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REPORTER



August 2024

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From the editor

Dear Readers,

Green and gold have never looked so good! Congratulations to our incredible South African swimmer, Tatjana Smith, for winning gold at the Olympics. Her triumph is a testament to the power of dedication, resilience, and the unyielding spirit of South African women. As we celebrate Women's Month this August, we're inspired by the achievements of women across all fields, especially those in the food industry who are driving innovation and empowerment.

In this edition of Food & Beverage Reporter, we spotlight women-led initiatives transforming the food and beverage landscape. **Synercore's Dr Hanneli van der Merwe** leads our features with her insights on "Purpose-Driven Drinks," focusing on the booming functional beverages market. These drinks, enriched with medicinal and active supplements, have grown remarkably over the past five years. As consumers increasingly seek products that offer health benefits, the functional beverage segment has become one of the most dynamic and sought-after categories in the beverage trade. In catering to the increasing customer preference for beverages with new and exciting flavours, **Kerry** is leading the way with new ClearBurst technology, flavour oils and water which result in flavoured drinks and alcoholic beverages with crystal clear form and superior taste. With **Kerry** at the helm, authentically South African flavours taste better, richer and brighter than before! Discover how these innovative drinks and flavours are making waves in the market and what this trend means for the future of the industry.

We also bring you the next installment in our series, "**A Guide for New Food Business Owners.**" This comprehensive guide is invaluable for anyone looking to navigate the complexities of starting and running a food business. This issue delves into "Food Safety Laws in South Africa," providing an insightful overview of the legal landscape that governs food safety standards in our country. Understanding these laws is crucial for ensuring our food supply is safe and businesses operate within the legal framework.

We're also excited to highlight the latest industry innovations, including the transformative impact of **Ishida** RVE multi-head weighers on the French olive and spreads manufacturer Tropic Apéro. These weighers have revolutionized their output and manufacturing processes, ending the challenges of unreliable machines and production disruptions. Ishida weighers' accuracy, consistency, and efficiency exemplify how technological advancements can drive industry improvements. Further innovation transforms industry with Sidel's launch of the **Qual-IS digital quality control system** representing a pioneering approach to quality management, not merely monitoring quality but actively driving it. These innovations underscore the industry's commitment to empowering businesses and enhancing operational efficiency.

As we honour Women's Month, we celebrate the remarkable contributions of women in the food industry who lead with passion, innovation, and a commitment to excellence. Their stories inspire us and remind us of the profound impact women have in shaping a healthier, more sustainable future.

Enjoy this vibrant and empowering issue, and join us in celebrating the incredible women who make our world and industry a better place!

Warm regards,

Adele

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- Ingredient innovations
- Testing & laboratory
- Canning systems & liquid gas
- PET
- Carton & Board
- Recycling technology

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PepsiCo South Africa to sell its Marmite, Bovril and Savoury Food Ingredients business to Lallemand

Lallemand Inc (through its South African affiliate, Rymco Pty Ltd, trading as Anchor Yeast) has agreed to buy the Marmite and Bovril black spreads and Savoury Food Ingredients business unit from PepsiCo South Africa. The transaction is expected to close in Q4 2024, subject to approval from the Competition Commission of South Africa.

The Savoury Food Ingredients business unit, based in Johannesburg, produces Marmite and Bovril for sale to Southern African consumers through retail outlets and through wholesalers serving the informal retail market. It also produces savoury food ingredients, including brewer's yeast extract and hydrolysed vegetable protein-based flavourings for use by South African based food manufacturers and international customers.

Commenting on the proposed transaction, Antoine Chagnon, CEO of Lallemand said, "We are committed to making biotechnology one of the answers to the

challenges the world faces with respect to, nutrition, health and the environment.

"Lallemand has significant experience in producing yeast, yeast derivatives and yeast-based food ingredients. The addition of the Marmite and Bovril brands will be highly complementary to our Anchor Yeast consumer product offering and existing business with South Africa's leading retail outlets. This Savoury Food Ingredients business unit is also complementary to the taste and savoury solutions offered by Lallemand Bio-Ingredient's business to its global food manufacturing customers. The proposed acquisition demonstrates Lallemand ongoing commitment to the Southern African region."



Big VAT changes on the cards

Major changes are coming to VAT in South Africa, with the government looking to expand the range of food items exempt from the tax. President Cyril Ramaphosa announced during the Opening of Parliament Address that the Government of National Unity (GNU) will review ways to help reduce prices of goods for South Africans. This includes a comprehensive review of administered prices, including the fuel price formula, to identify areas where prices can be reduced.

As South Africans grapple with high poverty levels and the cost of living, it will also look to expand the range of essential food items exempt from VAT. Trade Intelligence's Grocery Shopper Report for 2024/25 revealed how severely South Africans have been affected by the rising cost of living and, in particular, food inflation.

The report showed that 17% of household expenditure in South Africa is on food, second only to housing and utilities, which account for 25% of spending.

Over the past few years, food inflation has remained sticky, keeping headline inflation elevated and even resulting in the Competition

Commission investigating retailers for potential price gouging. In 2023, food inflation averaged 10.8%, following an average of 9.2% in 2022 – driving up headline inflation.

"Even at a time when many companies are making large profits, millions of South Africans are suffering as a result of rising prices," Ramaphosa said.



Durbanville Hills – official wine partner to Masterchef South Africa

The cellar, known for its award-winning cool climate wines, is thrilled to partner with the successful culinary show which sees aspiring chefs from around South Africa testing their skills in a highly competitive and entertaining arena.

Brand manager, Robyn Bradshaw, says MasterChef South Africa is the perfect collaboration for Durbanville Hills.

“The show strongly aligns with our wines where the art of food and wine naturally meet. The creativity required to be a participant on the show matches the creativity of our winemakers when they craft our wines. The show features all products from the range, from sparkling wine to brandy. The Collectors Reserve range, used throughout the season are very food friendly and suits the culinary creations not only made on the show by the teams, but also anyone who enjoys the art of cooking delicious meals at home.”



The Collectors Reserve range is inspired by Cape Town and its radiant energy and creativity. Capetonian artist Theo Paul Vorster was commissioned to pair each wine with a prominent Cape Town landmark, most of which are visible from the winery.

SAB champions responsibility through its SAB Sharp platform

South African Breweries outlined the impact of SAB Sharp, a platform dedicated to fostering a culture of responsibility within South African communities. The platform highlights the importance of responsibility across society and the crucial nature of partnerships with government, law enforcement, and community organisations to promote responsibility associated with beer consumption.

“This platform is integrated into our business strategy and operations, reinforcing our ambition to grow the beer category responsibly. We take pride in the impact and sustainable interventions that cultivate a culture of responsibility in South Africa, guaranteeing that every beer experience is a positive one”, said Zoleka Lisa, Vice President, Corporate Affairs, South African Breweries.

Driven through four strategic pillars, the platform's initiatives are supported by strong partnerships with government, law enforcement, and community organisations, resulting in impactful outcomes and a significant, positive shift in social norms. The four key pillars each target a specific area to promote responsible behaviour.

- LIVE Sharp empowers responsible communities by creating an enabling environment for job creation and ultimately driving economic inclusion.
- DRIVE Sharp encourages responsible driving by



partnering with law enforcement agencies to curb drunk driving.

- TALK Sharp - dedicated social marketing programs and campaigns to influence behaviours towards more responsible consumption.
- SELL Sharp empowers responsible trading by enabling retailers to comply with responsible trading practices.

“SAB Sharp is a testament to our dedication to fostering a culture of responsibility in all our communities. To date, we have seen promising results from our efforts and are confident in the partnerships and partners that have given us the scale to make this significant impact. We look forward to continuing these collaborations and expect to strengthen our scale, our partnerships, and our learnings in order to achieve greater impact,” concluded Lisa.

Reboot with Reboost

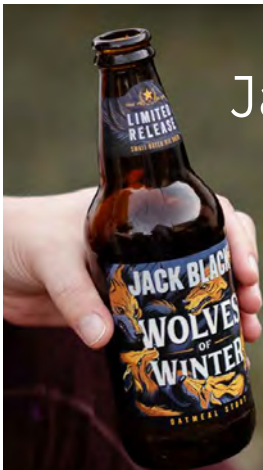
Reboost Energy a proudly South African energy drink company is proud to launch its first ever female focused energy drink flavour:

Watermelon Splash. This isn't just any energy drink—it's a celebration, a burst of delicious refreshing power specifically crafted to fuel amazing women. This energy drink is designed to cater for women's aesthetic preferences in an energy drink that supports their busy lifestyles without compromising on taste. Watermelon Splash delivers exactly that. With its pink can design and fruity ingredients - the perfect choice for the upcoming spring/summer season.



Jack Black howls in winter

The brewer's seasonal release, Wolves of Winter Oatmeal Stout, is a firm winter favourite. The name Wolves of Winter is a nod to the Jack Black brewing team, known as the "wolf pack." Each sip delivers a complex and heart-warming experience, with notes of dark chocolate, coffee, and liquorice. The addition of rolled oats creates a smooth, creamy mouthfeel that perfectly complements the roasted malt character.



New product innovations push bold flavours

MAGGI has introduced new and improved noodles with a thicker strand that carries a bold new flavour while maintaining the same taste consumers love. These noodles save time while providing a delicious and satisfying meal with every bite. In addition, MAGGI has launched the new MAGGI Hot Lazenby Worcestershire sauce. This spicy twist on the iconic flavour offers more variety in the kitchen to enhance meal preparation for those who prefer a bit of heat.

Baeng Machele, Category Marketing Manager: Food at Nestlé, highlighted the new product, stating, "Given the demands on our constantly on-the-go consumers, we always aim to bring a little relief. Our new tastier and thicker noodles reinforce their loyalty to MAGGI, as the brand they know and love. Happiness, after all, is best served homemade."

Machele added, "Sensory explorations and new cuisine discoveries are transforming food experiences. With our new thicker noodles, we are expertly meeting our consumers' culinary needs, empowering them to cook fresh, filling and nutritious balanced meals."



A Signature move

Spier's new design features a contemporary aesthetic, that made its debut at the ProWein 2024 trade fair in Düsseldorf. This exciting update elevates the packaging, all while staying true to the brand's heritage and commitment to quality and achieves this balance beautifully. The iconic Spier wordmark remains prominent, ensuring instant brand recognition. A striking new addition is the gable head motif at the top of the label. As a proudly South African winery dating back to 1692, Spier's winemaking heritage is 332 years old, with 21 architecturally significant gables preserved on the farm to this day. The new gable motif pays homage to these gables - the most of any farm in the Cape Winelands.

Food Safety Laws in South Africa: A guide for new food business owners



The first step in starting a food business in South Africa is understanding the regulatory requirements. It's no secret that the structure and enforcement of our food legislation is a little "fragmented". It's crucial to understand the legal landscape to ensure you're compliant with all necessary food safety laws. The following article breaks down some important definitions, key players and laws involved in food safety and quality.

Dr. Stephen R. Covey tells us one of the habits of highly effective people is to "Begin With the End in Mind." We need to tackle each project with a clear vision of our desired direction and destination, and then continue proactively taking the steps to make things happen.

What is Food Control?

The World Health Organization (WHO) defines it as follows: "Food control is defined as a mandatory regulatory activity of enforcement by national or local authorities to provide consumer protection and ensure that all foods during production, handling, storage, processing, and distribution are safe, wholesome, and fit for human consumption; conform to safety and quality requirements; and are honestly and accurately labeled as prescribed by law."

This definition underscores the role of government authorities in ensuring the **safety, quality**, and correct labelling of food to protect consumers. It involves the oversight of various stages in the food supply chain, from production to distribution, and aims to ensure that food products meet established standards and regulations.

Food control encompasses both food safety and food quality.

Food safety involves the measures and conditions necessary to control hazards and ensure that food is safe to eat. The focus is on preventing foodborne illnesses and ensuring that food is free from harmful contaminants or hazards, including:

- **Microbiological Hazards:** Ensuring food is free from harmful bacteria, viruses, and parasites. For example, preventing contamination with Salmonella in poultry.
- **Chemical Hazards:** Avoiding harmful chemicals such as pesticides, heavy metals, or food additives. For example, ensuring fruits and vegetables are free from excessive pesticide residues.
- **Physical Hazards:** Preventing foreign objects like glass, metal, or plastic from being present in food. For example, making sure that packaged foods do not contain pieces of plastic or metal fragments.
- **Allergen Control:** Managing and labelling allergens to prevent allergic reactions. For example, clearly labelling products that contain nuts.

Food Safety Failures could result in recalls or outbreaks due to any of these hazards, some recent examples include:

- **Listeriosis outbreak:** In 2018, South Africa faced a major listeriosis outbreak caused by contaminated processed meats, highlighting the importance of rigorous food safety protocols.
- **Food Recalls:** In 2021 patulin, a form of mycotoxin, was found in many apple juices, and triggered a nationwide recall which affected many brands. **Food handling can also lead to food safety issues, for example, cross contamination due to poor food handler training, or a break in the cold chain, from poor temperature control measures.**

Food quality encompasses the attributes and characteristics of food that are acceptable to consumers. This includes aspects like taste, texture, appearance, and nutritional value. While food quality also ensures that food is safe to consume, its primary focus is on meeting consumer expectations and standards. Quality addresses aspects such as:

- **Sensory Characteristics:** Attributes like flavour, colour, texture, and aroma. For example, ensuring that fruits are ripe, flavourful, and free from blemishes.
- **Nutritional Content:** Ensuring the food contains the expected levels of nutrients. For example, verifying that

a fortified cereal contains the advertised vitamins and minerals.

