PROGRESS REPORT 2012







ABOUT THE INTERNATIONAL FOOD & BEVERAGE ALLIANCE

The Alliance, formed in 2008, is a forum for bringing together global, regional and national food and non-alcoholic beverage companies around a common goal of helping people in all nations to achieve balanced diets and healthy, active lifestyles. We are committed to leading the industry towards this goal through product innovation, improved access to nutrition information, responsible marketing practices, the promotion of balanced diets and physical activity. We are also committed to collaboration – bringing the private sector, the United Nations, the World Health Organization, governments and civil society together in successful partnerships to address public health challenges. To learn more, please visit our website at ifballiance.org

ABOUT THIS REPORT

This report provides an overview of the work of IFBA and its members in 2012 (not including McDonald's which joined as a full member in 2013). It summarizes the results of the compliance monitoring exercise conducted by Accenture Media Monitoring in 2012.

August 2013



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A MESSAGE FROM THE CO-CHAIRS

Welcome to the fourth annual progress report of the International Food & Beverage Alliance. In 2008, our CEOs took the initiative and established five commitments in support of the World Health Organization (WHO) 2004 Global Strategy on Diet, Physical Activity and Health:

- 1. Reformulate and develop new products that support the goals of improving diets;
- 2. Provide clear and fact-based nutrition information to all consumers;
- 3. Extend responsible advertising and marketing initiatives to children globally;
- 4. Promote balanced diets and healthy, active lifestyles; and
- 5. Actively support public-private partnerships that support the WHO 2004 *Global Strategy on Diet, Physical Activity and Health.*

We are committed to undertaking these initiatives while ensuring that our products meet the taste and convenience needs expected by our consumers. In 2012, we continued our efforts to reformulate and develop new products with improved nutrition reducing key nutrients of public health concern and increasing those ingredients considered beneficial for good health; to provide nutrition information to consumers to help them make informed dietary decisions; to reduce the impact of the marketing of foods high in fats, sugar and salt to children and increase their exposure to foods and beverages compatible with a balanced diet and healthy, active lifestyle. In collaboration with governments and civil society, our members supported hundreds of programmes around the world, in communities and in the workplace, aimed at promoting balanced diets, physical activity and healthy, active lifestyles.

Transparency and accountability underpin our efforts. For the fourth year running we have engaged Accenture Media Monitoring to independently monitor and report on our global commitment on responsible marketing to children. The outcome of their findings is included in this progress report. At the end of 2011, we strengthened our global policy on advertising and marketing communications to children to cover more television programming and improve coverage in the online world. Third-party monitoring exercises will measure against this enhanced policy beginning in 2013. In September 2012 and in May 2013 we hosted two stakeholder forums, in New York City and in Brussels, to solicit input on our progress and our reporting. This report reflects suggestions from those forums.

IFBA and its members recognize the role we play in addressing public health challenges. We have been leading efforts to reformulate products to reduce key nutrients of public health concern and are committed to sharing our expertise and working together with industry and Member States in these efforts. In April 2012, we participated in an informal dialogue convened by the WHO Western Pacific Regional Office in Manilla to

discuss our industry's actions to reduce salt intake and our global policy on the marketing of foods and non-alcoholic beverages to children.

In May 2012, we joined with governments, civil society and academia in Brasilia, for the first meeting of the Pan American Forum for Action on NCDs (PAFNCD), and agreed to participate in a multisectoral alliance dietary salt reduction. In August 2012, at the PAFNCD meeting of the "SaltSmart Consortium," we shared our strategies on sodium reduction and committed to design and implement a common, stepwise approach to dietary salt reduction in the Americas.

While recommendations to reformulate products with reduced levels of sodium, sugar or saturated fats may appear to be simple, implementation is often much more complicated. It may require extensive changes to the recipe either through the use of a different ingredient or a different manufacturing process. Some changes also require insights into consumer behaviour to ensure consumer appeal and acceptability of reformulated products. The 2012 progress report seeks to provide some insight into these complexities and challenges.

We present case studies on reformulating and developing products to improve nutrition – reducing calories and removing or reducing key nutrients of public health concern (sodium, saturated and trans fats and sugar); increasing those considered beneficial for good health (whole grains and fibres, vitamins and minerals, and fruits and vegetables); and fortifying products to help reach populations suffering from undernutrition.

We also present case studies of our work and partnerships in sustainable agriculture – the development and commercialization of new crop varieties for improved nutrition, quality and productivity; the establishment of environmental, social and economic sustainability policies and practices; the traceability and certification of our raw material supply; and initiatives to improve the livelihoods of farmers, their families and their communities.

In May, we welcomed the adoption by Member States of the resolution endorsing the WHO *Global Action Plan* on the Prevention and Control of Noncommunicable Diseases, 2013-2020 (Global Action Plan 2013-2020) and adopting the Comprehensive Global Monitoring Framework and voluntary global targets. We believe this action represents a concrete step towards reducing the incidence of NCDs globally and pledge our support for these strategies. The actions recommended for our industry on product reformulation, nutrition labelling and restrictions on marketing of foods high in fat, sugar and salt to children are ones we have been implementing on a voluntary basis since 2004, and form the core of our work to help improve global public health.

We believe – and experience has shown – that multistakeholder efforts represent one of the strongest and most cost-effective ways to address public health challenges. We are pleased to see the UN, WHO and Member States also embrace this principle and that the *Global Action Plan 2013-2020* recognizes that civil society, academia, nongovernmental and professional organizations and industry "need to be engaged for NCDs to be tackled effectively." We are committed to doing our part.

We were honoured to be invited by WHO to participate in the consultations around the development of the strategies on NCDs and we look forward to working with Member States as they now turn to mobilizing stakeholders and implementing the *Global Action Plan 2013-2020*.

Anne Heughan

Thre Heighe

External Affairs Director, Unilever

Co-Chair, IFBA

Mary Catherine Toker

May Cach

Vice President, Government and Public Affairs, General Mills

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PRODUCT COMPOSITION & AVAILABILITY

CONTINUE TO REFORMULATE PRODUCTS AND DEVELOP NEW PRODUCTS THAT SUPPORT THE GOAL OF IMPROVING DIETS

IFBA members are committed to making foods and beverages that are both enjoyable and healthy. We are also committed to helping address some of the world's most pressing public health challenges, including nutritional imbalances, obesity and other lifestyle-related diseases.

Since 2004, IFBA members have been steadily improving nutrition in their products, removing or reducing key ingredients of public health concern – sodium, saturated fats and trans fats, sugar and calories – and adding ingredients considered beneficial to good health, such as whole grains and fibres, vitamins and minerals, fruits and vegetables. In this section, we present examples of product reformulation work undertaken in 2012. (See Tables 1-4).

We also present five case studies from IFBA members illustrating their efforts on developing and reformulating products to improve nutrition:

- → The Coca-Cola Company and efforts to reduce calories in beverages with low- or nocalorie sweeteners.
- → **Grupo Bimbo** and strategies to reduce saturated fats in baked goods and address undernutrition in children with fortified breads.
- → Kellogg Company and actions to increase fibre in American diets and vitamin D in children's diets in the United Kingdom.
- → **Nestlé's** micronutrient fortification programme.
- → Unilever's strategy to reduce sodium across its product portfolio globally.

Collaborating with others to prevent chronic disease

We have long committed to collaborative efforts and in 2012, these interests continued and expanded. Examples follow -

Australia: In October 2012, IFBA members, The Coca-Cola Company, General Mills, Nestlé, PepsiCo and Unilever joined with associate member, the Australian Food & Grocery Council (AFGC) to launch the Healthier Australia Commitment, an industry-wide initiative to help reduce the incidence of chronic preventable diseases. To help improve the nutritional quality of the Australian diet, members have voluntarily agreed to the following targets for reductions in saturated fat, sodium and energy by 2015:

- Reduce saturated fat in products by
 25 percent equivalent to over 3 million kilograms removed from the food supply;
- Reduce sodium in products by 25 percent equivalent to over 270,000 kilograms removed from the food supply; and
- Reduce energy, with a focus on energy dense, nutrient poor products by 12.5 percent – equivalent to over 100 billion kilojoules removed from the food supply.

PAHO: At the end of 2011, PAHO's Member States mandated a multistakeholder, collaborative, "whole of government" and "whole of society" approach to fight NCDs consistent with the global commitments made at the UN High-level Meeting of the General Assembly on the Prevention and Control of NCDs in September 2011, and established the Pan American Forum for Action on NCDs (PAFNCD). IFBA serves on the Interim Advisory Group of PAFNCD. In May 2012, governments, civil society, academia and the private sector, including IFBA, met in Brasilia, Brazil for the first meeting of the PAFNCD. At that

meeting, participants agreed on the need for multisectoral alliances in seven priority intervention areas, including dietary salt reduction. In August 2012, the "SaltSmart Consortium," comprised of representatives from governments, civil society, academia and IFBA members, Grupo Bimbo, Mondelēz International, Nestlé and Unilever, was convened by PAHO. They committed to implement a common, stepwise approach to dietary salt reduction in the Americas by fostering collaboration among governments, civil society and industry with the aim of realizing PAHO's goal of reducing salt intake to less than 5 g/person/day by 2020. Mondelēz International Unilever serve as the industry representatives on the steering group for the consortium. The consortium will set specific goals and timelines with industry continuing to progressively reformulate products; governments considering appropriate guidelines and policies and all partners supporting efforts in advocacy, communications and social marketing.

