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THE FOOD INDUSTRY IN 2012
A REVIEW

The Premier Source on Innovation, Production, Packaging and Distribution in the Food & Beverage Industry

FOOD BUSINESS AFRICA

ISSUE 1 | FEB 2013 | KSHS.350 / USD.6

SPECIAL FOCUS:
FOOD FORTIFICATION
Protea Polymers is a distributor of speciality functional and effect chemicals and polymers, with a major presence in every sector of the broader chemical distribution market. Operating in Eastern Africa, the company represents a large number of international principals, counting among its suppliers many of the world’s leading chemical producers.

As Protea Polymers E.A Ltd., we are working together with BASF as our supplier of Nutrition ingredients to be used in the fortification process. For fortification of staple foods, we supply BASF Vitamins A & AD3 for the fortification of Sugar, Edible fats & oils.

We also have in the range of BASF products Antioxidants, Carotenoids, Emulsifiers, Emulsifier Performance systems, Enzymes ingredients & lipids.

To provide a total solution to the fortification process, we distribute a Bio-Analyt test kit for analysing Vitamin A content in Fortified foods. The test kit is a simple to use instrument giving test results in less than 10 minutes.
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Welcome to the inaugural issue of Food Business Africa magazine – the magazine focused on the processors, suppliers, academicians and other stakeholders in the food and beverage industry in sub-Saharan Africa.

Food Business Africa magazine is the first resource of its type in the region. The magazine provides a forum for reflection on the food processing scene in the region and has a noble aim of encouraging innovations in the industry. This magazine will also critically provide a channel for suppliers, academia, and Government to interact with the food and beverage industry players for the common good of all concerned.

At FoodWorld Media, the publishers of this ground-breaking magazine, we believe that information is power, and that this power is only of value if it turns ideas into actionable activities that add value to all food industry stakeholders.

It is a critical time in our continent, and the food and beverage sector continues to be of importance in the development of Africa. As populations increase and urban living becomes the norm (the billionth African was born in 2010), the mouths to feed continually increase, challenges and opportunities for the food and beverage sector to meet this population’s quantity, quality, convenience and nutrition needs increase.

To complicate matters further is the fact that food is increasingly becoming international, with food made in East Africa easily being consumed in Japan or any other far flung country, where the requirements may be entirely different from the source country.

To enlighten our readers on, thereby contributing our part in this key sector.

In this first issue, it is our pleasure to present a Special Report of a review of the year just past, 2012, and what to look out for in 2013. 2012 was a year in which there were significant investments in the region’s food companies, key legislations were enacted and a whole range of products launched. In our Formulations feature, we delve deeper into Food Fortification, to provide our readers with the importance, opportunities in and the process of adding vitamins and minerals in foods and beverages.

Join us in this journey that is all about food processing in Africa!
WHO ARE THE READERS OF FOOD BUSINESS AFRICA?

- Large, medium and small scale food and beverage processors – dairies, bakeries, fruit & vegetable, meat, breweries and distillers, sugar, milling, fats, oils, coffee & tea, confectionery, savoury and related industries
- Suppliers to the food and beverage sector – ingredients, equipment, packaging, chemicals
- Suppliers of services to the food and beverage sector – banks, insurance, logistics, consultancy
- Government bodies including regulatory bodies, training bodies, Ministries of Agriculture and Health
- Restaurant and retail outlet managers, major fast food companies
- Universities/colleges/chef schools
- Co-operatives, produce dealers and handlers of agricultural produce

Advertising in the Food Business Africa provides an opportunity to reach key decision makers in the food industry supply chain in the EAC and COMESA.

Contact us: Tel: +254 20 8155022 • Cell: +254 725 343932 • Email: info@foodbusinessafrica.com
# Meetings and Exhibitions

## FEBRUARY

### Feb. 8 - 9th
**Ruiru Coffee Fair**
**Location:** Coffee Research Foundation Ruiru

Coffee industry players and suppliers converge for a 2-day exhibition and fair to deliberate everything about coffee in the region.

### Feb. 14 - 16th
**10th African Fine Coffees Conference and Exhibition**
**Location:** Munyonyo Conference Center, Uganda

Africa’s largest coffee trade platform brings together coffee roasters, traders, producers, professionals, and connoisseurs under one roof.

### Feb. 25 - 28th
**Gulfood 2013**
**Location:** Dubai World Trade Center, Dubai UAE

Exhibitors from the food and beverage, food service, packaging and restaurant sectors converge in Dubai to experience the latest trends in the industry.

## MARCH

### March 6 - 8th
**Global Food Safety Summit**
**Location:** Barcelona, Spain

A summit for food safety professionals from retailers, manufacturers, producers, food service operators, service providers, academics, certification and accreditation bodies, government officials, public authorities and international organizations to advance food safety globally.

www.tcgfoodsafety.com

### March 12 - 15th
**Propak Africa 2013**
**Location:** Expo Center, Nasrec, Johannesburg, South Africa

Propak Africa is the largest and most successful packaging, food processing, labelling, printing and plastics exhibition in Africa. Hosted together with Print Expo, Pro-Plas Africa Expo, Pro-Label Africa and FoodPro.

www.propakafrica.co.za

### March 17 - 20th
**The International Food and Drink Event (IFE 2013)**
**Location:** ExCel London

IFE is the UK’s largest and most respected food and drink trade event.

www.ife.co.uk

### March 23rd - 26th
**Craft Brewers Conference & Brew Expo Americas.**
**Location:** Washington DC, USA

BrewExpo America® is the premier trade show for craft brewers and brewing veterans, with over 400 exhibitors offering a variety of products and services.

www.craftbrewersconference.com

## APRIL

### April 26 - 28th
**South African Cheese Festival**
**Location:** Sandringham, Stellenbosch, South Africa

The Cheese Festival annually brings several large and artisan cheesemakers from around the country and the world for a culinary adventure.

www.cheesefestival.co.za

## MAY

### May 4 - 9th
**IFFA 2013**
**Location:** Frankfurt Fair and Exhibition Center, Frankfurt, Germany

IFFA is the leading international trade fair for processing, packaging and sales in the meat industry, offering a comprehensive overview of machinery and equipment for all stages of the process chain – from slaughtering to processing and packaging.

www.iffa.messefrankfurt.com

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We would like to feature your event. Contact us: info@foodbusinessafrica.com
The Mumias Sugar Company Board of directors announced the appointment of Chris Kisire Chepkoit as the Finance Director of Mumias Sugar Company. He holds a Bachelor of Commerce degree in Accounting and Master of Business & Administration in Management Science from the University of Nairobi, CPA (K), CPS (K) and a certificate in the Advanced Management Program offered jointly by IESE and Strathmore Business Schools.

Mr. Chepkoit brings on board a wealth of experience in Financial Management, Business operations, Strategic Management and Board Management. He has formerly served as Chief Executive Officer of Sovereign Group Limited (a private investment firm), Finance and Administration Director of The Standard Group Limited (Media) and Financial Controller of DHL Worldwide Express Limited (Logistics).

Unga Group Ltd announced that its Board of Directors has appointed Ms. Isabella Ochola-Wilson to the post of the new Chairman of the Group. Ms Wilson replaces the long-serving Richard Kemoli, who retired.

She has a Bachelor of Arts degree in Business Administration from the University of Dar-es-Salaam and a Master of Business Administration degree in Marketing from University of British Columbia, Canada.

Companies featured **in this issue**

1. Brookside Dairy Ltd  
2. Sameer Agriculture & Livestock  
3. Mumias Sugar Company  
4. East African Breweries Ltd  
5. SBC Kenya Ltd (Pepsi)  
6. Coca Cola Sabco Ltd  
7. Skol Brewery Ltd  
8. Kenafirc Industries Ltd  
9. Ingredion Holding LLC  
10. Keroche Breweries Ltd  
11. Nile Breweries Ltd  
12. Fresh Cuts Uganda Ltd  
13. Pwani Oil Products  
14. Java Coffee House  
15. Crown Beverages Ltd  
16. Kibidav Dairy Ltd  
17. Unilever Kenya Ltd  
18. Kevian Kenya Ltd  
19. Proctor & Allan Ltd  
20. Soy Afric Ltd  
21. Aquamist Mineral Water Ltd

Would you want us to Share your Story with our readers?

Are you a Manufacturer, Supplier or Distributor in the Food industry? Food Business Africa would like to share the story of your great company with our readers.

Email: info@foodbusinessafrica.com
Illinois, USA - Mondelez International Inc., formerly Kraft Foods Inc., announced that it had completed the spin-off of its North American grocery business, Kraft Foods Group, Inc. With the spinoff, Kraft Foods Group will be headed by Tony Vernon, while Mondelez International will be headed by Irene Rosenfeld, the former CEO of the combined Kraft.

www.mondelezinternational.com

Royal DSM, the global life sciences and materials company, has acquired Fortitech, the global leader in food ingredient blends for the food and beverage, infant nutrition and dietary supplements industries.

