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# Asia Food JOURNAL



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# Editor's Note



## Technology, Digitalisation and Automation: The Future Is Now

As the new editor of *Asia Food Journal*, replacing outgoing editor Denice Cabel, I welcome you to the final issue of 2017. Thank you very much for your support over the years, and I also hope you will continue to be there for us as we strive to bring *Asia Food Journal* to new heights!

As the year comes to a close, the industry is abuzz with how technology, digitalisation and automation are set to change the future of the food and beverage manufacturing industry, and how simply everyone needs to leap onto this boat to not only stay relevant, but also, learn how to swim instead of sinking. The necessity of this modernisation has been the main topic of discussion at almost every major conference I have been to this past month, yet rarely is the flip side openly discussed onstage: Does all this technology and innovation mean that old-fashioned traditions, roots and brand origins need to take a backseat? In light of this, we spoke to Mintel's Head of Insights, Jane Barnett who has given us her expert opinion on this matter – do drop us an email and let us know what you think about this too.

On a lighter note, we see that some types of foods, previously kept out of the limelight due to ignorance of their health properties, are now rapidly gaining back popularity. One of the most obvious contenders here is butter – a few decades back, any liberal usage of butter would have been frowned upon as “sinful” and “unhealthy”. But today, its new health halo status is helping it to make a major comeback that does not look like it is going away any time soon.

The recently published Tetra Pak Index 2017 was a veritable wealth of information on industry market trends and helpful updates, but one major component that also drew much discussion was about “Super Leaders”, an influential group of the online community that hold much influence and sway over consumers. The core message here is that for the marketing of any brand or product to be performed efficiently in this day and age, figuring out how to collaborate and connect with this subset is essential.

Apart from the above, we have a whole lot more prepared for you in this issue of *Asia Food Journal*. In light of the upcoming festive season, here's wishing all of you a very Merry Christmas and Happy New Year, and, Happy Reading!

Pearly Neo  
Editor, Asia Food Journal

# Asia Food JOURNAL

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■ BUSINESS

## Kellogg to complete acquisition of nutrition bar brand RXBAR for US\$600 million

Kellogg Company has entered into an acquisition agreement with Chicago Bar Company LLC, the producer of RXBAR, a line of clean-label protein bars made with whole food ingredients, and which is one of the fastest growing nutrition bar brands in the United States. RXBAR will continue to operate independently as a standalone company, but now with the opportunity to leverage on Kellogg's scale and resources.

"RXBAR is a unique and innovative company. Its values, people and cutting-edge approach represent an exciting opportunity for our business. Adding a pioneer in clean-label, high-protein snacking to our portfolio bolsters our already strong wholesome snacks offering. RXBAR is an excellent strategic fit for Kellogg as we pivot to growth," said Kellogg Company CEO Steve Cahillane. "With its strong millennial consumption and diversified channel presence including e-commerce, RXBAR is perfectly positioned to perform well against future food trends."

"We carefully considered who the right partner would be for RXBAR's future. We have always been committed to delivering the highest quality products that taste great, and being radically candid and transparent with our consumers, and these priorities remain. Joining Kellogg is not only a great cultural fit, but it provides us with the tools and resources to accelerate our growth, so the brand can scale even faster than it has today," said Peter Rahal, CEO and co-founder of RXBAR.

"The RXBAR team has built an incredible business, with impressive growth and profitability. Our focus will be on helping to drive the brand's continued growth," said Kellogg North America President Paul Norman. "We're excited to welcome the RXBAR team to Kellogg."

The acquisition by Kellogg is subject to customary closing conditions and is expected to close by the end of 2017. The purchase price is US\$600 million, or approximately US\$400 million net of tax benefits. Growing rapidly, RXBAR's net sales are expected to be approximately \$120 million in 2017. The multiple on projected 2018 EBITDA is expected to be in the range of 12-14x, inclusive of the tax benefits to the purchase price.

# Grab & Go

■ BUSINESS

## Seachill sold to Hilton Food Group for GBP84 million

Icelandic Group has announced the sale of its UK-based subsidiary Icelandic Group UK (Seachill), to the Hilton Food Group (Hilton), a leading specialist international meat packing business for an Enterprise Value of GBP84 million. The transaction is expected to be completed in November 2017.

Seachill will become a standalone division of Hilton following completion of the sale, with the existing Seachill management team remaining in place. Simon Smith, the current Seachill Chief Executive Officer, will continue to lead the business as a divisional head of Hilton.

Seachill is a major supplier of chilled and frozen natural whitefish and salmon and added value products within the coated and ready-to-eat fish sectors. Significant sector expertise in consumer understanding, procurement and factory operations underpin the business and enable strong partner relationships with strategic major retailers. Seachill is also the owner of The Saucy Fish Co. which has gained recognition and success both domestically and internationally as a modern, consumer-focused brand.

Hilton is a leading specialist international meat packing business, supplying major international retailers from its state-of-the-art facilities. Hilton's business was established in 1994 to set up and operate a beef and lamb central meat packing facility in Huntingdon, UK. Hilton has grown rapidly and now has six factories across Europe plus two joint ventures which allows its products to be sold in supermarkets across 14 European countries. Hilton is a publicly traded company listed on the Main Market of the London Stock Exchange.

Herdis Dröfn Fjeldsted, Chair of the Board of Icelandic Group and CEO of the Icelandic Enterprise Investment Fund said, "This agreement to sell the business comes after the completion of a very successful reorganisation of our UK businesses under the current management team into a single business known as Seachill, which has given a scale that has enabled the growth of stronger and more successful strategic relationships with customers and suppliers. It is clear that Hilton is very well positioned to deliver further success for the business."

Simon Smith, CEO of Seachill added, "There is a very strong strategic fit between the businesses, and I believe the transaction will be welcomed by all stakeholders. Under the ownership of Hilton we will be able to invest further in our facilities and improve our organisational capability to serve our customers better. This is great news for the ongoing success of the business."



Seachill is a major supplier of natural whitefish and salmon.

## ■ PEOPLE

### Kellogg names Steven Cahillane as new CEO following John Bryant's retirement



Steven A. Cahillane has been elected as Kellogg's new Chief Executive Officer.  
(Credit: foodaktuell)

The Kellogg Company board of directors has unanimously elected Steven A. Cahillane as the company's Chief Executive Officer. This appointment will take place effective 2 October 2017, as current CEO John A. Bryant retires. Cahillane will also join the company's board of directors as he takes on the role, and will assume the role of chairman on 15 March 2018. Bryant will continue as executive chairman until then. Cahillane's most recent role was as President and CEO of The Nature's Bounty Co.

"It has been my pleasure to serve as the CEO of Kellogg Company over the past seven years," Bryant said. "I am even more confident in the future of our company today than at any other time in my 20 years with Kellogg. I've decided that the time is right to hand over the reins to a new leader who can continue the transformation of this great company."

"Today, it's my pleasure on behalf of the Kellogg Board to welcome Steve," Bryant continued. "He is a proven leader with an exceptional track record of creating shareholder value."

Cahillane has been President and CEO of Nature's Bounty since 2014. "Kellogg is an incredible company with a rich legacy and iconic brands that are beloved around the world," Cahillane said. "It will be my privilege and honour to work with such a talented group of employees as we pursue the tremendous growth opportunities before us."

## ■ MARKET TRENDS

### Mintel announces five major global food and drink trends for 2018

In 2018, market intelligence agency Mintel predicts that five trends will set the stage for the global food and beverage market. Mintel Global Food and Drink Analyst Jenny Zegler discusses the major trends predicted to play out in food and drink markets around the world, beginning with the trends that will gain wider traction in the months ahead to emerging trends that are influential, but just on the fringe in many regions.

#### 1) Full Disclosure

Widespread distrust places pressure on manufacturers to offer thorough and honest disclosures about how, where, when and by whom food and drink is grown, harvested, made and/or sold. The need for reassurance about the safety and trustworthiness of food and drink has led to increased use of natural as well as ethical and environmental claims in global food and drink launches. In addition to more specific product details, the next wave of clean label will challenge manufacturers and retailers to democratise transparency and traceability so that products are accessible to all consumers regardless of household income.

#### 2) Self-Fulfilling Practices

The frantic pace of modern life, constant connectivity, pervasive distrust and contentious tones in politics and the media have caused many consumers to look for ways to escape negativity in their lives. Many people who feel overwhelmed are focusing on "self-care," or prioritising time and efforts dedicated to themselves. Going forward, more consumers will be looking for ingredients, products, and combinations of food and drink that provide nutrition, physical or emotional benefits that advance their priorities for self-care.

#### 3) New Sensations

In 2018, the sound, feel, and satisfaction that texture provides will become more important for food and drink companies and consumers alike. Texture is the next facet of formulation that can be leveraged to provide consumers with interactive – and documentation-worthy – experiences. The quest for experiences will provide opportunities for multi-sensory food and drink that uses unexpected texture to provide consumers, especially the teens and young adults of the iGeneration, with tangible connections to the real world, as well as moments worth sharing either in-person or online.

#### 4) Preferential Treatment

As technology helps to make shopping as effortless as possible, an era of targeted promotions and products is emerging. Motivated by the potential to save time and ideally money, consumers are sampling a variety of channels and technologies when shopping for food and drink, including home delivery, subscription services and automatic replenishment. Companies and retailers can leverage technology to establish new levels of efficiency, such as customised recommendations, cross-category pairings and resourceful solutions that save consumers time, effort, and energy.

#### 5) Science Fare

A technological revolution is playing out in manufacturing as some forward-looking companies are developing solutions to replace traditional farms and factories with scientifically engineered ingredients and finished products. In 2018, technology will begin to disrupt the traditional food chain as enterprising manufacturers aim to replace farms and factories with laboratories. While lab, cultured or synthetic food and drink is only just emerging, technology could eventually be used to design food and drink that is inherently more nutritious, which could extend the consumer audience for scientifically engineered food and drink beyond environmentally conscious shoppers to reach consumers who are concerned about ingredient consistency, efficacy and purity.



Flexible and balanced diets will become more and more important in the modern, hectic way of life.

## Global brown sugar market expected to be driven by bakery, dairy product demand



The global brown sugar market is likely to exhibit steady growth in the coming years.

Latest research indicates that the the global brown sugar market is likely to exhibit robust growth in the upcoming years, due to a rising demand from the food and beverage industry. Brown sugar is a staple in the production of various commercially important food and beverage products such as bakery products and sweetened beverages. The global brown sugar market is thus likely to exhibit steady growth in the coming years due to the steady growth trajectory expected from the food and beverage industry.