United Kingdom: In March 2011, the U.K. government launched "The Public Responsibility Deal" (the Responsibility Deal) to tackle rising obesity rates. Industry and organizations signing up as partners to the Responsibility Deal pledge to take action voluntarily to support the aim of the Responsibility Deal to create an environment that can empower and support people to make informed, balanced choices that will help them lead healthier lives. The Responsibility Deal has four networks: alcohol, food, health at work and physical activity, each of which have pledges that set out the specific actions that partners agree to take. Participants report annually on their progress in delivering their pledges. IFBA members, The Coca-Cola Company, Ferrero, General Mills, Mars, Mondelez International, Nestlé, PepsiCo and Unilever, each pledged to salt reduction targets for the end of 2012 and at the end of the year, each company had met its respective target. In 2012, members submitted delivery plans for out-ofhome calorie labelling, salt reduction and calorie reduction; for health at work (including occupational health standards, health and wellbeing reports and healthier staff restaurants); and community and workplace physical activity

programmes. In November, the government announced a pledge to encourage people to eat more fruits and vegetables – a pledge which has been embraced by IFBA members.

U.S.A.: Founded in 2009, the Healthy Weight Commitment Foundation (HWCF) is a comprehensive national multi-year effort developed by 16 food and beverage manufacturers, including The Coca-Cola Company, General Mills, Kellogg, Mars, Mondelez International, Nestlé, PepsiCo and Unilever, aimed at reducing obesity, especially childhood obesity, by 2015. Focusing its efforts on families and schools, HWCF promotes ways to help people achieve a healthy weight through energy balance calories in and calories out. HWCF members voluntarily pledged to collectively remove 1.5 trillion calories from their products (against a 2007 baseline) by the end of 2015 (with an interim goal to remove 1.0 trillion calories by the end of 2012). The pledge is designed to reduce the calorie gap commensurate with HWCF members' role in the U.S. diet. Members also committed to an external, independent evaluation of the pledge by the Robert Wood Johnson Foundation (RWJF), a philanthropic organization devoted exclusively to improving the health and health care of all Americans. With funding from RWJF, researchers at the University of North Carolina Food Research Program developed the metrics to track progress towards the goal and assess the overall impact on children. ¹ They also established baseline benchmarks for the evaluation which indicated that HWCF companies accounted for about 25 percent of calories consumed in the U.S. in 2007. The metrics also make it possible, for the first time, to track the flow of food and beverage products sold, purchased and consumed by Americans. In May 2013, HWCF reported that at the end of 2012 - three years ahead of schedule it had exceeded the calorie goal they set for 2015 - a reduction of 1.5 trillion calories sold in the marketplace. Companies achieved this caloriereduction goal, by developing, introducing and selling more lower-calorie options, changing

¹ Meghan M. Slining, Shu Wen NG, Barry M. Popkin, "Food Companies' Calorie-Reduction Pledges to Improve U.S. Diet," *American Journal of Preventive Medicine* 44, Issue 2 (2013):174-184

recipes, where possible, to lower the calorie content of current products or reducing portion sizes of existing single-serve products.

Evaluating our progress

IFBA is committed to monitor and report its progress in a way that is meaningful to the public health community. In 2011, IFBA engaged the services of SRA International to conduct a third-party audit of our members' progress for 2009-2011 on two of the commitments made in 2008 to the WHO:

- To reformulate and develop products that support the goals of improving diets; and
- To provide nutrition information to consumers.

This was the first time IFBA had undertaken such an audit and we underestimated the challenges of this exercise. IFBA members all have significantly different product portfolios and do not employ a standard or systematic methodology for tracking and measuring changes in product formulations or in nutritional information provided to consumers. Therefore, the first challenge we faced was in designing a survey instrument and metrics that would be universally applicable and reportable by all companies. Secondly, members faced significant constraints in collecting data due to the confidential and proprietary nature of the business information requested; accessibility (data housed in different corporate data systems); and availability (requested data often not maintained for monitoring business processes).

While the process proved to be challenging, the exercise did provide some valuable insights. Moving forward, we will look to build on the lessons learned as we continue our efforts to measure and evaluate our members' progress.

Reformulated and new products with improved nutrition

The following four tables provide examples of product reformulation work undertaken by IFBA members in 2012 to reduce salt, fats, sugar and calories and increase ingredients considered beneficial to good health.

SODIUM

In 2012, IFBA members continued efforts to reduce sodium in their products as they move towards their reduction goals.

Table 1: Reducing Salt		
2012 Achievements	Target	
Ferrero		
No further salt reduction actions as all products have already achieved an optimal level in their respective categories. No products exceed a level of 250 mg/per 100 g and the majority of products are below 150 mg/per 100 g.	All Ferrero products are very marginal contributors to sodiul intake. In addition, portion sizes are very small and individually packed, in order to allow parents to exert full control over children's consumption.	
General Mills		
U.S.A.: In 2012, General Mills ready-to-serve soup category achieved more than 20% sodium reduction, four years ahead of schedule. Sodium was reduced by 30% or more in several <i>Chex Mix</i> varieties and significant strides were made in other product categories, such as dry dinners, canned vegetables, frozen pizza and refigerated dough. In fiscal 2012, the company had 1,641 retail SKUs with 480 mg or less sodium per serving.	- 20% across top ten product categories (2015)	
Grupo Bimbo		
Latin America: -8% reduction in bread key brands.	- 30% across bread key brands (2015)	
Mexico: -26% reduction in bread key brands.	- 15% across snacks key brands (2015)	
U.S.A.: -30% reduction in bread key brands.	,	
Kellogg		
Global: Kellogg has been reducing the sodium content in its foods for more than 20 years. In Kellogg's key markets around the world, the company has reduced the average amount of sodium per serving in its ready-to-eat cereals by 18% between 2007 and 2012. Australia:	Global: Continue responsible sodium reduction globally.	
 Reduced sodium in Kellogg's® Rice Bubbles® and Kellogg's® Corn Flakes ® by 20% - eight months ahead of targeted date Reduced sodium in cereals by up to 59% since 1997 		
Europe: Reduced sodium in <i>Kellogg's® Rice Krispies®</i> and <i>Kellogg's® Corn Flakes®</i> by 30%. This reduction also lowered sodium in five other popular cereals that use these two cereals as a base.		
India: Reduced sodium in <i>Kellogg's® Corn Flakes®</i> by 20%.		
U.S.A. : Reduced sodium in Kellogg's most popular cereals by as much as 70% since 1998.		

Table 1: Reducing Salt, continued	
2012 Achievements	Target
Mars	
Europe: Ready-to-heat (RTH) flavoured rice products 0.45 g salt or 180 mg sodium per 100 g: U.K. 100% compliant; EU 65% compliant for RTH flavoured rice and 77% for RTH unflavoured rice products. 30% reduction in salt level on average in RTH flavoured and unflavoured rice products compared to 2011. Cooking sauces are compliant with FSA targets (1.5 g salt or 600 mg sodium/per 100 g): Uncle Ben's Thin Sauces in U.K. and continental Europe 97% complian; Uncle Ben's Thick Sauces 100% compliant. Dolmio Thin Sauces — 95% compliant in the EU and 94% in U.K.; Dolmio Thick Sauces – 100% compliant. Seeds of Change cooking sauces 92% compliant (0.83 g salt or 330 mg sodium/per 100 g.). Overall compliance rates across the Mars food portfolio against the 2012 FSA salt targets is 98% for the U.K. and 89% for the EU. In 2012, Mars Europe produced 407 tonnes less salt in its food portfolio than it used in 2007 – a 34% reduction. Salt reductions achieved in 2012 compared to 2007, expressed per 100 g of product: - 29.6% in Uncle Ben's RTH Unflavoured Rice - 49.4% in Uncle Ben's RTH Flavoured Rice - 30.8% in Uncle Ben's Thin Sauces - 14.8% in Uncle Ben's Thin Sauces - 14.8% in Uncle Ben's Thick Sauces Commonwealth of Independent States: 23% sodium reduction in 4 SKU's. In total 63% of the volume in line with FSA targets (0.45 g/100 g RTH rices and 1.5 g/100 g sauces. Middle East/Turkey/Africa: In 2012 Mars South Africa reduced sodium levels in the Instant Soup range by as much as 20.7% and 5% across the rest of the food portfolio.	-15% across entire global food portfolio (2015)
Creamy Four Cheese. (Previous formula: 561 mg sodium/100 g; new formula: 395 mg sodium/100 g).	
Mondelēz International	
From 2010, sodium removed by an average of 6% across cheese and biscuit portfolio. Serve on Pan American Forum for Action on NCDs SaltSmart Consortium steering committee.	Global: Continue sodium reduction efforts, in addition to region- specific goals.
North America: Achieved commitment to reduce soidum by an average of 10% across North American portfolio from 2010 through 2012. Removed approximately 1 million pounds of sodium, equal to 193 million teaspoons of salt, from the portfolio.	Latin America: - 10% across cheese and biscuit portfolio (by end 2013) North America:
U.K.: Reduced sodium in <i>Dairylea</i> cheese line by 25% since 2009.	- 10% across portfolio by end 2012 (completed)
Nestlé	
 Global: 90% of children's products (sales value) met the Nestlé Nutritional Foundation sodium criterion. The culinary and breakfast cereal recipes contain 12,500 tonnes less salt compared to 2005. 	Global: - 25% in products with a sodium content greater than 100 mg/100 kcal (2005-2010). Continue reducing sodium levels by an average of 10% in products that can best contribute to reducing sodium intake (e.g. soups, recipes and pizza portfolio) (2012-2015).