The acquisition accelerates DSM’s strategy to become a full solutions provider in food ingredient blends and expands DSM’s value chain presence while adding additional capabilities to its business. Subject to customary conditions, the transaction was expected to close before the end of 2012.

DSM opened an East African representative office in Nairobi in July 2012 to serve the region.

Leendert Staal, President and CEO of DSM Nutritional Products, commented: “The acquisition of Fortitech is another very important step towards the implementation of DSM’s Nutrition strategy. It will help us to expand our value chain presence and to deliver more value to our customers. With Fortitech DSM will be able to deliver customized food ingredient premixes and blends to our customers while at the same time strengthening our international footprint”.

www.dsm.com

Illinois, USA - Ingredion Incorporated Inc. is the official name of the multinational company formerly known as Corn Products International, Inc. The local Kenyan operation has also since been rebranded to Ingredion Holding LLC.

A statement released by the company quoted Ilene Gordon, Chairman, President and CEO, at the start of the rebranding exercise stated that “Ingredion better reflects our global presence and focus on ingredient solutions. Going forward, we will continue to build on our strong legacies of partnering with our customers, employees, vendors and communities, which we believe is the foundation of shareholder value”.

The company is a leading global ingredients solutions provider specializing in nature-based sweeteners, starches and nutrition ingredients. With customers in more than 40 countries, Ingredion serves approximately 60 diverse sectors in food, beverage, brewing, pharmaceuticals and other industries.

The change of name to Ingredion follows the completion of Corn Products’ acquisition of National Starch, the specialty starches business of Akzo Nobel N.V. in 2010. That acquisition enabled the company to go to market with a broader portfolio of products and enhanced its geographic reach around the world.

Meanwhile, as part of the business restructuring, the company closed its Kenyan plant in Eldoret town in Western Kenya in July. The company, quoting a tough operating environment in the region, is now focused on higher value ingredients that it will continue to source from its affiliates around the world. The office and warehouse will continue to operate in Nairobi.

www.ingredion.com
M&A: Unibra in takeover of BMC brewery, Rwanda

Kigali, RW: Brasserie des Mille Collines (BMC) have officially sold their 51% stake in Skol beer to Unibra, a Belgium-based brewery, giving the latter 100% ownership. The company has also been renamed Skol Brewery Limited (SBL). The price of the take-over was not made public.

The takeover makes it easier for the new owners to embark on an aggressive capital expenditure plan aimed at increasing the market share of its Skol beer. "The brewery is undergoing a five-year Capital Expenditure plan of more than US$15 million, earmarked for equipment and packaging for capacity expansion. This should see the brewer grow its output significantly," said Unibra’s Christopher Thibaut.

In the two-and-a-half years they have spent on the market, BMC have managed to introduce Skol beer as a serious competitor against Bralirwa beverages, although the latter still remain dominant. As of 2012, the Rwandan beer market was estimated at around 1.2 million hectoliters, of which Skol contributes about 100,000 hl, or 8% of the total market.

Thomas Weingarten, Skol’s managing director, says there is an increasing demand for Skol beer whose main strong point, he explained, is the fact that it’s “a quality brand of international repute”. The brewery’s introduction of a new brand with a local feel, Gatanu, is expected to boost their market share beyond 10%.

The Rwanda focus

Expansion: SABMiller extends Chibuku reach in Africa

London, UK - SABMiller, the brewing giant, has expanded its African beer brand, Chibuku, into ten countries across the continent.

Chibuku is an opaque beer based on traditional African recipes using maize and/or sorghum, depending on local tastes. The expansion of the brand more than doubles the number of Chibuku markets from four (Botswana, Malawi, Zambia and Zimbabwe) at the start of 2011.

Following an investment of US$16m over the last 18 months, it was expected that, by the end of 2012, Chibuku volumes across new markets in Africa would total well over 50 million liters. Chibuku will therefore be available in Ghana, Mozambique, Swaziland, Lesotho, Uganda and Tanzania.

Chibuku is a low-alcohol beer that ferments in the package with alcohol strength increasing from 0.5%ABV on day one up to 4%ABV on day five before expiry. Given its short shelf life, it must be brewed and consumed locally. A new variant, ‘Chibuku Super’, was launched in Zambia in September. Chibuku Super is lightly carbonated and pasteurised to improve shelf life and ease distribution.

SABMiller’s expansion of Chibuku is part of its strategy to make more affordable beers for lower-income consumers across Africa taking share from the often unsafe ’informal’ alcohol market.

Mark Bowman, Managing Director of SABMiller Africa, said: “We have been investing heavily to grow capacity and stay ahead of demand across Africa. The expansion of our Chibuku operations illustrates how we are driving our affordability strategy, product innovation and maintaining momentum behind our ‘Farming Better Futures’ program through this continued investment.”

www.sabmiller.com
GMOs: Kenya ban as California refuses labeling

Nairobi, KE - The Ministry of Public Health and Sanitation has banned the importation of genetically modified organisms effective November last year. The issue of GMOs is a divisive one in Kenya, with the country grappling with whether to allow cultivation of GMO crops, and how to regulate the sector, despite the passing of the Biosafety Act in 2009.

Despite the existence of the National Biosafety Authority to supervise and control the transfer, handling and use of GMOs, the regulatory environment is still uncertain and needs clarity for the use of these products in a safe and sustainable manner.

This comes hot on the heels of the US state of California failing to pass Proposition 37 in the November 2012 elections that was meant to enforce labeling of all food products that had GMO content. The USA is among a number of countries that have used this technology to improve crop yields.

Expansion: Keroche Breweries launches KSh2.5 billion line

Naivasha, KE - Keroche Breweries Ltd plans to expand its production line by the end of next year, with an eye on a 20% market share. The new plant will cost KSh2.5 billion. Keroche Breweries launched its first beer brand Summit Lager in 2008, becoming the first local Kenyan company to launch a beer brand. Summit Lager has since been well received in the market. This investment will also help Keroche introduce more brands into the market

Investment: Kenafric Industries Opens Ksh1 Billion Plant

Nairobi, KE: Kenafric Industries, the candy and food giant, commissioned a new KSh1 billion plant to increase the production capacity of its chewing gum line. According to Bosch Packaging Technology, the suppliers of the equipment, it is the first of its kind in Kenya and in Eastern Africa. For primary packaging, Bosch additionally delivered eight Mini wrap flow wrapping machines.

The line produces and packages chewing gum with an output of up to 1.8 tons per hour. Due to its high complexity only four of these lines are installed globally each year, according to Bosch. The new comprehensive solution will support the manufacturer of stationery, foodstuffs, confectionery and footwear to establish a leading position in the African confectionery market.
STANDARDS: EAC States agree on grains quality

The five East African Community (EAC) states have finally agreed on the recommended moisture content for cereals and grains in the region. The maximum moisture content has been set at 13.5% for cereals, pulses and related processed commodities.

Technical experts from the East African Standards Council from Burundi, Rwanda, Kenya, Tanzania and Uganda made the resolutions during a two-day regional workshop on EAC staple food standards harmonization.

Uganda National Bureau of Standards (UNBS) chief Dr. Ben Mayindo noted that the delayed harmonization of the cereals standards was hurting traders.

“Cereal traders in the region can now sell their produce with ease. We have finally reached an agreement regarding the agreeable moisture content of cereals in the region,” said Mayindo at the workshop. He decried the continuing delay of harmonization of various standards in the region, saying it was an impediment to the Common Market protocol.

The EAC experts reached consensus on the moisture content of maize, dry beans, wheat, milled rice, millet grains, peas, sorghum, soy beans, split beans and brown rice, among others.

Onjolo Samuel Omollo, the assistant manager, Agriculture Standards, Kenya Bureau of Standards, told New Vision that the requirements for the moisture content for the cereals and pulses that was initially set at 13% for maize was too high to be met by farmers. Meanwhile, the Ugandan standards of moisture content stood at 15%, far below the required standards.

“We petitioned that earlier position because most farmers in East African don't have artificial methods of drying, but rely on the sun. This percentage would leave very few farmers meeting the required moisture content,” said Omollo.

Mayindo said that following the harmonization, cereals and pulses that don't meet the minimum quality requirements will be prevented from being traded across the internal borders of the EAC partner states.

MoU: USAID signs integration pact with TradeMark EA

Nairobi, Kenya — The United States Agency for International Development (USAID) and TradeMark East Africa (TMEA) signed a memorandum of understanding affirming their partnership, setting common goals of increasing trade within East Africa, and promoting exports to current and new markets, including the US. The partnership will also support the East African Community’s (EAC) excellent progress on regional trade integration. The agreement was signed by Earl Gast, USAID Assistant Administrator for the Africa Bureau, and Frank Matsaert, CEO of TMEA.