According to Transparency Market Research, the global brown sugar market was valued at US\$18.3 billion in 2017 and is likely to rise to US\$26.5 billion over the 2017 to 2022 forecast period at a solid CAGR of 7.7 per cent.

A rising demand for bakery products in urban areas is likely to be a major driver for brown sugar. The bakery products industry is a key consumer of powdered, granulated, as well as syrup brown sugar and is likely to remain a major contributor to the global brown sugar market due to the increasing awareness of Western bakery products in emerging markets.

The rising indigenous bakery products industry in emerging regions such as Latin America and Asia Pacific is also likely to remain a significant contributor to the global brown sugar market in the coming years, due to the rising popularity of bakery items in urban areas in these regions. The household production of bakery products is also likely to increase in emerging regions due to the increasing interest in cooking bakery products.

The beverage industry is also likely to be another major contributor in the coming years. Aerated and fruit-based beverages have become widely popular across the world, and demand for brown sugar in beverage production is thus likely to benefit the industry massively over the coming years. The rising popularity of local beverage manufacturers, who can compete with international players due to cheaper regulatory expenses, is likely to remain a major driver for the global brown sugar market in the coming years, particularly in emerging regions such as Southeast Asia and Latin America.

Geographically, Asia Pacific (except Japan) is likely to remain the leading contributor here. The region accounted for more than 33 per cent of the global brown sugar market in 2017 and is likely to remain relevant to the market figures over the coming years in spite of a fall in market share. North America is likely to become increasingly relevant due to the growing demand from the packaged food and beverage industry. The longstanding popularity of bakery products in North America has been a major driver for the brown sugar market in the region, and the North America market is expected to grow from US\$2.5 billion to US\$3.8 billion over the 2017 to 2022 forecast period at a robust 8.7 per cent CAGR.

Europe is also likely to remain a dominant contributor thanks to the widespread presence of traditional bakery practices, which often make use of molasses more than modern operations. The Europe brown sugar market is expected to be valued at more than US\$4.7 billion by 2022, with the region likely to exhibit a 7.7 per cent CAGR over the 2017-2022 forecast period.

## ■ REGULATORY

### Warning: 'Love' cannot be named as an ingredient, as decreed by the FDA to Nashoba Brooks

The Nashoba Brooks Bakery, located in Massachusetts, USA, has been issued a warning letter by the U.S. Food and Drug Administration (FDA) which contained a myriad of issues they were required to address and resolve, but what most caught the public eye was that the bakery had listed 'love' as an ingredient in its Nashoba Granola label.

The FDA wrote the warning letter to Nashoba Brooks on 22 September 2017, stating that ingredients must be listed by their common or usual name and that "'love' is not a common or usual name of an ingredient, and is considered to be intervening material because it is not part of the common or usual name of the ingredient."

Nashoba Brooks CEO John Gates assured that full cooperation will be given to the FDA by the bakery, and also emphasised that the bakery has a cleaning contract of \$100,000 as well as a pest control contract to address the other issues, which include the maintenance of equipment and utensils, employee training verification, and building safety amongst others.

Stuart Witt, the bakery's co-owner and chief baker, said that 'love' has been listed on the label from the beginning, when the company was opened almost 20 years ago.

Gates added, "Because it's such a long process, there's so much room for error if you're not really caring and putting a lot of love into it. It was in part light hearted, but it was also to signal our customers that we really care about what we do," he said.

At first glance, this is a somewhat humorous issue that can be forgotten after a laugh, but the aftermath of this warning being highlighted has divided consumers and businesses into two pacts, one of which feels that this is a gross overreaction on the part of the FDA, the other showing understanding of this decision.

Regardless, Nashoba Brooks has complied with the FDA's demands and removed 'love' from their ingredients list.



The FDA has issued a warning that 'Love' cannot be named as a food ingredient.

## FDA proposes revoke of health claim for soy protein



The FDA intends to revoke the health claim that soy protein is beneficial for heart disease.

For the first time ever, the FDA is proposing to revoke a health claim, in particular the claim that soy protein is beneficial for heart disease.

“We have considered it necessary to propose a rule to revoke a health claim because numerous studies published since the claim was authorized in 1999 have presented inconsistent findings on the relationship between soy protein and heart disease,” said Susan Mayne, director for the FDA Center for Food Safety and Applied Nutrition, in a statement released by the agency on 30 October 2017.

She added, “While some evidence continues to suggest a relationship between soy protein and a reduced risk of heart disease – including evidence reviewed by the FDA when the claim was authorized – the totality of currently available scientific evidence calls into question the certainty of this relationship. For example, some studies, published after the FDA authorized the health claim, show inconsistent findings concerning the ability of soy protein to lower heart-damaging low-density lipoprotein (LDL) cholesterol.”

The FDA had identified 709 publications in its re-evaluation of the claim, and concluded from the evidence that the relationship between

soy protein and heart disease does not meet the rigorous standard for an FDA-authorized health claim.

“Should the FDA finalise this rule, the agency intends to allow the use of a qualified health claim as long as there is sufficient evidence to support a link between eating soy protein and a reduced risk of heart disease. A qualified health claim, which requires a lower scientific standard of evidence than an authorized health claim, would allow industry to use qualifying language that explains the limited evidence linking consumption of soy protein with heart disease risk reduction,” said Mayne.

Public comments on this topic will be accepted for 75 days, and manufacturers will be allowed to keep the current authorised claim on products until a final decision is made. The health claim for soy protein and the reduced risk of coronary heart disease had been authorized by the FDA in the 26 October 1999 issue of the Federal Register, stating that including soy protein in a diet low in saturated fat and cholesterol may reduce the risk of coronary heart disease by lowering blood cholesterol levels.

## 4,000 cattle in New Zealand to be culled to contain Mycoplasma bovis spread

The New Zealand Ministry for Primary Industries (MPI) is moving forward with control measures to prevent further spread of the cattle disease *Mycoplasma bovis*, with plans being developed with farmers to cull animals from the known infected farms.

“Since the start of this response in late July, we’ve carried out tens of thousands of tests of the infected, neighbouring and trace properties as well as district-wide testing in Waimate and Waitaki, and nationwide testing of bulk milk,” said MPI’s Director of Response, Geoff Gwyn.

“The only positive results for the disease have been on seven infected properties, leading us to be cautiously optimistic that we are dealing with a localised area of infection around Oamaru,” Mr Gwyn added.

“To prevent further spread of the disease, around 4,000 cattle on five of the seven infected properties will need to be culled and a programme put in place to decontaminate the properties and then repopulate the farms. The two other properties have had a small number of animals culled already and no cattle remain. This whole operation is about managing the disease while keeping our future options open. We want to minimise the risk of further spread of the disease. Moving ahead with depopulation of the affected farms will allow them to get back to normal business as soon as it is safe to do so.”

DairyNZ, Federated Farmers and Beef+Lamb New Zealand support the actions MPI is taking, while at the same time recognising that this is a difficult time for the farmers involved. The industry bodies believe the measures are necessary to protect New Zealand cattle farms against this disease. New Zealand is one of the few countries in the world where *Mycoplasma bovis* is not endemic, which is why the industry groups support such significant measures to keep it that way.

“I want to be very clear that this isn’t something that’s going to start tomorrow. This is a big logistical exercise, it needs to be thoroughly planned and co-ordinated and we will be doing it with the farmers who know their businesses best,” he added.

MPI anticipates the first stage of the process – removing the animals – will start after consultation with affected parties. Most of the cattle will be sent for slaughter in accordance with standard practice.

All premises, transportation vehicles and equipment involved in culling will follow a strict decontamination and disinfection protocol to mitigate the risk of spreading the disease.

Once depopulation is completed, there will be at least a 60 day stand-down period where no cattle will be permitted on the farms. During this time the infected properties will be cleaned and disinfected.



4,000 cattle in New Zealand culled to control disease spread.



# Asia Food Logistica: Record Numbers

**A**sia Fruit Logistica 2017 was essentially a hive of business activity, with more than 13,000 trade visitors from 76 different countries pouring through the doors of the AsiaWorld-Expo in Hong Kong from 6 to 8 September 2017. Visitor numbers were up by 16 per cent as compared to last year's event, setting a new attendance record.

Some 70 per cent of visitors came from Asia, representing 20 different markets across the Asia-Pacific region. The majority of geographical profiles were from China, Hong Kong, India, Taiwan, Korea, Malaysia, Indonesia, Singapore, New Zealand, Japan and Australia.

"We're delighted with the dynamic business activity on the show-floor during Asia Fruit Logistica this year," said Wilfried Wollbold, commercial director of organiser Global Produce Events. "The results underline Asia Fruit Logistica's role as the leading continental trade exhibition for the fresh produce business in Asia."

Visitors this year were treated to a show that had expanded by almost a third as compared with last year's event in terms of exhibition space, whereas exhibitor numbers had increased by more than 150. A total of 813 exhibitors from 43 different countries participated, with 24 national pavilions featured at the event.

## Asiafruit Congress: Expert insights

The Asiafruit Congress, which took place on the day before the Asia Fruit Logistica proper saw attendance from more than 400 high-level industry professionals from around 40 different countries, who were treated presentations and discussions by expert speakers, covering a range of hot topics.



ASIAFRUIT CONGRESS SESSION: (L-R) Chris White, Managing Director of Asiafruit's publisher Fruitnet Media International; Michael Every, Rabobank (Hong Kong); Filip Fontaine, BelOrta (Belgium); José Antonio Gómez, Camposol Trading (USA)

The congress opened with a session exploring the rapidly changing food retail landscape in Asia.

Shirley Zhu, who leads the South East Asia research programme for global food and grocery analyst IGD, provided a macro-view of the key trends in Asia's food retail market. The session then zoomed in on the merging of online and offline (O2O) retail channels. Moderator Chris White interviewed Paul Sheh of Alibaba-backed O2O retailer Hema Supermarket, followed by Walmart China's Winstone Chee and Sam's Club China's Yoep Man, about their respective strategies.

## Asia Fruit Awards: Celebrating excellence

Asiafruit Congress also hosted the presentation of the Asia Fruit Awards.

Presented by Asiafruit Magazine and Asia Fruit Logistica to celebrate excellence in Asia's fresh produce business, the Asia Fruit Awards recognise Asia's best companies in the fields of marketing, importing and produce retailing.



