditional retail landscapes. The convenience of a click-anddeliver economy has not only changed how consumers shop but has also prompted businesses to reimagine their storefronts and customer experiences.

Beyond mere transactions, modern consumers are increasingly choosing brands that resonate with their values. Sustainability, ethics, and social responsibility are no longer mere buzzwords but pivotal factors influencing purchasing decisions.

Transparency is the new currency of trust. Adding to this, Chief Executive of Ginni Filaments said, "Sustainable purchasing has become a fundamental aspect of modern consumers' behavior. With increasing awareness about product sourcing and its environmental consequences, consumers now actively research, read labels, and more to ensure their choices have minimal, if any, negative impact on the environment. As industry leaders, we consider it our duty to provide customers with options that not only meet their needs but also align with their values. Consequently, we employ Good Manufacturing Practices and create innovative products using recycled materials to consistently reduce our carbon footprint and waste generation. For instance, we manufacture wipes using recycled polyester fibres, giving discarded materials an extended life in the ecosystem. Additionally, we offer compostable and biodegradable wipes that leave no trace in the environment.".

In an environment of constant flux, the ability to pivot swiftly has become a cornerstone of success. Agile business models that can adapt to changing circumstances are proving to be more resilient and responsive to market needs.

Just as the wind propels a ship forward, industry trends can drive one's business towards success. Staying vigilant for technological advancements, market shifts, and emerging patterns is crucial for the successful business. These trends are the winds that fills sails, propelling one forward. On the subject,

Ms. Vandana Tandan, Head of Markets-India & Bangladesh, SIG said, "The increasing awareness among consumers regarding sustainability has inspired a growing number of companies to develop innovative, dependable, and eco-friendly packaging solutions. At SIG, being an industry leader, we have ensured both our manufacturing process and final product are ideal for our customers

and the environment. We are adopting energy-efficient manufacturing processes to remove more carbon than we are emitting, ensuring an overall reduction in the industry's carbon footprint. We are also working on aluminium-free packaging, making it a more sustainable alternative. As an industry leader, we are also actively working to reduce food waste through measures such as portion control and optimized package sizes due to our flexibility advantage, another crucial aspect contributing to sustainability."

In the sea of change, success is not just about reaching the destination—it's about embracing the journey. The challenges and uncertainties are part of the adventure. Celebrate small victories, learn from setbacks, and view change as an opportunity for growth. A positive mindset can transform challenges into stepping stones toward success.

In navigating these turbulent waters, businesses must not only acknowledge these shifts but actively embrace and harness them. The ability to adapt, innovate, and stay attuned to the evolving needs and expectations of customers is the compass that will guide companies through this era of transformative change. Those that set sail with a keen understanding of the currents will find themselves not only surviving but thriving in the new normal.

## Optimize quality control with next-generation, real-time industrial liquid process monitoring technology



Collo Analyzer monitors total liquid quality in real-time with EMF sensors, Machine Learning, and liquid fingerprints.

innish deep tech company ColloidTek, has developed Collo Analyzer, a new method for realtime liquid process quality monitoring, offering significant benefits for the food and beverage manufacturing industry. Based on EMF sensors and machine learning, the technology detects various contaminants and identifies potential risks in liquid processing with a single real-time measurement and instant, inline analysis. This novel solution has the potential to revolutionize liquid quality control by providing food and beverage manufacturers with comprehensive information about the quality of their products at any stage of production, ensuring the safety, quality and correct taste of the end-product.

In liquid processing, for example, in the dairy industry, efficient quality control is critical. It is essential to confirm that there are no contaminants in milk batches, such as the remains of CIP

chemicals. Traditionally, collecting samples for laboratory analysis has been time-consuming, leading to delays and potential product quality risks. In addition to the logistics of transporting the sample to the laboratory, manufacturers can expect to wait days for results. Meanwhile, the milk has often already been processed into end-products.

However, if a sample's testing finds the batch to be potentially hazardous, the implications may be huge. Product recalls incur significant costs, from logistics and disposal to legal fees, fines, and refunds. Further to the immediate financial costs, the potential long-term consequences caused by damaged reputation and loss of consumer trust could be capable of crippling even a larger company. This is especially true in today's digital age, where hazardous products can go viral in a matter of hours and cause lasting reputation damage, impacting sales and profits.

"It takes years to build a great reputation, but only a day to ruin it," says Julia Vieira, Sales Manager at Collo. "Discarding a batch even partially for quality issues costs financially, but it is much worse if a poor batch slips out because you didn't catch a problem. Recalling products is expensive and harmful to your reputation - especially if the mistake can lead to health concerns for the consumer. Gaining real-time eyesight into your process, across your production from raw material to finished product, can make a real difference."

Even after addressing the quality control issues, companies may struggle to regain consumer trust and restore their brand image. Preventing such mistakes through rigorous quality control, adherence to regulations, and proactive risk management is essential to safeguard a company's financial stability and reputation.

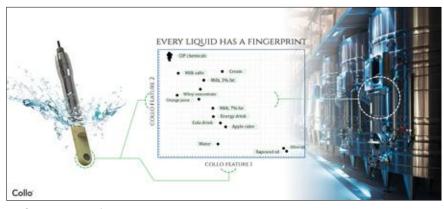
#### Real-time quality control for any liquid product

With the rise of advanced technologies, comprehensive quality control is easier and cheaper to achieve than ever before. Collo Liquid Analyzer is an efficient and reliable method to ensure companies meet their quality and safety requirements. Unlike traditional laboratory testing, the Collo Analyzer offers instant, in-line analysis of the quality of the liquid.

"Our solution fingerprints liquids and can detect nearly any change in any liquid," explains Matti Järveläinen, CEO of Collo. "Collo's strength is that it can detect various contaminants and risks from the food or beverage product with one single measurement. These include CIP chemical residues in the product, foreign objects like metal particles, cross-contamination, and even product taste or structure changes."

Traditionally, quality control in the food and beverage industry is based on collecting samples and sending them to the laboratory, where the results arrive after several days or even weeks. In some cases, there aren't even any tests available for detecting certain risks. With Collo, a test takes two seconds. The measurement can be done at the site manually by dipping the sensor into the product, or in-line straight from the pipe. There is no need to send samples anywhere; the results are instantly available. This is made possible by EMF technology and the advanced algorithms that power the analyzer, which is the only one of its kind in the food and beverage industry.

"The 'fingerprint' of a liquid is compared to what the client requires. If something is off, they know



Collo creates a 'liquid fingerprint' of the measured liquid based on its dielectric properties. Each liquid fingerprint is unique, and so Collo can detect not just different products, but even small changes in the measured liquid. With continuous measurement and instant results, Collo can know and control the quality of the process liquid in real-time around the clock.

immediately and can take appropriate action. This reduces hazardous mistakes and poor-quality batches," says Matti Järveläinen. "Our end goal is to give organizations the costeffective tool they need to maintain strict quality control over their liquid processes."

#### Simplified quality control for larger product portfolios

Due to increased consumer demand, companies must consistently monitor the quality of higher production volumes and larger plant-based product portfolios. While a diverse portfolio can offer market advantages. it also introduces a host of complexities and challenges for quality control. Larger product portfolios lead to increased numbers of quality control tests, and each product variant may have unique specifications, ingredients, and quality standards.

Most currently available systems can only analyze liquids with specific viscosity, transparency, or other characteristics. This often means several different analyzers and sensors are needed at each testing point, which leads to a complex multi-sensor system that is laborious to maintain and still doesn't arm manufacturers with enough information for comprehensive quality control. As Collo Analyzer can be used with thick liquids, like honey, as well as transparent or non-conductive liquids, such as vodka or milk protein concentrate, only one device is required to measure the quality of all the liquids in the production.

The solution can simultaneously detect multiple risks or deviations, simplifying complex quality control processes by replacing other tests and covering aspects of safety and quality that no other analyzer can manage. This novel technology not only accelerates the quality control process but also empowers manufacturers to take immediate corrective actions when deviations are detected, reducing the risk of costly recalls and ensuring that every batch of products meets the highest quality and safety standards.