Specifically, USAID and TMEA agreed to work to increase intra-regional trade by 25% and exports to the rest of the world by 10% by 2016. Much of this progress is expected to be accomplished by reducing transit time and trade costs by 15%, while supporting the EAC in moving towards a more fully functional Customs Union and Common Market.

East Africa is one of the fastest growing regions in the world, though trade continues to be hampered by tariff as well as non-tariff barriers, including over-stretched ports and time consuming Customs and border operations.
Significant developments occurred in the year 2012 in the food and beverage sector in Eastern and Central Africa.

With significant new investments, new product launches, legislation that touched on the food industry in several countries in the region, the level of activity during the year was unprecedented. Be they multinationals, publicly quoted firms, family-owned enterprises, or SMEs, many companies had some investments of sorts, including new plants, increased production capacities, new products, investment in supply chain and logistics or investment in new markets.

However, with the positive news came some challenges, including pressures on commodity and ingredient prices, high costs of borrowing, increased inflationary pressures, changes in Government policy, and negative effects of lower-priced imported products that eroded markets for some firms. These factors have affected many of the food industry players in a major way, eroding margins and market shares, while, in some cases, resulting in closures of plants in the region.

The resilience of the food sector players and their ability to adjust to and even take advantage of these shocks have defined and will continue to define this sector going forward in 2013.

The following issues dominated the food and beverage sector in our region in 2012.
MERGERS, ACQUISITIONS AND CLOSURES

Corn Products closes Eldoret Plant
Probably the story of the year in the food and beverage sector was the July closure of the Corn Products Kenya Plant in Eldoret, Kenya. The only corn wet-milling plant in Eastern and Central Africa, the closure of the nearly 40-year-old Plant came after the company mentioned that the difficult operating environment and high costs made it impossible for the American-owned firm to continue manufacturing locally. The local manufacturer of glucose syrup and native starch, however, continues to be present in the market through trading of products from its affiliates.

IBL Group buys into Fresh Cuts in Uganda
Fresh Cuts, the leading meat processor, and Ireland Blyth Limited (IBL) Group, one of the largest business conglomerates in Mauritius, formally entered a strategic partnership to further Fresh Cuts’ influence in the East African region. With this significant financial investment and acquisition in the company, IBL will leverage their expertise and business knowledge, to give the company an advantage to expand the meat processing industry to a competitive level on the export market.

Unibra assumes total control of Skol brewery
In Rwanda, Unibra, the Belgian brewer, assumed 100% control of Brassieres des Milles Collines (BMC), the brewers of Skol brand lager. The brewery, now renamed Skol Brewery Ltd., is poised for aggressive growth into the region as a result of a planned US$15 million investment to increase its production capacity from the current 100 m liters per annum.

ECP Invests in Java Restaurant
On the restaurants side, Emerging Capital Partners, a Pan African private equity specialist, invested in Nairobi Java House, Kenya’s leading café and casual dining restaurant operator. The news marks the first private equity deal in the restaurant sector in East Africa, and ECP’s second investment in the East Africa region from its latest fund, ECP Africa Fund III. In conjunction with this investment, ECP announced it was opening a new office in Nairobi, Kenya. According to its website, the company has already raised and invested more than US$1.8 billion for growth capital investment in Africa.

SIGNIFICANT INVESTMENTS IN THE REGION

Significant investments were made in the region in 2012. As the global economy environment changes, with Europe significantly slowing down, the African continent is reaping from increased investments from multinationals, with Eastern Africa becoming a location where, increasingly, the multinationals are facing off in the market. Meanwhile, local firms are also not being left behind, with many of these companies having grown significantly over the years, and increasing their investments in 2012 as well.

Brewing sector
The sector that has had the most visible tug-of-war in 2012 has been the brewing sector, with Diageo-owned East African Breweries Ltd (EABL) facing off with SABMiller-owned Tanzania Breweries Ltd in Tanzania and Nile Breweries Ltd in Uganda, and other countries in the region.

In 2012 EABL commissioned a KSh1 billion new state-of-the-art canning line at its Ruaraka Plant in Nairobi with a capacity to produce up to 36,000 cans per hour, to boost its production and supply capacity. It also increased its capacity in Uganda by installing a new mash filter, while increasing its presence in Tanzania with its Serengeti brewery operations. The Company also announced a US$4.3 billion investment at its Ruaraka brewery in Kenya.

SABMiller on its part has significantly upped its stake in Eastern Africa by investing about US$120 million in Tanzania and Uganda in its subsidiary Nile Breweries Ltd. A new brewery under construction in Mbarara town, Western Uganda, to be opened in 2014, plus new investments in its Jinja-based brewery and Tanzania breweries, doubled production capacity in the new nation of South Sudan, and inroads into Kenya with its brands has put SABMiller in great stride in the market.

The news has not been dominated by the two giants only, though. With an increase in middle income consumers, Heineken early in the year opened a regional office in Nairobi to tap into the premium market niche in the region. Meanwhile, the locally-owned Keroche Breweries Ltd has broken ground on a new brewery in Naivasha town, worth KSh2.5 billion, to boost its market share and grow its volumes.

PROBABLY THE STORY OF THE YEAR IN THE FOOD AND BEVERAGE SECTOR WAS THE JULY CLOSURE OF THE CORN PRODUCTS KENYA

Soft drinks sector
After many decades of domination of the soft drinks market in Kenya by Coca Cola, the Kenyan market is set for the re-entry of PepsiCo. The new PepsiCo plant that is already complete in Nairobi, valued at KSh2.4 billion, will join other plants operated in the region by the soft drinks giant in Tanzania and Uganda. The company’s new facility is located in the Ruaraka area in Nairobi and will be operated by SBC Kenya Ltd.

Meanwhile, Coca Cola is not resting as it ramps up its investments to ensure it stays ahead of the game and defend its strong position in the juices, bottled water and soda market.
A number of low-calorie products were introduced in 2012 including the above chewing gum brand.

Sugar sector
The sugar industry in Kenya seems to be on the path of readying itself to face competition from cheaper COMESA sugar by diversifying their product portfolio. Mumias Sugar, the biggest cane miller in Kenya, began operations of their 22 million liters per annum capacity ethanol distillery and also of their 15 million liters per annum water purification plant.

These investments come when the sugar companies in Kenya have faced stiff competition for cane from farmers with several cases in court and several instances of clashes in the cane growing zones because of sugarcane ‘poaching’.

LEGISLATION – FORTIFICATION, GMOS AND BREAST MILK SUBSTITUTES
The legislative environment and the effect of Government policy formulation and enforcement remained a big challenge to the food sector during 2012. Although some important pieces of legislation that affect regional trade have been resolved, including coming up with an EAC standard on cereal grains, issues of regional trade and associated market access remained pressing for the sector in 2012.

On legislation, the most talked about issues in the year were the following:

Fortification embraced in Kenya
Through the efforts of GAIN (the Global Alliance for Improved Nutrition), the Kenya Bureau of Standards, the Ministry of Health & Sanitation and other industry players, Kenya passed sweeping legislation to ensure cereal grains and cooking oil/fat will, from June 2013, be mandatorily fortified with key vitamins and minerals.

This was a significant development for the food sector, and consumers in general, considering the debilitating effects nutrient deficiency has had on the population. It remains to be seen how the other states in the region will respond to this move by Kenya.

GMO crops banned
GMOS confusion continued in the region as Kenya’s Ministry of Health and Sanitation banned the importation of GMO foods.

The ban was made following a report from the now infamous Seralini study that linked GM maize with increased cancer risk in rats. Although this study was later rejected by the European Food Safety Authority (EFSA) as lacking in sound scientific method, the damage was already done. In rejecting the findings, EFSA said that the ‘the design, reporting and analysis of the study, as outlined in the paper, were inadequate’.

Internationally, the debate on GMOs continued, with the US state of California including in its ballot for the November elections a proposition to enforce labeling of GM foods in the state. This measure, also called Proposition 37, was however defeated in the ballot.

Kenya passes the Breast Milk Substitutes Bill
2012 was a busy year for the Kenyan Ministry of Public Health and Sanitation as the Ministry also drafted a Bill to promote exclusive breastfeeding for children under 6 months.

The Bill seeks to ‘provide for appropriate marketing and distribution of breast milk substitutes, safe and adequate nutrition for infants, through the promotion of breastfeeding and proper use of breast milk substitutes’. The Bill, according to the Ministry, is meant to regularize and domesticate the World Health Organization’s (WHO) Code on Marketing of Breast Milk Substitutes.

The Bill was aggressively opposed by the Kenya Association of Manufacturers. The Bill has established a committee to be known as the National Committee on Infant and Young Child Feeding to formulate policies and advice the Cabinet Secretary on the production, manufacture, sale, advertising, promotion and use of designated...
or complementary food products. The Bill also bans advertising and promotion of designated and complementary products.