WINNER MARKETING CAMPAIGN OF THE YEAR: Belgian Fruit Valley. (L-R) Chris White (Fruitnet Media International), Award recipient Marc Evrard (Commercial director of Belgian Fruit Valley), Wilfried Wollbold (Commercial Director ASIA FRUIT LOGISTICA)

Major apple and pear cooperative Belgian Fruit Valley won the Marketing Campaign of the Year for 'Truval Pears', a long-running campaign that aims to develop new markets for a new product across Asia.

Freshmart Singapore took out the Importer of the Year Award, while the Produce Retailer of the Year Award went to Alibaba-invested O2O retailer Hema Supermarket. ■

THE NEXT EDITION OF ASIA FOOD LOGISTICA WILL BE HELD ON 5<sup>TH</sup> TO 7<sup>TH</sup> SEPTEMBER 2018, AT THE ASIAWORLD-EXPO CENTER IN HONG KONG. THE ASIAFRUIT CONGRESS WILL TAKE PLACE ON 4<sup>TH</sup> SEPTEMBER AT THE SAME VENUE.

# VitaFoods Asia: First Singapore Edition

The first ever Singapore edition of Vitafoods Asia, a unique, dedicated event for nutraceuticals, functional food and beverages, and dietary supplements in Asia, ended on a high note on 25 September 2017.

Held in the Sands Expo & Convention Centre at Marina Bay Sands, the overall seventh edition of Vitafoods Asia welcomed a total of 5,067 industry professionals (representing a 113 per cent increase over the 2016 edition) from 62 countries to discover a remarkable showcase presented by 260 global exhibitors from 40 countries that cover the entire nutraceutical supply chain. The event also enabled trade visitors to learn from over 40 world-class industry expert speakers, who shared deep insights from their wealth of experience.



Vitafoods Asia 2017 welcomed a total of 5,067 industry professionals from 62 countries, representing a 113 per cent increase in attendance over its 2016 edition.

“The strategic relocation of Vitafoods Asia saw the show double – both in size and attendance,” revealed Chris Lee, managing director at Informa Exhibitions’ Global Health & Nutrition Network, Europe. “The quality of visitors who came through and the meaningful connections made at the event have been phenomenal. While it’s never just about the numbers, we’re very heartened by the industry’s response.”

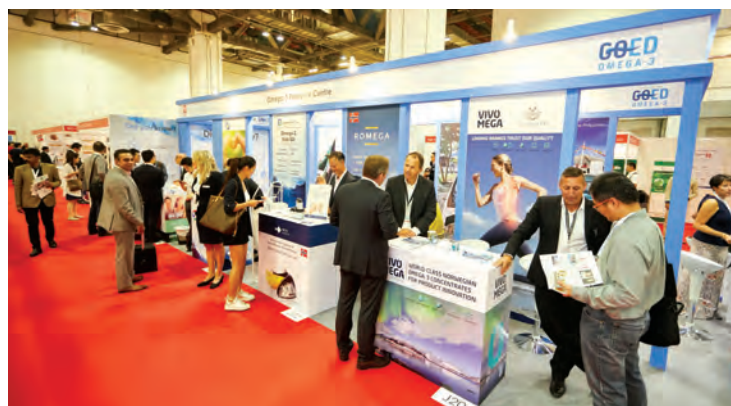
## New Venue, Renewed Interest

Earlier, Vitafoods Asia’s relocation to Singapore generated a lot of buzz, and the industry was overwhelmingly positive about the move, with approval expressed from exhibitors and visitors alike.

Returning visitor, Sandeep JHA, CEO of Generix Lifesciences Pte. Ltd. shared, “I’ve been to previous editions of Vitafoods Asia in Hong Kong, and this year’s is much bigger and better. I was invited to attend as a hosted buyer, and it was great to hear from a pre-selected group of companies who are keen on entering the India market. I didn’t have to seek them out myself, and the fact that they’ve done their ‘homework’ made it much easier to do business with them.”

## Sourcing Simplified: Visitor Attractions Hit the Mark

Over the two-day event, attendees had the opportunity to uncover the latest raw materials, ingredients, finished products, equipment, and services available in the market. Visitor attractions such as the Inspiration Showcase highlighted exhibitors’ best-selling products and new launches, while the International Pavilions and Omega-3 Resource Centre helped attendees zoom in on exhibitors from a certain country, or with a specific offering.



The Omega-3 Resource Centre enabled visitors to learn about Omega-3 formats, sources, and market data, as well as to connect with suitable Omega-3 supply chain partners.



Visitors to the Tasting Centre had the opportunity to see, taste, and touch an array of the latest functional food and beverage items.

“The Inspiration Showcase was a great place to start my time at the show,” said Iwona Mamczur, regional director (Asia-Pacific) at Nicholas Hall Asia-Pacific Pte. Ltd. “Now, I know which exhibitors to visit, based on the interesting showcase items that I’ve seen. I run a pharmaceutical consultancy in Singapore and my team is here looking for new products to inform our clients about trends and developments in the industry. I’m happy that the event has moved

to Singapore so that my whole team can attend the show, see the products, and meet the exhibitors.”

Another perennial attraction that was well-received by attendees was the Tasting Centre. Here, visitors were able to see, touch, and taste an array of the latest functional finished products. Commenting on their visitor experience at the Tasting Centre, first-time attendee from Malaysia, Kambric Yiin, assistant at Sun Ten Pharmaceutical, expressed, “I’ve never seen anything like this before. The exhibitors’ varied offerings are impressive, and it is a great chance for me to compare different products all at once.”

Exhibitors participating in this feature were automatically in the running for the Tasting Centre Awards, where visitors voted for the best-tasting functional food and beverage from a total of 37 entries across two categories. OptiPharm Pty Ltd’s Premium Vegan Dairy Free Cheese and TCI Co. Ltd’s Vita-Botanico Liquid Concentrate eventually emerged as winners in the Best Functional Food and Best Functional Beverage Awards respectively.

When asked about their win, Garry McDonald, managing director of OptiPharm Pty. Ltd., stated, “We’re very happy to have won the award! We made it to Top 3 last year, so winning this year is a big step forward. Putting our product on the Tasting Centre has definitely helped bring some visitors over to our booth. We’ve met people from Cambodia and gathered more leads from Korea and Taiwan this year, so that’s really good for us.”



OptiPharm Pty Ltd’s Premium Vegan Dairy Free Cheese won the Best Functional Food Award.

## Effective Learning Platforms Inject Vitality to the Event

Apart from business opportunities, Vitafoods Asia also offered multiple knowledge-sharing platforms led by the some of the industry’s best minds, covering both commercial and academic standpoints. Collectively, the learning platforms – Vitafoods Asia Conference, Innovation Theatre, and Life Stages Theatre – included content that addresses business challenges for a variety of job roles and business types, whether on market entry and access, scientific and technical know-how, or regulatory changes.

Lee concluded, “Over the last six years, Vitafoods Asia has been bridging the gap between ingredients suppliers, food manufacturers, and distributors by facilitating business and providing learning opportunities. The number of exhibitors and visitors at Vitafoods Asia is ever-growing, and we’re very excited to be a facilitator in these companies’ journey of establishing a presence in Asia’s nutraceutical industry.” ■

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# Global Attitudes towards Fibre

Fibre has gained much attention as a key component of a healthy diet. Nonetheless, views and expectations of this ingredient vary widely across countries, explains Beth Nieman Hacker.

**G**lobally, there is little doubt that interest in food and beverage products perceived as 'healthier' by consumers is on the rise. Though the avoidance of particular ingredients like sugar and additives remains a popular option, awareness that this is only half the battle towards achieving the Holy Grail of health is increasing, and consumer interest in foods with added health benefits is gaining traction, particularly with regard to fibre.

Studies indicate that specific attitudes towards fibre vary by region. For example, approximately half of all consumers in China want to reduce both sugar and fat, but consumers in the US and Europe are more likely to avoid sugar than fat, whereas those living in Latin America and the Middle East rank their concerns in the opposite order, with fat being a higher concern than sugar. Additionally, consumers in Latin America are the most interested in increasing fibre consumption (70 per cent as compared to a global average of 52 per cent), followed by consumers in China (66 per cent) and the USA (60 per cent).

The sustained interest in fibre has led to manufacturers looking to it more and more, both for its unique ability to deliver satisfying sensory experiences in reduced-sugar and reduced-calorie formulations, as well as its enabling of popular health and nutrition



Complementing the avoidance of sugar and fat with a fibre-dense diet is now one of the holy grails of healthy eating.

benefits claims, such as 'source of fibre', 'digestive health' and even 'heart health'.

## The Fibre Gap

Despite the pomp and vigour surrounding this ingredient, many consumers face a daily struggle to meet the recommended guidelines for daily fibre intake. The World Health Organization suggests that adults consume 25 grams per day, but most people fall short of this number. In the US, for example, only 3 per cent of consumers meet the recommended daily fibre intake.

So, why aren't consumers eating enough fibre? A large portion (33 per cent) claim that this is due to a lack of products with fibre available in the market – this clearly indicates that manufacturers have a broad opportunity in this area to provide these desired products and help narrow the fibre gap.

## Why Fibre? Which Fibre?

To close this gap, it is first important to understand the various reasons for the continued interest in fibre, as well as the most-preferred fibre sources globally.

The top motivator for fibre consumption on a global scale is, unsurprisingly, digestive health. In specific locales though, Europe prefers fibre to maintain a 'healthy diet', whereas consumers in the



There is a global trend of increasing awareness in the importance of fibre for health.

Middle East are primarily interested in fibre because it 'helps keep them full for longer'. In Asia Pacific, 'regularity' is the top driver.

The most-preferred fibre sources in most regions are generally oat, wheat, corn or barley. A majority (66 per cent) of global consumers are favourable toward seeing 'oat fibre' on a label, and 47 per cent are favourable toward 'soluble corn fibre'.

### Fibre Formulation

Health effects aside, the primary purchase driver for consumers is still taste, so it is important to choose fibres that will not negatively affect taste or texture. A negative example would be if high-fibre formulations have a gritty mouthfeel, which would be difficult for consumers to tolerate no matter how much great the desire to increase fibre intake, especially in the long term.