Table 1: Reducing Salt, continued 2012 Achievements **Target PepsiCo** Australia: Global: By end 2012, PepsiCo's Australian snacks division, The Smith's Snack Food Company PepsiCo continues to reduce achieved its goal of reducing the sodium content across its product range by 25% over sodium levels in many of its five years, based on weighted volumes which reflect sales performance. Over 50 popular foods and high-volume snack products across its global products from all major brands (Smith's Chips, Doritos, Twisties, Red Rock Deli and Grain Waves) were reformulated by lowering sodium rates, reformulating seasoning flavours, portfolio, while still providing and using a new seasoning approach that includes potassium chloride. the great taste consumers expect. Brazil: Reduced sodium in Fandangos, by more than 30%. Achieved a 30% sodium reduction in Doritos Nacho seasoning, without impacting U.S.A.: Frito-Lay reduced sodium levels in its flavoured potato chips by an average 25% without sacrificing taste. This builds on earlier sodium reduction efforts of "Lightly Salted" versions of Fritos corn chips and Lay's Wavy potato chips, each with less than 50% of the sodium of their original versions. Unilever Global: Unilever's goal is to reduce the 80% of the Foods and Refreshment portfolio by volume met salt levels equivalent to salt level to help consumers recommended 5 g per day based on globally recognised dietary guidelines by end meet the recommended level of September 2012. For the Foods portfolio alone, more than 50% reached 5 g per day 5 g of salt per day based on (measured Jan-Sept 2012). In 2012 Unilever moved to full volume-based (tonnes as sold) globally recognised dietary reporting for this target. This number is not comparable to previously reported numbers guidelines. measured by product (stock keeping unit). Examples follow by region: The first milestone was to reduce salt levels to an interim target of 6 g per day by the end of 2010. This required reductions of up to 25%. The ambition is to reduce by a further 15-20% on average to meet the target of 5 g of salt per day between 2015 and 2020. Argentina, Brazil and Chile: Several variants of Hellmann's mayonnaise have been reduced in sodium by up to 12%. European salad dressings (Knorr, Hellmann's, Calvé, Amora and Ligeresa brands) relaunched with salt levels that meet the 5 g per day target. Similarly, many foodservice variants have successfully reduced salt levels. Kissan ketchup range has seen a silent sodium reduction of 10% since 2011 and currently all ketchups meet the interim target of 6 g salt per day. Ragú Robusto tomato sauces had up to a 22% sodium reduction. Now 100% of the company's red tomato sauces including Old World Style, Chunky, Robusto and Organic contain 480 mg per serving or less, the step-wise approach towards the 5 g salt target.

SATURATED FATS AND TRANS FATS

Over the years IFBA members have been working to remove trans fats from their products and today, trans fat has been virtually eliminated from product portfolios. Saturated fats have been reduced and levels of essential fats and "good" or healthy fats have been increased.

Table 2: Reducing Saturated Fats and Trans Fats		
2012 Achievements	Target	
Ferrero		
In 2012, the company confirmed the universal adoption of manufacturing processes which avoid any use of hydrogenated fats.	Many years ago, Ferrero eliminated the use of hydrogenated fats in its products. Ferrero will consider participating in EU and national initiatives aimed at reformulating food products in order to reduce the levels of saturated fat, if such initiative is in compliance with technology, taste and costs.	
General Mills		
U.S.A. and U.K.: All <i>Pillsbury</i> biscuits and crescents now have zero grams labelled trans fat. In the U.K. the company achieved its goal of removing trans fat from partially hydrogenated oils in products, meeting the trans fat elimination target of the U.K.	On track to meet its public commitment to eliminate all labelled trans fats from products; already achieved in the U.K.	
Grupo Bimbo		
Global: Trans fats eliminated in 95% of portfolio.	- 25% across sweet baked goods key brands (2015)	
Latin America: -7% in saturated fats in sweet baked goods key brands.	- 15% in snacks key brands (2015)	
Mexico: -53% in saturated fats in cookies key brands.		
Kellogg		
Global: All products marketed to children under 12 have less than 2 g saturated fat per serving and labelled zero grams trans fat as required by Kellogg's Global Nutrient Criteria. Special K® Cracker Chips and Popcorn Chips with 0.5 g per serving or less of saturated fat and 0 g trans fat per serving are now available in several key markets around the globe.	Global: Continue responsible saturated fats and trans fats reduction globally.	
U.S.A.: 98% of foods are now labelled zero grams of trans fat.		

Table 2: Reducing Saturated Fats and Trans Fats, continued

2012 Achievements Target

Mars

Europe:

As part of the Mars Health and Nutrition Strategy, Mars has committed to continually reformulate products to improve the nutritional content of its existing brands whilst maintaining the same quality and taste. Since 2004, trans fat from technological origin has been eliminated and all confectionery products have less than 0.5 g trans fat/100 g and most products contain less than 0.2 g trans fat. Saturated fats were reduced in 2010 in *Mars, Milky Way* and *Snickers* and in 2012 in *Balisto*.

Mars Chocolate France signed a commitment under the French National Nutrition and Health Programme (PNNS). An independent evaluation confirmed Mars had met its commitments: saturated fat was decreased in *Balisto* by 30%, in *Milky Way* by 20%, in *Snickers* by 17% and in *Mars* by 16%.

<u>Chocolate products</u>: A slight reduction of the fat content (from 27.9 g to 26.7 g) in the chocolate covering *Snickers, Twix, Bounty* and *Balisto* bars, leading to a total fat content reduction in the finished products of 1.7 billion kcal less consumed through these products.

<u>Ice cream products</u>: To reduce the dairy fat in ice cream bars from 9% to 5%, in order to reduce total fat and saturated fat contents, respectively 8.8% and 9.4% average reduction, in 4 brands - *Mars®*, *Snickers®*, *Bounty®*, *Twix®*, and *Variety Mix* (assortment of *Mars®*, *Snickers®*, *Bounty®* and *Twix®*).

Commonwealth of Independent States:

Work is on track: *Milky way*: 2.35 g /bar 26 g. *Twix* 3.57 g/finger 27.5 g. *Snickers* 5.07 g/bar 50 g. *Mars* 5.2 g/bar 50 g (will be below 5 g end 2013).

Middle East/Turkey/Africa:

Chocolate products

- In 2012 hydrogenated fat was removed as an ingredient in Galaxy Flutes and replaced with a non-hydrogenated fat, in continuing efforts to remove all added trans-fats from the conpany's products.
- As part of the focus on reducing saturated fat, the Mars bar will be reduced from 51 g to 48 g, reducing the amount of saturated fat in a single bar from 5.3 g to less than 5 g of saturated fat. This change will be implemented in December 2013

SATURATED FAT:

No more than 5 g/portion in nougat bars and no more than 7 g/portion in biscuits

TRANS FAT

Eliminate all process occurring trans fat

Mondelēz International

Global:

Since 2007, trans fat eliminated or removed across the global portfolio. $\label{eq:control}$

EU:

- Removing partially hydrogenated vegetable oil from biscuits.
- Since 2007, reduced saturated fat in the Prince biscuit by 45% in Europe.

Global:

Continue to eliminate or greatly reduce industrially produced trans fat across the portfolio.

Nestlé

Global :

90% of children's products (sales value) met the Nestlé Nutritional Foundation saturated fats criterion.

Global:

By 2014, 100% of children's products will meet the Nestlé Nutritional Foundation saturated fats criterion.

Table 2: Reducing Saturated Fats and Trans Fats, continued 2012 Achievements **Target PepsiCo** Global: Global: PepsiCo has significantly expanded its range of baked snacks, launching Baked Lay's PepsiCo is working to reduce the and Baked Ruffles potato chips in a variety of flavours, as well as an assortment of saturated fat content of its key baked crisps and crackers. Examples follow by region :global food brands, and achieving significant reductions by switching The entire Smith's potato chip range is cooked in high oleic sunflower and/or canola to oils that contain lower saturated fat, as well as launching a growing oil, reducing their saturated fat content by 75% compared to chips cooked in 100% range of snacks that are baked, not palmolein oil. Red Rock Deli potato chips and Grain Waves are cooked in 100% high oleic sunflower oil. fried, in a variety of markets. India: Between 2006 and 2012, PepsiCo Expanded the baked line of snacks with the launch of six new Aliva baked snacks made with multi-grains including corn, rice, wheat oats as well as milk and other removed 9,366 metric tonnes of saturated fat from its key global local ingredients. food brands. Russia: Saturated fat levels have been reduced by almost 13% since 2006 through the introduction of lower- saturated fat versions of Cheetos and the more than 300% growth of low saturated-fat Hrusteam products. Saudi Arabia: Lay's Forno contains 60% less fat and 20% less sodium than regular potato chips. U.K.: U.K.: Launched Baked Stars, a low-calorie snack for children that meets U.K. health PepsiCo has committed to baking standards for products marketed to children. or including positive nutrition in 50% of its savory snacks by 2015. Since 2006, PepsiCo U.K. and Ireland have launched Walkers Lights, which contain 30% less fat and Walkers Baked, which contain 70% less fat than the In 2012, Walker's U.K. developed a new baking technology that creates a consistently crunchier, premium snack that is also lower in fat than standard fried crisps. Walker's Extra Crunchy is so popular in the U.K. that new flavors are being launched and disribution is expanding to other European countries. The new technology is also used to make Walkers Crinkles, a thick, wavy, ridged crisp with more intense, all-natural flavors, designed for lunch boxes; Walker's Deep Ridged, with a rich steak flavor developed for hungry young men; and Walkers Baked Star. Unilever SATURATED FAT SATURATED FAT Global: Global: The biggest contribution Unilever can make to reducing saturated fat intake is to Unilever is committed to improving the fat composition of its products encourage people to switch from butter to margarine. 92% of its leading spreads by volume contained less than 33% saturated fat as a by reducing saturated fat as much proportion of total fat in 2012. as possible and increasing levels of 92% of its leading spreads by volume provided at least 15% of the essential fatty essential fats. acids recommended by international guidelines in 2012. Europe: Next to the leading spreads, Unilever's liquid margarines for cooking and baking are providing consumers with healthier fats in 12 European countries. As liquid margarines do not burn or splatter like oil or butter and are very low in saturated fat, innovations such as Perfekt Braten in Germany, have rapidly gained market share. **TRANS FAT TRANS FAT** By end 2012, 100% of Unilever's portfolio by volume did not contain trans fats Global: originating from partially hydrogenated vegetable oil. To ensure Unilever maintains its performance against a target of

100% trans fat free products (originating from partially hydrogenated vegetable oil), it has made the absence of trans fats a standard reporting requirement for

all of its suppliers.