NEW PRODUCTS & TRENDS IN THE MARKET
In a crowded marketplace, it is fair to say that getting a new product noticed and appreciated is a difficult task. Even as product developers try to develop new products to excite the market, we still appreciate that 2012 saw a lot of innovative new products enter the market.

Low calorie products seem to have come of age in 2012, with 3 of our picks being low calorie variants of common brands after several years of introductions but with limited success by several companies. Products with new packaging had an array of products that either added a new stock keeping unit (SKU) or changed the pack altogether, in one case incorporating environmental consciousness into the new pack. Of note were companies that stepped into new territories they have never ventured into before and made significant inroads with new product lines that excited the market.

The trend of the year was the successful launches by Coca Cola and East African Breweries of low calorie variants of their Coke and Tusker brands in Kenya. The two brands, Tusker Lite and Coke Lite, have found their place in the market and seem to be doing well, in a category that has not had significant success in the East African market.

Also of note was introduction of Castle Lite into the Kenyan market by SABMiller, having introduced the brand into Tanzania, where it has been a huge success, and in Uganda. Pepsi have also introduced, Pepsi Light into the market.

Sustainability became an interesting topic in the sector when Crown Beverages Ltd., owned by SABMiller, introduced a lighter more environmentally friendly pack for its Keringet still and carbonated waters.

Fortified products started to emerge from the legislation put in place in Kenya. Unga Ltd introduced fortified Jogoo maize meal towards the end of the year, among several millers that did so as the year ended.

COMMODITY PRICES SEESAW IN THE YEAR
With the international commodities markets facing a year of increased uncertainty, major traded commodities went through a period of near turmoil.
in 2012, especially in the June-September period. Lower-than-expected corn yields in the American corn-belt as a result of drought led to a sharp increase in prices of corn and wheat.

Corn prices averaged US$270-280 per MT for most of the early part of the year, but with a sharp rise to about US$320 per MT between June and December. Wheat prices averaged US$270-280 per MT in early 2012 before rising sharply from the middle of the year to US$350-360 per MT.

Not following this trend was sugar, where international prices were under downward pressure for much of the second half of 2012 as a result of expectation of a third consecutive increase in global production and large export availabilities in the 2012/13 marketing season, notably in Brazil’, noted the FAO, of the United Nations. Oils and fats eased in pricing during the year due to ‘the continued build-up of large global inventories of palm oil – as abundant production in Southeast Asia coincided with a protracted weakness of import demand’, said the FAO in its World Food Situation report released in January 2013.

According to the FAO Food Index in 2012 the Index averaged 212, 7% less than in 2011, with the sharpest declines registered by sugar (17.1%), dairy products (14.5%) and oils (10.7%). The 2012 price falls were much more modest for cereals (2.4 percent) and meat (1.1%).

**HIGH BUT EASING INFLATION DURING 2012**

“The year 2012 was a year of high but easing inflationary pressures in the region. As the attached graph shows, annual headline inflation in Uganda commenced the year at a high of 25.7% in January 2012 to close the year at 5.5%. Kenya started the year at 18.93% and by the end of the year inflation had come to 3.25%. However, Tanzania’s inflation rates have fallen from a high of 19.8% to 12.1%, a more modest decrease than the other EAC countries.

Although inflationary pressures abated during the year, prices of food products remain high, making it harder for food companies to increase volumes or increase margins in the market place.
<table>
<thead>
<tr>
<th>DATE</th>
<th>TRAINING</th>
<th>COURSE COSTS</th>
<th>VENUE</th>
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<tbody>
<tr>
<td>11-15 February</td>
<td>High Performance Liquid Chromatography (HPLC)/Gas Chromatography (GC) Trouble shooting training</td>
<td>GC only: KSh 20,000</td>
<td>Nairobi, Kenya</td>
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<td>HPLC only: KSh 40,000</td>
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<td>HPLC &amp; GC: KSh 50,000</td>
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<td>13-15 February</td>
<td>Fourier Transform Infrared Spectroscopy (FTIR) Training</td>
<td>Ksh 20,000; USD 300</td>
<td>Nairobi, Kenya</td>
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<td>9-12 April</td>
<td>Training in Water &amp; Sanitation</td>
<td>KSh 45,000 or USD 600</td>
<td>Kisumu, Kenya</td>
</tr>
<tr>
<td>22-26 April</td>
<td>Chemometrics Course</td>
<td>KSh 45,000 or USD 600</td>
<td>Kisumu, Kenya</td>
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<tr>
<td>6-9 May</td>
<td>Waste Management Quality Control Testing &amp; Research in Africa</td>
<td>KSh 45,000 or USD 600</td>
<td>Kisumu, Kenya</td>
</tr>
<tr>
<td>29-31 May</td>
<td>Analytical Techniques of Measurements</td>
<td>KSh 45,000 or USD 600</td>
<td>Nairobi, Kenya</td>
</tr>
<tr>
<td>19-23 June</td>
<td>Detection Techniques of Mycotoxins and Toxigenics in Food Chain</td>
<td>KSh 45,000 or USD 600</td>
<td>Nairobi, Kenya</td>
</tr>
<tr>
<td>24-26 July</td>
<td>Atomic Absorption (AA) Spectrometry</td>
<td>KSh 45,000 or USD 600</td>
<td>Mombasa, Kenya</td>
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<tr>
<td>19-23 August</td>
<td>Infra Red Measurement Techniques</td>
<td>KSh 45,000 or USD 600</td>
<td>Nairobi, Kenya</td>
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<tr>
<td>3-6 September</td>
<td>Detection Techniques of Mycotoxins and Toxigenics in Food Chain</td>
<td>KSh 45,000 or USD 600</td>
<td>Kisumu, Kenya</td>
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<tr>
<td>29 Oct – 2 November</td>
<td>Integrated Solid Waste &amp; e-Waste Management</td>
<td>KSh 60,000 or USD 800</td>
<td>Mombasa, Kenya</td>
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<tr>
<td>3-6 December</td>
<td>Training in Water &amp; Sanitation</td>
<td>KSh 45,000 or USD 600</td>
<td>Nairobi, Kenya</td>
</tr>
</tbody>
</table>

This fee will cater for Training materials, Lunch and Tuition payable to ChromAfrica LLC

Current Vendor Partners

For more information please contact the under-signed:

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Tel: 0725580090
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SCALING UP FORTIFICATION IN KENYA LAUNCH

Unga CEO and Chairman, Kenya National Food Fortification Alliance, Nick Hutchinson makes his speech.

Representatives from KAPA Oil, Pwani Oil, Mumias Sugar, Pembe Flour and Unga Ltd show off their fortified products.

Dr. SK Shariff, Director, Public Health and Sanitation officially unveils fortified products during the launch.

Peter Kebati, CEO, Mumias Sugar (left) receives a certificate from Dr. SK Shariff, Director, Public Health and Sanitation, (right) as Eva Oduor, CEO, KEBS looks on.

Vimal Shah, CEO, Bidco Oil addresses the guests.
Anand Gaggar, MD, Sameer Agriculture and Zachariah Binoy, CEO, Biofood Products listen keenly to proceedings.

Terry Wefwafwa, Head, Division of Nutrition, Ministry of Public Health addressing the meeting.

CJ Jones, Country Director, GAIN Kenya, gives her speech.

A Kensalt representative (left) receives a certificate from Dr. SK Shariff, Director, Public Health and Sanitation (right). At the centre is Eva Oduor, CEO, KEBS.
As we get into 2013, we expect a few key trends to dominate the discussion in the food and beverage industry.

By Ronald Onsare and TJ Kwach

Kenya’s General Election anxiety builds

On the economic side, everyone is waiting with bated breath for the results of Kenya’s General Election of March 4, 2013. After the debacle of the 2007 General Election and the losses suffered by a number of food companies in the region as a result of lost sales, factory closures, and difficulty in getting materials in or out of the factory, many food industry executives are apprehensive about this upcoming election and would want to see Kenya coming out of this without any violence or damage.

On the new products side, we think that 2013 will be as exciting as 2012 has been, maybe better. The pace of innovation can only get faster and more exciting for product developers.
The 4 key factors that we think could dominate 2013 include:

1. **Fortification goes beyond legislation**
   It has to be said that the effect of Kenya’s recent enforcement of fortification of cereals and oils remains the most important legislation in 2012. And the effect of this legislation is expected to echo well into and past 2013 and many more years to come. Even the neighboring countries of the EAC and COMESA are expected to catch this ‘fortified cold’. In this regard, Uganda, Rwanda and Tanzania easily come to mind. And the effect in terms of products could also extend to other potential food products that could be fortified.

   2013 will be the time the cereal and edible oils and fats industries will ensure that they adopt this legal requirement and sort out any teething problems and challenges. Government action, in terms of guidance to the industry during the changeover, measurement and testing of fortification agents and final products will ensure success and not chaos during the implementation phase and thereafter.