- **Consistency:** Maintaining uniformity in size, shape, and appearance. For example, ensuring that all chips in a bag are evenly seasoned and not broken.
- **Label Accuracy:** Ensuring that labels accurately represent the product's contents. For example, confirming that a product labelled as "low fat" meets the regulatory requirements for fat content.

Food quality issues could result in consumer dissatisfaction, example could include:

- **Texture Issues:** A batch of yoghurt that has an unusual texture or consistency, could affect consumer satisfaction.
- **Off-Flavour:** A bottled juice that has fermented and developed an off-taste, making it unappealing to consumers.

Consider these comparative examples:

1. Food Safety Issue:

- A batch of spinach is found to be contaminated with *E. coli* bacteria. This is a foodsafety issue because consuming the spinach could lead to serious illness.

2. Food Quality Issue:

- A batch of spinach is wilted and has a poor appearance. This is a food quality issue because, while it may still be safe to eat, its freshness and appeal to consumers are compromised.

3. Food Safety and Food Quality Combined:

- A canned soup which has been improperly sealed can may harbour *Clostridium botulinum* bacteria, posing a safety risk. Additionally, the soup might taste sour due to spoilage, which is a quality issue.

Understanding the difference between **Food Safety** and **Food Quality** is crucial for anyone involved in the food industry. Both aspects are essential for delivering safe, enjoyable, and trustworthy food products to consumers.

An overview of food production requirements in South Africa

1. Mandatory Legal Requirements

These are the law, they are the non-negotiables to which you must comply if you produce a food or drink stuff in South Africa.

National Level

You have different Acts and under Acts you have Regulations.

Municipal Level

You have by-laws, which vary across municipal districts.

2. Voluntary or client requirements

These are standards, norms, guidelines, often required by clients as a prerequisite for the purchase of your products.

3. Voluntary or certification requirements

Your organisation may decide to apply for GFSI-recognised certification against one of the food safety and quality schemes such as FSSC 22000 among others. This will give your consumers and clients the confidence that your product is benchmarked against global standards.

NOTE: Where local acts, regulations, standards or guidelines cannot be found, it is best practice to refer to Codex Alimentarius International Food Standards, which is a collection of internationally recognized standards, codes of practice, guidelines, and other recommendations published by the Food and Agriculture Organization of the United Nations and World Health Organization, relating to food, food production, food labelling, and food safety.

Key authorities overseeing food legislation

South Africa's Food Control System is fragmented involving multiple governmental departments. It is managed at national, provincial, and local levels. Here's a breakdown of the main departments and their roles:



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1. Department of Health (DoH)

<https://www.health.gov.za/>

<https://www.health.gov.za/food-control/>

- **National level** – Directorate Food Control responsible for ensuring the safety of food in South Africa. Main functions are to:
 - Administer food legislation, including regulations and technical guidelines.
 - Inform and educate industry, consumers, media, government, and stakeholders on food safety.
 - Audit and support Port Health Services for imported food control and Municipal Health Services for enforcement and education.
 - Evaluate risk assessments for agricultural chemicals and biotech food for relevant departments.

- Coordinate food monitoring programmes and manage food safety alerts.
- Act as South Africa's National Contact Point for the joint FAO/WHO Codex Alimentarius Commission (CAC), International Food Safety Authorities Network (INFOSAN) and the European Union Rapid Alert System for Food and Feed (RASFF)
- Participate in national and international food control bodies.

• Provincial level –

Environmental Health Services

Main functions are to

- Audit, support and co-ordinate Municipalities/Health districts
- Control imported food (Port Health)
- Promote intersectoral co-operation
- Law enforcement of food legislation
- Inspect and sample food products
- Investigate complaints/food poisoning incidences
- Provide health promotion/education
- Create intersectoral co-operation
- Issue Certificates of Acceptability (CoA) of food premises and food exports
- Implement community projects e.g. Street food

• Key Legislation:

- Foodstuffs, Cosmetics and Disinfectants Act (No. 54 of 1972).
 - Regulations under the Act R638: 2018
Regulations Governing General Hygiene Requirements for Food Premises, the Transport of Food and Related Matters (Hygiene standards and Certificate of Acceptability requirements)

R146: 2012

Labelling and Advertising of Foodstuffs

Note: Draft Labelling and Advertising of Foodstuff Regulation R3337:2023 not published yet.

2. Department of Trade, Industry and Competition (DTIC)

<https://www.thedtic.gov.za/department-of-trade-industry-and-competition/>

- **Focus:** Economic and commercial policies.
- **Role:** Protects consumers and oversees commercial activities in the food industry.
- **Subsidiary Agencies:**
 - South African Bureau of Standards (SABS): Develops and promotes standards for various industries, including food. <https://www.sabs.co.za/index.asp>
 - National Regulator for Compulsory Specifications (NRCS): Enforces technical and compulsory standards. Frozen fish, shellfish and molluscs, and canned meat and fish <https://www.nrccs.org.za/>
 - South African National Accreditation System (SANAS): Technical Infrastructure (TI) Institutes. The TI institutes are responsible for standards, quality assurance, accreditation and metrology activities. <https://www.sanas.co.za/pages/index.aspx?page=sanas-and-the-dit>
 - National Metrology Institute of South Africa (NMISA): Ensures uniform measurement standards. <https://www.nmisa.org/Pages/default.aspx>
 - The National Consumer Commission (NCC): Main function to enforce Consumer Protection Act <https://thenc.org.za/>
- **Key Legislation:**
 - Consumer Protection Act, 2008 (Act No. 68 of 2008)
 - Legal Metrology Act, 2014 (Act No. 9 of 2014)
 - National Building Regulations and Building Standards Act 1977 (Act No. 103 of 1977)
 - National Regulator for Compulsory Specifications Act, 2008 (Act No. 5 of 2008)
 - Standards Act, 2008 (Act No. 8 of 2008)
 - Trade Metrology Act, 1973 (Act No. 77 of 1973)

3. Department of Agriculture, Land Reform and Rural Development (DALRRD)

<https://www.dalrrd.gov.za/>

On 30 June President Cyril Ramaphosa, announced his new cabinet. During this announcement he advised that the Department will now be split as there are now two separate Ministers for Agriculture

(J Steenhuisen) and Land Reform and Rural Development (M Nyhontso). Please note that changes to information may happen when DALRRD update website.

Department of Agriculture

Agricultural Production Health & Food Safety, Natural resources & Disaster Management – Inspection & Quarantine Services

- **Focus:** Agricultural sector and raw food production.
- **Role: Food Safety & quality assurance**
Sub-directorate Agricultural Product Quality Assurance is to standardise quality norms for agricultural and related products by establishing the criteria for such norms and distributing the information to all interested parties.

The Directorate appoints **assignees** to undertake inspections at the point of sale, manufacture, packing or export to ensure that the set standards and requirements are maintained and that the benefits of classification, grading and marking reach the consumer.

- **PPECB** - The Perishable Products Export Control Board (PPECB) is an independent service provider of quality certification and cold chain management services for producers and exporters of perishable food products. <https://ppecb.com/>
- **Prokon** - Product Control for Agriculture, registered as a non-profit company under the Companies Act, No. 71 of 2008, is an independent quality assurance company that conducts quality inspections and renders other related services to stakeholders in the fresh produce industry. <https://www.prokonsa.co.za/index.html>
- **Food Safety Agency** - Independent Meat Inspection, Service Provider for Meat Classification Regulated Animal Products <https://foodsafetyagency.co.za/>
- **SAMIC** - assignee, for the purpose of the application of sections 3(1)(a) and (b) and 8 of the Agricultural Product Standards Act, 1990 (Act 119 of 1990) with regards to the classification and marking of meat intended for sale in the Republic of South Africa and to oversee the implementation of the mentioned regulations. The regulations prescribe the classification categories of carcasses and regulate or prohibit the use of certain indications and claims on carcasses and meat in connection with the sale thereof. <https://samic.co.za/>

- **Leaf** - Inspection, Grading and Sampling for quality control for the following products: Grains: Maize, Rice, Sorghum, Soya Beans, Sunflower, Seeds, Groundnuts, Dry Beans, Canola, Barley, Wheat Bread, Durum Wheat, Soft Wheat, Popcorn, Pulses and other grains. Grains Products: Maize Products, Wheat Products and Other Grain products
<https://www.leafservices.co.za/>
- **Sub-directorate:** National Analytical Services.
 - Chemical Residue laboratories in Pretoria and Stellenbosch render an analytical service in the monitoring of pesticide residue on fruit, vegetables, tea, wine and grains
 - Wine and spirit laboratory
 - Micro-additives laboratory
- **Role:** Food import & export standards
 - Animal health import and export.
 - Plant health importing to SA and exporting from SA
 - To provide Food Business Operating (FBO) codes for agricultural industries and enforces specific licensing requirements for raw food production.
- **Key Legislation:**
 - Animals Protection Act (No. 71 of 1962)
 - Meat Safety Act (No. 40 of 2000)
 - Agricultural Product Standards Act 119 of 1990
 - Liquor Products Act (Act 60, 1989)
 - Local Authorities and Enforcement



Links to helpful Resources

1. South African Government. (2024). Legislation and Regulations.
<https://www.gov.za/documents/notices>
2. Codex Alimentarius International Food Standards:
<https://www.fao.org/fao-who-codexalimentarius/codex-texts/list-standards/jp/>

Disclaimer note:

This article provides an overview of the legal landscape and does not cover all relevant legislation. For accurate and comprehensive information, please consult the original legislative sources applicable to your industry.

Where to start

Begin at your local municipality! Local municipalities or authorities enforce national legislations and may have additional bylaws relevant to your specific location. They are responsible for issuing business licenses and certificates such as the Certificate of Acceptability (CoA) required for food handling businesses.

Major Acts and Regulations

- **Consumer Protection Act (No. 68 of 2008)**
Protects consumers from harmful products and ensures they have the right to safe, high-quality goods.
- **Business Act (No. 71 of 1991)**
Requires all food handling businesses to obtain a business license from local municipalities.
- **Agricultural Products Standards Act (No. 119 of 1990)**
Regulates quality standards for agricultural products and provides FBO codes.
- **Foodstuffs, Cosmetics and Disinfectants Act (No. 54 of 1972)**
Governs hygiene requirements for food premises and the transport of food.
- **Occupational Health and Safety Act (No. 85 of 1993)**
Ensures the health and safety of employees in food handling businesses.
- **Standards Act (No. 8 of 2008)**
Promotes the use of South African National Standards (SANS) for consistent quality and safety in food production.

Starting a food business in South Africa involves navigating a complex web of regulations designed to ensure food safety and quality. By understanding the roles of various departments and complying with relevant legislations, you can successfully manage a compliant and thriving food handling business. If you need further assistance, consulting with a food safety expert or your local authority can provide additional guidance and support.

For more detailed inquiries and legal advice specific to your situation, consider consulting with a food law specialist or relevant governmental departments directly.

Good luck on your business journey! Look out for the next article which will look at your “End in Mind.”

The role of the Chief Financial Officer (CFO) in the manufacturing sector is undergoing a significant transformation. Traditionally seen as the gatekeepers of financial integrity and corporate compliance, CFOs in manufacturing are now finding themselves leading digital transformation initiatives.



Aucamp van der Schyff, Head of Finance at SYSPRO EMEA

Why hybrid manufacturing CFOs are increasingly expected to operationalise and lead digital transformation initiatives

This shift towards a hybrid role that encompasses both financial stewardship and operational leadership is not merely a trend but a response to the increasing complexity and competitiveness of the manufacturing industry. These hybrid manufacturing CFOs are increasingly expected to become more operationally aligned, with a particular focus on the role that IT and systems like Enterprise Resource Planning (ERP) are driving in this transition.

Our Annual Manufacturing CFO Survey showed that 52% of CFOs in this sector are increasingly expected to operationalise digital transformation, which points towards a greater involvement in operational areas.

Hybrid CFOs bridge the gap between finance and operations

The manufacturing sector is marked by rapid technological advancements, shifting consumer expectations and the relentless pursuit of efficiency and innovation. Digital transformation, once a strategic choice, has become a necessity for survival and growth.

In this context, ERP systems have played a pivotal role in integrating various business processes, providing real-time insights and driving agility. However, the successful implementation and optimisation of these

systems require more than just the expertise of the IT team; they demand strategic vision, financial acumen and a deep understanding of operational workflows, qualities that only hybrid CFOs possess.

For this reason, most CFOs we spoke to (85%) are either part of or lead their digital transformation project teams. These hybrid CFOs are perfectly positioned to lead digital transformation initiatives. Their comprehensive understanding of the company's financial health and insights into operational efficiencies enable them to make informed decisions on technology investments that drive growth and competitiveness.