During a privileged discussion with Dr. Ashish Agarwal, Co-Founder & CTO of WRMS, he elaborates on the company's mission and goals, sheds light on the current challenges faced by the Indian Dairy sector, and discusses the technological advancements made in the industry.

Describe your company, its mission and goal?

Gurugram-based WRMS (Weather Risk Management Services) is a climate and dairy risk management company founded in 2004. The company endeavours to empower farmers to overcome the most daunting agrarian challenges by leveraging data, technology, and financial innovation. WRMS provides a range of tech-driven input advisory services to farmers to enable higher yields, backing it with guaranteed purchase of their produce. The company is working upon breakthroughs that can make the agriculture and dairy sector more robust. Ingen Technologies Private Limited, a fully owned subsidiary of WRMS, manufactures, supplies, installs and operates advanced IoTs like Automatic Weather Stations (AWS), Automatic Rain Gauge Systems (ARG), Soil Moisture Sensors, Drones, Automatic Pest Sensors, Secu-Lock, SecuTrak, and more.

WRMS has worked with esteemed clients like PepsiCo, Safal, ITC, Mother Dairy, etc., along with government and govt-run bodies like NCFC, Bihar Government, Karnataka State Natural Disaster Monitoring Centre, Andhra **Pradesh State Development Planning** Society, and more. Apart from this, it has also partnered time and again with multilateral agencies such as Work Bank Group, UNCDF, and insurance bodies like ICICI Lombard, HDFC, Ergo, to name a few.

With a team of 500+ multi-disciplinary experts across Agricultural Science, Data Science, Meteorology, Actuarial Science and Information Technology, the company is on a mission to revolutionize the farming sector by allowing farmers to dive into the world of latest technology without worrying about the risks involved as the company offers them 360 degree income protection.

> What do you think are the challenges the Indian Dairy sector is witnessing

presently?

India is the world's largest milk producer, contributing a whopping 19 percent of the global production. According to the Animal Husbandry Statistics Division, Government of India, the dairy sector churned over 198 million tones of milk in 2019-20. Even though India is the largest producer of milk in the world, the industry itself is largely unorganized, with only 18-20 percent of the total milk produced being channelized in an organized manner.

The livestock industry contributes almost 4 percent to India's GDP, with the dairy sector making up the majority. It is thus surprising that this sector is largely unorganized. As a growing economy, India has seen rapid development in recent years and the dairy industry, in particular, needs to be brought into focus. The sector as it is at present faces several challenges such as unavailability of nutritious fodder, poor milk storage facilities, pilferage & adulteration during transit, and lack of education to name a few. As per WHO, 87% of citizens will be suffering from serious diseases like cancer by the year 2025 if adulteration of milk and milk products is not checked immediately. Most of the adulteration happens during milk transportation from MCC to the Milk Processing Plant because of the inferior existing mechanical lock seals and GSM-based locks.

Thus, to deal with various challenges faced by the Dairy sector, Ingen Technologies, a fully owned subsidiary of WRMS, launched SecuLock, a stateof-the-art indigenously manufactured smart e-lock developed for live monitoring and prevention of theft & pilferage, especially in milk tankers. SecuLock is a foolproof solution to manage theft and pilferage that amounts to a huge loss every year due to the unavailability of potential preventive measures or devices. SecuLock has the potential to bring revolutionary changes in the dairy industry and helps dairy partners procure and distribute dairy products the most healthily and securely as possible.

How do you see technological advancements made in the Indian Dairy sector?

In the past few years, the Indian dairy industry has received a tremendous boost through technology-driven products, services and solutions. Nowadays, farmers no longer spend hours hand milking each cow one by one, thanks to the advent of the relevant technologies, which have drastically changed the functioning



of Indian farms and dairies. Over the last few decades, such advancements in technology have allowed dairy farmers to improve the everyday quality of life of their herds as well.

According to the Ministry of Food Processing Industries, the capacity created by private dairies in the last 20 years is more than the capacity set up by the cooperatives in over 30 years. It's all because of the advanced high-tech setups in private farms. This indicates that development is proportionate to tech adoption.

There has been tremendous growth through technology in the dairy sector, and with modern technological tools, there is more scope for development in the future. Even though the adoption of new technology and digitalization has been slow in the sector; it is gradually permeating the sector, resulting in its growth. With Dairytech and Agritech start-ups entering the space and bridging the gaps in cattle management and the supply chain; the scenario is changing. The future of the Indian dairy sector appears bright; as digitalization is expected to usher in a new era of growth.

#### What is SecuLock and what are the USPs of SecuLock?

SecuLock is a smart tamper-proof smart E-Lock developed by Ingen Technologies for live monitoring and prevention of theft & pilferage, especially in milk tankers. This Smart-E Lock system includes an electronic door-locking device, a central server, a mobile application, and control devices. The pre-installed tracking device captures and transmits location data to a central server for en-route theft and pilferage prevention and monitoring. The memory stores location data and locking/unlocking data. SecuLock and all its components are not physically accessible and thus, can't be tampered with. Light sensors are also installed on the device to detect if the lock was activated during the dispatch of the vehicle. The device can only be operated through an OTP-enabled login, thus, only a designated officer can access the lock. It also offers real-time tracking of vehicles through a GPS tracking system

along with alerts to identify any route deviation and unauthorized stoppage during the journey.

Please throw light on how adulteration and pilferage of the dairy product can be prevented through SecuLock?

According to a report by the Indian Express, almost 70% of milk sold in India is "adulterated," as it does not match the standards laid down by the Food Safety and Standards Authority of India (FS-SAI). Normally the adulteration is done either for financial gain or lack of proper hygienic conditions of processing, storage, transportation, and marketing. Amongst all, most of the adulteration happens when the milk is in transit.

SecuLock emerges as a robust solution to combat the alarming rise in adulteration and pilferage of dairy products, especially during transportation from Milk Collection Centers (MCC) to Milk Processing Plants. The prevailing issues with mechanical locks, such as vulnerability to key duplication and challenges in identifying culprits due to physical key exchanges, and GSM-based locks susceptible to tampering, necessitate a more secure approach. SecuLock addresses these concerns by introducing a tamper-proof Smart E-Lock solution featuring OTP-enabled locks, physically inaccessible components, and sensorbased assembly.

In operation, SecuLock offers online, offline, and emergency modes. In the online mode, the hardware verifies commands from the server through GPRS communication, logging details such as mobile phone information, GPS coordinates, and timestamps for every operation. In the offline mode, the hardware can operate the lock without server verification, storing operation details locally and transmitting them to the server when the network becomes available. This mode proves useful in areas with weak network connectivity or during internet blockages. In emergency mode, the hardware checks the OTP received from the app with locally stored OTPs, ensuring secure operation even without network connectivity. Details of emergency mode operations are logged for subsequent verification.

This comprehensive approach not only ensures the security of dairy product transportation but also provides a traceable and verifiable record of every operation. By leveraging advanced technology and secure communication channels, SecuLock minimizes the risk of adulteration and pilferage, contributing significantly to the prevention of serious health issues linked to contaminated milk and milk products. The integration of SecuLock stands as a crucial step towards safeguarding public health and the integrity of the dairy supply chain.

SecuLock is a revolutionary product that can also be leveraged by diverse industries like dairy, cargo, courier, and companies handling the transport of bulk goods from one point to another with high chances of on-road theft and adulteration.

How is your product different from the products available in the market? Explain.

- SecuLock and all its components are not physically accessible and, thus can't be tampered with. In other locks, Mechanical assembly is visible from outside to transporters, drivers and other stakeholders. Thus, these locks can be tampered with (by cutting the rods, hinges and other components).
- SecuLock has a Sensor assembly like a light sensor to detect if the lock was activated during the dispatch of the vehicle. It is impossible to detect if other locks were not activated during the dispatch of tankers.
- SecuLock ensures that all interactions are carried out exclusively through OTP-enabled logins, restricting access to only designated officers. The OTP can be modified at any time to address organizational concerns. In contrast, alternative locks necessitate the replacement of both locks and keys in scenarios such as key loss, diminished trust in officers, personnel departure, or changes in officer departments.
- In case of misuse, SecuLock offers all logs on the server which can be accessed instantly for audit and investigation. With other locks, it is difficult to identify the officer involved among many officers in case of misuse.