In addition, the following areas also need to be taken into consideration in order to create a great-tasting product containing fibre:

- Clean label – Formulate with a fibre that offers consumer-friendly labels to add more appeal to your product.
- Digestive comfort – Avoid certain fibres that, particularly at high inclusion levels, could cause digestive discomfort.
- Process stability – Ensure that the fibre content in the product is consistent through processing and shelflife.

Fibre has a good deal to offer manufacturers no matter the geographical location of the targeted consumers. From a formulation perspective, fibre can improve product body and mouthfeel, which are often lost due to sugar reduction. From a marketing point of view, it also enables manufacturers to make a variety of claims related to health or nutrition benefits that resonate with consumers around the world. This means that whether consumers want to eat less sugar



Common fibre-related health claims include 'source of fibre', 'digestive health' and even 'heart health'.

or get more nutritional benefits, fibre can help, and this is an area worth exploiting. ■

THIS ARTICLE WAS SUBMITTED BY BETH NIEMAN HACKER, DIRECTOR OF MARKET RESEARCH FOR TATE & LYLE.



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# The Return of Butter

In the 70's and 80's, butter was considered naught more than a sinful indulgence that many avoided. Today, it is making a glorious comeback, and we hear from Stanley Goh about this.

**G**lobally, butter consumption is significantly rising - Annual butter consumption has increased by a staggering 1.7 million metric tonnes since 2005, making this the equivalent of more than three billion 500g blocks of butter.

While almost all of this growth initially took place in emerging Asian countries thanks to a growing middle class, formidable growth has also been seen in developed countries. Butter consumption is already generally high in developed countries, and even small changes by food companies have had a huge impact on demand. For instance, when McDonald's switched to butter on its Egg McMuffin, annual butter consumption in the United States increased by about 9,000 tonnes.

This worldwide growth is set to continue, with another 2.1 million metric tonnes of butter expected to be required annually by 2025 to meet increased global demand, according to the OECD-FAO Agricultural Outlook 2016-2025.

## Natural goodness

One of the main factors driving the demand for butter is what is called its new 'health halo', a global phenomenon where butter has been essentially crowned as a healthy food product. In the 1970s



Butter's delicious flavours are enhanced during baking and frying due to its chemical composition.



Stanley Goh

and 1980s, the most common nutritional advice was to eat less fat and more carbohydrates, but today, scientists and consumers alike now know that this assumption was built on a number of flawed studies.

Also long gone are the days where synthetic products, such as margarine, were considered to be a healthier option than those provided by nature. Nutritionists today advise consumers to eat 'real food' that is as close to nature as possible, so many consumers now appreciate the importance of a balanced diet that embraces rich, natural foods in moderation, thus demand more natural ingredients in their diets.

Being just a churn away from full-cream cow's milk, butter easily meets that requirement. Butter is made from cream derived from milk – and nothing else.

Millennials and Gen Z see butter as a more natural, whole option and are one of the key drivers behind this resurgence. At the same time, for older generations, the changing recommendations around butter have given them "permission" to finally continue to eat butter.

Adding to this, social media is expediting butter's comeback. For instance the hugely popular "Bulletproof diet", whose followers add butter to their daily coffee, has gained prominence on social media both in the United States and globally. According to the United States Department of Agriculture, butter consumption is set to grow 8 per cent in the country this year.

## Quest for the best

Growing urbanisation and an expanding middle class has increased out-of-home spending in Asia, especially in sectors like bakery. In fact, Asia now drives the global growth in the bread, bakery and cakes market, with bakery goods enjoying a rapid increase in demand. In 2013, the Asia Pacific region generated more than 60 per cent of global baked goods growth, with the bulk of this coming from China.

As incomes grow and taste preferences evolve, these consumers are demanding higher quality, better-tasting and more nutritious food, a trend dubbed as 'premiumisation'. The "Young, Educated and Rich", as many of the younger generation in Asia living in cities with more demanding, higher paying jobs are dubbed, are the ones really driving this trend, with considerably more disposable income and a tendency to spend more than their parents' generation.



The worldwide demand for butter is expected to grow exponentially.

While dairy has not been a traditional staple for many consumers in Asia, this move towards the premium is also driving large increases in overall demand for high-quality, natural dairy, including butter. Asian consumers are prepared to pay more for premium bakery foods containing real dairy – up to pay 15 per cent more for bakery products made with butter compared to margarine, according to Kadence International Research.

### Championing butter on the menu

As consumer tastes grow in sophistication, food and beverage establishments are looking for ingredients that give them a competitive edge through superior taste and improved overall business performance. Many chefs recognise that butter has a natural, unique flavour capable of elevating their menu offerings and is a great solution for a wide variety of uses in kitchens and bakeries.

For example, butterfat traps air when creamed with sugar, which helps cakes rise. It also helps with developing gluten and contributes to the flavour, texture and shelf-life of baked goods. With its creamy texture and unique melting properties, it also provides a rich base for sauces, such as a classic béarnaise. Often regarded as the 'gold standard', butter is difficult to imitate thanks to the complex combination of its many naturally-occurring compounds.

Furthermore, butter's delicious flavours are enhanced during baking and frying. This is because some flavour compounds in butter are only released during exposure to higher temperatures.

As chefs and food businesses look at how they can champion butter on their menus, brands such as Anchor Food Professionals choose to ensure their butter becomes top choice for these businesses by using the freshest ingredients, such as fresh milk from pasture-grazing cows in New Zealand to guarantee a full, rich, creamy flavour and satisfying mouthfeel when the butter is used in a variety of foods.

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Millennials and Gen Z see butter as a more natural, whole food option, whereas those of the older generation see the changing recommendations as having 'permission' to enjoy eating butter.

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### Meeting demand for butter

Further to merely providing the butter, companies like Anchor, which is also the world's largest exporter of butter and anhydrous milk fat, have also come up with other unique ways to help customers meet the growing demand for butter, e.g. having their professional chefs work with customers to determine which formats of butter best suit their needs, and how to help improve functional performance in their kitchens.

So after decades of misunderstanding around the role that fat plays in a healthy diet, butter is well and truly back on the menu and from all accounts, it appears to be here to stay. ■

STANLEY GOH IS FONTERRA'S REGIONAL DIRECTOR OF FOODSERVICE FOR ASIA & THE MIDDLE EAST AND IS RESPONSIBLE FOR THE IMPLEMENTATION OF THE GOALS AND STRATEGY FOR FONTERRA'S FOODSERVICE BUSINESS IN THIS DIVERSE AND IMPORTANT REGION. IN TOTAL, HE BRINGS 21 YEARS OF EXPERIENCE IN SALES AND GENERAL MANAGEMENT, INCLUDING THE ROLES OF SALES DIRECTOR FOR MALAYSIA AND SINGAPORE FOR PROCTER & GAMBLE, COUNTRY MANAGER FOR SINGAPORE AND THEN MALAYSIA WITH NIKE, AND HEAD OF SAMSUNG CONSUMER ELECTRONICS SINGAPORE FOR SAMSUNG ELECTRONICS ASIA.

## SMART BEVERAGE PACKAGING

# The Power of Smart Packaging

Smart packaging helps beverage brands to deliver experiential content and build a powerful stream of marketing and supply chain data, explains CROWN Asia Pacific President Robert Bourque.

The Asia Pacific region continues to prevail as one of the largest markets for beverage packaging, thanks to the rising popularity of fruit juices, ready-to-drink teas, energy drinks and beer. With the region's food and beverage market estimated at US\$49 billion, major beverage companies are also expanding their product portfolios to cater to this growing demand. Increased competition is also leading beverage brands to explore novel ways to customise products for consumers and further stand out from the crowd.

A visibly popular emerging strategy that brands are employing to attract and retain consumer attention involves harnessing the interconnectivity of the digital space, including breakthroughs in augmented reality (AR) and the Internet of Things (IoT). The proliferation of smartphones – which have an estimated 1.254 billion users in Asia Pacific – has amplified the possibilities these platforms present, especially as it relates to packaging. The end result is a powerful channel for brands to deliver the engaging experiences that today's consumers are seeking and to foster closer connections.



Robert Bourque

## Gaining the Edge with Digital

According to the PricewaterhouseCoopers' (PwC) Total Retail 2016 survey, consumers in Southeast Asia are among the world's fastest adopters of mobile and social media in retail due to the ease and convenience of online shopping, particularly in Singapore, Malaysia and Thailand. Along with facilitating the purchase of goods, smartphones enable consumers to make crucial buying decisions by serving as a gateway to collect more information about a product, read reviews, compare prices between brands and even access promotional offerings.

This high level of technological engagement combined with growing consumer affluence and rapid urbanization is contributing to greater demand for packaged goods, including beverages. Savvy beverage manufacturers are capitalizing on this intersection of trends by shifting their focus to the creation of unique digital interactions that are delivered through smart packaging. Beverage cans, which are growing faster than many other formats in the Asia Pacific region due to, in part, their convenience and sustainability attributes, are an ideal delivery vehicle for these initiatives. The integration of technologies like AR and Quick Response (QR) codes turn beverage cans into multi-media portals, offering access to games, videos, sweepstakes, coupons and other activities that ensure consumer engagement long after a product is purchased. Combining the power of smartphones and beverage cans as conduits for AR experiences also allows brand owners to layer virtual product or experiential content on top of the real world in such a way that brands appear to be existing in the same space as the consumers.

As an example, to help its customers deliver breakthrough experiences through digital platforms, Crown has developed CrownSmart™, an application that facilitates interaction with consumers via unique codes situated beneath the tabs of beverage cans. The code remains hidden until the can is opened, creating a direct link exclusively to the end consumer. Immediately after the consumer scans the code, brands can gather valuable, real-time purchasing and consumption data, including who opened what content and when and where the code was activated. This information will, in turn, help brands tailor subsequent campaigns to stay aligned with consumers' behaviour, needs and preferences.



Scanning the QR code on the beverage tab will bring the consumer to a preset link for further interaction.



Integrating technologies like QR codes into beverage cans turn them into multi-media portals that ensure consumer engagement long after product purchase.

Including unique codes on packaging also embeds digital intelligence into each unit, making it simultaneously trackable and interactive. This enables traceability and authentication to be carried out with ease, helping to protect brand reputation in the event of a recall or from problems like product diversion and counterfeiting. In this case, Crown has partnered with EVRYTHNG, the IoT Smart Products Platform pioneer, to connect consumer packaged goods with these 'digital triggers' into the cloud. Products that are #BornDigital™ in this way are capable of delivering applications, experiences and analytics at every stage of their lifecycle: From the time they are made, shipped, sold all the way to the moment they are consumed and responsibly disposed of.