Driving ERP-led digital transformation

By operationalising digital transformation with ERP as the linchpin, hybrid CFOs ensure that technology adoption is not just an IT project, but a strategic business move that aligns with the company's financial goals and operational realities.

ERP systems are at the heart of digital transformation efforts in the African manufacturing sector. These systems offer a unified platform to streamline processes, enhance decision-making and improve operational efficiencies. Hybrid CFOs play a

crucial role in driving ERP-led transformation programs to ensure that their manufacturing companies can achieve their objectives of being agile and resilient against a barrage of market pressures out of their control.

A new era of responsible growth and resilience

The rise of the Hybrid CFO is ushering in a new era of responsible growth and resilience. Companies were traditionally focused on making profits and achieving their business goals. However, it is possible to accomplish these objectives while also improving resilience. This improved resilience will enable manufacturers to take advantage of new opportunities, with 60% citing the need to expand their revenue streams and 60% innovating with a new product line.

The CFOs we spoke to said that reducing costs and increasing revenue were equally popular strategies for building resilience. While 48% of them are saying that cutting overheads and increasing margins to end customers were priorities, they were cautious because both tactics come with challenges.

Hybrid CFOs are well-equipped to navigate these challenges by enabling a culture of innovation, ensuring seamless communication between departments and aligning digital initiatives with financial performance metrics.

Conclusion

As the African manufacturing sector changes, the convergence of finance and technology will become increasingly pronounced. Hybrid CFOs will be at the forefront of this transformation, driving innovation, operational excellence and financial sustainability. Their role in operationalising and leading digital transformation initiatives will redefine the scope of financial leadership and shape the future of manufacturing in this country.

The onus is on manufacturing CFOs to continue adapting to a rapidly changing world and leveraging the power of their company's data to make better strategic, operational, and financial decisions as they lead digital transformation initiatives for their organisation.

As the manufacturing sector continues to navigate the complexities of modern manufacturing, the hybrid CFO will play a pivotal role in ensuring that African manufacturers not only survive but thrive in the face of significant change and extraordinary market pressures.

za.syspro.com

About the authors:

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From Taste to Tech:
A Journey through Food Analysis

Food Analysis

A row of colorful functional drinks in plastic bottles on a shelf. The bottles are arranged in a line, with colors ranging from white to yellow, orange, and red. The labels on the bottles are partially visible, showing some text in Chinese characters. The background is blurred, suggesting a store or display setting.

The future of purpose driven drinks

Proper nutrition is so important for our personal health and wellbeing that it is even written into cartoons. A certain muscular sailor teaches children that spinach will make you strong while a whitty rabbit constantly sports a bright orange carrot.

However, the pace of daily life we currently set for ourselves often leads to us settling for the easier more comfortable and less healthy option when it comes to our nutrition. In response, many fast food empires have risen by providing food at the touch of a button limiting the time required for things as tedious as cooking a well balanced dinner.

Despite being spoilt for choice in everything from what to watch on television to what we eat, society is becoming increasingly more unhappy with some studies estimating that burnout and depression rates are roughly 59% and 21%, respectively.

The question therefore becomes: "How do we balance a healthy diet with the demands of daily life?" Part of the answer lies in the simple fact that we have to consume roughly three litres of water a day. So why not ensure that this is jam-packed with whatever we need to sustain the pace that our daily lives demand, or even add specific compounds which cater for the specific needs of our own personal health? Whether you're a bricky drinking a 500ml energy drink as a meal replacement or an executive getting all your macros by sipping on a scelletium-infused "freezo", there is method in this functional beverage madness!

Functional beverages are any drinks that have an added benefit albeit a medicinal or active supplement. These supplements may be as simple as adding minerals, or as complex as adding specific combinations of amino acids to your drink to improve cellular respiration. They can even include complete plant-based actives such as lion's mane mushrooms, scelletium or hempseed oil containing CBD. Not surprisingly the functional beverage segment has seen continuous growth over the past five years and has become one of the most sought-after product development categories in the beverage trade.

Based on the accessibility/acceptability and the dosage of a supplement, two main approaches have been suggested. The first group of beverages in the functional space play it safe with more of a dress rehearsal than the actual ball. These drinks often boast sustained maintenance of cellular homeostasis by including minerals and vitamins. The second group is designed to push the envelope on the active ingredients and may include plant extracts such as alkaloids and cannabinoids which have been suggested to reduce stress. Others claim to give you wings by providing a shot of caffeine. These benefits can be

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Functional health & wellness ingredients		Starter cultures	
Probiotics	Powder & liquid flavours		Flavour extracts
Masking agents	Sugar replacement blends		Enzymes
Fruit preps & syrups		Foaming agents	
Preservative blends		Emulsifiers	
Grains & cereals			

Beverage Categories

Neutral dairy

Plant based

Low pH dairy

Juices

Non-alcoholic drinks

Carbonated drinks

Concentrates

Powder drinks

STRATEGIC PARTNERS

highlighted with daily intake limits as well as legal requirements which makes for clever packaging to educate your intended market.

Because the strategic marketing of these beverages are key, there is a lot to consider if your intent is to design a functional beverage. One of the main methods to address this is to lead with the proposed "health benefit". Here one can position a beverage to be energy boosting, good for digestion, immune supportive, increased hydration, reduced stress and weight management. Typically these products may contain actives such as caffeine, vitamins, probiotics, prebiotics, electrolytes, melatonin and ingredients that promotes satiety. This script can easily be flipped by marketing the product by ingredient type, the target audience, the product format perspective (RTD, powder etc), dietary preference or even by simply highlighting the actual active ingredient.

The versatility of the functional beverage space is showcased in the differences between so-called simple and complex functional beverages. The main difference between these two groups are the source of the active ingredient (i.e., natural or synthetic), the total amount of active ingredients added and, lastly, the potential interaction between active ingredients which may enhance the effectivity of the product. An example of the latter being black pepper which aids in the absorption of curcumin from turmeric. The following examples serves as a quick comparison between simple and complex functional beverages:

"Companies are investing in ingredient and flavour innovations by sourcing botanicals, herbs, probiotics while continually striving to reduce sugar"

Product 1 - "Lemon Water with Honey and Ginger"

Ingredients: Lemon juice, honey and ginger
The function gained from each ingredient will be vitamin C and immunity boost from the lemon juice as well as the fact that it is good for the digestion. The honey giving us the natural sweetness, antibacterial properties as well as antioxidants. The ginger of course also good for the digestive system and the anti-inflammatory action it provides.

Product 2 - "Turmeric Latte with adaptogens and probiotics"

Ingredients: Almond milk, turmeric, cinnamon, black pepper, ginger, coconut oil, ashwagandha powder, maca powder, probiotic powder, honey or maple syrup
The functional effect that we can gain from this elaborate list of ingredients in short: Anti-inflammatory, anti-oxidant, aids digestion, aids the

absorption of fat soluble vitamins, management of stress, boost of energy, supports hormonal balance and supporting the immune system.

In recent years we have seen the functional beverage segment develop from limited stock in specific health stores to general retail. Start-up brands like Happy Culture and Good Gut, which focus on probiotics, Numuti containing adaptogens, and Dope with its focus on CBD, are but a few examples of the vast new playground of functional beverages. Health and wellness are forever popular and, with the ease of access to information, functional beverages are driven in South Africa by the influence of the Millennial, culture and social media and the combination of preference and convenience. Companies are investing in ingredient and flavour innovations by sourcing botanicals, herbs, probiotics while continually striving to reduce sugar. With the fast pace of the lives we live today to have a purpose driven drink in hand just makes a lot of sense!

However, the South African beverage market can be both quick and slow adopters depending on the market pull. With a segment like functional beverages, of course there are some considerations. There is a big difference between serving someone a lemon water versus fortifying it with a scheduled ingredient like melatonin or an adaptogen like Sceletium/CBD/THC. Regulatory considerations mostly boils down to what claims can be made on packaging and with trademarked ingredients, producers therefore often opt for clever brand names and branding to do the talking. While there is still a lot of grey area left for the producer, retailer and consumer and market education as well as access to information is the current key to success.

In conclusion

Focus on personalised health and wellbeing along with the access to a very active world of social media marketing has set the stage for brand owners to stake their claim in this exciting market to fuel us with "everything we need in a day"!

As knowledge grows, navigating regulatory constraints and grey areas will improve over time as systems adapt and evolve. However, for now our first step to lead a purpose driven life has become a jump as we sip on these elixirs whilst we pound away on our computers or find ourselves stuck in yet another traffic jam to be just in time to pick up our kids from school. The functional beverage market of South Africa is thriving and will continue to thrive for years to come.

Authors:

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**DID YOU KNOW?**

Palsgaard's food technology experts work across seven global application centres, driving constant innovation and empowering the international food industry to explore new trends. Its specialised research and development sister company, Nexus, plays a critical role in this process, having scientific freedom to push the boundaries of emulsifier technology and deliver ground breaking solutions.

Partners in ambitious project to pioneer plant-based alternatives to egg ingredients

Palsgaard and Aarhus University are inviting food manufacturers to collaborate on a project to develop new plant-based replacements for egg ingredients.

The €5 million PIER ("Plant-based food ingredients to be egg replacers") project aims to replace 10% of the eggs used globally as ingredients in food products such as baked goods, dressings, desserts and ready meals.

Food manufacturers now have the opportunity to become frontrunners on the scheme, which is designed to cut recipe costs at the same time as reducing carbon footprint. The focus is on bringing in manufacturers that are currently using significant volumes of egg and egg powders in their products and have a strategic ambition to reduce their reliance on fresh and dried eggs.

By taking part, companies will be able to co-create with the other project members and secure priority access to the new ingredients for their own products.

Claus Hviid Christensen, Chief Executive Officer of Nexus, Palsgaard's specialised R&D sister company, said: "The PIER project represents an exciting opportunity to drive positive change by developing more cost-effective, climate-friendly ingredients. We're looking to bring in partners from the food industry

who are ready to co-create with us, testing their existing recipes and developing new recipes using solutions that are not yet available on the market. By securing first-mover advantage on next-generation egg replacements, the successful applicants will get a big head start in being able to cut their costs and their carbon footprint."

Sustainability is a key driver for the project, with the CO₂ emissions from the global annual consumption of eggs equivalent to three times that of all container ship traffic. It is estimated that 12% of those eggs are used as ingredients in food products to provide functionality such as texture and volume by foaming, gelling and emulsifying¹.

www.palsgaard.com/en/

References

¹ <https://food.au.dk/currently/news/nyhed/artikel/new-climate-friendly-food-ingredients-are-going-to-be-plant-based>



Rush Nutrition's Journey of African Superfoods & Women's Empowerment

Rush Nutrition, an authentically healthy South African brand made by moms for parents looking for simple, local, and natural nourishment, is leading the way in nutrition and women-led empowerment.

With a workforce of 70% women and supported by investors – Secha Capital and Tiger Brands Venture Capital Fund – that prioritise empowering female owner-operators, Rush Nutrition is intentional in its commitment to hiring mothers and empowering women in the food industry.

“Thanks to our investor’s commitment to equality and empowerment, the largest equity stake remains with me as the female founder and our shared goal of investing in women in this sector,” says Lara Mare, Managing Director, and Founder of Rush Nutrition. “I am intentional about the hiring of mothers especially. I started the business as a single mother who wanted more autonomy and flexibility than that allowed by corporate work environments, and I want to pay it forward to other mothers and women.”

Rush Nutrition has cultivated a culture of flexibility and autonomy which has highlighted how difficult it is for women to raise a family within the constraints of modern business.

“So many women carry the burden of responsibility for the children, and they are providers which makes it difficult, even if it is rewarding,” continues Mare. “We give people the space they need to be with their families. In fact, one of our slogans is ‘Made by Moms, Inspired by Nature.’”

Rush Nutrition has also made it easier for moms to build healthy families with a focus on creating a range of snacks and juices that make it easy for people to make healthy choices while staying away from gluten, soy, preservatives, additives, and refined sugar which could compromise gut health and drive inflammation.

The company has an increasingly varied range of nutritious snacks and juices. Included within the range are the 100% Pomegranate Juice that has been endorsed by the Heart and Stroke Foundation; the just-launched 100% Blueberry Juice that is high in antioxidants, and a range of snacks that combine flavour with nutritional integrity.

“There’s an inherent trust knowing that mothers are conscious about what they’re feeding their families –

they're the gatekeepers, and we celebrate and applaud them," says Mare. "Women just see nutrition differently, and they are also a powerful force for change in the business environment. They have a gentler approach, collaborate, and connect to build an immersive and engaging culture."

Women-owned, woman-led, and women-inspired, Rush Nutrition is growing from strength to strength, bringing families the food they need to thrive.