## Sustainable, automated and digital solutions for the food industry



Exhibiting at Anuga FoodTec 2024 under the motto "Multiply Your Value", the MULTIVAC Group will be presenting its wide range of innovative processing and packaging solutions for the food sector. The focus will be on its comprehensive slicing range and integrated lines, which contribute significantly to making production processes very efficient and resource-saving thanks to their high level of automation and digitalisation. Visitors will find the MULTIVAC Group in Hall 8.1 (Stand C10), as well as in a marquee on the open-air site, where the processing machines will be shown in live operation.

Wide slicing range for all types of sliced products

howing a fully automated, high performance line for slicing and packaging sausage and cheese slices, MULTIVAC will be presenting itself as a supplier of complete solutions of-line. The MULTIVAC Line Control

- from processing through to end-(MLC) throughout the entire line enables all the process stages to be operated very efficiently from one central point - from slicing through to loading into the thermoforming packaging machine and subsequent converging of the packs, and right up to inspection, labelling and container loading. Recipe changes "on the fly" will be demonstrated at the trade fair, which significantly reduce start-up losses during product changes, and this therefore saves resources and production costs. When it comes to slicing and packaging small to medium-sized batches, a flowpack line will be on show at the trade fair, and this consists of a new entry-level slicer and the universal W 510 flowpacker, which is characterised by its ease of operation and cleaning.



The line at the trade fair will feature cheese slices being packed.

Packaging of fresh meat and ready

For those visitors interested in the cost-effective portioning and packaging of fresh meat, a thermoforming packaging line will be shown, which offers a very high level of flexibility, small give-away and low packaging costs. The heart of the line is a new high-output portioning machine from TVI, of which the main features are maximum product yield, the finest cutting quality and weight precision, together with a new type of weight sorting system for equal portions with the smallest give-away. The compact R3 thermoforming packaging machine is used for packing the portions, and this machine can also run recyclable and environmentally-friendly mono materials very efficiently, as well as being capable of being designed to customers' individual requirements thanks to its modular construction. The line is also equipped with a new cross web labeller for compact thermoforming packaging machines, which offers a high level of efficiency at low investment cost. All the process stages - portioning, infeeding, packing and labelling - can be controlled via the central MLC line control.

When it comes to traysealing, MUL-TIVAC will be presenting a line for packing ready meals, which offers outstanding performance with exceptionally efficient use of the available

production space. A full wrap label, which encloses all four sides of the pack like a sleeve, ensures that the packs are labelled attractively.

**Entry-level solutions for small** and medium-sized processors In addition to this, MULTIVAC will also be giving an insight at the trade fair into its wide range of compact solutions for the food industry. A number of different packs, including skin, MAP and stretch, will be demonstrated on

a range of compact traysealers. And when it comes to packing fruit and

vegetables, an innovative concept called Top Close labelling will be shown, which enables fresh produce trays to be sealed closed with a label in a very resource-saving way.

#### Solutions for the bakery industry

Thanks to its more powerful drive system, the ROLLFIX prime dough sheeter from FRITSCH can take portions of dough weighing up to about 20 kilograms. A double spindle on the delivery roller provides even greater power, and with its selectable infeed speed it enables a greater degree of flat rolling to be achieved. The intuitive control concept makes the operation of the machine exceptionally easy. The sheeting programs can be created quickly and easily, and they are saved very transparently with the corresponding product image and name in the machine's memory. The stainless steel construction not only provides a high level of mechanical sturdiness and therefore a longer lifespan, it also contributes to the machine's outstanding hygiene features. Fresh products will be baked daily in an open bakery.

In addition to this, the MULTIVAC Cooling@Packing System, a vacuum application for cooling bakery products, which can be integrated into thermoforming packaging machines, and enables sensitive bakery products to be packed without any loss of quality, will also be shown in Cologne. By packing the product immediately after baking, a higher level of freshness and longer shelf life can be achieved. Energy costs for product cooling can also be saved, and shorter baking time means that production capacity can be increased. And last but not least, one of the many features of this solution is the reduced space requirement in bakeries.

#### Processing solutions in live operation

Another exhibition area in a marguee on the open-air site (in front of Hall 8.1) is dedicated by the MULTIVAC Group to the portioning of fresh meat and the slicing of processed meats and cheese. There machines will be shown in live operation, including various portioning machines of the GMS series, which produce trim-free portioning thanks to their 3D forming, as well as MULTIVAC slicers in different output categories.

## **Adaptation of** brewing technology enables production of vegan food alternatives

egan alternatives to meat, dairy and eggs are gaining popularity around the world - and the resulting market potential is enormous. The Krones Group offers producers numerous options to help them utilise the full potential of alternative proteins. For plant-based products such as oat drinks, Krones has been offering the requisite process technology, in different variants with suitable line layouts, for some time now. In early 2023, the portfolio was expanded to include technology for precision fermentation.

In precision fermentation, animal or plant cells are programmed or optimised to create certain products like enzymes, fats, proteins, vitamins, flavourings and natural pigments. Proteins made by fermentation can then be combined with other ingredients and further processed to imitate meat, egg or milk products.

#### Biomass production using Steinecker Poseidon technology

A concrete example for cultivating and replicating such proteins is biomass production. For this process, cells are placed in a tank, where their growth is stimulated. And that is where Steinecker comes in, with its own bioreactor. Developed on the basis of the Poseidon fermentation unit, which has proven its useful-ness in the brewing arena, the bioreactor uses a circulation system instead of an agitator. The circulation system is equipped with aseptic valve technology from Evoguard and a low-shear aseptic pump. With this technology built into a sterile tank with familiar steam and condensate barriers, the system is ideal for both cell cultivation and fermentation.

The bioreactor from Steinecker is especially well suited for producers wanting to operate on a large scale. That is because, for tanks larger than 25,000 litres especially, it is far easier and more cost effective to integrate a circulation system than an agitator. That being said, Steinecker always designs its bioreactors to precisely match the fermentation process and the customer's wishes and seamlessly integrates them into an overall line concept. Steinecker always takes a flexible approach, accounting for each customer's indi-vidual specifications. As such, the company can also deliver conventional bioreactors featuring an agitator instead of a circulation system.

## The Surge in Demand: Food Robotics Solutions **Anticipated to Attain a Market Value of US\$ 7.8** Billion by 2033



he current demand for Food Robotics Solutions has witnessed a substantial surge as the food industry seeks innovative and efficient ways to meet the growing challenges of production, processing, and distribution. With the increasing global population and changing consumer preferences, there is a pressing need for automation to enhance productivity, reduce costs, and ensure the safety and quality of food products. Food Robotics Solutions encompass a wide range of applications, including automated packaging, sorting, slicing, and even cooking. These technologies not only streamline the production processes but also address concerns related to hygiene, consistency, and precision in the food manufacturing sector.

In addition to efficiency improvements, the demand for Food Robotics Solutions is also driven by the need for sustainable practices in the food industry. Robotics and automation can contribute to reducing food waste by optimizing production processes, improving inventory management, and minimizing human errors. The integration of robotics in agriculture, such as robotic

Growing adoption of digitization in the food industry is significantly driving the sales of food robotic solutions. Food robotic systems are becoming key components of smart production environments as the industry undergoes digital transformation. They allow for the seamless integration of sophisticated technologies such as IoT. data analytics, and automation. assisting food manufacturers in optimizing processes, improving product quality, and increasing overall efficiency.

harvesting and precision farming, further emphasizes the role of technology in creating a more sustainable and resilient food supply chain. As a result, businesses across the food industry are increasingly adopting and investing in Food Robotics Solutions to stay competitive, enhance their operational capabilities, and meet the evolving demands of the modern consumer landscape. According to a recently published research report by Fact.MR, a leading provider of market research and competitive intelligence, the Global Food Robotics Market is

anticipated to reach a valuation of US\$ 2.47 billion in 2023. The research further forecasts a Compound Annual Growth Rate (CAGR) of 12% for the demand of food robotics worldwide between the years 2023 and 2033.