### Digital Engagement = The New Normal

As appetites for digital consumption grow, the potential for creating engaging experiences via smartphones and packaging is virtually limitless, especially among Southeast Asia's technologically savvy consumers. Beverage brands adopting smart packaging techniques and taking advantage of this new stream of data will be well positioned to reinforce brand activation through targeted exposure, drive new and repeat purchases, and optimise their supply chains by improving



Scanning the QR code on the can tab will require an app to be downloaded.



An example of how the QR code can be added to the beverage tab.

product traceability. With industrial IoT adoption growing and the emergence of more smart city projects worldwide, an exciting future lies ahead for beverage brands to utilize valuable consumer data to create experiential content and drive greater consumer engagement in Southeast Asia. ■

ROBERT BOURQUE, PRESIDENT OF CROWN ASIA PACIFIC IS RESPONSIBLE FOR THE OPERATIONS OF 32 PLANTS WITH BEVERAGE, FOOD CAN, AEROSOL AND GENERAL LINE PACKAGING PRODUCTION LINES ACROSS CHINA AND SOUTHEAST ASIA, SUPPORTING BOTH GLOBAL AND LOCAL CUSTOMERS. PRIOR TO ASSUMING HIS CURRENT POSITION IN 2016, ROBERT WAS SENIOR VICE PRESIDENT FOR CROWN BEVERAGE PACKAGING, CHINA AND HONG KONG.

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## SEALING AND LEAK DETECTION

# Sealing Success in the Food Market

Effective sealing and leak detection systems are essential to ensure products meet the freshness, quality and convenience requirements of today's consumers, says Oliver Smart of Ishida Europe.

The food industry has been dominated by two noticeable trends in recent years. Firstly, there has been a big increase in demand for pre-packed fresh products, driven in part by many consumers' desires to adopt a healthier lifestyle, with a focus on organic ingredients and a reduction in the use of preservatives. At the same time, the need for convenience remains paramount as busy lives restrict the time available to shop or cook.

According to Nielsen, fixed weight, pre-packed food is seeing sales increases in many areas. For example, in the meat sector, where deli products recorded a 1.3 per cent growth in 2016 but pre-packed varieties achieved 2.8 per cent. There was also growth in pre-packaged fruits and vegetables.

At the same time, pack requirements are also changing. The growth in single occupancy households and the need for greater portion control – both to reduce food waste and tackle the growing obesity crisis – have seen the introduction of smaller and single-serve packs. Another development is that of individually-sealed twin-packs, enabling consumers to use some product immediately and store the remainder for later consumption.



Oliver Smart

One of the most important aspects of the requirement to combine freshness and convenience is the need to maximise the shelf-life of products. This has led to the development of a variety of techniques and technologies to deliver this.

One of the earliest examples, which is still widely used today, is the use of absorbing or emitting sachets and pads, placed within a sealed container. Another commonly-used technology is Modified Atmosphere Packaging (MAP), which involves the modification of the normal atmospheric gas mix within a container, balancing oxygen, carbon dioxide and nitrogen levels to achieve maximum shelf-life. Carbon

dioxide is used as an inhibitor and, in most cases, is present in 10 per cent or higher proportions.

Pack materials are also playing their part with the introduction of barrier films that can control moisture and oxygen transfer in and out of the container. Bio preservation introduces a controlled level of microbiota or antimicrobials that render harmful pathogens inactive. Packaging material scalping is also used to absorb unwanted flavours and odours.

Very often today, manufacturers are implementing the so-called 'hurdle' technique to maximise shelf-life. This involves using a combination of these technologies, usually with MAP as the base, in order to ensure that pathogens have a number of different barriers to overcome, thus further minimising the risk of them reaching the product.

## Without high seal quality, all shelf-life technology is essentially pointless

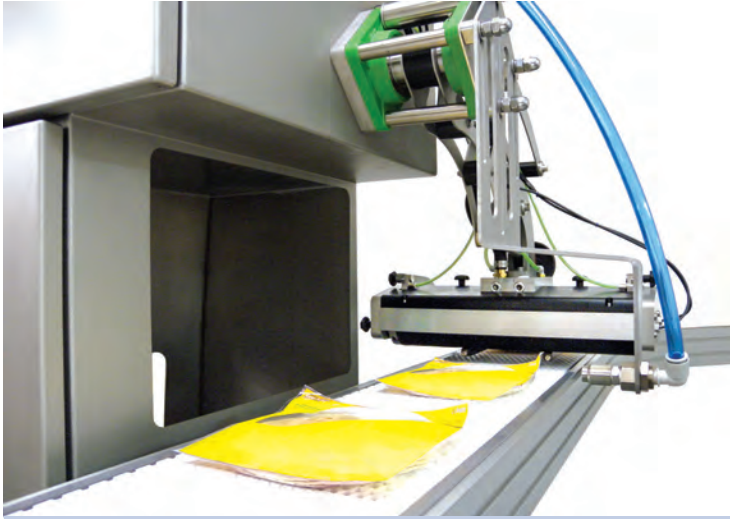
What is true for all these techniques is that they depend on the integrity of the pack to be effective. Fundamentally, this involves the quality of the seal – if this is defective, manufacturers will be unable to control the environment within the pack and therefore ensure the long term freshness of the product. This will have an impact on brand reputation if the faulty packs pass undetected through the manufacturer's control points and are incorrectly delivered to the retail or foodservice outlet.

A poor seal can create other quality issues. If there is a leak in a ready meal pack containing a liquid or sauce, this leak has the

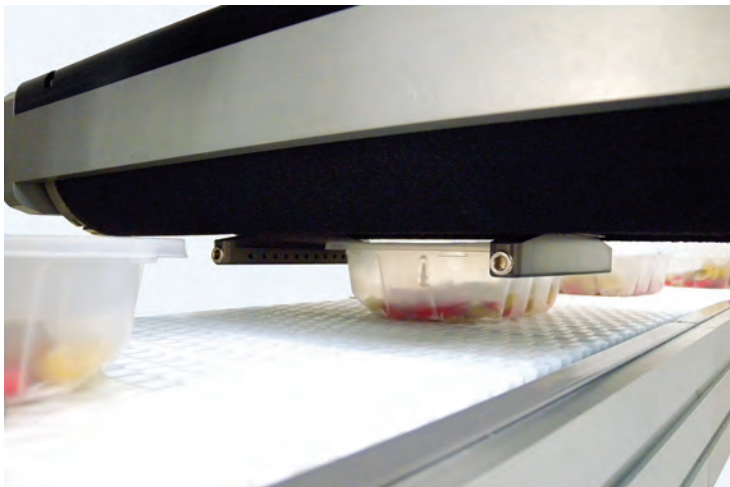


One of the earliest shelf-life maximising techniques is the common absorbing sachet, and it is still omnipresent today.

All shelf-life maximising techniques depend on pack integrity, which in turn depend on seal quality.



Ishida Airscan Leak Detection inspecting poppadum packets.



Trays being inspected to ensure seal integrity is intact.



Items like fresh pasta (above) especially require proper sealing to ensure quality is not impacted.

potential to ruin an entire case of correctly sealed packs by spilling its contents across them.

Increasing automation throughout the processing and packing lines and higher packing speeds mean fewer opportunities for operators to spot leaking packs. Moreover, a tiny hole or tear in a pack or seal may be too small to detect with the naked eye, particularly on high-speed production and packing lines.

New techniques are also being developed to help indicate product quality when the pack is on-shelf, such as LED indicator strips. This means that rather than consumers noticing a reduction in product quality when they open the pack at home, this is highlighted to them when the product is on-shelf. As a result they will not purchase the product, leaving this poor quality image on show for everyone to see. With many supermarkets also including details of the supplying farm on their fresh produce packaging, the damage to reputation can have a far wider reach than just the brand owner.

For all these reasons, food manufacturers are increasingly looking at introducing a reliable seal testing system into their operations. There are a variety of different methods and systems available.

### The various types of sealing systems available

Off-line systems will test a number of products during a set period, for example ten every hour. These can range from a basic water bath to more advanced desk top systems for testing vacuums or carrying out gas analyses.

Online systems offer greater peace of mind as they are able to test every pack and in this way provide more security against defective packs. For MAP packs containing less than 10 per cent carbon dioxide or packs that do not use MAP, one method is to apply gentle pressure to each pack to see if there is any 'give' which will indicate poor seal integrity. These 'mechanical' seal testers are capable of speeds of up to 120 packs per minute.

More recently, a new detection technology has been developed which uses lasers to identify leaks of CO<sub>2</sub> from holes as small as 0.25mm in MAP packs at speeds of up to 180 packs per minute.

### Choosing the right sealing system for your product

In choosing the appropriate system, it is important to assess the element of risk involved and the implications of poorly sealed packs being undetected. If the consequences – costs such as rework, wasted product and retailer fines, along with the loss of brand reputation – are likely to be serious, then an in-line system will be necessary.

It is essential to check the effectiveness of the seal detection process, including how packs are assessed. Some systems inspect batches of product rather than individual packs. This can mean that just one defective pack leads to an entire batch being rejected, which can create a logistical issue. The ability for the detection system to keep up with the overall speed of the line is also vital.

While the food sector remains fast-changing, one thing has remained constant – the customer is king. And with consumers having so much choice, brand loyalty can be difficult to establish and maintain. In this sector where freshness and convenience is key, delivering consistently high quality products is a significant part of achieving this, and this relies on the same consistency of quality in the packaging. For high throughput, automated processing and packing lines, an effective leak detection system is therefore an essential part of the operation, and one that is likely to deliver a fast return on investment. ■

THIS ARTICLE WAS SUBMITTED BY OLIVER SMART, PRODUCT MANAGER FOR FRESH PRODUCE AT ISHIDA EUROPE. OLIVER IS RESPONSIBLE FOR THE COMPANY'S AIRSCAN, SEAL TESTER, FLEXGRADER AND WEIGH PRICE LABELLER (WPL) PRODUCT LINES. OLIVER HAS SPENT THE LAST EIGHT YEARS WORKING AS A DESIGN ENGINEER ON PACKAGING SOLUTIONS. AS PRODUCT MANAGER, HE HAS BEEN RESEARCHING THE LEAK DETECTION MARKET IN-DEPTH TO UNDERSTAND KEY CUSTOMER DRIVERS.