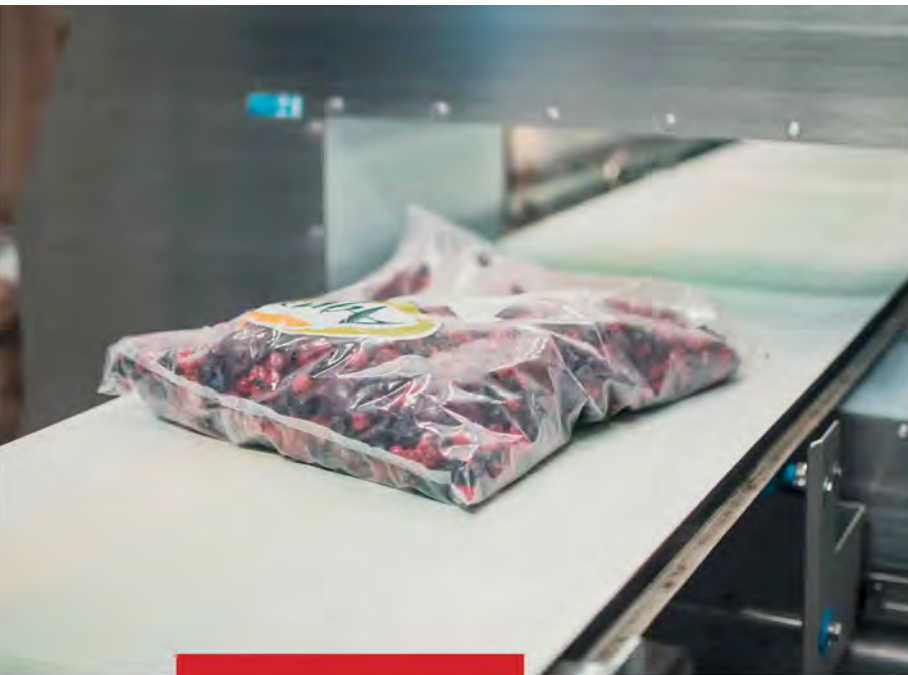
The brand has recently gained investment from the Tiger Brands Venture Capital Fund which became a minority shareholder in the last quarter of 2023, joining Secha Capital, an early-stage impact private equity firm which gained a minority stake in 2020. As Secha Capital Director, Rushil Vallabh, said, "Rush Nutrition excited us because they are at the forefront of functional nutrition design and have an authentic product."

It is a sentiment echoed by Barati Mahloele, Tiger Brands Venture Capital Fund Director who said, "Consumer awareness is at an all-time high around product sustainability and nutrition. At the same time, our mission as Tiger Brands is to make plant-based snacks and beverages more accessible and affordable for South African consumers. This deal ticked all the boxes as well as being female-founded and operated."

In a world where being rushed and stressed is the norm and it is quite easy to make poor food choices – fast food, fast snacks, quick bites – Rush turns fast eating into nutritious and delicious.

Rush Nutrition has created a proudly African range of Superfoods, snacks and beverages built on a foundation of feminine innovation and ingenuity.

- 100% vegan, kosher and Halaal
- Nutrient-dense, clean, and pure
- Endorsed by organisations such as the Heart and Stroke Foundation of South Africa
- Rush products are designed for health-conscious parents seeking healthy and nutritious snacks for their families
- 70% of the Rush Nutrition workforce is women
- Investors in Rush Nutrition, Secha Capital and Tiger Brands Venture Capital Fund, prioritise empowering female-owned operators



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Discover a ground breaking stevia composition

Tate & Lyle unveiled its new stevia composition, Optimizer Stevia 8.10. This innovative ingredient delivers the highly desired premium taste profile closest to sugar, even at high sugar replacement levels, while offering a more cost-effective solution than other premium sweeteners.

This stevia composition offers a comprehensive set of benefits for both manufacturers and consumers. With Optimizer Stevia 8.10, manufacturers gain access to a versatile, great tasting stevia at a lower cost-in-use, offering an improved value compared to other premium stevia sweeteners. This translates to delicious, low-calorie options that meet consumer demand without compromising on taste. The unique composition qualifies for labelling as "stevia extract", (following JECFA* guidance) aligning with consumer preference for a sweetener derived from nature.^{1**}

“With versatility across applications, Optimizer Stevia 8.10 is ideal for achieving a superior taste profile in high sugar-replacement formulations like nutrition bars and shakes, functional beverages, vitamin gummies, and yoghurt”

Abigail Storms, Senior Vice President Global Platform, Sweeteners & Fibers, Tate & Lyle said, "Optimizer Stevia 8.10 is a breakthrough for the

industry. We've leveraged our technical expertise to create a sweetener that not only meets the highest standards of taste and quality but also delivers cost savings to our customers. Optimizer Stevia 8.10 opens a world of possibilities for food and beverage manufacturers because they no longer have to compromise on taste because of cost. Whether you're looking to improve taste, reduce costs, or enhance the nutritional profile of your products, Optimizer Stevia 8.10 delivers on all fronts."

This development underscores Tate & Lyle's unwavering commitment to scientific innovation. Through proprietary production processes, the company has unlocked the potential of previously underutilised steviol glycosides, naturally occurring components within the stevia leaf. This innovative process developed by Tate & Lyle's scientists and engineers enables greater use of the stevia leaf extract, promoting more efficient manufacturing processes.

www.tateandlyle.com

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- 1 Tate & Lyle Proprietary Research, 2024 Global Consumer Ingredient Perception Research – US; Base size n=302
- * Joint FAO/WHO Expert Committee on Food Additives
- ** The applicability of label claims and the regulatory and intellectual property status of Tate & Lyle ingredients varies by jurisdiction

Leprino Foods and Fooditive Group sign exclusive agreement to commercialise non-animal casein worldwide

Leprino Foods Company, the world's largest mozzarella cheese manufacturer, and Fooditive Group, pioneering plant-based ingredient innovators and leading fermentation specialists, are thrilled to announce a transformative global partnership. This agreement marks a significant step towards a sustainable food future with the commercialisation of Fooditive's revolutionary non-animal casein protein.

Under the terms of the long-term licensing partnership, Leprino Foods will have exclusive worldwide rights to produce non-animal casein manufactured using Fooditive's proprietary precision fermentation platform. Additionally, Leprino Foods will have exclusive worldwide rights to market and distribute for use in cheese and a non-exclusive worldwide license to market and distribute for all other food applications, reinforcing the commitment of both companies to drive innovation and sustainability in the food industry.

Fooditive's fermentation-derived non-animal casein offers a ground breaking new product line that promises to transform the food industry. This innovative protein mimics the functionalities and taste of traditional animal-derived casein, providing a sustainable and accessible alternative that meets the demands of both the food industry and consumers. Fooditive's non-animal casein delivers the same taste, texture, and promise of cow-derived casein.

The versatility of Fooditive's casein makes it suitable for use in any application where animal casein is typically utilised, including cheese, beverages, yoghurts, desserts, coffee creamers, snack bars, sports nutrition products, and more. Together, Leprino Foods and Fooditive Group are poised to introduce this revolutionary casein to the industry in innovative and forward-thinking ways.

Moayad Abushokhedim, the CEO of Fooditive Group, commented, "We are beyond excited to partner with Leprino Foods in bringing our revolutionary non-animal casein to the global market. This collaboration not only underscores our commitment to sustainability



Fooditive's non-animal casein delivers the same taste, texture, and promise of cow-derived casein.

and showcases the incredible potential of our precision fermentation technology but also our commitment to partnerships. By offering high-quality, environmentally friendly proteins, we are paving the way for a more sustainable future and delivering innovative, plant-based alternatives that meet the evolving demands of consumers. Together with Leprino Foods, we are set to transform the food industry and make a lasting impact on the planet."

Mike Durkin, President, Leprino Foods Company, commented, "This agreement with Fooditive highlights our ability to innovate and adapt swiftly to emerging trends and technologies. By incorporating precision fermentation alongside our conventional dairy production, we will explore how this non-animal casein derived from fermentation will add to our product portfolio. This innovation not only can enhance our range, but also holds the promise of reducing the environmental footprint across the supply chain, all while maintaining the highest standards of product functionality, quality, taste and texture."

www.fooditivegroup.com, www.leprinofoods.com

Blood fat profiles confirm health benefits of replacing butter with high-quality plant oils

Switching from a diet high in saturated animal fats to one rich in plant-based unsaturated fats affects the fat composition in the blood, which in turn influences long-term disease risk.



Image source: Chalmers University of Technology

A recent study published in *Nature Medicine*, conducted by a team of researchers from Chalmers University of Technology, Sweden, the German Institute of Human Nutrition, Germany, and several other universities, shows that it is possible to accurately measure diet-related fat changes in the blood and directly link them to the risk of developing cardiovascular disease and type 2 diabetes.

“Our study confirms with even more certainty the health benefits of a diet high in unsaturated plant fats such as the Mediterranean diet and could help provide targeted dietary advice to those who would benefit most from changing their eating habits”, says Clemens Wittenbecher, research leader at Chalmers University of Technology and the study’s senior author.

The World Health Organisation (WHO) highlights the importance of healthy diets in preventing chronic diseases, recommending the replacement of saturated

fats with plant-based unsaturated fats to reduce cardiometabolic risk. However, the certainty of these guidelines is moderate due to limitations in existing studies.

This new study addresses these limitations by closely analysing fats in the blood, also known as lipids, with a method called lipidomics. These very detailed lipid measurements enabled the researchers to link diet and disease in an innovative combination of different study types. This novel approach combines dietary intervention studies (that use highly controlled diets), with previously carried out cohort studies with long-term health tracking.



Clemens Wittenbecher, research leader at Chalmers University of Technology

Diet trials to monitor how changes in food consumption affect blood fat

Part of this research was conducted in a dietary intervention study at the University of Reading, U.K., which involved 113 participants. For 16 weeks, one group consumed a diet high in saturated animal fats, while the other group followed a diet rich in unsaturated plant-based fats. Blood samples were analysed using lipidomics to identify specific lipid molecules reflecting the different diets each participant consumed.

"We summarised the effects on blood lipids with a multi-lipid score (MLS). A high MLS indicates a healthy blood fat profile, and a high intake of unsaturated plant fat and low intake of saturated animal fat can help achieving such positive MLS levels", says Fabian Eichelmann from the German Institute of Human Nutrition Potsdam-Rehbruecke and first author of the study.

These MLS results from the dietary intervention study were then statistically related to the occurrence of cardiovascular disease and type 2 diabetes in large observational studies that had previously been carried out. These large cohort studies followed initially healthy participants for several years. This analysis of data from both sets of studies showed that participants with a higher MLS, which indicates a beneficial dietary fat composition, had a substantially reduced risk of developing cardiometabolic diseases.

Switching to a healthier diet, can have the most pronounced health benefits

Additionally, the study examined whether individuals with low MLS levels, indicating high saturated fat

content of the diet, specifically benefited from a healthier diet. The Mediterranean diet focuses on providing more unsaturated plant fats and was used in one of the large intervention trials, known as the PREDIMED trial. Using this study, the researchers found that diabetes prevention was indeed most pronounced in individuals with low MLS levels at the start of the study.

"Diet is so complex that it is often difficult to draw conclusive evidence from a single study. Our approach of using lipidomics to combine intervention studies with highly controlled diets and prospective cohort studies with long-term health tracking can overcome current limitations in nutrition research," explains Clemens Wittenbecher.

More about the research:

The research is presented in the paper: "Lipidome changes due to improved dietary fat quality inform cardiometabolic risk reduction and precision nutrition" published in the journal Nature Medicine.

The researchers involved in the study are Fabian Eichelmann, Marcela Prada, Laury Sellem, Kim G Jackson, Jordi Salas Salvadoró, Cristina Razquin Burillo, Ramon Estruch, Michael Friedén, Frederik Rosqvist, Ulf Risérus, Kathryn M Rexrode, Marta Guasch-Ferré, Qi Sun, Walter C Willett, Miguel Angel Martinez-Gonzalez, Julie A Lovegrove, Frank B Hu, Matthias B Schulze and Clemens Wittenbecher

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Satisfy South Africa's thirst for authentic flavours and superior taste in beverages



The South African beverages market has grown significantly in recent years and is expected to hit \$25.74bn by 2029. Increasing consumer preference for beverages that focus on convenience and new flavours is accelerating growth and creating more opportunities in the beverage space.

The beverage market has mostly been defined by traditional mainstream flavours like cola, orange, and lemon. More recent years have seen a growing social drinking scene and renewed interest in ready-to-drink products, both of which are driving a strong opportunity for new flavour formulations.

In fact, a 2024 Research and Markets report on the South African beverages market projected a 5.19% CAGR from 2024 to 2029, growing from 420bn in 2024 to \$25.74bn by 2029.

Social drinking in South Africa has been gaining popularity in recent years, as evidenced by the increased demand for alcoholic beverages, including beer. According to a 2023 GlobalData report, South Africa makes up 95% of the flavoured alcoholic beverages market in Africa.

“Increasing consumer preference for beverages that focus on convenience and new flavours is accelerating growth and creating more opportunities in the beverage space”

Premium alcoholic beverages have also come to the fore with local players introducing fruit hops into their craft beer to offer more flavours to consumers. This has been successful in positioning their craft beer as premium. Alcohol-free and low-alcohol options are having a moment too, largely due to younger consumers trying to stay healthier.