   And it has to be said that enforcement of the standards by KEBS will also add a fresh challenge to the legislation. 2013 will be a testing time for the bureau as public confidence in this noble initiative will only be as strong as the level of compliance to the set standards and KEBS’s ability to ensure those manufacturers that do not meet the specifications are identified, notified and asked to provide corrective action.

   2013 could be the year that fortification could well move beyond cereal grains into other food categories that are commonly fortified around the world. Products like still and carbonated beverages (water, juices, drinks), dairy products (low fat milk, yoghurt), and baked goods could be avenues through which companies could differentiate themselves in a crowded marketplace.

   However, with several key product categories that have potential for fortification still lacking defined (and hence enforceable) fortification standards, 2013 could be a tough year for the Standards authorities. The clarion call to develop these standards will surely become louder in 2013.

2. **More Low Calorie products introduction**
   Lite beverages were some of the most outstanding new products in 2012. These low calorie non-nutritive sugar variants made very grand entries and have quite a considerable following, not like any other low calorie products ever introduced in this market. It seems the consumers are increasingly appreciative of the health benefits of low calorie food varieties and we expect 2013 to be a good year for increased adoption of these products and, maybe some more introductions of competing products on the shelves.

   One interesting angle to watch in 2013 could be the probability of increased innovation in low fat products in the dairy and other associated sectors. This would be in tandem with the low sugar products.

3. **Packaging innovation**
   In a market where competition is increasing on a daily basis, packaging innovation will continue to be a key trend in 2013 as food and beverage companies look for new ways to excite customers or introduce new packaging concepts that are built around lowering costs, increasing convenience to consumers or for other myriad reasons.

   In mature product categories where innovation is hard to come by, packaging innovation remains one way that food and beverage firms will continue to excite the market.

4. **Premiumisation will continue**
   With the market at the lower end of the market getting saturated in some product categories and companies looking for ways to increase margins, 2013 could see the introduction of some more unique premium brands into the market. In a market where the lower end the market larger is much larger than the middle and upper end, it looks contradictory that premiumisation could be a trend.

   However, we foresee product developers looking for some niche products that can improve margins and increase their market foot print just like we saw in 2012 with the introduction of low calorie products.

   This is especially so in the brewing, beverage and dairy sectors where companies will want to trade up consumers to premium brands.
The recent move by the Government of Kenya to enforce mandatory fortification of cereals and edible oils and fats is arguably the biggest change to happen in the Kenyan food industry regulations arena since Independence.

The food and beverage sector players, apart from meeting their own internal goals like financial excellence in their operations, face a huge challenge that is unique to this sector: provision of safe, wholesome, nutritious foods to the general population. So the question has always been how food manufacturers can meet these internal goals, while meeting the public good.

However, it is the subject of food fortification that easily brings the food industry closer to narrowing this gap, for fortification enables food and beverage manufacturers to, in many instances, provide more wholesome and nutritious foods that meet the needs of the general or specific parts of the population. This initiative therefore opens up a huge opportunity for food companies to, together with other stakeholders; improve the general nutritional and economic well-being of their customers.

It is fair to say that the food industry has been carrying out voluntary fortification of various cereals (especially weaning foods and infant formula), sugar and oils for some years. Further, complementary foods that have been meant for the NGOs and UN-funded programs have also been fortified to meet the needs of the target populations. These initiatives have however been limited. In cases where fortified products have been sold at retail level, they have been targeted towards those parts of the population that could afford the fortified products that were, by and large, more expensive than the non-fortified equivalents. One exception has been salt, which has been fortified since the 1970s in Kenya.

What is fortification?
Food fortification is defined by the Codex Alimentarius as “the addition of one or more essential nutrients to a food, whether or not it is normally contained in the food, for the purpose of preventing or correcting...”

Food fortification offers an opportunity for food and beverage processors to improve the nutritional status of their consumers and achieve their business goals. In this special feature we delve into the intricacies of fortification and its benefits.

By Ronnie Onsare and TJ Kwach
a demonstrated deficiency of one or more nutrients in the population or specific population groups”.

The most common fortified foods are, according to the Food and Agriculture Organization of the UN, cereals and cereal-based products, milk and milk products, fats and oils, tea and other beverages and infant formulas.

The public good and fortification

Fortification of food with micronutrients has played an important role in reducing common nutrient deficiencies in many countries around the world, including the use of iodine to prevent goiter, vitamin D to prevent rickets, thiamine to prevent beri-beri, niacin to prevent pellagra, and iron to prevent anemia. These fortification policies have been great successes for public health, according to the American Society of Clinical Nutrition.

According to WHO/FAO, over 2 billion suffer from a variety of micronutrient deficiencies, many of them in Africa, while 1 in 3 people worldwide are at risk of iodine, vitamin A, or iron deficiency. A case in point is that congenital hypothyroidism due to iodine deficiency is the most common preventable cause of mental retardation in the world.

The public health burden of nutrient deficiency in developing countries is huge. In Kenya, according to the Minister for Public Health and Sanitation, “…..more than 80% of children below 5 years do not get adequate levels of Vitamin A. Almost 60% of these children have iron deficiency anemia. An estimated 1,000 women of child-bearing age die during pregnancy and child birth due to severe iron deficiency anemia”. This sad state of affairs is replicated in many African and developing countries.

While there are business considerations to carrying out food fortification, it is such dire statistics that have forced the Government’s hand in enforcing mandatory fortification in many countries. Countries including Chile, Mexico, Argentina, China, and Malaysia have enforced mandatory fortification of foods ranging from dairy products and salt to cereals. South Africa adopted mandatory fortification of flours, including bread flour, with a mix of vitamins and minerals in 2003.

The benefits of fortification in the nutritional and economic benefits to the population and the economy at large are well documented. For example, providing adequate Vitamin A in deficiency areas can improve a child’s chances of survival by as much as 25%, according to the WHO. According to the Director of Public Health and Sanitation, in Kenya “…salt iodization has contributed to reduction of goiter from 21% at Independence to 6% in 2004”. According to the Tanzania Food Nutrition Center, salt iodization had reduced the prevalence of goiter in endemic districts from an average of 60.7% in 1980s to 12.3% in 2004.

The economic benefits to a country can also be substantial as demonstrated by a 2004 report by UNICEF titled ‘Vitamin and Mineral Deficiencies: A Damage Assessment Report for China’. This report showed that if the achievements of a salt iodization program in China were sustained over a 10-year period, the economy was expected to gain over US$25 billion.

The focus of the international community has been mostly on the three most prevalent deficiencies, Vitamin A, iodine and iron. Other micronutrients that have also been in focus include vitamin D, E, C and the B-complex, and zinc.

The most common fortified foods are cereals and cereal-based products, milk and milk products, fats and oils, tea and other beverages and infant formulas.”

History of food fortification in the region

Salt iodization has been one of the most effective interventions in the food sector in Kenya. Salt was the first food product to be fortified at the national level since 1972. This initiative has almost eliminated the occurrence of goiter in the general population, with the Ministry of Health reporting a reduction of goiter to about 6% as at 2004.

Complementary food products including Unimix, a corn-soy blend have been fortified with vitamins and minerals as per specifications of the FAO/WHO for a number of years in the region. Meanwhile, millers
and packers of weaning foods and infant formulas have for decades been fortifying various cereals and meals with vitamins and minerals. These millers include Unga Millers, Proctor & Allan, and Soy Afric Ltd.

In the fats and oil sector, Unilever Kenya Ltd commenced fortification of its popular Blue Band margarine with Vitamins A and E in 2004. Just as in the case of cereals, UN agencies and NGOs have also for years asked the oil refiners to fortify fats and oils supplied to them with Vitamin A.

**What to fortify**

While the benefits of fortification have been documented for many years and the degree of success in terms of reach is still minimal in many countries, there is a limit to what food products to fortify. Eating a healthy balanced diet and exposure to sunlight are general guidelines that will ensure no one really needs to eat fortified foods at all. However, with the prevalence of low incomes, poor food choices that lack diversity and lack of knowledge, a majority of the population still need fortified foods.

However, to control abuse of such a noble cause, many countries have come up with regulations on what to fortify and the quantities of fortificant to use for each product. It is in this regard that the US Foods and Drug Authority in 1994 came up with a regulation that is usually referred to as the ‘Jelly Bean Rule’ (Title 21 CFR Part 104 section 20). This rule states that foods low in fat, cholesterol and sodium cannot claim to be healthy unless they contain at least 10% of the Recommended Daily Allowance of Vitamin A, Vitamin C, calcium, protein, iron or fiber. Also, a manufacturer cannot fortify food with the sole intent of making the fortification claim. This has controlled the use of fortification as a tool to use to sell products that are inherently unhealthy to the population. These types of products include sweets and candies, and snacks.

At the same time a manufacturer cannot claim to have fortified fresh produce like vegetables, meat, poultry and fish.

**Fortification guiding principles**

The FAO/WHO Codex Alimentarius Commission has provided general guidelines that need to be met for a food to be fortified with essential nutrients. Further, many Governments around the world have provided guidelines on food fortification.