The realm of food robotics encompasses the utilization of robots and automated solutions to enhance various facets of food production, processing, packaging, and distribution. This approach yields several advantages, including heightened efficiency, diminished labor costs, enhanced food safety measures, and the ability to satisfy the escalating consumer demands for consistently high-quality food products.

#### **Key Segments of Food Robotics Industry Research Report**

Food robotic systems find diverse applications in food manufacturing, processing, quality control, and the realm of robotic food delivery. The increasing demand for these systems is attributed to challenges like labor shortages and the imperative to adopt more sustainable food production practices while rigorously adhering to stringent food safety requirements.

#### **Key Takeaways from Market Study**

- The global market for food robotics is estimated at a valuation of \$2.47 billion in 2023.
- Food robotics sales are expected to rise at 12% CAGR between 2023 and 2033.
- The global market is projected to reach US\$ 7.8 billion by the end of 2033.
- Asia Pacific and Europe together accounted for 58% share of worldwide revenue from low payload food robotics.
- Significant growth rates are predicted for the market in Asia Pacific, Latin America, the Middle East, and Africa during the forecast period (2023 to 2033).

"Food robots tackle important challenges

and possibilities in the food and beverage industry by providing automation solutions that improve efficiency, safety, quality, and sustainability. They help food manufacturers respond to changing consumer expectations and market dynamics while maintaining regulatory compliance and managing labor-related constraints," says a Fact.MR analyst.

#### Food Robotics Driving Much-Needed **Digitization in Food Industry**

Growing adoption of digitization in the food industry is significantly driving the sales of food robotic solutions. Food robotic systems are becoming key components of smart production environments as the industry undergoes digital transformation. They allow for the seamless integration of sophisticated technologies such as IoT, data analytics, and automation, assisting food manufacturers in optimizing processes, improving product quality, and increasing overall efficiency.

Food robots can easily carry out the customization and personalization of food products made available by digitization. Incorporation of AI and machine learning in digitized food production contexts has helped improve the working capacity of these robots.

#### Rising Preference for Packaged Food Demand for packaged food has been on the rise due to continuously changing lifestyles, urbanization, and dietary pref-

erences. More people are opting for easy and tasty ready-to-eat meals, snacks, and processed foods. This has increased the demand for packaged food, which places additional pressure on food manufacturers to meet production quotas efficiently and consistently.

Food robotic systems can automate a variety of packaging operations, including filling, sealing, labeling, and quality control, guaranteeing that packaged food products are produced in large quantities and with precision. Food robotic systems help minimize human touch and lower the risk of contamination during the packaging process and can improve the shelf-life and freshness of packaged foods.

#### Competitive Landscape

The expanding adoption of robotics in food processing and production is propelling market growth. The increasing number of significant market players is influencing competitiveness, as suppliers invest in research and development to devise innovative solutions catering to industry needs.

The realm of food robotics comprises a blend of entrenched competitors, innovative startups, and global companies specializing in automation and robotics. Distinctive features of the food robotics market include continual technological advancements, tailoring solutions to align with the food sector's requirements, and a strong focus on food safety, quality, and efficiency. With the escalating demand for automation in the food sector, competition among these entities is expected to intensify, driving further innovation and industry expansion.

#### **Recent Developments:**

- In February 2022, Mitsubishi **Electric Corporation introduced** a teaching-less robot system technology primarily designed for food-processing facilities. These robots conduct organizational, sorting, and similar operations at human-like speed without requiring constant supervision.
- In April 2021, Rockwell Automation Inc. established a partnership with Comau, aiming to streamline processing and lifecycle management in the food and beverages industry.

The study divulges essential insights into the market based on type (articulated, cartesian, scara, parallel, cylindrical, collaborative, others), application (palletizing, packaging, repackaging, pick & place, processing), payload (low, medium, heavy), and end use (beverages, meat, poultry, seafood, dairy, bakery, fruits, vegetables, confectionery, others), across five major regions of the world (North America, Europe, Asia Pacific, Latin America, and MEA).

These insights are based on a report on Food Robotics Marketby Fact.MR.



### **Further addition for Nature MultiPack**

#### KHS provides universal adhesive for plastic bottles

- System can be used with practically any shape, size or material thickness of container
- Separation of PET bottles easier for consumers
- Containers fully suitable for processing in bottle deposit machines

Following the launch of a universal adhesive for beverage cans, KHS is now also offering this pioneering further development for plastic bottles. This increases the possible uses of Nature MultiPack, one of the most environmentally-friendly forms of secondary packaging currently available on the beverage market.



HS has further streamlined its resource-conserving system that joins beverage containers together with just a few dots of adhesive without using any shrink film whatsoever - and made it much more flexible in its application. After presenting its new universal adhesive that can be used on all standard aluminum cans regardless of their coating or surface treatment at the interpack trade show this year, the systems provider has now taken the next logical step and provided a similar consumable for PET bottles. These now have an adhesive at their disposal that can be used on practically any shape, size or material thickness of the same. This is facilitated by a special process where the adhesive is foamed during application to the containers.

"This is a principally proven technology that's been used for many years in the production of foam for mattresses or seals in car manufacture, for example," explains Dr. Matthias Caninenberg, head of Nature MultiPack Technology at KHS. "In our case we face two challenges. One of these lies in the process technology, the aim of which is to reconcile three different objectives: protection of the container wall against damage, simple handling and safe transportation of the pack."

Three objectives: a triangle of tension In order to effect the perfect balance in this "triangle of tension", as Dr. Caninenberg calls it, nitrogen is added to the adhesive on the KHS Innopack Kisters NMP packaging machine before this is applied to the full PET bottle. During application, the previously pressurized gas expands and foams the adhesive. This gives the glue a higher elasticity that has three benefits:

- Firstly, it is easier for consumers to separate the bottles from one another. Instead of containers suddenly snapping apart, the adhesive is compressed and peeled off much more slowly during opening. This gives people the impression that even less strength is required to unstick the containers - even though very little was needed before. Practical application is thus as simple as with the previous pack.
- Secondly, the outer wall of the PET container is subjected to less stress when the pack is opened, meaning that even with lightweight bottles with a very low wall thickness overload and damage are more or less totally ruled out.
- And thirdly, as the adhesive and thus the pack are more flexible, the forces applied along the logistics chain can be better absorbed and compensated for without the pack being damaged.

The second challenge concerns the

machine technology. "The gas/adhesive mixture must be homogenous in its distribution to the applicators. To this end, we've developed an optimized pressure nozzle with the help of modern production facilities. What's more, our machine operates within an extremely narrow tolerance range in order to perfectly maintain the aforementioned triangle of tension. The very first shot has to hit the tolerance window," Dr. Caninenberg ascertains. "The machine and process technology must of course function reliably for this to be the case."

The new setup has two further pluses to offer when it comes to the recycling of the PET containers. When separated from the container, the dots of adhesive do not leave any notable sticky residue behind and thus do not cause any disruptions when fed into bottle deposit machines. Moreover, the density of the adhesive is greatly reduced by foaming, enabling it to rise to the surface much better when

washed off during the actual recycling process. This makes it even easier to remove this material from the recycling loop.

#### **Optimum** wetting

Dr. Caninenberg describes why a separate universal adhesive for aluminum cans and PET bottles continues to be necessary: "The two materials have a different surface energy. This defines how liquids behave on a solid. Unlike on a raincoat, for instance, where de-wetting creates the required water-resistant effect, we use an adhesive matched to the surface energy of the container for optimum wetting."

In combination with a further technical novelty, the cardboard bottle clip carrying handle specially designed for Nature MultiPack, KHS gives the beverage industry "one of the most resource-conserving and environmentally-friendly forms of secondary packaging currently available," as Dr. Caninenberg proudly sums up.