Already, key industry players in South Africa have jumped on the flavoured beverage bandwagon. In September 2022, Coca-Cola introduced its new juice brand, Cappy, a 100% fruit juice product available in flavours such as Tropical, Orange Mango, Apple, Orange, and Grape. Similarly in July 2022, Red Bull in South Africa also launched a new Summer Edition Apricot energy drink flavoured with a blend of apricot and strawberry with a hint of peach.

With innovation in the industry catering to this expanding interest in new flavours and alcoholic and non-alcoholic beverages, manufacturers have an opportunity to keep their product offerings attractive by delivering fresh, new tastes.

Welcome a new era in beverage formulation

Traditionally, emulsion methods of adding flavours like citrus oils, mint oils, and spice oils to beverages result in a cloudy mixture that's commonly seen in alcoholic beverages, fizzy drinks, sports and energy drinks, bottled orange juice, even flavoured water. On the molecular level, this mixture is also unstable. With the right flavour solution, such as Kerry's new ClearBurst technology, flavour oils and water can mix better, resulting in flavoured drinks and alcoholic beverages in crystal clear formats with superior taste. Gin, for example, is made from fermented juniper berries. With ClearBurst, manufacturers can use juniper oil to easily achieve either a gin-flavoured alcohol-free clear format beverage or enhance the flavour of gin. As ClearBurst works well with citrus oils too, it can be easily applied to other clear format alcoholic beverages, such as adding citrus flavours to vodka.

“With the right flavour solution, such as Kerry’s new ClearBurst technology, flavour oils and water can mix better, resulting in flavoured drinks and alcoholic beverages in crystal clear formats with superior taste

Achieve superior flavour efficacy with authentic taste experience

Globalisation and South Africa's diverse cultural identity make the country unique in a way that while locals are open to international flavours, they still seek out familiar tastes and flavours.

Achieving authentic flavours localised for individual markets is an area of strong potential for the beverages industry, yet it comes with challenges. For example, while citrus flavours are popular, the market is flooded with products that struggle to capture authentic taste. Grapefruit, lime, lemonade, bitter orange, blood orange, and clementine are some of the fastest growing citrus flavours in South Africa in recent years, as seen in new product launches. However, often, citrus-flavoured beverages that have certain taste claims end up tasting like something else.

This is because citrus flavours are typically extracted using an essential oil wash method,

in this case, a citrus oil wash. This method only retains the water-soluble portions of the flavour, extracting less than 10% of its flavour. This results in the loss of authentic flavour character, leading to a diminished taste profile.

To gain a competitive advantage, authenticity in taste is crucial. In South Africa, manufacturers have been challenged to deliver the authentic taste of the well-loved naartjie (South African tangerine), which has its own nuances distinct from other varieties of mandarin oranges.

This is where a solution like ClearBurst can come into play. By integrating science and local raw ingredients, ClearBurst technology can capture the naartjie's unique flavour profile to help manufacturers create a clear format beverage product with an authentic South African taste, with notes that are brighter and richer. Being locally produced also allows manufacturers to optimise costs and create a more efficient production and supply chain.

The future of refreshment

As South Africa's beverage landscape evolves, the consumer's thirst for discovery and premium beverage experiences will continue to drive market demand. To stay ahead of the curve, manufacturers need to focus on cost efficient innovative offerings to excite taste buds while distilling the country's rich cultural heritage through unique local flavours.

CLICK HERE to find out more about Kerry ClearBurst technology and how it can deliver authentic, premium flavours to beverages.



www.kerry.com

About the author:

Neil Wiltshire is a Senior Flavourist, RD&A at Kerry South Africa.



“Regeneration Rising” is creating exciting new colour directions



Sustainability has become increasingly important across the food and beverage industry. Consumers are developing a growing appreciation for the natural world and an increasing desire to protect the planet. They’re paying more attention to the origins of raw materials and to sustainable production.

This “Regeneration Rising” trend is now having an impact on new product development. Manufacturers are not only switching to more sustainable ingredients and more environmentally friendly production methods and packaging. They’re also working to create products that have instinctive appeal for these eco-conscious consumers.

Why colour counts

Colour can be used to convey powerful messages about how food and drink is created. In the confectionery industry, for example, European brands once used vibrant colours to demonstrate that their products were high quality with intense flavours. Over time, confectionery with bright colours came to be

associated with high sugar content and artificial ingredients, so brands began launching products with pastel colours to indicate that their products were more natural and less sugary.

These colour cues are constantly evolving and depend on context, including the product category, the wider product positioning, and cultural expectations. But with the right approach, brands can use colour to send out instinctive messages about their products and increase their appeal among their target consumers.

When developers prioritise colour at the beginning of the innovation process, it acts as a north star, ensuring that each product is visually effective and tells a compelling story.

Key colour directions

As a global supplier of plant-based EXBERRY colours, GNT is involved in research to identify key trends and developments across the global food and beverage industry.

We’ve found that an increasing number of manufacturers are now drawing inspiration from the array of rich colours in the natural world, using visually impactful shades that can be found growing on land and in the sea. This allows their products to send out positive signals about their eco-credentials while maintaining a bold, bright, and fun aesthetic.

Working alongside futures research agency FranklinTill, we've identified three new "colour directions" in line with the Regeneration Trend. These colour directions involve using a palette to convey messages and evoke emotions.

"Elevated Earth" is a colour direction that draws from the raw, unrefined beauty of nature's imperfections. It's a celebration of material origins and textures – a tribute to heritage ingredients sourced from regenerative food suppliers. Textured purple, earthy reds, and muted oranges bring to life the colours of nutrient-rich soils from regenerative agricultural practices, nutritious and emergent Latin American fruits, and alternative chocolate ingredients. Biodiverse heirloom fruits and vegetables and highly pigmented spices bring in rich reds.

Elevated Earth is not just a colour scheme; it's a philosophy that permeates food and drink categories, infusing them with an organic yet premium aesthetic. In beverages, for example, this translates into sub-categories like kombucha, drinking vinegars, Mexican tepache, and earthy mushroom teas and coffees. Each carries the hallmark of authenticity, with variations in texture and colour that speak to the natural origins of their ingredients.

"Nature Lab" features a palette that pushes the boundaries of what we consider natural. In the science lab, we zoom into edible plant cells via a microscope to discover an invisible world of unexpected structure, shapes, and textural play in a kaleidoscopic spectrum of green, pink, red, yellow, orange, and blue. Transparency, intricate geometric shapes, and new manufacturing methods are part of this colour direction. This translates into plant-based yoghurt with colourful inclusions, vibrant-at-the-edge-of-neon RTD ranges, 3D printed confectionery, or contemporary shaped pâtisserie.

"Vibrant greens and blues are key, inspired by bio-based alternatives to synthetic colour, such as algae. These ingredients are manipulated into high-performance, sustainable, and vibrant hues"

The floral pink-red shades add tropical to sour fruit flavours, whereas saturated yellows and bright oranges bring tastes of Bergamot or marigold to the table. The pinks, reds, oranges, and yellows of climate-adaptive cactus fruits, berries and wildflowers also verge on hyperreal. Those shades illustrate that natural colour does not have to be dull – it can be bold, bright, and textured.

"Wholesome Nostalgia" takes into account the strong modern focus on community, family, and personal wellbeing. Consumers are enjoying a



Elevated Earth is not just a colour scheme; it's a philosophy that permeates food and drink categories, infusing them with an organic yet premium aesthetic

resurgence of feel-good rituals such as celebratory dinner parties and idyllic picnics in the park. This gives rise to a longing for nostalgic products with dreamlike colours, sweetness, and almost "kitschy" decorations. Food and drink can transport us back to childhood memories with a romanticised, "good old days" feel and long-loved tastes such as ice creams with vanilla flavour and colourful sprinkles.

While Wholesome Nostalgia is a pastel-focused direction that takes us back to childhood memories, it also brings a modern twist. Cool, pretty pinks from magnolia blossom and wild rose petals can be paired with pale lemony yellows and fruity peach colours that bring in a comforting warmth. Adding sophisticated greens such as pistachio or cultivated legumes underline the indulgence aspect of this colour direction.

Plant-based colours

At GNT, we've been creating EXBERRY colours from non-GMO fruits, vegetables, and plants since 1978. As pioneers in plant-based, sustainable colours, Regeneration Rising is a topic that is very close to our hearts.

We work alongside our customers to devise effective solutions that tap into the latest trends and connect with consumer needs. We can provide support throughout every stage of the product development process, helping brands develop eye-catching, sustainable products that capture the essence of their natural raw materials.

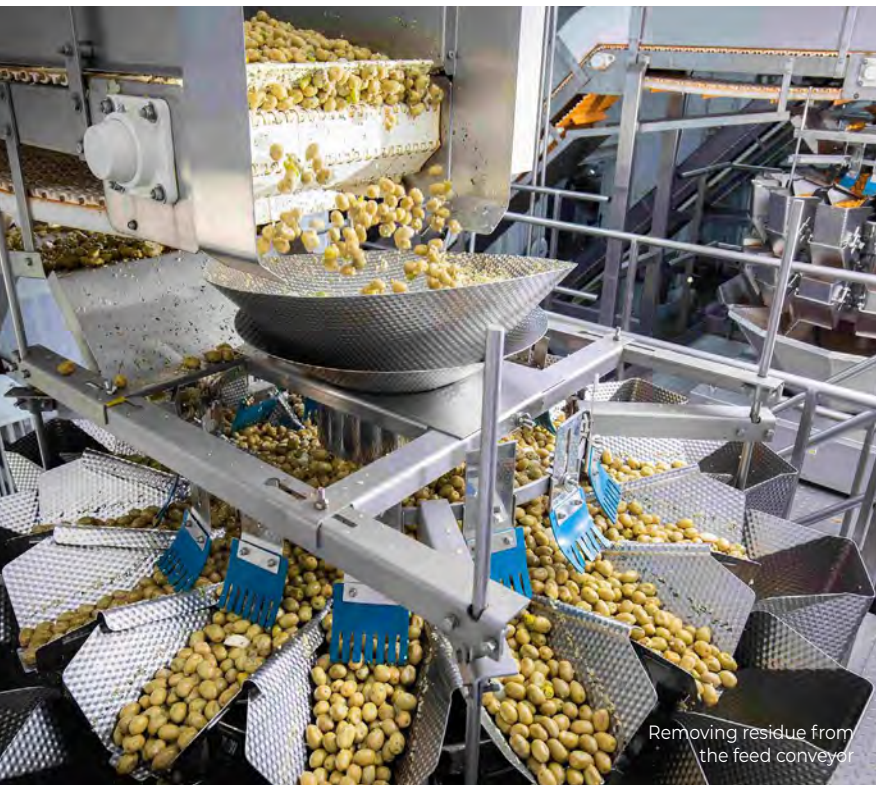
EXBERRY is the ideal colour solution for the Regeneration Rising era. Suitable for almost any food and beverage application, our colours can be used to create innovative products featuring spectacular shades inspired by the natural world.

www.exberry.com

About the author:

Dieuwertje Raaijmakers is a trend specialist at GNT Group.

Ishida accuracy and reliability optimise productivity and eliminate breakdowns for olive producer



The installation of four Ishida RVE multihead weighers at a leading French olive and spreads manufacturer has enabled the company to increase productivity by 10%, reduce average giveaway from 7g to 2g, and cut the volume of non-compliant finished packs by 70%.

Located in the heart of Provence, Tropic Apéro balances tradition with novelty in the production of a wide range of products, supplied to large retail stores in both bulk and packaged format. However, with high customer demand, the company was suffering from the unreliability of its previous equipment across its four production lines. The weighers were constantly breaking down, and this equated to the equivalent of 10 days' lost production per line per year. Maintenance and spare part costs were also excessive.

To ensure consistently high output rates and eliminate machine breakdowns, Tropic Apéro invested in the 14-head 3 litre Ishida RVE multihead

weighers. And thanks to the excellent results achieved from the first installed machine, the company quickly decided to buy a further three weighers to standardise equipment across its packing lines, as part of a €1.5 million investment programme over five years. "Everyone we spoke to in the agri-food industry raved about the quality of Ishida weighers," explained Ludovic Champion, Tropic Apéro's Director of Operations. "The tests we conducted on the initial Ishida weighing solution were so conclusive that we purchased three more to standardise our machinery. We have now significantly increased the efficiency of our production lines and drastically reduced our spare parts budget while reducing product loss."

"To ensure consistently high output rates and eliminate machine breakdowns, Tropic Apéro invested in the 14-head 3 litre Ishida RVE multihead weighers"



of water, for long term reliable operation.

The embossing of all contact parts reduces the contact surface area to prevent product sticking and to maximise throughput. For line personnel the weigher's ease of use, set up and cleaning (all contact parts are easily removable without tools) simplify daily operations, minimise machine downtime and maximise productivity.