According to Title 21 CFR Part 104 Section 20, the following factors need to be taken into consideration when choosing a nutrient for use in foods as a fortificant:

- **Stability** – the nutrient shall be stable in the food under customary conditions of storage, handling and processing. This includes the effect of pH, temperature, oxygen, light and moisture on the nutrient once it is added and stored or the food processed in the normal way.

- **Availability** – the nutrient is physiologically available from the food. Various forms of fortification nutrients are available, each with a defined level of availability in the food once consumed.

- **Safety** – the consumption of the food containing the added nutrient shall not result in excessive intake of the nutrient, considering other sources in the diet.

- **Suitability** – the nutrient is suitable for its intended purpose and is in compliance with applicable laws and regulations governing the safety of substances in food.

From the above considerations, it is imperative that the food company intending to fortify a food product works closely with the regulatory

**SOME KEY FORTIFICATION ACTIONS IN AFRICA**

<table>
<thead>
<tr>
<th>ACTION</th>
<th>YEAR</th>
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<tbody>
<tr>
<td>Voluntary Salt Iodization in Kenya</td>
<td>1972</td>
</tr>
<tr>
<td>Kenya enforces Mandatory Salt Iodization</td>
<td>1978</td>
</tr>
<tr>
<td>Uganda enforces Mandatory Salt Iodization</td>
<td>1997</td>
</tr>
<tr>
<td>Voluntary Flour Fortification of flour by millers in Kenya</td>
<td>2000</td>
</tr>
<tr>
<td>South Africa enforces Mandatory Fortification of Cereal Flours</td>
<td>2003</td>
</tr>
<tr>
<td>Fortification of Margarine with Vitamin A by Unilever</td>
<td>2004</td>
</tr>
<tr>
<td>Tanzania enforces Mandatory Salt Iodization</td>
<td>2006</td>
</tr>
<tr>
<td>Bidco Oil launches first fortified oil in Kenya</td>
<td>2006</td>
</tr>
<tr>
<td>Ghana commences mandatory fortification of flour, oil</td>
<td>2007</td>
</tr>
<tr>
<td>Nigeria commences mandatory fortification of flour, oil and sugar</td>
<td>2008</td>
</tr>
<tr>
<td>Mumias Sugar launches fortified sugar in Kenya</td>
<td>2011</td>
</tr>
<tr>
<td>Ethiopia passes Universal Salt Iodization Legislation</td>
<td>2011</td>
</tr>
<tr>
<td>Kenya gazettes Mandatory Fortification of Flours and Oils</td>
<td>2012</td>
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</table>

“A MANUFACTURER CANNOT CLAIM TO HAVE FORTIFIED FRESH PRODUCE LIKE VEGETABLES, MEAT, POULTRY AND FISH”
authors who define the type of fortificant and the levels of use to meet a particular nutritional deficiency.

Also important is the part played by fortification nutrient suppliers in guiding the user on the type, stability and availability of the fortificant to be used. In many instances, the fortification nutrient supplier can provide guidance on the type of equipment to use, processing parameters and storage conditions.

The ultimate responsibility of course lies with the product developer whose goal is to make food that is not only nutritious but also convenient, affordable and with a taste the consumer will love.

**Labeling is Key**

It is important that manufacturers provide sufficient information to the users of the fortified product, including the fortificant and level of fortificant in the food. It is also common to indicate the Recommended Daily Allowance (RDA) of the particular fortificant that is provided by the said amounts of the fortificant in the food.

According to the FDA, “any claims or statements in the labeling of food about the addition of a vitamin or mineral to a food shall be made only if the claim or statement is not false or misleading and otherwise complies with any applicable regulations.”

Label declarations that are allowed include:

- “fully restored with vitamins and minerals” or “fully restored with vitamins and minerals to the level of unprocessed ___” (the blank to be filled in with the common or usual name of the food) may be used to describe foods fortified to restore the nutrients lost during storage, processing or handling.
- “vitamins and minerals added are in proportion to caloric content” may be used to describe food fortified when the fortificant is added to foods in proportion to the total caloric content of the food, to balance the vitamin and mineral content.
- the term “enriched,” “fortified,” “added,” or similar terms may be used interchangeably to indicate the addition of one or more vitamins or minerals to a food, unless an applicable regulation requires the use of specific words or statements.

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### The Numbers

**124,670,000**

Number of doses of Vitamin A given to children around the world in 2012.

*World Bank report 2012*

**1978**

The year Kenya enforced mandatory fortification of salt with iodine.

**2,000,000,000**

Number of people suffering from micro-nutrient deficiency in the world.

*World Health Organisation*

**73%**

Number of children below 5years with anaemia deficiency in Kenya.

*National Micro-nutrient survey, 1999*

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### Fortificant

<table>
<thead>
<tr>
<th>Fortificant</th>
<th>Common Foods Fortified with this Fortificant</th>
<th>Disease and Deficiency Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodine</td>
<td>Salt, milk and milk products, bread, flour, sugar and condiments</td>
<td>Goiter, hypothyroidism, pregnancy and growth complications</td>
</tr>
<tr>
<td>Iron</td>
<td>Cereals, milk products, sugar, curry powder, soya sauce and cookies</td>
<td>Anemia</td>
</tr>
<tr>
<td>Calcium</td>
<td>Milk and milk products, fruit juices, carbonated beverages and rice</td>
<td>Bone deformations</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Milk and milk products, sugar, oils, margarine and fat spreads, breakfast cereals</td>
<td>Eye and vision problems, skin problems including skin cancer</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Margarine, oils and dairy products</td>
<td>Rickets, osteoporosis and some cancers</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>Fat and oils, breakfast cereals</td>
<td>Vision problems, weakened muscles, nerve degeneration</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Fruit juices and similar beverages, dairy products, breakfast cereals</td>
<td>Dental problems, dry hair and skin, loss of immunity</td>
</tr>
<tr>
<td>Vitamin B1 (Thiamine)</td>
<td>Cereals and cereal based products</td>
<td>Complications of nervous systems, brain, muscles, heart and gastro-intestinal system</td>
</tr>
<tr>
<td>Vitamin B2 (Niacin)</td>
<td>Cereals and cereal based products</td>
<td>Pellagra, vascular or gastrointestinal diseases</td>
</tr>
<tr>
<td>Folic acid</td>
<td>Cereals and cereal based products</td>
<td>Megaloblastic or macrocytic anemia, cardiovascular disease, certain types of cancer, and neural tube defects in infants</td>
</tr>
</tbody>
</table>
Products that made the Biggest Splash in 2012

Products that made the Biggest Splash’ is an annual survey that we carry out to provide our readers with the latest product innovations that have made significant contributions in the market in the year. While this analysis is not based on a scientific study or concrete data as to the performance of the specific brands in the market, our editors feel that these brands had a significant impact on the market in terms of new product trends, packaging, environmental sustainability, convenience and nutrition.

At Food Business Africa, we believe that the more we expose the best efforts to our readers, the more we shall inspire the food industry professionals to think more, analyze the market more and introduce more new products into the marketplace. This will eventually lead to a more vibrant food industry in Africa. Our editors opine that this list shines a light forward on avenues new product developers can use to develop new products or re-engineer current product lines so as to excite the market and generate more value for their companies in 2013 and beyond.

Aquamist flavored water

No local company had come up with this type of product before, and surely Aquamist were very courageous in introducing a line of flavored sweetened water. Sweetened with artificial sweeteners, which, sadly, were not named on the pack, this product blew a breath of fresh air into the water category. Aquamist flavored water is available in 500ml plastic bottles in various flavor combinations.

Coke Zero finally lands

Coca Cola added a light version to its iconic brand Coke. Coke Zero is free of nutritive sugar and is sweetened with aspartame and acesulfame-K. It is targeted at the 18–24 years age group, and fits in with a population that is increasingly health conscious. With a nutritional profile of 0 Calories, 0g Fat, Coke Zero is available in 500ml and 1-liter plastic bottles. Coke Zero joins Coke Diet, which is also a low calorie drink from Coca Cola.

Daima extended shelf life milk

Sameer Livestock & Agriculture Kenya reinvigorated the fresh milk market by introducing an Extended Shelf Life (ESL) milk product that requires no refrigeration but stays for 3 weeks on the shelf. This is a significant improvement on the previously available technology that produced fresh milk that could only stay for 3 days on the shelf. Daima ESL is available in 500ml pouches.