## **Cosmo First (erstwhile Cosmo Films) launches Metalised Capacitor Grade BOPP Films**

osmo Films, a global leader in speciality films for packaging, labelling, synthetic paper, and lamination applications recently launched Metalised Electrical grade BOPP films for Capacitor application. These Films are used for Capacitor manufacturing of various types of AC and DC Capacitors. These Capacitors have diverse application ranging from Electronics appliances, Industrial applications, Power Electronics, Automobile, Electric Vehicles, Renewable Power systems, etc.

These metalised capacitor grade films will be manufactured under clean room conditions with micro slitting capability and thickness ranging from 2.5 micron to 12 micron. Speaking on the launch, Mr Kulbhushan Mallik, Global Business Head, Cosmo Films, "We, at Cosmo First, have proudly pioneered industry-first solutions for the past four decades. This

strategic move aligns perfectly with the Cosmo Film's vision of strengthening our global leadership in speciality films through innovative and sustainable solutions".

There is lot of focus from Government to make the country self-reliant under Atmanirbhar Bharat Scheme and Electronics manufacturing and Electronics exports is a key initiative. Capacitors being an important component in electronics eco-system truly supports this Government initiative. Currently there is lot of imports happening of these electrical grade capacitor films from countries like China and with growing demand of high-quality Capacitor Grade Films, there is a large potential for these films for both domestic and exports market. The current installed capacity of these Metalised Films is approximately 750 MT per annum, and Cosmo Films will look to scale up this product category in future.



For more information related to our Capacitor metalliser films, please visit www. cosmofilms.com

## **Innovations in Meat Processing:** A Technological Revolution



he world population is increasing rapidly and it is expected to hit approximately 10 billion people by the year 2050. Ensuring enough, safe, and sustainable food for all of these people remains one of the key future challenges facing humanity, especially in the current scenario of resource depletion, pandemics, and climate change. Meat pro-duction and consumption have increased over the past five decades and it is expected that the meat production will continue increasing in order to meet the growing demand for animal proteins.

However, due to their high perishability, various preservation and processing methods have been traditionally applied to meat and meat products to main-tain high quality and extend their shelf life. On the other hand, a wide range of analytical methods has been investigated over the years to characterize meat and meat prod-ucts in terms of quality, safety, and authenticity. Yet, many of the conventional preserva-tion, processing, and analytical methods are unable to cope with the well-known chal-lenges (e.g., short shelf life and large heterogeneity) faced by the meat industry, making it difficult to preserve,

Innovative packaging technologies play a crucial role in preserving the freshness and quality of meat products. Modified Atmosphere Packaging (MAP) and vacuum packaging help extend shelf life by controlling the atmosphere around the meat, slowing down the oxidation and microbial growth processes. Smart packaging with sensors can provide real-time information about the condition of the meat, ensuring better inventory management and reducing food waste.

process, and analyse these products. Meat processing has undergone a significant transformation in recent years, thanks to advancements in technology. From traditional butchery methods to state-of-the-art automated processing plants, the meat industry has embraced innovation to enhance efficiency, safety, and sustainability. This article explores the various technologies revolutionizing meat processing and their impact on the industry.

#### **Automation and Robotics:**

One of the most notable advancements in meat processing is the integration of

automation and robotics. Automated systems are used in various stages, from slaughter to packaging, improving precision and speed while reducing labor costs. Robots can perform tasks such as deboning, trimming, and sorting with remarkable accuracy, ensuring higher yields and consistent product quality.

#### High-Pressure Processing (HPP):

High-Pressure Processing is a nonthermal preservation method that uses water to eliminate harmful bacteria while preserving the nutritional and sensory qualities of meat. This technology extends shelf life and enhances food safety without the need for excessive heat or chemical preservatives, meeting the increasing consumer demand for minimally processed and clean-label products.

#### **Traceability and Quality Control:**

Blockchain technology is being implemented to enhance traceability in meat processing. By creating an immutable record of every step in the supply chain, from farm to table, blockchain ensures transparency and helps identify and address issues such as contamination or disease outbreaks quickly. Additionally,

advanced imaging and sensor technologies are used for quality control, detecting defects and ensuring the consistency of meat products.

#### **Smart Packaging:**

Innovative packaging technologies play a crucial role in preserving the freshness and quality of meat products. Modified Atmosphere Packaging (MAP) and vacuum packaging help extend shelf life by controlling the atmosphere around the meat, slowing down the oxidation and microbial growth processes. Smart packaging with sensors can provide realtime information about the condition of the meat, ensuring better inventory management and reducing food waste.

Digital packaging has introduced unparalleled operational efficiencies to the meat industry. By incorporating a unique serialised product code on every package, companies gain the ability to track and trace each product throughout its entire lifecycle.

This level of visibility allows for the prompt identification and resolution of quality issues, reducing the risk of costly recalls. Real-time inventory management is made possible through the digitisation of every product, providing valuable insights into operations and pinpointing areas for improvement.

With data on efficiency metrics, companies can enhance their processes, increase throughput and improve overall yield. Additionally, digital packaging enables the identification of inefficiencies within the supply chain, leading to more streamlined logistics and reduced wastage of time and resources. The sustainability benefits of digital packaging are also evident, as it reduces the use of materials and food waste. By providing real-time information about the quality and freshness of the food, digital packaging helps minimise food wastage, promoting a more environmentally friendly approach to packaging and distribution.

#### **Sustainable Practices:**

The meat processing industry is increasingly focusing on sustainability. Technologies like water recycling systems, energy-efficient machinery, and waste reduction measures are being implemented to minimize the environmental



impact. Some companies are exploring alternative protein sources, such as plant-based and lab-grown meats, as a more sustainable and ethical option.

#### **Data Analytics and Artificial** Intelligence (AI):

Data analytics and AI are transforming meat processing by optimizing production processes and predicting equipment maintenance needs. Al algorithms can analyze vast amounts of data in realtime, helping companies make informed decisions to improve efficiency, reduce waste, and enhance overall productivity.

#### **Challenges and Considerations:**

While technology has brought about significant improvements, the meat processing industry faces challenges in adopting these innovations. Initial investment costs, training a workforce to operate advanced systems, and addressing concerns about job displacement are some hurdles that need to be overcome.

Moreover, there are ongoing discussions about the ethical implications of certain technologies, such as lab-grown meat and the use of automation in slaughterhouses. Striking a balance between technological advancements and ethical considerations is essential for the industry's long-term success.

#### Consumers are embracing the digital age

Consumers are embracing the innovative possibilities offered by digital packaging. The demand for case-ready meat has been growing steadily and digital

packaging provides brands with a way to stand out in the crowded marketplace. It enables a more engaging and interactive shopping experience, meeting the expectations of modern consumers for transparency, coupons, recipes and sustainability claims.

By scanning QR codes printed on each package, consumers can access a wealth of information about the product, from its sourcing and sustainability credentials to popular recipes tailored to their region. This personalised experience fosters customer loyalty and helps companies build strong brands that resonate with their target audience.

With a cloud-based approach, digital packaging goes beyond generic websites, offering unique and location-specific content to consumers. Brands can continually refine their messaging based on real-time data, allowing for more informed business decisions and improved consumer engagement.

The meat processing industry is at the forefront of technological innovation, leveraging automation, data analytics, and sustainable practices to meet the evolving demands of consumers. As technology continues to advance, the industry must navigate challenges, ensuring that these innovations are not only economically viable but also ethical. sustainable, and aligned with consumer preferences. The integration of cutting-edge technologies positions the meat processing sector for a future characterized by improved efficiency, safety, and environmental responsibility.

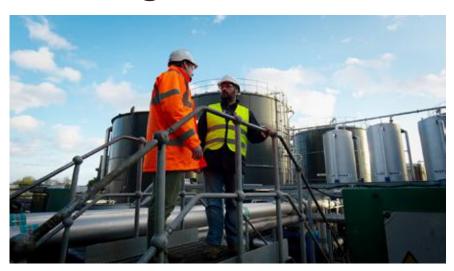
## Alfa Laval and Bisviridi partner to revolutionize biofuel production from organic waste

Ifa Laval, the global leader in heat transfer, centrifugal separation, and fluid handling, and Bisviridi, a new company part of the BioteCH4 group, the leading anaerobic digestion (AD) operator in the United Kingdom, are collaborating to elevate the sustainability potential of organic and food waste recycling.