At Tropico Apéro, the weighers are in operation during the off season for one 8-hour shift, 5 days per week, and for two or three shifts, around five to six days a week, in peak season. Each machine is handling 40 packs per minute, enabling the company to produce around 700,000 250g packs per week.

www.ishidaeurope.com



The Tropico Apéro team with finished pots

The accuracy and consistency of the Ishida weighers have enabled Tropico Apéro to focus on minimising giveaway across the different types of packaging used for its products. The reduction in non-compliant packs has also greatly eased the workload for operators on each line.

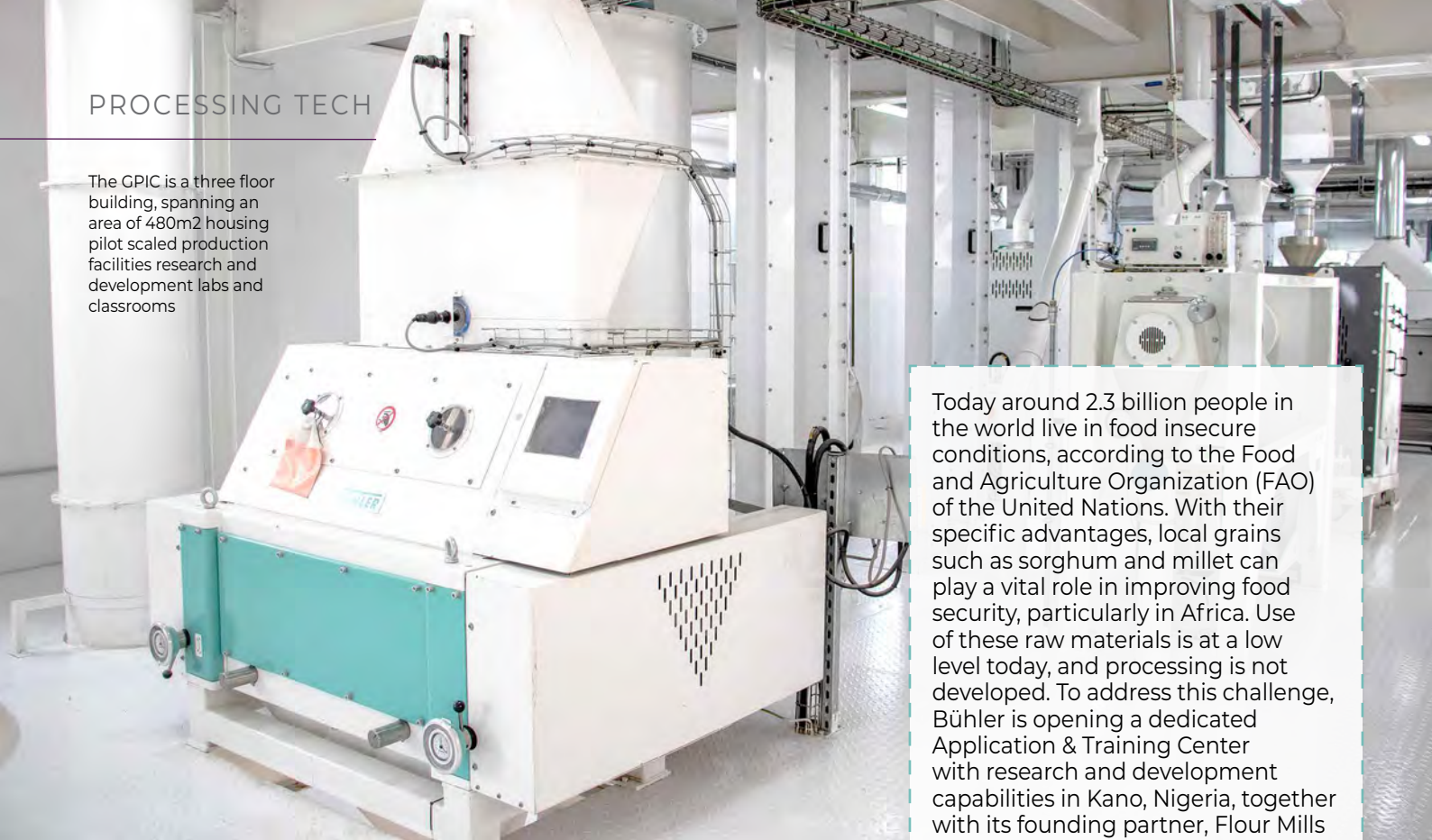
It features a high grade stainless-steel finish with an embossed surface and enhanced design to prevent the ingress

The Ishida CCW-RVE multihead weigher has been designed for the rapid weighing of free-flowing or semi-sticky dry, chilled, fresh and frozen products.



Top of CCW-RVE multihead weigher with orange olives

The GPIC is a three floor building, spanning an area of 480m² housing pilot scaled production facilities research and development labs and classrooms



Today around 2.3 billion people in the world live in food insecure conditions, according to the Food and Agriculture Organization (FAO) of the United Nations. With their specific advantages, local grains such as sorghum and millet can play a vital role in improving food security, particularly in Africa. Use of these raw materials is at a low level today, and processing is not developed. To address this challenge, Bühler is opening a dedicated Application & Training Center with research and development capabilities in Kano, Nigeria, together with its founding partner, Flour Mills of Nigeria (FMN), and its collaborating partners, such as Olam Agri.

Bühler opens application center for local grains in Nigeria together with Flour Mills of Nigeria

Bühler, in collaboration with Flour Mills of Nigeria Plc, has opened a grains application center in Nigeria dedicated to processing local and ancient grains. This sustainable and transformative commitment was made based on the need to address food insecurity, not just in Nigeria, but progressively across the African continent.

The main goal is to bring industrial processing of these grains to the next level and thereby contribute to affordable nutrition. "Sustainable food value chains utilising local grains are the number one priority to develop Africa," says Johannes Wick, CEO of Bühler's Grains & Food segment.

"In addition to improving the food value chain, we see great business opportunities with a new category of processed food," says John Coumantaros, Chairman of the Board of Flour Mills of Nigeria. Commenting on the foreseeable impact of the Application & Training Center, Coumantaros stated, "FMN has always been at the forefront of driving food self-sufficiency in

Nigeria and progressively across the continent. The application center is well positioned to sustainably develop local grains, create business opportunities, and provide viable alternatives to some imported raw materials used in production. Therefore, this partnership further demonstrates our consistency in developing local content and in our commitment to feeding and enriching lives, every day."

Local grains and crops offer many benefits and are therefore a key tool in improving food security. They have high nutrient density with valuable vitamins, minerals, proteins, and fats, are climate tolerant and able to withstand high temperatures and arid conditions, and require less fertiliser and pesticide than other grains. "With these characteristics local grains are ideal plants to be cultivated in Africa, specifically under the conditions of accelerating climate change," says Ali Hmayed, Head of Bühler's new Grain Processing Innovation Center (GPIC) in Kano. The main reasons these local grains and crops have not yet been integrated into industrial solutions are complex, ranging from low farming volumes and short shelf life to a lack of process knowledge and equipment. Together with its partners, Bühler is now taking a major step to break through this blockage and is open to further collaborations.

The GPIC is a three-floor building spanning an area of 480 square meters, housing pilot-scale production facilities, research and development labs, and classrooms. The production facility includes all steps of processing, from cleaning and sorting to dehulling, tempering, and milling. The heart of the plant is Bühler's high-compression ALPesa grinding system. The GPIC will empower customers, researchers, and partners to collaboratively explore cost efficient food processing solutions for local grains such as sorghum, millet, maize, soybeans, and other local crops such as cassava, different types of beans, nuts, and seeds.

In close collaboration with the Bühler African Milling School in Nairobi, Kenya, the GPIC also offers training and education courses on local grains and their advantages and requirements in cultivation and processing. Additionally, this new Application & Training Center will enable Bühler to optimise its processing portfolio for local grains in terms of both performance and cost efficiency. The GPIC is embedded in Bühler's global network of 25 Application & Training Centers. The first series of trials with customers has already been agreed upon.

Strengthening food security and economy

One key reason for the challenging food situations in Africa is that many regions of the continent are strong importers of grains, mainly wheat and rice. This makes them vulnerable to trade disruptions and foreign exchange rate fluctuations. "Local grains offer many opportunities, not only to increase food security but also to generate new jobs in agriculture and adjacent markets, as well as enabling countries to become more independent from imports," states Hmayed.

The transformation of the food supply chain in Africa will not happen overnight. "This requires concerted efforts across numerous sectors, including agriculture, processing, recipe development, end-product innovation, and consumer engagement," says John Coumantaros from FMN.

Together with its partners, we at Bühler are happy to now contribute to this system change with the aim of ensuring that more people in Africa have access to affordable and healthy food, thereby reducing hunger.

www.buhlergroup.com

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TNA snack solutions achieve a 76% increase in production

With the snacks market in Italy accelerating and cost-conscious consumers increasingly turning to budget-friendly private-label goods, Preziosi Food, a leading Italian manufacturer of potato chips and snacks, needed a complete solutions partner with the capability to deliver significant production capacity increases in a very short 12-month timeframe.

TNA solutions stepped up to deliver and oversaw the implementation of a fully integrated potato chip line, a state-of-the-art pellet frying system, and a complete distribution, seasoning and packaging system that took Preziosi's production capacity from 17 to 30 million kilos of product per year.

"Preziosi had a very short amount of time to plan and execute the project," said Eric Geling, Chief Sales Officer at TNA solutions. "Any delays would have impacted the company's private label contracts. However, working with a complete solutions partner greatly minimised the risk during the installation phase. Our objective was to ensure that each machine delivers on its promise, from the highest output level to the lowest downtime."

TNA is the only global single-source solutions provider that can deliver equipment for the entire potato snack production line, which aligns well with Preziosi's main goal of increasing production capacity. TNA's high-performance potato chip line includes washing, cutting, frying, distribution, seasoning, and high-speed packaging, enabling Preziosi to operate at speeds of up to 1,500kg/hour. The further installation of a state-of-the-art pellet frying system in place of Preziosi's existing fryer doubled line capacity to 600kg/hour.

"Despite a number of challenges, including the need to keep production going while navigating a complex installation process, with help from TNA, we managed to overcome these hurdles while also achieving steady growth of over 20%," said Lorenzo Caporaletti, President and CEO of Preziosi Food. "Our requirements were not only cutting-edge technology; we also wanted to manage the installation and improve the plant within a strict 12-month period without stopping or slowing production. It required a lot of creative thinking from both sides."

With Preziosi producing over 300 SKUs of snacks across potato chips, pellets and extruded items, one of the main aims of the project was to not compromise on the company's commitment to delivering high-quality, safe and controlled products. As such, TNA's holistic



approach and deep process knowledge enabled its expert engineers to identify areas that could be leveraged to deliver maximum value, ultimately increasing snack production capacity by an impressive 76%.

The high-performance TNA continuous frying system, for example, included patented opti-flow technology, which ensured consistency in each batch and reduced rejects. Lowering the outfeed temperature of the oil inside the fryer to 150°C via a double heat exchanger also reduced acrylamide formation, greater colour intensity, and a crunchier product overall.

"Our application engineer, Arnaud Jansse, oversees our Food Technology Centre," added Geling. "Leveraging his 30 years of experience, he and his team were able to work with Preziosi to fine-tune the frying process, ensuring each product delivered was as perfect as it could be. Following this, the implementation of our tna roflo vibratory and horizontal conveyor systems took care of those products, reducing breakages and, therefore, shards in the final package while increasing distribution speeds."

The deployment of multiple TNA on-machine seasoning systems (OMS) delivered seamless changeovers and easy operation across multiple products simultaneously. This, coupled with five new market-leading tna robag packaging systems, further ensured Preziosi could continue to outstrip demand and deliver only the highest quality products to its customers and consumers alike.

www.tnasolutions.com

To read the full case study on TNA solutions' partnership with Preziosi Food, [CLICK HERE](#)



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The future is electric

As demand and reliance on plastic injection moulding rises, so are concerns about its environmental impact and energy consumption.

According to Grand View Research, forecasts suggest that the compound annual growth rate (CAGR) for the injection moulded plastics market will rise by 4.6 per cent through 2028. The anticipated growth is being driven by the growing demand for plastic components across various industries including automotive, packaging, home appliances, electrical and electronics and medical devices.

The market growth will be especially fuelled by rising investments in the packaging and automotive sectors, with automotive companies increasing their production capacities and prioritising weight reduction to enhance fuel efficiency. For instance, the increasing use of plastics to replace metals and alloys in automotive components is predicted to drive product demand among end users — and will offer significant opportunities for injection-moulded plastics to enter the market.

But, as demand and reliance on injection moulding rises, so too are concerns about its environmental



impact and the energy consumption of moulding processes. Combining high temperatures, pressures, cooling requirements and equipment operation, injection moulding can be a very energy-intensive manufacturing process.

Fortunately, all-electric injection moulding machines are offering an alternative to more energy-intensive hydraulic models.

<https://www.tmrobotics.com/>

Sustainable packaging business launched

International chemical business, 2M Group of Companies, has launched a new packaging focused business unit, Sustainable Packaging Technologies, to promote its growing portfolio of biomaterial technologies.