Please keep us informed of new products by your company, Email us: info@foodbusinessafrica.com
Keringet unveils eco-friendly bottle

A year after being taken over by SABMiller, the brewing giant, Crown Beverages Ltd re-branded its Keringet Mineral Water, including unveiling a new pack for its retail packs. The new rejuvenated pack is eco-friendly, stylish and has flowing lines that feel just right in the hand of the consumer while adding strength and stability to the bottle. 100% recyclable, the new pack has less carbon footprint as it is made of 20% less plastic material.

www.keringet.co.ke

Fresh Fri’s new pack stirs cooking oil market

Pwani Oil Refineries Ltd, stirred the market with an innovative curvy, spill-free pack for its Fresh Fri brand. The new pack, with curves inspired by African beauty, has a comfortable easy-to-grip handle, a non-drip spout, and a measuring cap; while a clear strip shows the consumer how much oil is left in the pack during use. The product is available in the 500g pack to the 20 kg bulk pack.

www.pwani.net

Snapp apple-flavored cider introduced

After years of domination of the cider market by Redds, a brand from SABMiller, East Africa Breweries Ltd responded by launching a natural fruit-flavoured alcoholic drink in the East African market. Snapp is targeted at the female consumer and is available in apple flavour, and is served in a 330 ml bottle. The drink has an alcohol content of 4.5% alcohol by volume

www.eabl.com

Toggs goat milk yoghurt

Kibidav Dairy added a fresh twist to the yoghurt category with this unique creamy flavored yoghurt and fresh milk. Known by its consumers for its nutritional benefits, goat milk has been a growing source of milk in this country. Toggs Goat Milk Yoghurt is available in 150ml and 500 ml in various flavors.

www.toggs.co.KE

Pick ‘n Peel 1.5-liter pack

Kevian Kenya Ltd., the makers of Pick ‘n Peel fruit juices, went bolder and bigger by introducing a 1.5-liter pack for its range of fruit juices. The value pack, which joins the 250ml and 1-liter packs, is a welcome addition to the fruit juice category, and has surely made its competitors in the juice category think in that direction.

www.picknpeel.com

EABL goes low cal with Tusker Lite

East Africa Breweries Limited (EABL) excited the market with the launch of a light version of its iconic brand Tusker Lager. Tusker, the biggest beer brand in Kenya and East Africa, has had a brand extension after many years. Tusker Lite is low in calories and is in a new pack featuring a characteristic long neck green bottle. The beer has an alcohol content of 4% alcohol by volume.

Tusker Lite is served in 330 ml bottles.

www.eabl.com
ACHIEVING EXCELLENCE IN QUALITY ASSURANCE

In this issue Thomas Okelo Ochieng, the Corporate Quality Assurance Manager, Mumias Sugar Company spoke to TJ KWACH and gave an insight into the role he plays in implementing robust quality management systems.

1 What is your current occupation?
I am currently Working as Corporate Quality Assurance Manager at Mumias Sugar Company Ltd having joined the company in October 2012.

2 What are your current key roles?
My roles are two-fold. First and foremost, driving quality management promotion in the entire organization towards productivity and the achievement of established business goals in terms of Quality, Cost, Delivery, Safety, Morale of

Educational Data
• BSc. in Food Science & Technology, Egerton University
• MBA in Strategic Management, Moi University

Professional qualification
• Quality Management Promotion & QC Problem Solving (PQMP), AOTS/HIDA - Yokohama KC, Japan
• Lead Auditor, ISO 9001QMS and ISO 22000 FSMS.
staff and Environment. Additionally, providing quality leadership through development and implementation of management systems, championing enterprise risk management and superintending continuous improvement initiatives across the entire value chain to enable sustainable compliance to business and quality related policies, requirements, standards and specifications. At MSC quality is the underpinning foundation of all our activities.

What other key occupations have you had prior to this current occupation?
I worked as Quality Assurance Manager at Corn Products Kenya Ltd for 7 years until October 2012 when I joined MSC. Before then, I worked as Quality Control Chemist and Process Superintendent both at Agro Chemical & Food Co. Ltd having joined the company as a Management Trainee in September 2001.

What do you like about your current employer, your role?
Mumias Sugar Company Ltd true to its stature as a market leader in the production and provision of sugar, green energy and allied products is forward looking and quite dynamic. Guided by its strong core values under the able leadership of the current CEO, Mr. Peter Kebati, this organization can only rise to the next level in so far as excellence is concerned. I am humbled to provide advisory services on strategic quality management to this Team and will strive to give my best in enhancing quality culture not only locally but to the entire Eastern Africa region as a whole.

What’s your management philosophy? What’s your leadership style?
Management by policy (MBP) since it is more practical and gets work effectively done both by self and associates. For leadership, a blend of participatory, consultative and authoritative works for me most of the time strictly based on KKDD – Keiken/Experience, Kan/intuition, Dokyo/guts and Data analysis.

As a management systems person, what’s the value of these systems to a company? How can managers ensure that these systems deliver as promised?
Systems are important in the sense that other than improving organizational effectiveness, they endeavor to eliminate variations in processes, a problem many entities have learnt to live with to the dissatisfaction of their customers and to their own detriment. Yes, as Jack Welsh, the celebrated former CEO of GE once remarked, customers do not experience the average or specifications of a process. They experience the variation and management systems effectively implemented fix this.

Give us an example of your normal day at work
Reporting to the Factory at 7am, my day begins a brief one on one work review meeting with my team members. This is followed with a detailed walk-about (MBWA) at the Gemba before I get back to my desk at 9 am to attend to any arising office matters, respond to business mails and clear my out-tray which takes me to Noon. I then work over lunch hour (with tea, coffee or Coke) on strategic quality management frameworks from Noon through 2.00 pm. I spend the afternoon on policy management and business review meetings and follow up actions with MSC business associates up-to 4 pm. The last 1 hour is spent responding to business mails attending to office matters and clearing the out-tray before closing the day at 5.30 pm.

As an individual, what do you think are your key strengths or passion?
I have passion for excellence which I go to whatever lengths to have achieved. This drive I believe was instilled in me by the motto ‘Shine in Everything Everywhere’ instilled in me during my formative days at St. Mary’s Yala.

Any hobbies or activities out of work?
I am an avid reader of books with bias on strategy, business turnarounds, quality improvement and change management. I love listening to music (benga) and watching my favorite sport (netball).

What do you think is one interesting thing that many people may not know about you?
I am an accomplished and decorated Set Piece Singer.

What advice would you give to those who aspire to practice a role like yours in future?
First, improve self through reading by investing in books and learning from others by networking and building relationships as much as possible. Secondly, maintain a positive attitude and go about your endeavors with discipline and humility all the times. Finally, never ever give up whatever challenges you face in your career path. Remember always that a bend in the road is not the end of the road unless you fail to make the bend.

“REMEMBER ALWAYS THAT A BEND IN THE ROAD IS NOT THE END OF THE ROAD UNLESS YOU FAIL TO MAKE THE BEND”
In any food production environment be it a kitchen or a large industrial concern, food safety is of paramount concern. Food safety is a broad topic, but it is hand washing that forms the basis of food safety and is where we would talk about in this article.

Hand washing is a basic requirement in meeting Good Manufacturing Practice (GMP) and HACCP requirements. It is known as one of the most effective ways to avoid infection of food with microbes, chemicals or physical hazards. These contaminants include bacteria such as Enterococcus and Enterobacter spp), viruses (including flu viruses, chemicals (including grease and other chemicals) and physical hazards like soil. The effect of hand washing in reducing respiratory infections and diarrhea cannot be over emphasized.

Hand washing is an activity that is appreciated more in our hospital environments, with dust coat and dust mask clad surgeons common on our TVs, vigorously washing their hands and arms in many a movie scene, ready to get into surgery.

It is this mindset that needs to be transferred to our kitchens and factory floors if we are to reduce infections or meet the increasing needs of our customers. It is therefore imperative to the Management of any food facility to ensure that hand washing is enforced in the facility to meet food safety standards.

While it is appreciated by many that hand washing contributes to reducing cross-contamination of food during preparation, processing or post processing handling, the level of compliance in many facilities in the region remains quite low, with considerable effect on consumer health. The net effect of this is that food products fail to meet set microbial and chemical standards and cause illness or death or lead to a food recall situation.

**TECHNIQUE OF WASHING HANDS**

Adequate and proper training shall be provided to all employees on how to wash hands. Warm water should be used, although the technique used can be more effective than using warm...
TRENDS

EQUIPMENT

OPERATIONS

FORMULATIONS

SPECIAL
FEATURE

WHEN TO WASH HANDS

Typical times when to wash hands:
• when hands are visibly soiled
• before and after eating, handling food, drinking or smoking
• after using the washroom
• after touching high-hand-contact surfaces e.g. door knobs and railings
• after touching the body or shaking hands
• after blowing the nose or after sneezing
• after touching raw meat, poultry, or fish
• after touching (dirty) equipment
• after touching money
• after handling garbage
• after caring for sick people

Each food facility needs to have in place a clear and concise policy on food safety. This not only shows commitment by the Management but also provides a basis on which everything else lies, from provision of resources to how engaged employees will identify with the need for following laid down guidelines.