SUGAR AND CALORIES

We understand consumers are also looking for products with less sugar and for ways to manage their calories. To meet these needs, we continue to reformulate products with less sugar, develop natural sweeteners and other ingredients as alternatives to sugars and calories and offer reduced portion sizes.

Table 3 : Reducing Sugar and Calories		
2012 Achievements	Targets	
The Coca-Cola Company		
Nearly 25% of the currrent global portfolio consists of low- and no-calorie beverages. In 2012, more than 100 low- and no-calorie products were launched. Since 2000, the average calories per serving has decreased by 9% globally.	Coca-Cola offers more than 3,500 beverages around the world, three times the number offered a decade ago and more than ten times the number offered 20 years ago. Coca-Cola is committed to a variety of beverages options to meet consumer tastes and demands.	
Ferrero		
New products launched in 2012: • Fine bakery products, with reduced portion size and reduced energy density. • Sugar confectionary mints with a reduced portion pack.	Ferrero confirms its long-standing adoption of reduced portion size and the participation in EU and national initiatives aimed at reformulating food products in order to reduce the quantities of sugar and calories, if in compliance with technology, taste and costs.	
General Mills		
SUGAR U.S.A: Today, all General Mills cereals marketed to children at 10 g of sugar or less per serving. Four varieties of these cereals, incluidng <i>Honey Nut Cheerios</i> and <i>Cinnamon Toast Crunch</i> , contain 9 g of sugar per serving, down from 11 g to 15 g of sugar in 2007.	SUGAR U.S.A.: General Mills continues to reduce sugar across its global product portfolio. For example, in 2009, the company announced it would reduce sugar in all of its cereals advertised to children under age 12 to single-digit grams of sugar per serving.	
CALORIES There are now more than 500 U.S. retail products with 100 calories or less per serving; and more than 800 U.S. retail products with 150 calories or less per serving.	CALORIES Reducing calories, fat, saturated fat, trans fat, sugar or sodium by 10% or more.	
Grupo Bimbo		
SUGAR Latin America: - 3% across sweet baked goods key brands. Mexico:	SUGAR - 10% across sweet baked goods key brands.	
- 9% across sweet baked goods key brands.		
CALORIES Mexico: School product portfolio (21 products) contains less than 130 calories per package.		

Table 3 : Reducing Sugar and Calories, col 2012 Achievements	
-	Target
Kellogg	Laurana
SUGAR Global:	SUGAR Global:
All products marketed to children under 12, around the world, have 12 g of sugar or less	Continue responsible sugar
per serving.	reduction globally.
U.S.A.:	1
Over several years Kellogg has decreased sugar in its top-selling U.S. kids' cereals by	
20-30%.	
• In 2012, two new kids' cereals were introduced: <i>Kellogg's® Scooby Doo</i> with 6 g of	
sugar, 3 g of fibre and 27 g of whole grain; and <i>Kellogg's® Cinnamon Jacks</i> with 10 g of sugar, 3 g of fibre and 12 g of whole grain.	
CALORIES	CALORIES
Global:	Global:
All products marketed to children under 12, around the world, have 200 calories or less	Continue responsible calorie
per serving.	reduction globally.
Counds Marine and U.V.	
Canada, Mexico and U.K.: In 2012, introduced <i>Kelloqq's®Special K® Cracker Chips</i> to provide consumers with new	
options for low calorie snacking.	
U.S.A.:	
Increased the offering of 100 calorie portion packs by more than 25% since 2010. Kellogg	
offers more than 100 snacks with 100 calorie or less per serving.	
Mayo	
Mars	CALORIES
CALORIES Europe:	CALORIES Global:
All reformulated Mars products on the European markets after February 2013 will have	Commitment for all servings
less than 250 kcal per portion due to a new chocolate recipe and the portion size	below 250 kcal.
reduction of several single packs (<i>Twix</i> single has been reduced from 2x29 g to 2x 25 g;	
Snickers single bar has been reduced from 57 g to 51 g and Milky Way reduced from 21.9 g	
to 21.5 g). This could be translated as a 15.7% calorie intake reduction by <i>Snickers</i>	
eaters, (old <i>Snickers</i> recipe = 503.4 kcal/100 g; new <i>Snickers</i> recipe = 483.8 kcal/100 g) and a 14% reduction by <i>Twix</i> eaters.	
and a 1470 reduction by Twix eaters.	
Commonwealth of Independent States:	
All products are below 250 kcal/portion (Mars, Snickers, Twix, Bounty).	
Middle East/Turkey/Africa:	
Currently all META-manufactured products, apart from the <i>Snickers</i> bar have less than 250kKcal per portion. By December 2013 <i>Snickers</i> single bar will undergo a minor recipe	
modification, a change in dimension and a reduction in weight from 54 to 50 g. This	
change will reduce the calorie content from 270 kcal to 248 kcal.	
U.S.A.:	
Calories reducted in <i>Snickers</i> Bar, <i>3 Musketeers</i> Bar and <i>Milky Way</i> Bar to 250 calories or less. This was achieved by making the bars smaller, and not through reformulation.	
iess. This was achieved by making the bars smaller, and not through reformulation.	
Mondelēz International	
<u>SUGAR</u>	CALORIES
Global:	Continue to reduce calories and
Reduced sugar beverages (TANG, Clight) offered in various markets around the	introduce portion-controlled
world.	options.
Expanded line of sugar-free gum - more than 70% of gum worldwide is sugar	
free.	

Table 3: Reducing Sugar and Calories, continued		
2012 Achievements	Target	
Nestlé		
SUGAR 90% of children's products (sales value) met the Nestlé Nutritional Foundation sugars criterion. In addition, there were 9,000 tonnes less sugars in breakfast cereals in 2011 vs. 2003.	SUGAR By 2015, Nestlé commits to less than 9 g of total sugars in any serving of children's or teen's breakfast cereals. By 2014, 100% of children's products (sales value) will meet the Nestlé Nutritional	
CALORIES An additional 401 products were renovated resulting in reduced calories; products amounting to CHF 26.2 billion of sales delivered specific Portion Guidance vs. CHF 21.9 billion in 2011.	Foundation sugars criterion. CALORIES Portion Guidance on 100% of children and family products by end 2015, i.e. more than double the current sales coverage.	
PepsiCo		
PepsiCo continues to launch new offerings with reduced added sugars, low and no-calorie options, active hydration products and juices. More than 500 of its beverages now meet internal nutritional guidelines. In 2012, these beverages collectively comprised 41% of the U.S. beverage portfolio's sales volume.		
SUGAR China: A 25% reduction in sugar achieved in <i>TUP</i> , leveraging breakthrough flavor technology tools, along with a smart combination of artificial sweeteners. The redesigned product keeps the same sweet taste that appeals to Chinese consumers.	SUGAR PepsiCo remains committed to reducing added sugar in its beverages.	
U.S.A.: Pepsi Next, made with 60% less sugar and introduced in 2011, is already proving popular with consumers looking for real cola taste. CALORIES Argentina: PepsiCo Beverages launched Green by 7UP, which features only 38 kcal in each 200 ml serving.		
Ireland and U.K.: In the U.S., <i>Trop50</i> , which contains 50% less calories, became one of the most successful product launches in the past five years. As a result of its success in the U.S., <i>Trop50</i> was launched in the U.K. and Ireland during mid-January 2013.		
Unilever		
<u>SUGAR</u> Unilever achieved a 4% reduction in sugar in its ready-to-drink teas between January 2011 and end September 2012, building on reductions, prior to 2010, in sugar levels in its ready-to-drink teas.	SUGAR By 2020 Unilever will remove an additional 25%.	
CALORIES Global: 81% of Unilever's children's ice creams contained 110 Kcal or fewer per portion by end September 2012, up from 73% at the end of 2011. In 2013 Unilver began to introduce a Specially for Kids logo on ice creams that meets the company's strict nutrition criteria while still appealing to children as fun treats, through a combination of taste, texture, shapes and colours. These products are aimed at encouraging kids to eat treats specifically designed for them instead of adult products. Working with food experts and industry specific bodies, Unilever's Seductive Nutrition programme provides recipe ideas and advice for creating nutritious and delicious meals, especially for top-selling dishes. Under the programme in the U.S., over 5,000 operators pledged to remove more than 450 million calories from their menus in 2012. The campaign is already active in 17 countries worldwide. It will enable restaurateurs to tap into consumer demand and increase revenues, while also contributing to public health.	CALORIES Global: By 2014, 100% of Unilever's children's ice creams will contain 110 Kcal or fewer per portion. 60% will meet this level by 2012.	

ADDING BENEFICIAL INGREDIENTS

Product reformulation is not just about removing key ingredients of public health concern, it is also about adding new and beneficial ingredients, while maintaining or exceeding consumers' taste expectations. IFBA members are also committed to helping to fortifying products to help reach populations suffering from malnutrition.