Leveraging the expertise from 2M Group's leading materials sciences company, Banner Chemicals, Sustainable Packaging Technologies will lead the way in enabling brands to meet the growing consumer demand for bio-based packaging, offering 'plug and play' replacements for traditional plastic across a wide range of consumer products.



Led by Business Unit Head, James Nelson, who brings 25 years of experience in the packaging and material science industry, Sustainable Packaging Technologies is headquartered at its manufacturing site in Milton Keynes.

The company's mission is to build a portfolio of biomaterial technologies and solutions that can be integrated into existing packaging manufacturing processes utilising 2M Group and Banner Chemical's extensive network, knowledge and resources.

"As we launch Sustainable Packaging Technologies, I'm thrilled to lead our team in driving sustainable innovation within the packaging industry," said James. "Our bio-based solutions will offer brands effective alternatives to plastic, delivering environmental responsibility without compromising on performance."

"We aim to act as a trusted partner between R&D material science companies and leading packaging manufacturers and converters who are keen to support brands to deliver on their sustainability pledges."

From enhancing the shelf life of goods to reducing waste, or meeting regulatory requirements, Sustainable Packaging Technologies will use its expertise and technology partnerships to help its clients achieve their environmental goals.

<https://2m-spt.com>

Mondi's cost-effective next generation recyclable packaging

Mondi, a leader in sustainable packaging and paper, is launching the latest addition to its popular portfolio of sustainable pre-made plastic bags - FlexiBag Reinforced: a range of innovative mono-PE-based, recyclable packaging solutions with improved mechanical properties.



Contributing to a circular economy, the FlexiBag Reinforced range is recyclable where collection facilities and recycling systems for PE films are in place. The bags have been created in-house by Mondi, leveraging its integrated value chain. This means the solutions can be tailored to different customers' specific needs more cost-effectively.

Improved mechanical properties make the bag superior to previous versions – better puncture resistance, stiffness and sealability are guaranteed. The level of barrier protection can be adjusted, providing medium to high barriers against fat, oxygen and moisture while keeping the content fresh - making it ideal for the pet food industry.

With FlexiBag Reinforced, Mondi proactively meets future regulative requirements: a customised percentage of post-consumer recycled (PCR) content can be added (based on mass-balance), significantly reducing the use of virgin plastics and promoting material efficiency by keeping materials in circulation.

Dirk Gabriel, COO Consumer Flexibles at Mondi, says: "Mondi recognises the increasing emphasis on PCR materials driven by future regulative requirements and as a market leader in sustainable pet food packaging, we are taking every effort to secure sufficient upstream supply of PCR material for our customers."

By working closely with our partners along the value chain we can understand the unique requirements of each customer and adapt accordingly to material efficiency and recyclability. With FlexiBag Reinforced, we are able to offer a solution that comes close to the material costs of conventional multi-material laminates for certain structures and at the same time offers recyclable packaging that gives our customers a competitive advantage in the market."

www.mondigroup.com



High-resistance bottle base in 100% rPET bottles

Sidel is widening its existing StarLITE®-R range, a dedicated portfolio of bottle bases designed for recycled PET (rPET).

"Nitrogen dosing adds a small quantity of liquid nitrogen to beverage and food products which enables an increase in pressure inside the bottle ultimately aiding the pack's resistance as it travels through the supply chain. This process is used for still beverages and food products. Brands are looking for a design that does not resemble a petaloid while maintaining the same performance as this traditional shape; this is a key feature of StarLITE® -R Nitro," explains Laurent Naveau, Packaging Innovator Leader at Sidel.

"As an original equipment manufacturer with over forty years of blowing expertise, Sidel has channelled this experience into the design of its new bottle base for nitrogen-dosed still products."

Stand-out shelf appeal

Sidel has developed a unique and original wave-shaped bottle base for nitrogen-dosed still beverages and edible oils to help manufacturers create stand-out supermarket self appeal.

This 'wave' pattern provides the perfect foundations for many bottle shapes and designs, from 0.2 litres to 2.5 litres, increasing the creative scope of manufacturers, while the non-petaloid base helps to differentiate among consumers from carbonated soft drinks.

StarLITE®-R Nitro's bottle base features optimised mould base geometry and an efficient venting system which helps to achieve perfect shaping easily.

Sustainable packaging

Sidel's StarLITE®-R Nitro offers manufacturers the opportunity to switch to 100 percent rPET, while utilising a low blowing pressure and keeping bottle weight to a minimum. For a 0.5L bottle, by switching from virgin PET to 100 percent rPET StarLITE®-R Nitro base, manufacturers can reduce carbon dioxide tonnage produced by 32 percent^[1]

Equally, manufacturers can reduce blowing pressure needed thanks to the Nitro base's optimised venting design that combines grooves with venting holes to achieve an 18bar blowing pressure for single-serve format vs 24bar market average, a 25 percent CO₂ reduction^[2].

The bottle solution is also compatible with a wide range of bottle weights including extreme light weights. <https://www.sidel.com/en>

Industry change-makers and organisations honoured with sustainability awards



Several inspiring industry change-makers – as well as brands making impressive strides in ensuring the sustainability of their products – have been honoured by South Africa's longest-standing producer responsibility organisation (PRO), Petco.

The annual Petco awards, which recognise inspiring work within the collection and recycling value chain throughout South Africa, have been announced.

The accolades were awarded to 11 recipients in nine categories ranging from the Recycling Partnership Gamechanger to Kerbside Collection and Sorting, and Top Woman in Recycling.

Among the brands recognised was Woolworths, for introducing South Africa's first polyolefin shrink-wrap sleeve on the PET bottles for its iced tea range – ensuring that these bottles can be recycled in South Africa.

Liquid board packaging producer Tetra Pak was also awarded for its innovative school-based recycling campaign which educated almost 20,000 learners about the importance of collecting and recycling liquid board cartons, resulting in the collection of 9.5 tonnes of cartons.

Chemical giant AECI's buy-back centre support was lauded for facilitating recycling and sustaining jobs, while GreenWay Africa and Heineken's Project Vuselela improved the collection of recyclable packaging, with a focus on inclusivity for waste pickers in the value chain.

Boksburg manufacturer Infinite Industries won the newly introduced Innovation category for turning "unrecyclable" waste into eco-friendly construction materials.

Aside from these industry stakeholders, a number of SMMEs and community-based initiatives were also honoured for their work.

Petco CEO Cheri Scholtz said the purpose of the accolades was to shine a light on unsung sustainability heroes and initiatives throughout South Africa.

"The awards once again recognise South Africans who are making an extraordinary contribution towards building a circular economy for our country.

"These community members and organisations are helping to create income streams in the waste economy, and divert post-consumer packaging from landfills and from ending up in the environment," said Scholtz.

"These are critical and yet often unrecognised strides in contributing to a sustainable future for our country."

Since 2004, Petco has been facilitating the collection and recycling of PET bottles and jars, and their associated labels and closures, on behalf of its members. It began doing the same for liquid board (LBP) packaging in 2023.

Award highlights for the food and beverage industry

Design for circularity

As part of its vision for zero packaging waste to landfill and commitment to circularity, Woolworths introduced South Africa's first recyclable shrink-wrap sleeve for its iced tea range, ensuring compatibility with existing recycling processes and encouraging circularity.

Previously, the PET shrink sleeve on the PET bottle caused the entire bottle to be non-recyclable as recyclers were not able to separate the two in the recycling process. The transition to a polyolefin shrink sleeve ensures that the materials separate easily at the container grinding stage and allows for clean separation between the PET flake and label remnants, facilitating effective bottle-to-bottle recycling of clean PET.

Among the brands recognised was Woolworths, for introducing South Africa's first polyolefin shrink-wrap sleeve on the PET bottles for its iced tea range – ensuring that these bottles can be recycled in South Africa”

Feroz Koor, head of sustainability for the Woolworths Group, said the retailer worked closely with its suppliers and local recyclers to develop South Africa's first floatable polyolefin sleeve, which will reduce waste and contribute to a circular economy.

“It was also critical to us to have a colourless PET bottle to optimise the quality of recyclate obtained from the recycling stream to unlock opportunities for creating an expanded range of next-generation products,” added Koor.

Environmental education and awareness initiative

Tetra Pak, alongside Woodlands Dairy and Petco, collaborated on the successful 'Choose to Recycle' schools competition, aimed at promoting the recycling of Tetra Pak liquid board packaging (LBP). The campaign included a roadshow across 22 selected schools in the Eastern Cape, running from July to November 2023.

Learners were educated on environmental responsibility and the importance of recycling LBP cartons. Each school received branded recycling bins, and used cartons were collected and recycled through a reverse vending machine, with progress tracked via an app. Winners in each area received prizes to support their schools, with a total of 270,000 packs (9.5 tonnes) recycled and 19,520 learners participating in the competition.

Tetra Pak sustainability manager Masale Manoko said teaching children to recycle, cut back on waste, and appreciate the environment helped to create more ecologically conscious adults.

“The youth of today will lead the globe in the future and have the ability to bring about constructive changes that will protect the environment for coming generations,” said Manoko.



Petco drives the collection and recycling of post-consumer packaging



Newly released audited data reveals how South Africa's longest-standing producer responsibility organisation (PRO), Petco, drove the collection and recycling of post-consumer packaging last year.

Since 2004, the organisation has been administering the voluntary collection and recycling of polyethylene terephthalate (PET) bottles and jars, and their associated labels and closures, on behalf of its members.

In 2023, which represents Year 2 of the country's now-mandatory extended producer responsibility (EPR) legislation, Petco achieved 98% of legislated targets set by the Department of Forestry, Fisheries and the Environment's (DFFE) for these products by volume.

The EPR regulations require that packaging producers – brand owners, retailers and importers – take responsibility for the full life cycle of their post-consumer packaging, so that it does not end up in the environment or landfill.

Petco achieved the required 64% collection rate and exceeded the 58% (60% achieved) recycling rate



Chief executive officer Cheri Scholtz

for PET beverage bottles placed on the market by its members.

These members currently include brand owners such as Unilever, Tiger Brands, Twizza, The Beverage Company, Coca-Cola and PepsiCo, and retailers Pick n Pay and Woolworths.

Last year, the organisation diversified its focus by welcoming new member Tetra Pak and their customers, established an EPR scheme for liquid board packaging (LBP), and started to build a sustainable value chain for these cartons.

In one year, Petco achieved 80% of the legislated recycling target for LBP during what it refers to in its annual report as the set-up phase.

To stimulate the collection of this packaging, the organisation also grew the number of active buy-

back centres in the value chain from seven to 32, and increased the price paid for LBP on the ground.

Chief executive officer Cheri Scholtz said Petco had been building a sustainable value chain for post-consumer PET packaging in South Africa for almost two decades and had propelled the nation towards a circular economy for this packaging.

"We've now taken everything we've learned over our 19-year journey with PET and applied our experience to building a sustainable model for LBP. This is in line with our expanded vision to drive circularity within the broader packaging value chain."

The combined results for PET and LBP also indicate that Petco's collection and recycling efforts last year on behalf of its members:

- Saved 64,100 cubic metres of landfill space
- Alleviated 314,500 tonnes of carbon emissions associated with virgin material production
- Provided infrastructure support to buy-back centres that helped sustain 910 employment opportunities and the livelihoods of more than 8,000 waste pickers.
- Saw 77 recycling workshops and three accredited business training courses conducted nationwide, drawing almost 6,000 participants
- Supported 58 municipalities countrywide and two national and nine provincial departments with collection and recycling initiatives.

Scholtz said the annual figures were about more than just statistics but rather demonstrated how Petco had contributed to the economy, sustained income opportunities for ordinary South Africans and prevented packaging from entering the environment.

Last year, Petco invested over R70 million in the collection and recycling value chain, enabling contracted recyclers to purchase R309 million in post-consumer packaging from collection businesses.

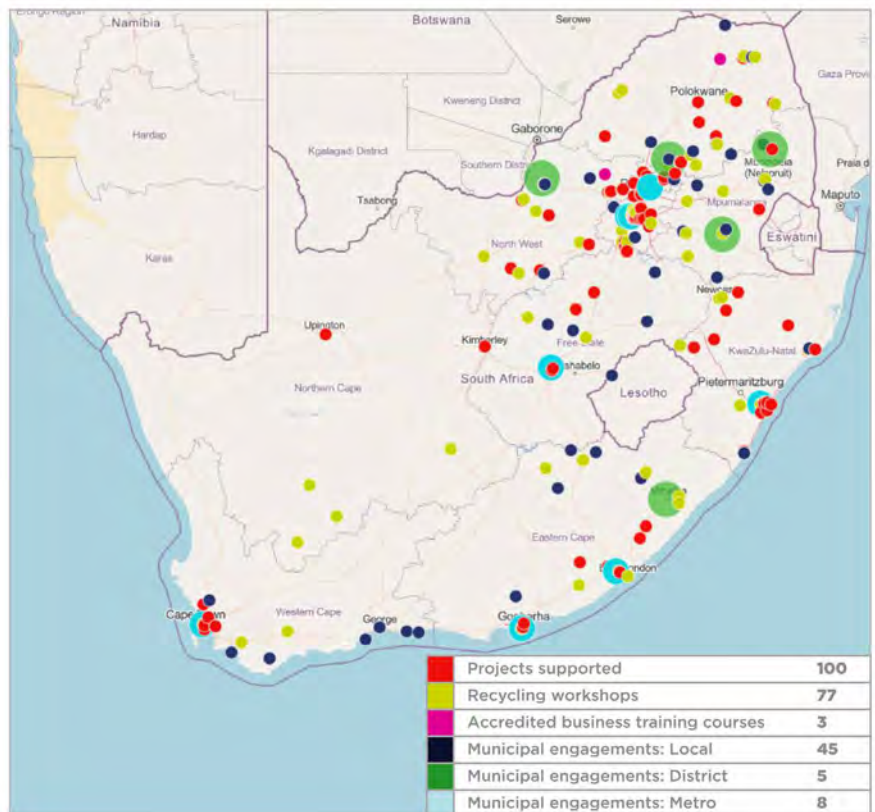
"We have a dedicated team on the ground in each province, working with corporate partners and various tiers of government, as well as waste pickers, and collectors to advance the collection of recyclable packaging, particularly those of interest to Petco members," said Scholtz.