The partnership integrates Alfa Laval's state-of-the-art Prodec Oil Plus decanter, designed for efficient oil separation, with anaerobic digestion to convert oil and fats waste into biofuel. This groundbreaking process, developed and patented by Bisviridi, produces Bio Crude, an eco-friendly alternative to oil-based fuels.

Notably, Bio Crude can be refined into sustainable aviation fuel (SAF), aligning with the aviation industry's decarbonization goals and entering an emerging market.

Lee Dobinson, Chief Commercial Officer of Bisviridi, highlights the value of the partnership, stating, "The fluctuation in oil prices over the last few years and the need for large biodiesel companies to find new sources of sustainable wasteoil streams has led us to develop a way of harnessing this waste material and diversify the output of the BioteCH4 business, increasing its revenues and sustainability. We are thrilled to collaborate with Alfa Laval, merging our AD expertise with their successful history in separation technology to further refine this process and potentially achieve large-scale production worldwide."



Carl Rehncrona, Business Unit President at Alfa Laval, emphasizes the commitment to success, stating, "Alfa Laval's comprehensive product knowledge and global service presence will fully support the entire lifecycle of the decanter skid. Together with Bisviridi, we are setting a new standard in AD, and we firmly believe that we can make a significant positive impact on the industry by transforming food waste and creating a more sustainable and resilient future."

Recover every drop of value The Alfa Laval Prodec Oil Plus decanter, a key component in the Bisviridi process, seamlessly integrates into any AD facility, offering numerous benefits. Prior to methanogenesis, the decanter efficiently extracts oil from organic waste, removing oils, fats, and grease content. This allows the remaining components to be reintroduced into the AD system, with minimal impact on biogas

production. The resulting bio crude boasts impressive purity levels of up to 99.5%, making it an ideal feedstock for refineries to produce biofuel for the SAF market.

Through a recent collaborative effort with BioteCH4, the AD plant can achieve a remarkable production capacity of up to, but not limited to 300 litres of oil per hour, all while seamlessly increasing and diversifying the AD operator's revenue stream. The Prodec Oil Plus decanter's innovative design ensures easy operation and maintenance, resulting in minimal payback time and total cost of ownership. It is available as a standalone component or as a plug-and-play skid, allowing for effortless integration into existing AD plants and processes.

To learn more about the new Prodec Oil Plus, please visit: www.alfalaval.com/prodecoilplus





## INDUSTECH FOOD TECH

SOUTH ASIA'S PREMIUM FOOD TECHNOLOGY SHOW

10-12 JAN India Exposition Mart Greater Noida, NCR, India

#### **EXHIBITOR** PROFILE

**F&B PROCESSING TECHNOLOGY** 

**DAIRY TECHNOLOGY** 

**EDIBLE OIL TECHNOLOGY** 

**SNACKS & BAKERY TECHNOLOGY** 

**HEATING TECHNOLOGY** 

DRINKING WATER TECHNOLOGY

**REFRIGERATION & AIR CONDITIONING** 

**PACKAGING TECHNOLOGY & SOLUTIONS** 

**AUTOMATION PROCESS & CONTROL** 

**ANCILLARY TECHNOLOGY** 

MATERIAL HANDLING TECHNOLOGY

WASTE WATER TREATMENT

#### WHO CAN VISIT?



Dairy Processor



Industry Specialists & Professionals



Food processing consultant



Restaurant Chains



F&B Processor



Bakery & Confectionery Processor



Drinking water Processor



Trade Associations



Edible Oil Processor



Snacks Processor & Manufacturer



Government Agencies



Food Service Institutions

### **EDITION 2024**

MAJOR HIGHLIGHTS

250+ EXHIBITORS

15000+ VISITORS

300+
INTERNATIONAL
BUYERS

30+
COUNTRIES

40+
TECHNOLOGY SESSIONS

SCAN FOR SPACE BOOKING







#### **CONTACT US**

Mr. Aun Alia | E: a.alia@tpci.in | M: (+91) 92058 83421

Ms. Apurva Jain | E: exhibitor.ift@tpci.in | M: (+91) 92058 83418



## **CCL Container Introduces Aluminum Wine Bottles**



CL Container, the leading manufacturer of recyclable aluminum packaging in North America has announced new aluminum bottle shaping capabilities that reflect long-standing wine bottle profiles. The new production proficiency meets everincreasing demand for sustainability and freshness while honoring the profiles of conventional bottles for wines such as chardonnays, merlots, pinots, zinfandels, and many others, including champagne.

Designed with CCL Container's Body-

Shapes shaping technology, these 750 ml aluminum bottles are resealable with a threaded cap that can keep wine fresh for longer than a traditional glass bottle. In addition, aluminum bottles cool quickly and stay cooler for a longer period of time thanks to higher thermal conductivity and greater chill retention than glass or plastic.

Because the threading in the cap does not contain plastic, the entire container, made from virgin aluminum, is 100 percent recyclable. Despite a wide diameter, aluminum bottles weigh less than glass bottles making them less expensive to ship. Their superior durability makes aluminum wine bottles virtually unbreakable.

"In spite of the fact that the wine industry continues to embody traditions that dates back many centuries, today's brands and wine drinkers are more than ready for smart innovation," states Vice President of Sales for CCL Container, Kimberly Kizer. "The new, aluminum wine bottles offer the best of 'what is next' in terms of quality, freshness, sustainability, and unique branding opportunities."

In a fiercely competitive industry, today's wine brands tend to blend with one another on the shelf in terms of appearance. No longer constrained by decorating limitations of traditional paper labels, CCL Container's aluminum wine bottles now enable wineries to take advantage of expanded creative possibilities. Multi-color lithography in as many as nine colors, embossing and debossing of graphics and logos, and a variety of other design options and finishes make it possible to create outstanding brand distinction and differentiation.

CCL Container looks forward to partnering with makers of reds, whites, rosés, sparkling wines, and more. From brands with established global identities to small, boutique wineries, aluminum wine bottles that reflect timeless shapes represent an opportunity for innovation while paying respect to the legacy of the noble grape.

## FIJI® WATER TRANSITIONS ICONIC BOTTLE TO 100% RECYCLED PLASTIC\* IN CANADA

Brand Replaces Nearly 70% of its Worldwide Bottle Volume\*\* with 100% Recycled Plastic, Bottle Only, in **Evolution to a 100% Recycled Plastic Future** 

IJI Water, a natural spring water from the Fiji Islands, is furthering its commitment to environmental sustainability with the transition of its best-selling 500 mL and 330 mL bottles to 100% recycled plastic\* (rPET), in the Canadian markets starting Winter 2023. This move is a significant step towards reducing plastic waste and replaces nearly 70% of FIJI Water's bottle volume worldwide with recycled material.\*\* The company is committed to transitioning its entire bottle portfolio to rPET by 2025.

"In our transition to recycled plastic, we aim to make a truly meaningful and lasting impact," said Wai Mei Lee, Vice President of International, FIJI Water. "In using recycled plastic, we give new life to existing materials while maintaining the same great taste, look, and







quality that consumers expect from FIJI Water."

As FIJI Water looks to the future, it has ambitious targets to help preserve the planet and is committed to making a difference. In addition to introducing 100% rPET bottles (bottle only) FIJI Water has also invested about \$2.97 million CAD in energy efficiency initiatives on the Fijian islands, which includes the use of microturbine energy generation and adopting low-sulphur fuel standards for shipping, reducing sulphur oxide emissions.

Locally in Fiji, the FIJI Water Foundation focuses on sustainability and the preservation of the islands, along with supporting and improving the lives of native Fijians through initiatives such as providing access to clean water, healthcare services, and grants for local schools and organizations, and more. Since 2007, the FIJI Water Foundation has provided funding to large-scale reforestation and conservation efforts to preserve and protect the Sovi Basin, Fiji's most important forest ecosystem and the largest remaining lowland rainforest, in partnership with Conservation International.