Table 4: Adding Beneficial Ingredients		
2012 Achievements	Targets	
The Coca-Cola Company		
Global: Increasing the number of fortified products offered. Current portfolio of products with added vitamins, minerals and other benefical ingredients include:		
China: Minute Maid® Pulpy Super Milky™ – fortified with whey protein and containing fruit bits.		
Colombia: Del Valle Fresh – fruit drink fortified with calcium and vitamin D to help support strong bones.		
France: Pocket Garden Blendie – portable vegetable drink, containing a mixture of fresh vegetables, spices and cream that provides a good source of fibre.		
Philippines: NutriJuice – fortified with four vitamins and minerals focused on providing iron to children with iron deficiencies.		
Spain: <i>Minute Maid Antiox</i> [™] – beverage with a combination of juices that contain antioxidants from unique fruits.		
Thailand/Vietnam: Minute Maid NutriBoost - Dairy and juice drink fortified with essential nutrients.		
Canada and U.S.A.: ZICO – Pure, premium coconut water beverage with five essential electrolytes, more potassium than a banana and low acidity.		
U.S.A.: Minute Maid * Kids+* – 100% orange juice with essential nutrients for children, including vitamins A, C, D, E and calcium.		
Ferrero		
Ferrero continues to prioritize the development of products containing fibres, vitamins and minerals naturally derived from the raw materials used (e.g. hazelnut) and not artificially added.	Ferrero uses a "Product Identity Card" to collect the available biological properties of Ferrero products in order to confirm their positive role.	
General Mills		
In fiscal 2012, General Mills improved nearly 16% of its U.S. retail sales volume, with improvements including adding whole grains, fibre and calcium and reducing calories, sugar, sodium and trans fat.	General Mills has improved the health profile of 68% of its U.S. retail sale volume since it began tracking and quanitifying health improvements in 2005.	
Grupo Bimbo		
Slobal: 80% of portfolio has added with vitamins and minerals. 337 products have added whole grains.		

Table 4: Adding Beneficial Ingredients, continued 2012 Achievements **Target** Kellogg Global: Global: Fibre: Around the world, several new high fibre cereals were introduced in 2012. These Continue responsible addition include Kellogg's®All-Bran® Golden Crunch and Kellogg's®All-Bran® Chocolate Crunch in several of beneficial ingredients European countries and Kellogg's®All-Bran® Apple Crunch in Mexico and Colombia. Each of (dietary fibre, whole grain, these new foods delivers 6 g of fibre per serving. In India, Kelloqq's®All-Bran Wheat Flakes® calcium and vitamin D) delivers 5 g of fibre per serving. globally. <u>Vitamin D:</u> In Ireland, several family-favorite cereals were fortified with vitamin D in response to a rise in childhood cases of rickets. In 2011, the U.K. began an initiative to fortify kids' cereals with vitamin D and the majority of children's cereals now contain vitmain D. Folic Acid: In the U.S. many varieties of Kellogg's®Rice Krispies® and Kellogg's® Frosted Mini Wheats® were reformulated with 50% of the daily value for folic acid. Protein: In the U.S., Kellogg's Special K® launched a suite of food with protein, including cereal, breakfast shakes, flatbread breakfast sandwiches and several snacks, such as granola bars. Additionally, in 2012 the U.S. launched Eggo® with added protein. Mondelēz International **WHOLE GRAINS** Global: Continue to increase whole Increased whole grain content in various biscuit brands across all regions (Premium Saltines, grains globally; and add Ritz Crackers, Teddy Grahams, Honey Maid Graham Crackers, LU biscuits, Belvita, Cerealitas, micronutrients as appropriate Trakinas, Club Social). in key markets to address nutritional deficiencies. Since 2011, offer over 150 biscuits with whole grains, delivering approximately 17,000 tonnes of whole grain ingredients. U.S.A.: In 2010, announced plans to increase whole grains in Nabisco biscuits, with aim to deliver nearly 9 billion servings of whole grain by end of 2013 through reformulation of existing brands (Triscuit, Wheat Thins, Honey Maid) and new products (Belvita, Newton Thins). MICRONUTRIENT FORTIFICATION Global: Tang powder beverage fortified with vitamin C and with specific nutrients in key markets: iron in Southeast Asia; B-12 and folic acid in China; and vitmain E in Argentina and Uruguay. Developed Bournvita using the Indian Council of Medical Research guidelines to deliver 20 essential vitamins and minerals for growing children. Indonesia: Developed Tiger Biskaut with Indonesian nutritionists to determine right mixture and needs of nutritients considered low in the population to combat micronutrient deficiencies and help with under-nutrition. Nigeria: Nutrition Society of Nigeria endorse Bournvita milk-based powder beverage fortified with multiple micronutrients essential to local population. Local cheese product fortified with iodine and iron to help prevent anaemia and stunting; approved by Philipping government fortification programme. Nestlé Breakfast cereals with Green Banner on pack contain at least 8 g whole grains per serving. More whole grain than 65% of MAGGI product portfolio worldwide promotes home cooking and meals with any other ingredient in any serving of children's or teen's breakfast More than 150 billion micronutrient fortified servings worldwide in 2012. cereals by 2015. By 2015, 90% of MAGGI product portfolio worldwide will promote home cooking and meals with vegetables. By 2016, 200 billion

micronutrient-fortified servings worldwide with a special focus on children and women of childbearing age.

Table 4: Adding Beneficial Ingredients, continued

2012 Achievements Target

PepsiCo

PepsiCo is growing its global nutrition business by increasing the amount of whole grains, fruits, vegetables, nuts, seeds and dairy in its global product portfolio. As a result, from 2002 to 2012, the nutrition business revenue has grown substantially, and, in 2012, represented 20% of revenue.

Global:

Quaker continues to introduce new products to satisfy the growing consumer demand for a convenient and nutritional breakfast. For example:

- In <u>India</u>, Quaker launched ready-to-cook traditional breakfasts in flavors inspired by authentic Indian foods and packed with seven nutritional advantages including fibre, protein, healthy oil and 30% whole grain.
- <u>PepsiCo China</u> offers wholesome Quaker congees, with whole grain oats and local ingredients like red dates and wolfberry for added nutritional value. Due to their popularity, Quaker China increased the number of congee flavor varieties that appeal to local tastes.
- In the <u>U.S.</u>, <u>Quaker</u> launched <u>Quaker Real Medleys</u>, which pair oatmeal with other whole grains, fruits and nuts in a portable cup and portion-controlled serving. <u>Quaker</u> also introduced <u>Quaker</u> Yogurt Bars, which deliver a good source of calcium and 12 g of whole grains.
- In Russia, Quaker launched oats under our local Chudo brand.

China:

During 2012, PepsiCo China introduced *Pulpy OJ*, providing a light drink consistency with the sensation of whole fruit in the pulp, which appeals to Chinese tastes.

U.K.:

• Tropicana smoothies deliver the equivalent of two portions of fruit per serving.

U.S.A.:

- In 2012, PepsiCo entered the U.S. dairy market through a new joint venture, Müller Quaker Dairy; launching new yogurts in select U.S. markets and expanding distribution nationally in 2013.
- Fruit and vegetable offerings expanded with the launch of *Tropicana Farmstand*, which
 provides one serving of fruit plus one serving of veggies, and is an excellent source of
 Vitamins A and C. *Naked Juice* also offers 30 different fruit and vegetable varieties.

Unilever

Global

In 2012, about a third of Unilever's sales volume (excluding the ready-to-drink tea business) contained at least 15% of the recommended daily amount (RDA) of an essential vitamin or mineral*. Several of Unilever's brands have consistently played a role in providing key nutrients to people in all parts of the world, like spreads with vitamins A, D and E; AdeS soy beverages and Maizena with a range of vitamins and minerals; and Annapurna iodised salt.

- Making healthy products more accessible for consumers on lower incomes is a core aim.
 Unilever has a specific target to recruit, train and employ 75,000 Shakti entrepreneurs in India by 2015 to support economic development as well as extend its distribution networks.
- Increasing intakes of fruit and vegetables, whole grains and fibre are an essential element
 of Unilever's campaigns to promote healthy balanced diets. It is a core part of the
 company's on- and off-pack recipes for consumers as well as the menu management tools
 that Unilever Food Solutions provides to operators and chefs.
- Uniliver is one of the world's largerst buyers of tomatoes and buys significant quantities of
 other vegetables for its food brands such as Knorr and Ragu; and fruit for its ice cream
 brands.
- * a product is defined as 'fortified' if there is a presence/addition of a vitamin or mineral (i.e. vitamin A, iodine, iron, calcium, zinc, magnesium, vitamin B6, folate, vitamin B12, niacin (vitamin B3), riboflavin (vitamin B2), thiamine (vitamin B1), vitamin C, vitamin D) of at least 15 % of the RDA per 100 grams of product. RDA are based on Nutrient Reference Values (NRV) as described in CODEX (CAC/GL 2/1985 Guidelines on Nutrition Labelling which give NRV for vitamins and minerals).

Case Study: The Coca-Cola Company and Sweeteners

Sugars are carbohydrates. Like all carbohydrates they provide a source of calories in our diets. The body breaks down carbohydrates and converts them into simple sugars, such as glucose. This ready form of energy is carried through the blood and delivered to every cell. With that in mind, it is important to remember that, when it comes to managing weight, all calories count including those contributed by sugar-sweetened beverages. All foods and beverages have the potential to contribute excess calories to the diet and people must be mindful of the total number of calories they consume. If, over time a person consumes more calories from all sources - not only carbohydrates, but also protein, fats and alcohol than he/she burns, he/she will gain weight because the extra calories (energy) are stored as body fat.