She said the organisation had supported 100 collection projects countrywide – inclusive of waste

pickers, SMMEs and co-operatives – with equipment such as baling machines, trailers, trolleys, scales and personal protective equipment to improve the quality and quantity of their collections.

"For us, the EPR targets are not a burden. They present a real opportunity to assist our members in advancing South Africa's circular economy by strengthening every single link in the value chain – no matter how big or small."

www.petco.co.za



Sidel launches Qual-IS™: the intelligent aseptic quality supervisor

Each bottle is allocated and printed with a unique code, which holds all the information connected to that bottle

Qual-IS™ is the unique solution by Sidel to merge all activities related to quality control - laboratory, traceability, and sampling - in a digitally, intelligent and integrated way. It is a pioneering approach to quality management, focusing on driving quality rather than simply monitoring it.

Over 80% of grocery companies define a financial risk from product recalls as either significant or catastrophic while almost 60% have been affected by a recall event in the last five years[1]. For all grocery brands quality control and food safety is their chief concern.

“Qual-IS is our latest digital solution - a smart, dynamic quality control system, specifically designed to sustain a high level of quality control at all times thanks to its advanced traceability and data analytics,” explains Enrico Savani, Product Manager for Sensitive Product Filling. “Our customers are able to secure food safety & quality with Qual-IS ensuring consumer satisfaction, trusted brand reputation, and boosting business and profitability.”

Qual-IS is a digital solution accessed through mobile, desktop, or HMI installed on the production line and across laboratory facilities. Qual-IS integrates six key components including a sampling plan; laboratory management; traceability; hazard analysis and critical control points (HACCP); calibration certificates and quality status.



A smart dynamic quality control system

An integrated process: traceability, sampling and laboratory management

Traceability lies at the heart of Qual-IS. Each bottle is allocated and printed with a unique code, which holds all the information connected to that bottle over the course of its manufacturing life including preform and cap used, product recipe, production process parameters and even critical factors, events and alarms.

Equally, sampling is an essential part of quality control systems and Qual-IS comes pre-loaded with both tailormade and pre-designed sampling patterns which are based on a statistical approach and Sidel's wider experience operating within the beverage industry for over fifty years. Using data intelligence, these sampling patterns will also automatically adjust following the results of microbiological tests and will also adapt to different production lines.

Qual-IS™ integrates quality control procedures across all elements of the aseptic production line from

perform blowing to laboratory management. Currently, data collected through quality control tests at the production stage and in the lab are often stored in separate databases. Qual-IS will now unite these two data collection points.

Lab microbiologists will be able to access all information associated with individual bottles by scanning the unique code previously printed. This will indicate which quality control tests are required. Information is presented in an easy-to-use data dashboard and reports are customisable and straightforward to export.

Qual-IS is a smart, dynamic quality control system, specifically designed to sustain a high level of quality control at all times thanks to its advanced traceability and data analytics”

Driving not monitoring quality control

Hazard analysis and critical control points are a mandatory step for all aseptic production processes and ensures food safety across each and every bottle. Before starting the production, the bottler chooses what are CCPs, and what happens in case those are not respected.

Through Qual-IS it will be possible to show the critical control point status including historical

production trends in one place. Plus, by scanning each bottle the value of each CCP can be instantly retrieved. Ultimately, Qual-IS provides easy access to historical data and customisable trends allowing operators to forecast future parameters more accurately.

Similarly, Qual-IS can also create a calibration map for equipment used across the aseptic production line and check the calibration certificates for each instrument linked to critical control points. Under the dedicated area within the Qual-IS app, operators will be able to view the expiration date for each certificate.

The certificate status is identified with a colour-coded system: green (certificate renewal date is within a set timeframe), amber (requires attention shortly), and red (certificate has expired, requires action). If the certificate has expired, equipment will will notify users through the Qual-IS alert system.

Finally, quality status across the production line is displayed in a real-time dashboard with the ability to visualise trends, set quality key performance indicators and create customisable reports.

“For customers who wish to enter the aseptic market, Qual-IS provides the mechanism to manage their new journey in an easy way. And for customers, who are already expert aseptic beverage producers, Qual-IS provides a uniform method to manage multiple production lines by analysing data across different areas in real time – helping to drive meticulously high standards of quality control,” concludes Enrico.

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Laboratory tracing and sampling



Even after power outages in production, LEIBINGER's new IQJET industrial printers are immediately ready to resume operation. Controlled shutdown with a closed ink circuit is assured by their innovative uninterruptible power supply function and automatic nozzle sealing technology. There is therefore no need to clean the printers before restarting them, avoiding the need for additional downtime.



Production reliability maximized by uninterruptible power supply for CIJ printers

Right around the globe, power outages are a fairly commonplace occurrence. Asia, Africa and South America are affected, and so is Europe, as demonstrated recently by the major power outage in the Balkans. For companies, this signifies unscheduled downtime, production delays and additional costs. Once a power outage has been resolved, production then urgently needs to get back up to speed. However, conventional industrial printers that print codes or serial numbers on products and packaging commonly experience start-up problems after power outages.

Why is that?

The devices process inks that dry very fast indeed and, when a power outage occurs, they shut down spontaneously. The ink then dries up within a very short time, contaminating the print head and clogging the lines. Restarting those printers then usually first involves a time-consuming manual cleaning process.

Ready to resume printing immediately after a restart

To avoid the kind of complications described above, the IQJET from LEIBINGER features an integrated energy storage system for an uninterruptible power supply (UPS). In the event of a power failure, an IQJET printer powers itself down fully and its print nozzle automatically gets sealed airtight, ensuring that the ink does not dry out. This also protects the print head from getting contaminated. Even after extended

periods of downtime, the IQJET is immediately ready for use again and does not need to be cleaned.

The UPS can also bridge relatively short power interruptions. This prevents malfunctions and fluctuations in print quality. In contrast to conventional printers, there are no breakdowns or problems with the ink when operator errors occur, e.g. pulling out the mains plug while still in operation to use the printer on a different production line.

Maximum reliability and efficiency

The IQJET minimizes downtime after power outages, it enhances operational reliability even when unforeseeable events occur, and it makes it possible to avoid the high levels of production waste created by other types of printer.

This in turn enables companies to reduce costs and to protect the environment.

IQJET delivers conviction across the board

The LEIBINGER IQJET is an efficient solution for the coding & marking of products across a wide range of sectors. The IQJET printer delivers a high level of Plug & Print functionality combined with good print quality and great operational availability, without the need for cleaning. Users can also benefit from their intuitive operation, minimal operating costs, maximum productivity and five years of maintenance-free operation.

<https://leibinger-group.com/>



Advanced coding and marking systems provide unique identifiers for each product

Ensuring that products are properly labelled and tracked throughout the supply chain is crucial.

At its most basic level, coding and marking technology involves the use of printed codes, symbols, and other identifiers on products or their packaging. These codes serve as a crucial link between the product and its associated information, such as manufacturing date, serial number, and other critical details.

This is where coding and marking technology comes in – an essential tool for marking and tracking products.

“Coding and marking systems benefit the food packaging industry in South Africa by ensuring traceability, enhancing product safety, and complying with regulatory standards. Packaging companies need this technology to provide clear and accurate product information, manage inventory efficiently, and prevent counterfeiting,” explains Wayne Lee, digital marketing at J-Pak.

Monique Stoman, marketing assistant at PYROTEC, concurs, “Apart from identifying the batches it also stipulates the production data of the life expectancy of the product.”

It plays a critical part as the first line of defence against counterfeit packaging coding and marking, enabling companies to protect their brand’s integrity. “Unique identifiable information can be captured and placed on the products via utilising various technologies including but not limited to RFID, unique codes and NFC,” explains Monique.



According to Wayne, the key is protecting brands with anti-counterfeit coding and marking technology by providing unique codes that are difficult to replicate, ensuring product authenticity.

“As the first line of defence against counterfeit packaging, J-Pak ensures that each product can be accurately tracked and verified throughout the supply chain.”

So while the products are being protected against counterfeiters they are also being tracked and traced throughout the whole chain via unique product identifiers.



Maximize your coding & marking reliability

High humidity and high temperatures aren't only found in tropical and subtropical climate zones, such as Southeast Asia. These extreme conditions are also often encountered in many production environments such as those in the Beverage, Food and Packaging sectors.

However, there are applications and production processes where the ambient conditions impact on the inks' processing and adhesion properties. Examples of this include food that is pre-cooked and filled during production, or printing cables in areas with high humidity and temperatures.

Continuous inkjet printers (CIJ) use a continuous ink jet to print best-before dates, texts, codes or other markings. Conventional printers can cause condensation on the print head if the humidity is very high. Humidity can also affect both the inks' viscosity and drying time. A solution developed by LEIBINGER with an integrated air dryer prevents this from happening and guarantees the inks' adhesion and rapid drying – along with seamless, smooth operation.

This is how the air dryer works

In short, the LEIBINGER air dryer draws in the humid ambient air, removes the moisture from it and directs the resulting dry air into the print head. This ensures a dry environment in the print head, in contrast to the surrounding production environment.



Identifying and meeting market requirements

“As a leading international coding and marking specialist, we listen closely to our customers and develop solutions to support them in their day-to-day operations. This is exactly how the air dryer feature originated. Under extreme ambient conditions, it ensures that CIJ printers can reliably deliver the best possible print results at all times, including high print adhesion,” explains Alexander Deuchert, Head of Product Management at LEIBINGER. “Our service technicians advise customers on all continents. Together with the production manager, they determine on site which printer specifications, options and features are best suited to the customer’s application – including whether the integration of an air dryer is recommended for successful operation. This option can also be retrofitted to existing printers and LEIBINGER’s qualified service team is also happy to provide support in this regard,” he concludes.

“These identifiers are logged into a centralised database, enabling real-time monitoring and traceability from production to end-user delivery,” states Wayne.

The type of innovative coding and marking solutions provided for the South African food packaging sector includes Continuous InkJet Printers, Thermal Transfer Printers, Laser Coders, Label Applicators, Print & Apply and Thermal InkJet Printers.

Technology and expertise in South Africa

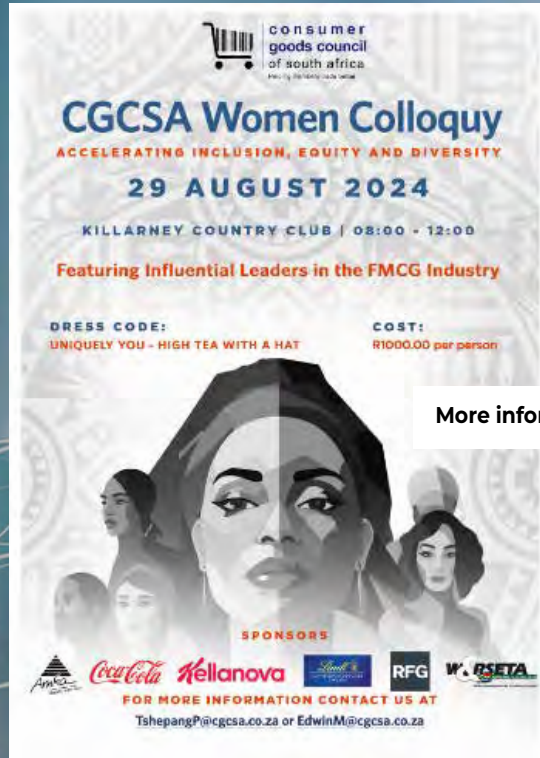
According to Wayne, “J-Pak has been a trusted and well-known company for almost half a century. Providing not only the equipment but internationally training technicians that ensures a successful installation of the equipment as well as 24 Hours/7 Days a Week support enabling production lines to run with little to no downtime.”

States Monique, “We design, develop and install unique track and trace software and applications to suit the customer’s needs and requirements through unique identification media like RFID and NFC to name a couple.

“We are the experts in the design development and implementation specialists when it comes to track & trace, coding & marking and automation solutions for the food packaging industry.”

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