## PUMPS

# The Way Forward for Pumps in F&B

Pumps play a major role in food and drink processing, as many machines require these for operation. Pearly Neo spoke to Grundfos' Eric Lai about how pumps are expected to evolve moving forth.

**W**hat are some of the current major roles that pumps play in terms of food processing and/or packaging?

The food and beverage (F&B) industry consists of a wide range of processes and applications that call for pumps to keep things moving during the production process, from the processing of raw materials to the hygienic transport of finished products. Pumps are prevalent across all food processing plants, confectionery and chocolate factories, as well as dairies.

For the dairy industry, hydraulic pumps are used to keep milk and other dairy products fresh and free of cross contamination, while sanitary pumps ensure the pasteurisation process is free from bacterial contamination. For chocolate and confectionery, pumps are necessary for process control, strict temperature control and the precise handling of solids. With other processed foods, pumps come into play to ensure constant motion for food mixtures with high viscosity.

Pumps are also used in every facility in the industrial water circuit, which includes ensuring a stable water supply, leading wastewater out of the plants to treatment facilities, and circulating



Eric Lai

water throughout the facilities for heating and cooling applications.

**How crucial a role do pumps play with regard to establishing true 'factories of the future', and what sort of changes/transformations do you feel need to be highlighted to industry players in order to move towards this?**

'Factories of the future' call for more efficient, greener processes, and the production of more customised and higher quality products. Industries in turn need to make the necessary transition towards a more demand-driven approach, with less waste and a better use

of resources.

For industries, pumps are involved in every part of the manufacturing process, accounting for up to 25 per cent of energy usage in certain industrial plant operations, as per numbers from the US Department of Energy. Thus, in order for industries such as F&B to future-proof themselves, they need to look at the latest pump technology and innovations that can take their manufacturing processes to the next level, including tapping into the Internet of Things and adaptable machines.

**It appears that digitalisation is one of the major factors of discussion in F&B. What sort and how big of a role does digitalisation play in the Asian F&B industry?**

Food manufacturing companies have been dealing with various challenges over the last few years, namely the volatile market demand and changing requirements from customers as well as suppliers, which have been driving the move towards 'factories of the future', or Industry 4.0.

As concerns over food safety grow rapidly in Asia, digital technology in the F&B industry is crucial in not only ensuring data-driven transparency throughout the manufacturing process, but also ensuring quality control and the strictest of hygiene standards.

With food innovation taking off to meet changing consumer tastes, the production process could look to include automated and adaptive technology to accommodate a wide range of raw materials while still maintaining the consistency and integrity of food products.



In chocolate manufacturing, pumps can help to manage temperature control so as to maintain optimum processing conditions.

**What sort of benefits can industry players expect to gain by placing emphasis on implementing digitalisation and intelligent solutions into their pumps and other processes?**

With digitalisation addressing some of the key issues in the traditional manufacturing process, intelligent applications such as adaptive pump technology mean increased efficiency and a more effective use of resources. This leads to the ability to intelligently control energy consumption by keeping the use of a pump to a bare minimum. These applications mean that the F&B industry has the potential to generate maximum output with a minimum use of resources.

**What are some of the recent challenges particularly relating to pumps that the F&B industry has faced, that have been successfully navigated with the use of intelligent solutions?**

Digitalisation is key to addressing the various challenges that exist in a traditional manufacturing process, making it more efficient and sustainable.

For example, when it comes to the handling of delicate or sensitive products in the food and beverage industry, Grundfos' smart pumps are able to intuitively adjust their speed and performance in response to changes in the product's properties. This ensures gentle handling during processing and efficiently prevents the product from being physically damaged. This in turn makes for less waste and higher yield.

For products like chocolate and confectionery that are sensitive to heat, these pumps are also able to adapt to changes in temperature based on feedback from sensors, ensuring that any potential temperature increase due to handling can be kept at a minimum so as to maintain optimum processing conditions.



Industrial pumps, like the Grundfos Biobooster above, play major roles in various F&B operations.



There is no limit to how far pumps will be able to evolve in the industry.

**Pumps are involved in every part of the manufacturing process, accounting for up to 25 per cent of energy usage in certain industrial plant operations.**



**What sorts of issues/concerns do you commonly come across when it comes to implementing these new solutions?**

While the food manufacturing industry has made great strides in switching to newer technology, adoption is still a challenge. What companies need to realise is that while advanced intelligent technology can cost more upfront, the benefits in the long run will exceed the upfront investment. As these innovations are further developed on a larger scale and with affordable distribution, cost will be less of a barrier in the near future.

**How do you foresee digitalisation changing the industry moving forward, and what does the future hold for digitalisation in F&B?**

Moving forward, the food industry will demand faster processes – machines that give manufacturers the flexibility to be more agile in the production process and more reactive to retail changes in real time. This means processing innovation that focuses on cleanability, flexibility in changeover and operator safety.

**What about pumps in particular – what do you see will be the 'end point' of evolution for pumps, i.e. what will the 'perfect' pump be able to do at the end of the day?**

Like with any other technology, there is no end point in terms of the evolution of pumps, as new challenges and issues develop along the way, as well as greater innovation. This is exciting for the pump industry as it means continuous improvement and keeping things competitive to stay ahead of the game to provide industries what they need. ■

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## DIGITALISATION

# Digitalisation for Sustainability

As the concept of Industry 4.0 gains momentum, adapting to the digital revolution has become near-tantamount in the F&B manufacturing scene. Raimund Klein tells us why.

The global manufacturing landscape has evolved rapidly over the past few years and the sector is experiencing a paradigm shift in both mindsets and processes, particularly with the advent of and push towards 'Industry 4.0'. Manufacturers now are faced with the prospect of being left behind or worse, going bust, if they fail to adapt to the digital revolution. Needless to say, priorities have changed and an increasing number of enterprises are beginning to realise the importance of embracing digitalization to remain competitive in the global marketplace.

The impact of the evolving manufacturing landscape cannot be understated, as shown by the results of the 2016 Global Manufacturing Competitiveness Index (GMCI); a multi-year study prepared by Deloitte Touche Tohmatsu Limited, Global Consumer & Industrial Products Industry Group and the Council on Competitiveness. The study revealed that manufacturing is still very much a key driver of global economies, heavily influencing infrastructure development, job creation and contribution towards gross domestic product (GDP), paving the way towards economic prosperity. Key markets in Southeast Asia such as Malaysia, Thailand, Indonesia and Vietnam were



Raimund Klein

highlighted for projected growth, and are expected to break into the top 15 nations on manufacturing competitiveness over the next five years. Singapore, currently ranked 10<sup>th</sup> on the index, attributes 20 per cent of its GDP to the manufacturing sector.

The food and beverage (F&B) industry in particular has been a significant contributor to the growth in manufacturing in Southeast Asia. Global management consulting firm L.E.K Consulting reported that the combination of a wealth of new products and the increasing penetration of modern retailing have led to double-digit growth rates for numerous F&B categories across the region.

It is plain to see that consumer demand is ripe, and the industry in general is experiencing positive expansion. A large part of the accelerated growth in recent years has been due to technological advancements in the industry. The question then really is, how well are businesses reacting to this growth and what measures are being implemented to ensure that they remain competitive?

Firstly, it is imperative that F&B manufacturers recognise the challenges they face. With increased production requirements, it is crucial that they maintain a consistently high level of product quality, maximum plant availability, optimum resource efficiency, and, increasingly, the greatest possible flexibility in order to meet growing individual customer requirements.

F&B manufacturing plants are as complex and complicated as any other plants. There is constant pressure to meet the high requirements of hygiene, quality, HSE, efficiency and costs. Due to lower margins when compared to other industries, coupled with demand for high quality, each and every tool capable of optimising performance and output must be utilised. Operational excellence is certainly not a new or novel concept in the industry; it has been in play for decades, considering the various technological developments the industry has already deployed – such as automation. Digitalisation is the next logical step in the industry's evolution as players seek to gain an upper hand amongst competitors.

Unfortunately, due to the various pressure points faced, the F&B manufacturing industry lags behind other industries, such as pharmaceuticals and electronics, when it comes to the implementation of new technologies. Thankfully, that is slowly changing as adoption rates are rising and are expected to catch up



Manufacturers today are faced with the prospect of being left behind or worse, going bust, if they fail to adapt to the digital revolution.



There is constant pressure for F&B manufacturing plants to meet the high requirements of hygiene, quality, HSE, efficiency and costs.

within the next five to 10 years. As a result, there will be a spike in the use of automation and robotics, which will be strengthened by advantages offered by data collection, analysis and utilisation, as the industry ushers in the digital age.

Digitalisation is a major trend and innovation driver, creating completely new business and growth opportunities for companies. It is fundamentally, though not exclusively, a tool for the collection of large amounts of data available, analysing said data and using the outcomes to optimise the performance of the related facilities and processes. One of the main advantages it brings to adopters is that it is technology that applies to all the processes, operations, equipment and logistics involved. Furthermore, digitalisation offers the manufacturer long-term cost savings opportunities in practically every aspect of the business.

Digitalisation plays a fundamental role in logistics, not only in terms of tracking and establishing provenance and quality, but also in terms of fine-tuning the supply chain to reduce storage requirements and eliminate feedstock shortage, which is a major concern when dealing with perishable goods. Furthermore, digitalisation will immensely aid in reducing the time between production completion and product delivery.

All manufacturing plants seek to optimise operations, and this is not easily done – this is where digitalisation shines with great potential. In-depth analysis can offer insight into weak links and underperforming sections of the process, in some cases even discovering obsolete portions. It also enables manufacturers to diminish time-lag between processes and eradicate loss of production time due to kinks in the production line.

Most processes in the food and beverage industry have a high demand for utilities, such as electricity and water. Digitalisation

helps manufacturers to use these utilities more efficiently, enabled through energy and water saving technologies, which not only helps to save money, but in this era of global warming and climate control, it aids in maintaining natural resources with the added benefit of being a greener operator.

Most critically, digitalisation is not a one-size-fits-all solution. It offers solutions that are tailor-made to suit the requirements of each manufacturing plant and its related processes, thus ensuring that factors such as recommended costs and efficiency are based on the manufacturing capabilities, budgets and bottom lines of each plant.