FIJI Water is a division of The Wonderful Company, which has a broad commitment to sustainability. To date, The Wonderful Company and co-owners Stewart and Lynda Resnick have invested more than \$1.72 billion CAD in environmental sustainability initiatives to help fight climate change. This commitment includes the largest ever gift for sustainability research of \$990 million CAD to Caltech, and \$66 million CAD to Technion-Israel Institute of Technology for research and sustainability. A portion of the research will focus on decomposable plastics, along with tackling issues of water, energy, food, and waste in a world confronting rapid climate change. Additionally, The Wonderful Company joined RE100, a global initiative made up of some of the world's biggest companies, which have all committed to using 100% renewable energy.

For more information, including details on FIJI Water's initiatives to reducing its environmental footprint, and for the latest updates on FIJI Water, please visit fijiwater.ca or follow @FIJIWater\_ca and the @FIJIWater-Foundation on Instagram

> \*Bottle only \*\*Projected total bottle volume per 2023 sales forecast SOURCE FIJI Water Canada

# **Food - Drink & Innovations** India's first ever digital magazine **Book your** advertising space for the next edition FEB - 2024 **CLICK HERE TO SEND YOUR QUERIES** www.fooddrinkinnovations.com



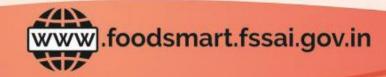


## Be a smart consumer

## Read what you eat



FSSAI: Empowering consumers to read labels





## QR code on test reports fortified rice, fortified rice **Kernel & vit premix for FRK**



SSAI has recently released an advisory to mandatorily put QR code on test reports issued for fortified rice (FR), fortified rice kernels (FRK) & vitamin premix for FRK, find below some important points for your kind perusal.

In continuation to the order bearing file no QA-11023/9/2022-RARD-FSSA-Part(1) (E-8226) dated 31st October 2023, IEC-34011/1/2021-1EC-FS-SAI-Part(6) dated 08th Nov, 2023

and QA-11023/9/2022-RARD-FSSAI (C No,-4935) dated 16h Nov 2023, wherein all FSSAI notified laboratories approved for testing of Fortified rice (FR), Fortified Rice kernel (FRK) and Vitamin premix for Fortified rice kernel were directed to mandatorily upload the test reports of samples of FR, FRK and Vitamin premix for FRK on IN-FoLNET portal and FoSCoS portal.

In this regard, all the FSSAI notified laboratories approved by FSSAI for testing of Fortified rice (FR), Fortified Rice kernel (FRK) & Vitamin Premix for FRK arc directed to provide QR code on all test reports issued by them which can be scanned using any QR scanning application available on mobile/any device to authenticate and reproduce the test report online. We are happy to apprise you that our labs are approved from FSSAI to perform the analysis of Fortified rice, fortified rice kernels & Vitamin Pre mix for fortified rice kernels.

## Printing 'date of mfg', 'unit sale price' on packaged items becomes mandatory from Jan 1



rinting the 'date of manufacturing' and 'unit sale price' has become mandatory on all packaged commodities effective from Monday, according to Consumer Affairs Secretary Rohit Kumar Singh.

Earlier, companies were given the option to either print the 'date of manufacturing' or 'date of import' or date of packaging on the packaged commodities. Now, companies have been mandated to print only the 'date of manufacturing', along with the 'unit sale price', as per the latest notification issued by the Consumer Affairs Ministry.

## Govt took many pro-active steps to control prices of food items



ood and Consumer Affairs Minister Piyush Goyal on Sunday noted that the Centre has taken many pro-active steps in last few years to control retail prices of food items and said the government will keep inflation under control while ensuring country's economic growth. He was addressing an event, organised by the ministry here, to celebrate National Consumers Day.

"Today, India has become the fastest growing large economy. Going forward, we will keep inflation under check and also ensure economic growth," Goyal said. Retail inflation inched up to a threemonth high of 5.55 per cent in November driven by higher food prices, according to latest official data. The retail inflation based on the Consumer Price Index (CPI) was at 4.87 per cent in October. Inflation had been declining since August when it touched 6.83 per cent. On steps taken by the central government, Goyal highlighted that 140 new price monitoring centres have been set up to keep a close watch on wholesale and retail prices of essential commodities.

"Today, prices are being monitored at 550 (consuming) centres on a daily basis. This helps in insulating consumers from price rise," Goyal said. In the last two years, he said, when the entire world witnessed very high inflation, especially in the food items, India was able to control inflation through pro-active fiscal and monetary policies.

"Whenever inflation (in some commod-

ity) started rising, the government took pro-active measures and controlled it." Goval cited measures taken by the Centre to control price rise in tomatoes and onions in a short period of time. The government sold tomatoes and onions through retail outlets of NCCF, NAFED and Kendriya Bhandar as well as mobile vans.

In case of onion, he said the government is buying onions from farmers to create buffer stock and ensure they get a fair price of their produce. He also highlighted that the Centre is selling Bharat Dal at Rs 60 per kg and Bharat atta at Rs 27.50 per kg to provide relief to common man. The government has banned exports of wheat, broken rice, non-basmati white rice and onions. It has also reduced import duties on edible oils and pulses to boost domestic supply and control price rise.

Talking about consumer protection issues, Goyal appreciated the work done by his ministry and National Consumer Disputes Redressal Commission (NCDRC) to resolve consumers' grievances. He stressed on the need to clear backlong of cases pending at consumer courts at national, state and district levels.

"We are all collectively working for better consumer satisfaction," he said, adding that the country will progress if consumers would be satisfied. Goyal said his ministry is focusing on adoption of technology in consumer forums for

speedy delivery of justice. To protect consumer interests, Goyal highlighted that the department of consumer affairs has issued a strict guidelines on dark patterns used by online marketplace and is also keeping a close watch on violations. The minister cited various examples of many dark patterns adopted by e-commerce firms that are detrimental to consumers interest.

Recently, the government has banned use of "dark patterns" on e-commerce platforms which intend to deceive customers or manipulate their choices. A gazette notification in this regard as "Guidelines for prevention and regulation of dark patterns" was issued on November 30 by the Central Consumer Protection Authority (CCPA), which is applicable to all platforms offering goods and services in India, and even advertisers and sellers.

Dark patterns have been defined as "any practice or deceptive design pattern using user interface or user experience interactions on any platform that is designed to mislead or trick users to do something they originally did not intend or want to do, by subverting or impairing the consumer autonomy, decision making or choice." Goyal also criticised the Congress party for not implementing the gold hallmarking scheme in an effective way.

He said the Narendra Modi-led government has rolled out this scheme in a very effective way with cooperation from all stakeholders. Goyal emphasised on the need to ensure consumers get quality products at a reasonable rates. He asked his ministry officials to focus on increasing consumer awareness, creating efficient and responsive governance system, protecting and awarding whistleblower and strengthening testing facilities. Consumer Affairs Secretary Rohit Kumar Singh highlighted that the number of cases disposed is more than the number of cases filed. There are 5.43 lakh cases pending in the consumer courts, he said, adding that the faster disposal rate would help in clearing the backlog.

#### FOOD - DRINK & INNOVATIONS



Indusfood - 2024 10 - 12, Jan - 2024 India Exposition Mart, Greater Noida, NCR, India

Vitafoods India - 2024 13 - 15, Feb - 2024 Pavilion 1, Jio World Convention Center, Mumbai

Aahar - 2024 05 - 09, March - 2024 Pragati Maidan, New Delhi

PackPlus South - 2024 26 - 28, April - 2024 BIEC Bangalore

Snack & BakeTec - 2024 05 - 07, June - 2024 India International Convention & Expo Center, Dwarka, New Delhi Interfoodtech - 2024 05 - 07, June - 2024 India International Convention & Expo Center, Dwarka, New Delhi

PacMechEx - 2024 05 - 07, June - 2024 India International Convention & Expo Center, Dwarka, New Delhi

India Warehousing Show - 2024 11 - 13, July - 2024 India International Convention & Expo Center, Dwarka, New Delhi

India Foodex - 202 22 - 24, Aug - 2024 Bangalore International Exhibition Centre

Anuga FoodTec India - 2024 28 - 30, Aug - 2024 Bombay Exhibition Centre, Mumbai, India

Anuga Select India - 2024 28 - 30, Aug - 2024 Bombay Exhibition Centre, Mumbai, India

PackEx India - 2024 28 - 30, Aug - 2024 Bombay Exhibition Centre, Mumbai, India

FI & HI India - 2024 25 - 27, Sept 2024 BIEC Bangalore

Propak India - 2024 25 - 27, Sept 2024 BIEC Bangalore

## **Revolutionizing Food Supply Chains: A Journey** through Industry 4.0 and Industrial Internet of Things (IIoT) Integration





he complex tapestry of the global food system encompasses a vast network of elements, including the environment, people, processes, and institutions. At its core lies industrial supply, a linchpin ensuring the provisioning of food and fostering

access to healthy options. This critical component, however, grapples with an array of challenges, spanning safety concerns, affordability issues, and the possibility of shortages and waste [1].