Sugars occur naturally in some foods and beverages and are added to others during processing and preparation or at the table. In addition to its use as a sweetener, added sugar provides other technical benefits depending on its physical and chemical properties, including its functioning as a preservative, texture modifier, fermentation substrate, flavouring and colouring agent and bulking agent.

Humans are predisposed from birth to recognize and like sweet taste. A moderate

intake of carbohydrates is acceptable in a balanced diet that also includes other important nutrients (proteins, fibre, fats, vitamins and minerals) to fulfill the body's needs without exceeding the total quantity of calories burned each day. Such a diet includes the necessary daily servings of fruits and vegetables (on average five to seven). But too many calories from any combination of foods and beverages in the diet can contribute to health problems like obesity.

Low- and no-calorie sweeteners are used as an alternative to sugar and can be one useful way to manage weight when they are used consistently to reduce calorie intake.

Low- and no-calorie sweeteners are ingredients that give foods and beverages a sweet taste typically with zero to very few calories. Most are several hundred times sweeter-tasting than sugar, so only small amounts are needed. Found in soft drinks, chewing gum, confectionery, desserts, dairy products and hot chocolate drinks, examples include aspartame, acesulfame K, saccharin, sucralose and stevia. Most are also available as table top sweeteners, and used in tea and coffee or in other foods, such as fruit and breakfast cereals.

The Coca-Cola Company has been using low- and no-calorie

sweeteners in its beverages to provide options for consumers in managing their caloric intake for more than 50 years, starting with the launch of TaB in 1963 and famously with Diet Coke in 1982. Today, the company offers more than 800 low- and no-calorie beverages, representing nearly 25 percent of its global product portfolio. A sweetener made from the Stevia plant, the latest addition to the range of lowand no-calorie sweeteners the company uses, is used in more than 45 Coca-Cola products worldwide. (See Fig. 1 below)

Developing a zerocalorie natural sweetener

The Coca-Cola Company invested years of pioneering work with Cargill Inc., an international producer and marketer of food, agricultural and industrial products, to develop a new, zero-calorie, natural sweetener aimed at health-conscious consumers. The sweetener comes from the best-tasting part of the leaf of the Stevia rebaudiana, a shrub in the sunflower family (chrysanthemum) native to Paraguay, where it has been used as a sweetener for centuries. The stevia leaf sweetener used by The Coca-Cola Company contains no calories or carbohydrates, is approximately 200-400 times sweeter than sugar, and has a clean, sweet taste.

While the company's stevia sweetener is currently

permitted for use in more than 75 countries, at the time the sweetener was developed, it was not approved as a food additive by health regulators in the U.S. or the EU. To verify the safety of the stevia sweetener for use as a general purpose sweetener, The Coca-Cola Company and Cargill developed a rigorous safety evaluation programme. The research programme included metabolism and pharmacokinetic studies, general and multi-generational safety studies, intake studies and human studies. These studies found that consumption did not affect blood-sugar control in Type 2 diabetics, and it had no major effect on the blood pressure of healthy adults.

A scientific panel reviewed the studies and determined that the stevia

sweetener is GRAS (generally recognized as safe), for general use as a sweetener in the U.S. The use of this stevia sweetener achieved permitted status under the U.S. Food and Drug Administration's regulations in 2008 and it was approved by the EU in 2011. The research findings were also published in 12 peerreviewed scientific publications. The sugar substitute launched under the brand name, Truvia®.

As well as using sweeteners in low- and no-calorie beverages, The Coca-Cola Company also uses sweeteners in certain, beverages that contain sugar to reduce their overall calorie content. No single low- or nocalorie sweetener can match the taste and functionality of table sugar, but some blends

can achieve sweetness can can achieve sweetness qualities that are very close. As many sweeteners are sweeter in combination than if used separately, a blend can also reduce the amount of total sweetener needed to achieve a desired level of sweetness. Coca-Cola's stevia sweetener, blended with sugar, has resulted in a calorie reduction for some sugar-sweetened beverages, by a minimum of 30 percent.

Figure 1: Low- or no-calorie Beverages Sweetened with Stevia

In the following products, the stevia sweetener is used in combination with other natural sweeteners, such as fruit juice, sugar or natural no- and low-calorie sweeteners.

Country	Product
Argentina	Epika
Australia	Pump Flavored Waters
Brazil	Del Valle Light Orange
Canada	glacéau vitaminwater zero™
Chile	Epika
China	Fanta Orange, Sokembicha
Costa Rica	glacéau vitaminwater zero™
Denmark	glacéau vitaminwater zero™
France	Sprite [®] , Nestea [®]
Great Britain	Sprite [®] , Nestea [®]
Ireland	Sprite [®]
Japan	Fanta Orange, Fanta Grape
Mexico	Sprite®, Fanta, Fresca, 19 Juice, glacéau vitaminwater zero™
Panama	glacéau vitaminwater zero™
Puerto Rico	glacéau vitaminwater zero™
South Africa	glacéau vitaminwater zero™
Spain	Minute Maid
Sweden	glacéau vitaminwater zero™
Switzerland	Sprite [®] , Nestea Citrus, Nestea Peach, Nestea Mango Pineapple
U.S.A.	glacéau vitaminwater zero™, Odwalla™ Strawberry Protein Monster™, Honest Tea®, Honest Tea®Fizz, Sprite Select, Fanta Select

The Coca-Cola Company recognizes the uniqueness of consumers' lifestyles and dietary choices and that variety is the foundation of its commitment to consumers. With its range of beverage products, package sizes, portion options and clear and transparent nutrition information, the company strives to inform, motivate and empower consumers to make beverage choices that meet their individual lifestyle needs for refreshment, enjoyment, nutrition and hydration.

In the company's view, all foods and beverages can have a place in a sensible, balanced diet combined with regular physical activity. In May 2013, the company announced four global business commitments to further contribute to healthier, happier and more active communities. The commitments, which apply to the more than 200 countries and territories where the company does business, are to:

- offer low- or no-calorie beverage options in every market;
- provide transparent nutrition information, featuring calories on the front of all of its packages;
- help get people moving by supporting physical activity programmes in every country where the company does business; and
- 4) market responsibly, including no advertising

to children under 12 anywhere in the world.

The company has also

committed to publicly and actively measure the scale and reach of its efforts on www.comingtogether.com.

The digital platform provides further details about the company's global commitments and invites people to learn more about what the company is doing, track its progress, post feedback and exchange ideas on how to collectively promote choice, energy balance and movement.

With the addition of low- and no-calorie products to the company's portfolio, since 2000, the average calories per serving of the company's portfolio of beverages have decreased by nine percent globally. And, between 2000 and 2010, the company's average amount of calories in sparkling beverages in Europe, decreased by ten percent. Today, 30 percent of the European portfolio is composed of low- and nocalorie beverages that use a variety of sweeteners.

Launching *Sprite®* with stevia in France

The Coca-Cola Company is continually broadening its product range to offer consumers more choice by determining consumers' needs and wants through extensive market research in every category.

Sprite® with the stevia-based sweetener was launched in France in March 2012. Prior to

launch, the company

conducted quantitative research in a test sample of consumers who used the product for a period of time.

Following the one week trial, the new pack with the stevia sweetener on the label was revealed to the participants with information that the product contained 30 percent less sugar. The research concretely demonstrated that consumers' needs were met by a product with fewer calories without compromising taste.

This new *Sprite®* was launched with a multi-media marketing campaign, including television advertisements, digital, experiential, on-pack and instore point of sale communications, prioritizing "with 30% less sugar" and "rediscover" messaging, as identified through research.

In March of 2013, Great Britain launched a similar formulation of *Sprite* sweetened with Stevia. The company is committed to offering low-and no-calorie beverage options in every market, including beverages sweetened with stevia.

Case Study: Grupo Bimbo Addressing Undernutrition and Overweight

The double burden of disease related to under- and overnutrition represents one of Mexico's most challenging public health problems, especially in vulnerable groups such as children under 12 years. According to the 2012 National Health and Nutrition Survey (ENSANUT 2012), children under five years of age suffer from malnutrition -2.8 percent underweight, 13.6 percent stunted and 1.6 percent emaciated - and overweight is found in 34.3 percent of children aged five

to 11 years. Growing children need a good, well-balanced diet to achieve mature, healthy bodies. However, many children either do not eat, or do not have access to, a balanced diet and are missing the essential nutrients, such as calcium, fibre, magnesium, vitamins A, C and D, B vitamins, iron, potassium and zinc, critical to growth and development. Studies in Mexican children estimate deficiencies, in iron, vitamin A, zinc and folate, in

children between the ages of

supplementation, but one of the most effective ways to meet community health needs is by population-based approaches involving food fortification of widely consumed basic foods. The great advantage to fortification of commonly consumed foods like breads and cereals is that no, or minimal, behaviour change is required on the part of the population.