To draw on all the benefits of digitalisation, businesses must first achieve an end-to-end integration of their data. This requires the integration of industrial software and automation, the expansion of communications networks, security in the area of automation and the use of business-specific industrial services. These will enable manufacturing companies to achieve faster, more flexible value-adding processes and so cater more specifically to individual customer needs, allowing them to respond far more rapidly to new market demands, and making it easier for them to develop complete new business models.

It is clear that digitalisation is a technological wave that will make the manufacturing industry more efficient, more productive and more profitable. In the highly competitive climate of the food and beverage industry, it is critical that every advantage be utilised in order to maintain market position and market share. Mastering all the challenges posed today and those which will arise in the future is possible only with digitalisation.

The digital transformation in an industrial context is only just the beginning, and it is about to change our world profoundly. ■

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Some are born to **LEAD** and  
**NOT follow**



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## FOOD FRAUD

# Industrial Food Fraud: What Gives?

Transparency-One marketing manager KellyAnn Tsai analyses the 4 most common food frauds in the industry today, and what F&B product owners need to do to handle these.

**F**ood fraud is, unfortunately, a billion-dollar business. The global food industry loses US\$10 to US\$15 billion per year to fake food, and it affects approximately 10 per cent of all commercially sold food products. Food fraud is defined as the act of “purposely altering, misrepresenting, mislabelling, substituting or tampering with any food product at any point along the farm to table food supply chain”, and it most commonly results from individuals or companies attempting to cut costs and maximise profits from food production.

Every transaction that occurs in the supply chain is an opportunity for fraud to occur, whether it is at the supplier, manufacturer or retailer level. Businesses need to be vigilant to avoid involvement in food fraud or, at minimum, be prepared to quickly identify and manage impacted products.

In truth, food fraud can even be described as a very sophisticated business, and it can manifest in different forms.

## 1. Misrepresentation/product content fraud

This is the most straightforward type of food fraud, where a product is represented as something that it is not. One of the most well-known examples of this was the 2013 horsemeat scandal in Europe and the United Kingdom, where ground beef containing up to 100% horsemeat was found in several products at multiple retail stores.



Ingredient or geographic-related food frauds often occur at the producer stage.



KellyAnn Tsai

Many players across the supply chain were adversely affected by this incident. At least 14 slaughterhouses and manufacturers in the UK were found to be involved, and the scandal ultimately spread to 13 other European countries. Frozen hamburger sales fell by 43 per cent, and sales of ready-frozen meals fell by 13 per cent as compared to previous numbers.

The horsemeat scandal highlighted the complexity of supply chains in the global food industry, and illustrates how easily a single incident of fraud can escalate to an international scale. Unfortunately, this type of fraud is widespread in the food industry, and a variety of products are

commonly tampered with, including:

- Honey: Honey is often cut with corn syrup or fructose syrup, especially when imported.
- Oregano: A 2015 study revealed that 25 per cent of oregano sold in the UK was adulterated with other ingredients, typically olive and myrtle leaves.
- Olive oil: Olive oil is commonly diluted with cheaper oils such as soybean, peanut, and sunflower seed oil.
- Fish: Pricier fish species such as red snapper and halibut are commonly faked and secretly replaced with cheaper species, such as tilefish.
- Parmesan cheese: In 2012, the US Food and Drug Administration discovered that a cheese manufacturer had used excessive amounts of cellulose, a common filler made of wood pulp, in its “100 per cent parmesan.”
- Alcohol: Between 2016 and 2017, an INTERPOL-Europol operation, which covered 61 countries, seized nearly 26 million litres of fake alcohol.

While these are some of the most common examples, virtually all food and beverage categories are susceptible to product content fraud. Suppliers, manufacturers, and brand owners must ensure an in-depth understanding of supply chains in order to effectively identify and ultimately prevent misrepresentation from occurring.

## 2. False country of origin

Food products that derive value from their geographic country of origin are also commonly falsified. In general, European countries,





Diluting olive oil with other, cheaper types of oil is also a common food fraud.

which have a reputation for specialized, high-quality foods, are the most seriously affected. In 2015, food fraud of certified-origin food products in Europe had a turnover of at least €4.3 billion.

Italy has some of the highest sales of foods with geographical indications, making gourmet Italian foods particularly susceptible to fraud. For example, the “Made in Italy” label is often used to pass off cheaper foreign products as Italian – such as “Made in Italy” tomato sauce that may actually include tomatoes imported from China, Spain, or the United States.

Additionally, an investigation into the production of Parma ham – an Italian delicacy produced from pure Italian male pigs – found that slaughterhouses had used pigs from outside Italy, in defiance of EU rules. The investigation cast doubt on the entire Parma ham industry – which generated €750 million in 2015 – as well as the validity of European geographical indications as a whole.

Naturally, any occurrence of fraudulent country of origin begins at the producer level. To identify and prevent this type of fraud, food businesses need to implement measures to map their supply chains down to the source.

### 3. Product claims

Consumers today are especially concerned about what is in their food, and rely on specialized product claims and labels to help guide them in their choices. Inaccurate product claims are particularly problematic for processed goods. It is all too easy for a noncompliant ingredient to enter the supply chain and completely discredit a product claim. For example, although the EU’s “organic” label can only be used on products that comply with EU organic production rules, over 700,000 fake “organic” products from Italy, valued at over €220 million, were sold in Europe in 2011.

The problem may also be compounded as retailers begin to shift away from long-established labels, in favour of alternative labelling. Earlier this year, UK retailers Tesco and Sainsbury’s announced they will replace the familiar “Fairtrade” label with “Fairly Traded” on



Branded or luxury food ingredients like Parma ham are often associated with fraudulent claims.

their products. This fragmentation of labelling makes the risk of inaccurate product claims more likely, as supply chain partners and consumers alike become less familiar with these new schemes and associated requirements.

Unfortunately, fraudulent product claims will not go away any time soon. Specialty labels command higher retail prices, making it an appealing target for fraudsters. Indeed, in 2015, Europol warned that “fake ethical produce could be ‘the next big food fraud waiting to happen.’”

### 4. Undeclared and unsafe ingredients

Perhaps the most dangerous of all the types of food fraud, products containing undeclared and potentially hazardous ingredients pose an enormous risk for consumers. Undeclared allergens, for example, can have fatal consequences: In 2012, a child died from peanut allergies due to a restaurant using a cheaper nut mix in lieu of almond powder. While most food allergies are caused by the “Big 8” – egg, fish, crustaceans, milk, nuts, peanuts, soy and wheat – allergic reactions can be caused by virtually any food, making food fraud an especially dangerous game as it moves into the life-threatening zone.

Non-food ingredients are also commonly used in fake food and can prove just as dangerous. For example, INTERPOL-Europol Operation Opson V, which spanned 2015-2016, seized 85,000 tons of olives that had been treated with copper sulphate to brighten their color. Copper sulphate is commonly used in pesticides, and overexposure can lead to nausea, vomiting, abdominal pain, and even death.



Cutting pure honey with syrups affects quality but is not immediately apparent.

In many cases, this type of fraud results from unsafe ingredients being added early in the supply chain, often by fraudulent suppliers unknown to the retailer. However, regardless of the source, it is ultimately the brand owner whose reputation is at stake. Consumer trust takes time to earn and is all too easy to lose, especially when it comes to food quality and safety. To avoid this, businesses must identify their entire supply chains and implement effective recall management measures to react quickly in case of crisis.

The business of food fraud is enormous, profitable, and cannot be solved overnight. In the meantime, shoppers can best protect themselves by understanding the different types of fraud, knowing which products are most commonly affected, and remaining sceptical of product claims or extremely low prices. As for brands, proactive measures can, and should, be taken to identify and eliminate fraud in the supply chain. Because fraud can be committed by any partner along the food chain, from raw material supplier up to the retailer, it is crucial to identify and map end-to-end supply chains. Effective technological solutions can help companies digitize their entire network, making it easier to manage, monitor, and analyse supply chains. Armed with this knowledge, companies will be well-equipped to prevent food fraud before it even begins occurring. ■

THIS ARTICLE WAS SUBMITTED BY KELLYANN TSAI, MARKETING MANAGER AT TRANSPARENCY-ONE.

## TETRA PAK INDEX 2017

# Tetra Pak Index 2017: Super Leaders

One outstanding topic in the recently published Tetra Pak Index 2017 was that of the Super Leader influence. Libby Costin discusses this with Asia Food Journal.

**A**sia Pacific is a dynamic and rapidly growing region, particularly with regard to the digital landscape. This region alone accounted for an astounding 70 per cent of total growth in global Internet users and 62 per cent of the growth in social media users according to the recent Digital in 2017 Global Overview. These rapid growth rates urge brands and manufacturers to place stronger focus not only on product innovation, but also the strategies to communicate and engage with customers digitally.

Specific to the food and beverage industry, the Tetra Pak Index 2017 focused on The Connected Consumer, and revealed insights on today's digitally savvy population and how they are connecting with food and drinks brands. The index identified a group of 'Super Leaders', the most influential subset of the wider online community. When engaged, Super Leaders can help brands to spread messages, shape opinions and help build trust in products

## The rise of Super Leaders

The world of connected consumers is a virtual community where every voice can exert an influence, yet building trust with the consumers is becoming increasingly difficult. The credibility of institutions is constantly being questioned, and traditional engagement strategies aren't working like they used to. Consumers want someone they can relate to, someone who has the same concerns and needs that they do. This has created a new group of elite influencers among these connected consumers: Super Leaders.

**Super Leaders: A subset of the Leader segment. Spread around the world and comprising just 7% of the online population, this is the most active and social group of all. Likely to be the earliest of adopters, the influencers and the trendsetters.**



Libby Costin

Super Leaders are a diverse group, but the one thing they have in common is that they are the most active and social of all the connected consumers. Online for more than six hours a day, they are well connected and highly vocal. 80 per cent of Super Leaders read reviews/ratings on food and beverages monthly, with 68 per cent writing reviews at least monthly. Their comments are shared online, with 75 per cent on social media, and have a key role to play in today's customer journey. Almost all those who write reviews and comments tag the relevant brands at least some of the time, which reflects their desire to be heard and their expectation of getting a response, and 78 per cent say that they expect the brand to reply.

Super Leaders are a golden source of brand advocacy and influence, in an age where consumers are becoming both more vocal and more likely to listen to and trust the opinions of their peers. Super Leaders are cultural amplifiers, potent and prolific commentators who pick up and held disseminate trends.