Lack of training at the facility on hand washing and food safety in general
The need for training cannot be overemphasized. Frequent, well coordinated training plans have to be part of the food safety program, which should incorporate hand washing. Once the training has been done, the use of easy to understand posters placed at strategic locations within the facility and other means shall be used to encourage compliance.

Lack of enforcement of laid down hand washing guidelines
Once drafted, any regulation requires enforcement. Management has the responsibility of ensuring complete compliance with hand washing procedures and guidelines. Tied to this is the responsibility of Management to monitor, analyze and find out any reasons for non-compliance and putting in place corrective actions.

Poor facility design that leads to hand washing points being far from the users
Plant design and any associated facilities can hinder the employees’ ability to meet requirements on hand washing. The Plant should be designed such that hand washing points are put in strategic areas that can easily be reached, and where the biggest risk is envisaged.

Lack of adequate hand washing points in the facility
The Management has to ensure that adequate sinks, detergents, water, sanitizers, gloves, and drying aids are available in available at the point of use. Responsibility for regular checks, replenishment and repairs in case of breakdowns should be clearly defined. Further, cases of unexplained breakdowns or consumables running out should be investigated and sorted out without compromising the product safety, and decisions made on products manufactured during the breakdown.

Improper food production procedures and systems
Proper procedures should be put in place to ensure proper work flow and procedures to reduce cross contamination, and thereby reduce the need for regular hand washing. Raw products should not be allowed to be handled in between ready products and where complicated process flows exist, simplification is key in meeting food safety goals, and ensure compliance with hand washing guidelines.

Njoki Nyoro is professional Food Safety Auditor and Food quality expert.

Factors that reduce compliance with hand washing and how to improve compliance:

Lack of a food safety policy by the facility

Water alone. The use of recommended detergents from reputable suppliers is recommended. A thorough rinse, followed by proper drying should be done after washing the hands. Wet hands shall be discouraged in food handling areas as they act as sources of contamination. An important step that can be added in highly sensitive areas is the sanitization of the dry hands with any of the available effective hand disinfectants.

Procedures (commonly done as signage or instructions) should be in place at each food facility to enforce hand washing so as to meet food safety requirements, as laid out by the national or local authorities. Even more important is that your customers have a right to receive foods that are safe to eat and are wholesome, or your company risks legal challenges from affected customers or from regulatory authorities.

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Importance of Asset Care
In any organization which engages the use of equipment and machinery, it is common knowledge that human error as well as defects in machinery is the root causes of some of the many losses that occur. Every factory that uses heavy equipment is usually aware of this, but rarely is action taken. This could either be due to lack of knowledge or the right methodology is not in place. For this reason, Asset Care becomes a vital feature in every factory or workplace.

Equipment Optimization
Equipment optimization is making the most out of your piece of equipment or machinery. This is achieved when equipment availability goes up, while producing good quality products quickly. Equipment optimization is affected by three main factors:

- Availability – lesser breakdowns of equipment so it is available for production
- Speed – quick turnaround of good quality products
- Quality - production of quality products

How can you achieve Equipment Optimization at your workplace or factory?
To begin with, whether you operate in a large organization or a small/medium-sized organization, you must recognize the significance of the machine operator since the operator has influence over Availability, Speed and Quality (herein referred to as ASQ). Subsequently, to guarantee equipment optimization, the operators MUST be engaged actively in the following:

- Equipment cleaning – Optimization is enhanced when equipment is cleaned on a regular basis and maintained well. Soil and muck accumulation can cause troubles which could lead to losses on a greater level, so by ensuring that your equipment is clean, ASQ becomes a greater possibility.
- Lubrication – As simple as it may look, lubrication, if ignored, could cause problems with the machine and lead to breakdowns as well as rapid deterioration. The correct lubricant must be used at the right point within the correct interval.
- Daily check sheet – This is an important step, but in many factories it is often bypassed. Make sure that someone responsible such as a line supervisor verifies the check sheets to ensure they are completed daily because, if anything, this way an abnormality can be noted and corrective action initiated earlier.
- Correct equipment operation – Lack of knowledge or skills on usage of equipment in the approved manner affects the ASQ. Make sure that all standard operating procedures are followed and that all operators are trained properly so that the equipment is used correctly and consistently.

Quick changeover – Changeovers need to be swift, otherwise they create unnecessary down time and the ASQ is negatively affected. This is because if a changeover takes a long time, is disorganized or occurs over and over again, it is only normal that things will not progress as they should.

Importance of implementation
To this point all is well; but definitely it doesn’t end there. At any workplace, there must be execution so that there are fewer breakdowns. This would allow more time to be spent on Preventative Maintenance instead of actual repair jobs. At any world class organization, Preventative Maintenance measures are routine and regular inspections are conducted for key equipment. The main point is that the maintenance teams and operators should work in harmony to ensure that changeovers can be done in minimum time and that any problems are solved together as a team.

B.O Maonga is a Process Engineer
The best gift a mother can give a baby is good health. While genetic influences on health of the baby are out of mother’s control the mother has full control of what to eat which in turn affects the health of the newborn. It is no longer okay to eat anything and everything during expectancy and expect the fetal development and mother’s health to be business as usual.

That is why the new trend is characterized by mothers who take nutrition decisions seriously and draw their choice from concrete scientific evidence which shows that health of the newborn, as well the baby’s health forty to fifty years later as an adult, is influenced by mother’s eating habits.

Improper nutrition during pregnancy can lead to underweight babies or babies with poor brain development. Therefore it is necessary to avoid some foods and eat more of others.

Below you will find nutrients that require special consideration during expectancy to guarantee good health of the baby as well that of the mother and those foods that should avoided. The role of supplements during expectancy will also be discussed.

**Important nutrients during expectancy**

**Folic Acid**

Consumption of an adequate amount of folic acid, which is the synthetic form of Vitamin B (folate), is recommended for all child-bearing women. Folic acid helps in the development of the nervous system, which consists of the brain and the spinal cord. The process of the development of the brain and the spinal cord start very early, approximately 26 days after conception, which sometimes occurs even before the mother is aware that she is expectant.

The brain and the spinal cord evolve from the neural tube, which if it fails to close properly, can lead to defects such as spina bifida (take this as split spine). Folic acid is required for complete closure of neural tube so women need to have sufficient folic acid in their body for proper fetal development.

Folate, the natural form of the vitamin which is commonly found in many leafy vegetables such as spinach, broccoli, oranges, bananas and dried beans performs the same functions as folic acid, but not as efficiently.

A serving of these foods provide approximately 40 micrograms of folate whereas the recommended amount is 600 micrograms per day. This translates into fifteen servings of these foods per day.

Common foods such as breakfast cereals, some rice, brands of bread and types of pasta are fortified with folate and can be good sources of this element. This is usually indicated on the label.

**Vitamin D**

Vitamin D supports fetal growth, the addition of calcium to the bones,
teeth and enamel development. The recommended amount of vitamin D is 5 micrograms per day. A great natural source of vitamin D is sunshine. Ultraviolet rays from the sun convert cholesterol in the skin into vitamin D. Food sources of vitamin D are few and include chicken liver, salmon, milk, beef liver, tuna and shrimp. Milk fortified with Vitamin D is also a good source of Vitamin D.

Iron
Women are in need of iron because large quantities are used to form the foetus’ hemoglobin which is required for proper fetal growth.

Supplements during expectancy
Expectant mothers generally require sufficient supply of all nutrients and slightly higher levels of certain minerals and vitamins. The objective of taking supplements is not to supply higher than required levels of one nutrient but to bring abnormally low levels of certain nutrients to normality.

One of the common supplements during expectancy is prenatal vitamin. Prenatal vitamins play similar role as multivitamins. They come in different forms such as tablet, liquid or chewable. Common prenatal vitamins contain slightly higher levels of essential vitamins and minerals such as folic acid and iron to ensure the mother gets the recommended supply.

Choosing the correct supplement can be very tricky. It is therefore advisable to seek guidance from a nutritionist or physician before buying a supplement. This is because although supplements are good, they have downsides.

One of the concerns being that the supplement industry is not well regulated, this calls for caution when buying a supplement.

The other issue with supplements is possibility of overdose poisoning. Some vitamins which are water soluble, such as vitamin C and B, are excreted as waste if consumed in excess.

However, excess of fat soluble vitamins such as A, D, E and K are stored in the liver and fatty tissues, where they can accumulate to dangerous levels.

**Bottom line: Nutrition during expectancy**

What to eat during expectancy is important to fetal development as well as mother’s health. The key thing is to ensure intake of sufficient nutrients, fiber, calories, proteins, vitamins, healthy fatty acids, minerals, folic acid and vitamin C.

It is not possible to go wrong with increasing intake of fruits and vegetables as well as whole grains, protein-rich foods, and dairy products. Supplements are sometimes necessary but should be taken following professional advice.

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Dr. Arimi is senior lecturer in Food Science at KeMU, Meru campus. He is a regular contributor to the Daily Nation.
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