Fortification of Bimbo white bread to address nutritional needs of children Grupo Bimbo, the world's

Grupo Bimbo, the world's largest bread maker, has a long history of using its research and development expertise to produce and promote fortified products. All products in the baking categories are fortified with minerals and vitamins, especially cookies and cakes. In some cases, the company has developed products tailored to meet micronutrient deficiencies in risk groups in specific regions of Mexico, for example, amino chelated iron has been added to commonly consumed biscuits (Animalitos, Deliciosas and Canelitas) in the southeast region of Mexico where anaemia problems have worsened, particularly in rural areas.5

The latest addition to the product portfolio was the

five to 11 years old. Micronutrient deficiency conditions relate to many chronic diseases. The causes of these deficiencies are complex. At the most basic level, the cause is related to diet. Many people do not consume sufficient amounts of nutrient-rich foods such as meat, eggs, fish, milk, fruits and vegetables. Micronutrient deficiencies in some at-risk groups, such as children, pregnant women or the elderly, require

Fig. 2: Percent Deficiencies in Key Micronutrients in Mexican Children **Nutrient Deficiency** Age Group **Deficiency** Iron (Anemia) 2 All Preschool 23.3% 12-23 months 38.0% 13.7% Children under 4 years 25.0% Vitamin A Five to eight-years Nine to 10-years 12.1% (> 10 mg / dL, 20 mg / Children under 11-years 9.1% dL) Zinc Five to six-years 21.4% (<65 mcg / dL) Seven to eight-years 19.3% Nine to 10-years 24.4% **Folate** Five to six-years 5.0% Seven to eight-years 6.4% (<57 mcg / dL) Nine to 10-years 4.6%

² JP Gutierrez , J. Rivera-Dommarco, T Shamah Levy, S. Villalpando-Hernández, A. Franco, L. Cuevas- Nasu, M. Romero-Martinez, M. Hernández-Ávila, J. Sepúlveda Amor, "Encuesta Nacional de Salud y Nutrición 2012. Resultados Nacionales," *Cuernavaca*, *México: Instituto Nacional de Salud Pública* (2012).

³ S. Villalpando, S. Montalo Velarde, N. Zambrano, A. García Guerra, C. Ramírez Silva, T. Shamah Levy, JA Rivera, "Vitamins A, and C and folate status in Mexican children under 12 years and women 12-49 years: A probabilistic national survey," *Salud Pública Mex* 45 (2003): S508 9.

⁴ S. Villalpando, A. García Guerra, C. Ramírez Silva , F. Mejía Rodríguez, T. Shamah Levy, JA Rivera, "Iron, zinc, iodide status in Mexican children under 12 years and women 12-49 years: A probabilistic national survey," *Salud Pública Mex* 45 (2003): S520 9.

⁵ A. Ortiz, V. Vazquez, M. Montes, "Feeding in Mexico: Approaches and future vision," *Universidad de Sonora* 13, no. 625 (2005):8-34.

launch in 2012 of Pan Blanco Bimbo con Actileche - a white bread developed specifically to address the nutritional needs of children. This white bread contains Actileche, an exclusive formula developed, over the course of a year, by the company in collaboration with the Instituto Nacional de Cencias Médicas y Nutrición Salvador Zubirán (INNSZ), one of the national institutes of health under the Ministry of Health in Mexico, and the largest centre for medical training and research in Mexico.

Bread is an important source of nutrition. It is also an important source of energy in the form of complex carbohydrates, containing vital vitamins and minerals in addition to having a low fat content which makes it a food with a nutritional profile suitable for any occasion. In addition, bread is highly consumed by the population and accessible, making it an ideal vehicle to deliver nutrients with deficiency prevalence to consumers.

Containing milk and vitamin A, Pan Blanco Bimbo con Actileche provides nutrients such as calcium, vitamin D, and a mixture of vitamins (B1, B2, niacin, folic) and minerals (iron, calcium, zinc, iodine and phosphorus) important for a child's growth and development.

Vitamin A is a critical micronutrient for the survival and physical health of children. It is key in preventing

blindness in children: it also gives their immune systems an infection-fighting boost. B vitamins (or B complex) which include thiamin, riboflavin, niacin, folate, pantothenic acid, B6, B12 and biotin are needed to make and use energy. Without enough B vitamins, children can become anaemic. For strong bones and teeth, children need calcium and daily vitamin D which helps the body absorb calcium so it can build bones. Too little calcium can lead to a higher chance of bone disease later in life. Iron is essential as it is a carrier of oxygen throughout the body and helps mental alertness. Iodine helps prevent developmental delays. Zinc helps immune systems fight viruses and other disease-causing germs and is needed for proper growth of skin, hair and nails.

The human digestive tract makes it difficult to absorb iron. The Actileche formula makes iron more bioavailable. The product label includes a declaration stating that it contains "milk". For a bread product to carry this declaration, the product must contain at least five percent milk.

To bring this product to market, the company undertook a series of consumer taste tests and trials.

The target market for *Pan Blanco Bimbo con Actileche*was identified as mothers, and
product marketing focused on
communicating the benefits of

vitamin A and milk for children. The launch was accompanied by an advertising campaign featuring a mother and the international soccer star, Lionel Messi, delivering a positive message on the benefits of healthy eating.

Reducing saturated fats

ENSANUT 2012 reports that the combined prevalence of overweight and obesity in Mexico is 73 percent for women and 69.4 percent for men. Although the increase in the prevalence of overweight and obesity in Mexican adults has been declining over the past six years, it should be noted that these prevalence rates are among the highest in the world.

In 2010, the Mexican Government established the Acuerdo Nacional para la Salud Alimentaria (the National Agreement for Nutrition and Health) (ANSA) aimed at establishing food policies and joint actions for different actors (government, academia, industry, NGOs and civil society) in order to combat overweight and obesity. The ANSA identified ten objectives that should be included on the agenda of priorities in public policies related to health, including an objective to lower daily intake of saturated fat in the diet and minimize trans fats from industrial sources.

Fats are essential for the proper functioning of the body; come in liquid or solid form; and are combinations of saturated and unsaturated

fatty acids. Fats provide essential fatty acids, linoleic and linolenic acid, which are not made by the body and must be obtained from food. These are important for brain development and controlling inflammation and blood clotting. Fats also provide a source of energy and act as a carrier for the absorption of vitamins A, D, E and K.

A high intake of saturated fat is related to increased body weight and increased blood cholesterol, which is associated with an increased risk of heart disease.

According to ENSANUT 2012, 37 percent of the total Mexican population reported having a normal cholesterol result, and 13 percent reported higher than normal levels.

Reducing saturated fats in processed foods – particularly in baked goods and confectionary products – while maintaining shelf life and an appealing appearance, texture and taste is challenging. There is no one-size fits all solution and each option needs to be applied differently to each food product. Grupo Bimbo has committed to reduce the level of saturated fats in its key global brands by 15 percent by 2020.

In 2009, Grupo Bimbo began a joint effort with selected suppliers to develop a new technology for handling fats that, in addition to ensuring the supply of fats, would also have a significant impact on improving the fat profiles of

the company's products. This new technology allows the company to provide important nutritional benefits in products generally perceived as indulgent, like cakes and cookies. This technology is capable of reducing 60 percent of saturated fatty acids and 12 percent of total fats while keeping the product free of trans fatty acids.

The installation of the technology will be completed

The installation of the technology will be completed by the end of the first quarter of 2013, and the company will be implementing it on the production for all the cookies under the *Marinela*, *Tia Rosa* and *Lara* brands in Mexico.

Enhancing the nutritional profile of the product portfolio

Grupo Bimbo's efforts to enhance the nutritional profile of its product portfolio are part of a broader commitment to consumer and societal health. In Grupo Bimbo, the company's main focus is on consumers' satisfaction, their health and nutrition. The company works under the guidelines set by national and international institutions such as ministries of health and the WHO for the development of all its products.

Grupo Bimbo focuses its efforts in improving the nutritional profile of its products by reducing total fat, trans fat, sugar and salt, reducing portion sizes, and offering fortified products with nutrients and functional ingredients to deliver greater benefits for consumers' health. Promoting healthy

lifestyles among the population, the workplaces and communities also contribute to the search for products with better nutritional profiles.

To understand and stay attuned to consumers' tastes and preferences, the company has adopted a highly segmented approach across multiple geographies and demographics. To capitalize and expand on those insights, and sustain the pace of innovation, the company relies on a robust Research & Development platform that includes four innovation and nutrition institutes for product development located in Mexico, the U.S. and Brazil.

The company's reformulation and innovation efforts to produce healthier products began in 2008. In 2012, the company improved the nutritional profile of more than 1,700 Grupo Bimbo products, representing 20 percent of the more than 8,000 products it sells, reducing key nutrients of public health concern - fats, saturated fats, sugar and sodium -and developing 198 products with an enhanced profile, including, Oroweat Low Sodium 100% Whole Wheat, Pumpkin Spice Bagel Thins, Galletas de arroz integral, Cocositos, Naranjositos, Madre Tierra lyophilized fruits, Pan tostado silueta 8 cereales, Pan Bimbo Vital semillas, among others. In 2011, the company's Research & Development and Marketing departments

developed a standardized innovation process for the identification and production of products with an improved nutritional profile. The system is comprised of six measureable processes which are in turn included in the Grupo Bimbo Model. ⁶

Improving the nutritional profile of the products includes integrating whole grains, fibres, vitamins, minerals and functional ingredients. In 2011, the company developed an indicator to numerically define and classify each of its products into four categories: healthy, better, good and indulgent. To categorize a product, the indicator takes into account the following elements: base points (points are added to the indicator according to the content of nutrients to be reduced or added); disqualifying elements (the product cannot earn more points if it exceeds certain levels of fat, saturated fats, sodium and sugar); additional points (if the product has no disqualifying elements, it can earn points for content of beneficial nutrients).

Since this system was introduced in 2011, the company worked on innovating and improving 150 products in the healthy and better categories and on improving the point score of the good and indulgent categories. The company's goal is to launch two products in the better and healthy categories in each brand/region every year and

improve profiles in the good and indulgent categories.