## The importance of the mobile platform

The online world is becoming increasingly mobile-centric. Providing "always-on" access and even greater functionality, the mobile platform is the main driver of connectivity today. Consumers now "pull" the contents and personalise it according to their needs and



Proper engagement with Super Leaders, who are also consumers, can be far more effective than advertising.



The infographic above illustrates where Super Leaders lie in terms of digital influence vs social engagement in today's technologically-savvy society.

wants, rather than waiting for brand to “push” their desired message across. From browsing products online to making purchasing decisions, mobile is becoming the key platform to reach consumers where they will be (mostly) accessible at all times.

The magic here lies in generating content that is meaningful, entertaining, engaging and actively encourages two-way interaction. Social media is a great tool to focus on, as it helps to spread and amplify opinions. Brands can target and maximise their interaction with Super Leaders on these channels in a relevant and timely way to better reach a wider consumer base. Having conversations with Super Leaders is also essential, and encouraging and interacting with their reviews and posts will almost certainly improve brand perception.

### Shifting consumer lifestyles and needs

South East Asia is a fast-growing market with various proliferating consumer segments and needs. Convenience and Food Safety are two strong needs that can be seen across the region. Consumers are constantly looking for products that are not only available, but also accessible. Regardless of which channel the consumer uses to make a purchase, the product itself remains an important medium of communication, especially in a world of third party content. This underscores the importance of packaging, which is inextricably linked to the product, as it is one of the few fully owned communications channels. In this regard, technology has opened up a vast range of possibilities.

The importance of Super Leaders within the purchasing process lies in the period before a customer buys a product. Customer journeys have evolved to become complex, revolving networks of multiple touch points, with each customer now looking to at least four information sources for reviews given by other ‘connected consumers’ before buying a product. This gives brands even more reason to engage Super Leaders, as unlike advertising produced by a brand, Super Leaders’ third-party reviews and conversations with brands are perceived as more authentic and believable, as they are also customers of the product. As a key component in the creation of memorable consumer experiences, packaging builds on brand values, such as authenticity, to motivate purchase intent and repurchase consideration.

With new digital technologies, packaging provides new opportunities for brands to engage, deepen, and connect directly with Super Leaders and connected consumers. Today, only 7 per cent of packaging is printed digitally, but this number is projected to grow significantly. For example, Tetra Pak sold close to 190 billion packages globally in 2016, which demonstrates how the potential reach of digital packages is substantially greater than any social media platform.

### Greater brand advocacy through transparency

Consumers have been becoming increasingly concerned about the safety and quality of their food and ethical sourcing in recent years - over 80 per cent of consumers in Thailand, Philippines, and Malaysia desire authentic brands who are genuinely invested in the local communities they operate in. Unsurprisingly, the demand for new traceability schemes has increased for a wide range of ingredients, including soya, sugar, corn and maize. Personalised products that offer this traceability and allow consumers to access information across all stages of production form one of the most effective communication channels that brands can use to build trust with their consumers in the long term.

Looking ahead, packaging innovation can help brands to bridge online and offline experiences with consumers. For example, digital codes printed on packages could allow consumers to connect directly to the brand site simply by scanning the code using their smartphone, which will open a web page with product information, discover ingredients or recipes, shop in virtual stores or enter competitions. Traceability and transparency can be achieved via an internet portal where the consumer can key in a code from their package. This opens up a display of all relevant information including a map where each collection point/farmer is pinpointed, indicating where the raw materials are sourced from. With smartphones now capable of automated QR code-scanning capability, removing the need for scanning apps, this will enable brands to engage, entertain, and educate consumers in real time, and make it even more convenient for consumers to use and benefit from digital packaging.

Winning over the heart of a connected consumer in a digital, information-saturated world presents both a challenge and an opportunity for brands. In addition to the product, brands need to adjust their communications and use more channel-specific and engaging content via the right group of influencers such as Super Leaders if they want to truly utilise the opportunities in this new world. Packaging is one of the tools that has a vital role to play in offering a gateway to greater consumer engagement, stronger differentiation among businesses, and ultimately, creating a sustainable competitive edge over other brands now and in the future. ■



Packaging matters when it comes to consumer engagement.

LIBBY COSTIN IS THE VICE PRESIDENT OF MARKETING AND PRODUCT MANAGEMENT, TETRA PAK SEA AND OCEANIA

# Innovation vs. Tradition in F&B

Innovation in F&B can be crucial to a business' survival, but ignoring tradition can lead to loss of customers. Pearly Neo speaks to Jane Barnett, Head of Insights, South APAC, Mintel to gain her expert opinion.

**I**n any company, tradition represents the origin and birth of the product and the business, and too much change runs a risk of being viewed as a 'betrayal' of its origins. What are your thoughts when you see companies struggling to deal with incorporating innovation into their processes due to a reliance or belief in traditional methods?

The rapid pace of change, the unpredictability of current events and contentious political environments in many countries are leading people to lean to the safety of products that are recognisable rather than revolutionary. The trust in the familiar, however, does not eliminate the need for innovation. Instead, it emphasises the opportunity for manufacturers to look to the past as a dependable source of inspiration.

Food and drink with authentic connections to history or tradition provide an inherent element of trustworthiness that many consumers yearn for in a tumultuous world. Over the past few years, interest in authenticity and a product's story has expanded the use of craft, artisan and handmade claims in food and drink. Traditional or retro-inspired products are able to



Jane Barnett

align with consumer desires to know more about products, especially if there are tangible connections with the past that lend an element of trustworthiness to the claims or tales told by the product.

This move to the past will also lead to innovations that use the familiar as a basis for something that is new but recognisable. This is reflected in the release of hybrid products as well as updated concepts such as cold-brew coffee or alcoholic root beer.

**The most common areas that invite innovation are in terms of ingredients and processing/packaging methods – what aspect overall do you see as having the greatest potential for development in the current market?**

The role of health is increasing in its importance across the Asia Pacific region. Consumers in Thailand, for example, are increasingly attuned to the link between overall health and the consumption of healthy foods. In fact, two-thirds of metro Thais say that they are definitely striving to have a healthier diet, according to Mintel research.

With such increased product innovation around the health space, reducing key "nasties" such as sugar and fat are garnering interest among consumers. Formulation changes and superfood ingredient inclusions are helping to create healthier products for consumers.

**No matter the area though, some traditions still cannot be replaced by innovation in order to ensure consumers feel comfortable with the products they are faced with. Can you elaborate on some creative solutions companies have used to renew traditional formulations, yet maintained that sense of familiarity?**

An interesting category to explore is rice in Thailand. Thailand is the world's leading exporter of rice and it wishes to both protect and advance its position, which can be done through innovation. Rather than operating in a commodity market, to achieve growth, the government has a strategic plan



Maintaining tradition in the fast-paced F&B industry can be a daunting prospect, but compromises must be made to satisfy consumers.



Technology and innovation will make life easier for businesses, but looking to the past as a dependable source of inspiration can have many benefits too.

in place to drive growth of higher-value rice varieties. In order to achieve this, the plan is focused on developing unique, clean, healthy varieties of rice. This in turn will see the familiar category of rice be inundated with more premium rice varieties such as organic rice, sprouted brown rice and riceberry rice.

**Many of today's consumers put a great deal of emphasis on chasing a healthier lifestyle, with many going vegetarian or vegan in pursuit of this. What are some of the current innovations in F&B that attempt to cater to this segment?**

Consumer preference for natural, simple and flexible diets has driven the expansion of vegetarian, vegan and other plant-focused formulations. Indeed, the space of plant-based nutrition is booming both globally and regionally within Asia Pacific. UK meat alternative company Quorn – which focuses on a mycoprotein source – recently launched in the Philippines, increasing accessibility to protein substitutes in the market.

**A particular challenge faced by the industry, especially in Asia, is that of time, where consumers wish to eat healthy but simply cannot find the time to do so. Many companies are targeting this in terms of innovation, but what are the currently yet-unfulfilled gaps that industry players should pay particular attention to?**

As discussed in Mintel's Global Food & Drink Trend 2017 'Time is of the Essence', the time investments required for products and meals will become as influential as nutrition or ingredient claims.

Time is an increasingly precious resource and our multitasking lifestyles are propelling a need for innovative short-cut solutions that are still fresh, nutritious and customisable. Already, the hectic pace of modern life has fuelled the evolution of snacking and other on-the-go products. However, food and drink does not always have to be 'fast'. Many consumers are seeking balance, which has led to products that have "slow" claims, such as slow-roasted or promising slow-release energy.

The focus on time when it comes to cooking has led to growth in a myriad of short-cuts, including extended shelf-life herb purees, quick-cooking sides and home delivery services. Many time-saving solutions allow consumers to short-cut one portion of the meal-making process without sacrificing key elements such as nutrition or personalisation.

A trend that we see growing in the western markets is that of healthy meal kit providers. Healthy meal kit providers deliver all the elements of a recipe straight to the doors of consumers' homes – and all that is required from them is to cook and assemble the meal in their own kitchen. Providers like HelloFresh and Blue Apron can be found in many markets around the world. This provides a quick and healthy solution; recipes are generally quite healthy, and with consumers making it themselves, they know exactly what is being included in the meal and are empowered to monitor the inclusion of fat and sugar.



Healthy meal kits contain all the ingredients needed for a healthy meal and only require the consumer to cook and assemble the meal.

**What other areas are there in the F&B industry where innovation very obviously plays a major and necessary role?**

A major concern today is inequality in consumer access to food and drink. Access to – and the cost of – healthy food and drink often impede lower-income consumers from purchasing healthy items, including products that are natural, organic or free from certain ingredients.

Many lower-income people are at risk of food-related health issues, such as obesity and diabetes. While low household income does not directly cause these health issues, lower-income populations are more susceptible because of their lack of access to fresh food, limited time to dedicate to physical activity and high levels of stress or anxiety.

As reflected in Mintel's Global Food & Drink Trend 2017 'Balancing the Scales: Health for Everyone', healthy food and drink are not "luxuries". More efforts are needed to make it easier for lower-income consumers to fulfil their healthier eating ambitions and this is a gap that innovation can fill. ■

JANE BARNETT IS THE HEAD OF INSIGHTS FOR THE ANZ, SOUTHEAST ASIA AND INDIA REGIONS IN MINTEL. SHE WAS PART OF THE FOOD INNOVATION PANEL AT TECHINNOVATION 2017.



# Season's *Greetings*

*Many thanks for your  
support!*

*See you in 2018!*

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