Instances such as the mislabelling and sale of horse meat as beef in Europe have underscored the pressing need for transparency and reliability within food supply chains [2]. To address this, innovative solutions like blockchain technology have gained traction, offering a promising avenue for enhancing transparency [3]. Simultaneously, the escalating prices of food, exemplified by a 17.4% rise in the UK in 2023 [4], pose a formidable barrier to the accessibility of healthy options, particularly for low-income communities, thereby exacerbating prevailing health inequalities. The challenges further manifest in food shortages that disrupt societies

and trade, evident in empty supermarket shelves and the disturbing prevalence of food waste, indicative of a lack of coordination in the manufacturing and distribution processes.

In response to these challenges, the principles of Industry 4.0 emerge as a beacon of hope, emphasizing information transparency and interconnection. At the forefront of this paradigm is the Industrial Internet of Things (IIoT), a concept envisioning a network of connected devices and services facilitating seamless data exchange and coordination. IIoT, with its dynamic inventory management, quality control, and predictive maintenance to minimize machine downtime, holds promise in addressing disruptions within supply chains [2].

The centrality of IIoT to the Industry 4.0 framework becomes apparent in its definition—a system comprising networked smart objects, cyber-physical assets, and associated information technologies. While the potential of IIoT spans diverse sectors, including manufacturing and healthcare, its integration into the food industry poses unique challenges. The intricate and interconnected nature of food supply chains demands real-time monitoring and data-driven decision-making, finding applications in climate control, food waste reduction, and cold chain management.

Relying on a curated selection of literature addressing contemporary challenges in the realm of the Industrial Internet of Things (IIoT), the researchers pinpoint the intricacies of implementing IIoT platforms. To bolster the research's relevance, they synthesize evidence specific to the technological requirements of the manufacturing industry. Following this, a meticulous requirements analysis is conducted using the Quality Function Deployment (QFD) method, while leveraging the industry 4.0 learning factory for requirements specifications.

The illustrative example of the Microsoft Azure IoT platform is then presented, shedding light on its functionalities, and serving as a tangible case for distilling essential design considerations [3].

Primary and secondary data on industry needs are gathered from two prominent food manufacturers. The qualitative data collected are summarized, highlighting key industry needs pertaining to traceability and supply chain visibility. These insights form the basis for the final list of industry requirements. The Microsoft Azure IoT platform, is a leading IIoT platform, is introduced as an exemplar. This cloud-based solution facilitates two-way communication between applications and devices, showcasing functionalities such as Azure IoT Central and Azure IoT Edge. These features, including predictive maintenance through Azure Machine Learning, are viable to underscore the platform's capabilities.

The Quality Function Deployment (QFD) methodology is usually employed to bridge the gap between industry demands and IIoT platform capabilities. This well-established engineering technique evaluates various IIoT platform functionalities against industry demands, particularly focusing on product traceability and supply chain visibility. The chosen exemplar, the Azure IoT platform, serves as a tangible case for distilling design considerations, with the QFD House of Quality utilized for this purpose [3].

The impact of Quality Function Deployment (QFD) analysis is typically presented, centered around IIoT platform functionalities based on Azure IoT. The identified functionalities encompass crucial aspects such as device management, device connectivity, edge computing, security and device identity management, data storage and processing, monitoring and logging, machine learning integration, business system integration, availability and recovery, and scalability. These functionalities play a pivotal role in shaping the effective implementation of IIoT platforms, particularly in the context of Industry 4.0.

The QFD analysis is informed by seven customer requirements derived from

qualitative data analysis, rated on a scale of 1 to 5 for importance. Four of these requirements are deemed highly important, being non-negotiable within the industry, while the remaining three, due to their specific technological characteristics, are rated as of medium importance. The percentage ratings for customer importance are derived from these scores, providing insights into the prioritization of functionalities. The OFD matrix offers a visual representation of the correlation between different functionalities, with positive and negative correlations indicating how functionalities complement or conflict with each other [3].

The analysis of the QFD matrix is detailed, with individual rows of the house providing reasoning for scores in selected cells. Notably, functionalities such as device connectivity, data storage and processing, monitoring, and logging, and availability and recovery emerge as critical for real-time supply chain visibility, product tracking, and genealogy. Business system integration proves crucial for avoiding data silos and fostering unified data analysis [2].

Integrating with Manufacturing Execution Systems (MES) directly aligns with business system integration. The use of sensor technologies is supported by various IIoT platform functionalities, with data storage and processing being essential for leveraging sensor-generated data. Edge computing emerges as a factor mitigating implementation costs, enabling less computationally powerful IIoT devices. Similarly, low implementation complexity is facilitated by a scalable IIoT platform architecture, easing implementation across diverse systems without significant architectural changes when scaled up [3].

As we traverse this landscape, the future beckons with promise and challenges. The ongoing evolution of the global food system, coupled with the relentless march of technology, will necessitate continual adaptation and innovation. The trajectory points toward a future where IIoT, grounded in Industry 4.0 principles, plays a pivotal role in reshaping the dynamics of food supply chains. The principles of transparency, interconnection, and real-time decision-making,

underscored by the capabilities of IIoT platforms, hold the key to addressing the multifaceted challenges that characterize the food industry. The path forward involves a concerted effort in addressing the unique challenges posed by the food industry's intricacies. From the adoption of blockchain technology for enhanced transparency to the careful consideration of data privacy concerns, the roadmap to a robust and resilient food supply chain is complex but achievable. The integration of IIoT platforms, as demonstrated by the Azure IoT example, offers a blueprint for effective implementation, bringing together diverse functionalities to meet the industry's specific needs.

In conclusion, the journey towards a future-proof and efficient food supply chain is an ongoing narrative. The fusion of technology, industry insights, and a commitment to addressing societal challenges will shape the trajectory of this narrative. As we stand at the intersection of the global food system and Industry 4.0, the potential for transformative change is immense. It is a future where technology not only addresses the challenges but becomes an integral part of the solution, fostering a resilient, transparent, and sustainable food ecosystem for generations to come. The story unfolds, and the narrative of innovation and adaptation continues in the dynamic landscape of the food industry.

#### Author's Details & References

Kushagra Agrawal is a computer science scholar at School of Computer Engineering, KIIT Deemed to be University, Bhubaneswar, India

Linkedin: https://www.linkedin.com/in/kushagraagrawal-51a3121ab/

Corresponding author email:

kush4409@gmail.com

#### References

[1] High-Level Panel of Experts on Food Security and Nutrition. (2014). "Food Losses and Waste in the Context of Sustainable Food Systems," Rome. [2] Mantravadi, Soujanya. (2023). "Empowering the Food Industry Through IIoT Platforms: Takeaways for IT/OT Integration in Industry 4.0," 122-129. doi: 10.1049/icp.2023.1743. [3] S. Menon and K. Jain. (2021). "Blockchain Technology for Transparency in Agri-Food Supply Chain: Use Cases, Limitations, and Future Directions," IEEE Trans Eng Manag. [4] Office for National Statistics. (2023). "Cost of Living Insights: Food," Aug. 11.





## Stay tuned to India's first ever Webzine on food - drink & allied sectors





www.fooddrinkinnovations.com
Write to: info@fooddrinkinnovations.com