Grupo Bimbo believes that informing consumers of the primary nutrients in its products is critical to promoting lifestyle changes. Each product label includes clear information on nutritional content and ingredients; information about the presence of allergens; and simple and easy-to-understand information on GDAs on the front of its product labels. Worldwide, all product labels include the caloric content of the product on front-of-pack. Since 2008, all product labels have carried a legend promoting 30 minutes of daily physical activity.

⁶ The main objective of the Grupo Bimbo Model "is to standardize criteria for action at every level and position throughout the company and throughout the world, to grow steadily using sustainable resources." *Grupo Bimbo 2011 Integrated Annual Report* (2011): 42.

Case Study: Kellogg Company Adding Beneficial Ingredients

Kellogg is committed to meeting consumers' nutrition needs by innovating new products and enhancing the nutrition credentials of its existing products. Around the world, the company has reduced the sugar, sodium and fat content in its foods, while increasing fibre, other nutrients of public health interest, and whole grains. For example, during the last several years, Kellogg has made significant commitments to increase the fibre and whole grains in its U.S. cereals and vitamin D in its U.K. cereals portfolio.

Fibre and the U.S.

Kellogg was founded more than a century ago with a philosophy that encouraged people to improve their health. The company has long understood the important role fibre plays in overall health and has an enduring commitment to helping Americans increase the fibre in their diets. Kellogg introduced its first fibre cereals, Kellogg's Bran Flakes and All-Bran, in 1915 and 1916 respectively, and Kellogg's Raisin Bran in 1942.

Fibre is an essential part of everyone's diet, yet few people understand the importance of dietary fibre, or where to get it. Fibre is that part of plant foods that the body can't digest or absorb and is found in fruits, vegetables, legumes, nuts, seeds and cereal grains and pseudo-cereal grains. Bran -

which is the outer layer of the grain that contains fibre, antioxidants, B vitamins, phytochemicals, and minerals such as iron, copper, zinc and magnesium - has the highest fibre content at about 25 percent to 45 percent.

Various fibres provide a number of very important health benefits. All fibres have an influence on the digestive process from start to finish. Soluble fibre increases viscosity within the digestive tract, which has been shown to provide a feeling of "fullness", which may help with weight management.⁷

Fibre may reduce the risk for certain types of cancer.
Certain soluble fibres such as beta-glucan found in oats and barley can also help reduce cholesterol levels, thereby reducing the risk for heart disease. And wheat bran, an insoluble fibre, is considered one of the best fibres to promote regularity.

Research released in 2011 and supported by a Kellogg grant, examined the main components of whole grains – specifically the bran and fibre – to better understand their impacts on heart health, type 2 diabetes and body weight. This systematic literature review found that bran and fibre intake had stronger association with reduced risk

for heart disease than whole grain intake, and helps to demonstrate the importance of fibre-rich bran. ⁸

The U.S. federal government's 2010 Dietary Guidelines for Americans recommends an average daily intake of fibre of 25 g to 38 g, depending on age and gender. Yet, for most Americans usual intake averages only 15 g per day. 9 The most recent National Health and Nutrition Examination Survey (NHANES), a programme of studies designed to assess the health and nutritional status of adults and children in the U.S., found that less than 10 percent of individuals in the U.S., aged one year or more, get enough fibre in their diets. 10

In 2009, in an effort to determine what factors contribute to the fibre deficit in the U.S. population, Kellogg conducted an omnibus survey of American adults to gauge consumers' knowledge of fibre and where to find it in foods.

⁷ Anthony Fardet, "New hypothesis for the health-protective mechanisms of whole-grain cereals: what is beyond fiber?" *Nutrition Research Reviews* 23 (2010):65-134.

⁸ George C. Fahey Jr., Susan S. Cho, Lu Qi, In S.Kim, and David M. Klurfeld, "A comparison of the literature on the association between intakes of bran, cereal fiber, and whole grains and risk of adiposity measures," *The FASEB Journal* 25 (2011):776.8.

U.S. Department of Agriculture and
 U.S. Department of Health and Human
 Services, Dietary Guidelines for
 Americans, 2010, 7th ed., (Washington,
 DC: U.S. Government Printing Office,
 2010), 41.

Alanna J. Moshfegh, et al., What We Eat in America, NHANES 2005-2006, "Usual Nutrient Intakes from Food and Water Compared to 1997 Dietary Reference Intakes for Vitamin D, Calcium, Phosphorus and Magnesium," (2009).

The terms "fibre" and "whole grains" are often used interchangeably and the results showed this confusion. Consumers were choosing products made with whole grain specifically to increase their fibre intake, but the analysis showed that the fibre content of these whole grain products varied greatly, with only one-third to one-half providing a "good" (delivering at least three grams) to "excellent" (delivering at least five grams) source of fibre. 11

Ready-to-eat cereals are one of the most significant sources of fibre in the diet, delivering levels of fibre on par with fruits and vegetables. In 2009, Kellogg announced it would add fibre to many of its readyto-eat cereals in the U.S. Over the next three years, the company enhanced the nutrition credentials of its products by adding fibre to popular ready-to-eat cereals -Kellogg's® Froot Loops®, Apple Jacks®, Corn Pops® and most varieties of Special K®. Today, Kellogg has more cereals that include at least a good source (3 g) of fibre and one-half serving (8 g) of whole grains than any other U.S. food company. 12 And some have far more fibre. For example, one serving of some All-Bran®

cereals can provide 40 percent of the daily value for fibre. To achieve this goal, each product required a unique approach to ensure that Kellogg maintained the same great taste people love. While the company's specific technologies and formulation approaches are proprietary, every added fibre helps people meet their daily fibre needs.

Beyond breakfast cereals,
Kellogg increased the fibre
content in many of its snack
foods in the U.S., including
FibrePlus® cereal bars,
providing 35 percent of
recommended fibre intake per
serving and reformulated
its Special K® Protein Meal
and Nutri-Grain® bars to
provide at least a good source
of fibre. Nutri-Grain Waffles
also provide a good source of
fibre in each serving.

Kellogg is committed to empowering consumers to make informed choices to meet their nutritional needs by providing comprehensive nutrition and ingredient information on its packaging. In 1916, Kellogg's became one of the first companies to display its cereals' recipes and nutritional information on its packaging. Today, Facts Up Front in the U.S. and Guideline Daily Amounts (GDAs) in other markets provide consumers with information on calories, sugar, sodium and nutrients. The company is continuing its efforts to help educate consumers about the difference between fibre and whole grains, encouraging

them to read the nutrition facts panel on the product package to look for fibre-rich, whole grain foods that provide at least a good source (3 g) of fibre.

Kellogg is dedicated to providing credible science and research information to support health professionals' efforts in educating consumers about making healthful choices and the importance of fibre. The company includes information on fibre for health professionals on www.KelloggsNutrition.Com and for consumers on www.Kelloggs.com. These resources include a convenient fibre tracker to help people make higher-fibre choices as they plan their daily diets.

Vitamin D and the U.K.

Known as the "sunshine" vitamin, vitamin D is produced by the body from direct sunlight on the skin. It also occurs naturally in some foods - including oily fish, fish liver oils, and egg yolks - and in fortified dairy and grain products.

Vitamin D has several important functions. It maintains normal blood levels of calcium and phosphorus and aids in the absorption of calcium, helping to form and maintain strong bones.

Vitamin D deficiency causes rickets in children and osteomalacia in adults. Less than adequate intakes and low vitamin D status has also been linked to a number of health

¹¹ Kellogg Company, Flip for Fiber. America's Fiber Deficit: What Health Professionals Need to Know to Help Increase Fiber Intake (2009).

¹² Based on a Kellogg audit of national breakfast cereals in June 2011. The data was drawn from label, website and a syndicated database and includes nationally distributed readyto-eat cereals from Kellogg's, General Mills, Post, Quaker and Malt-O-Meal.

problems, including osteoporosis, heart disease, hypertension, diabetes, autoimmune disease and some cancers.

Prior to the 1930s, high rates of rickets in children were common in the U.K., but food fortification, sun exposure and supplementation policies led to a dramatic decline. However, the number of cases has been rising over the last 15 years. 13 Research conducted by Kellogg in 2011 confirmed that pediatricians are seeing a growing number of cases of rickets - 82 percent of 120 pediatric dietitians surveyed had seen an increase in cases of rickets in the last five years, and 46 percent had seen cases in the last year.

Experts blame the return of rickets on a number of factors: children may make less vitamin D due to better practices of using sunscreen, which lowers vitamin D production; children are spending less time playing outside due to a sedentary lifestyle focused on television and computers; reduced consumption of the relatively few foods which are rich in Vitamin D (full-fat dairy products, eggs and oily fish); and the lack of foods fortified with vitamin D.

Only a few foods in the U.K. are fortified with vitamin D, such as margarine, some processed cheeses and some breakfast cereals, but not including milk which has been fortified in Canada and the U.S. for many years. It is good practice to protect children from sunburn. If parents are concerned, they should continue using sunscreens and look for good dietary sources of Vitamin D such as breakfast cereals.

The U.K. Department of Health recommends a daily supplement containing 10 mg of vitamin D for pregnant or breastfeeding women and for children between the age of six months and five years old, but currently, there is no recommended daily nutritional intake of the vitamin for children over age five. The Department of Health has asked the Scientific Advisory Committee on Nutrition to review the issue of current dietary recommendations on vitamin D, but it is not expected to report until 2014.

In 2011, to help address the problem of vitamin D deficiency in children's diets, Kellogg began fortifying its children-focused cereal brands with the 25 percent of the recommended daily requirements of vitamin D. At the end of 2012, the vast majority of the company's children's cereal portfolio for the U.K. market had been fortified with vitamin D. Kellogg has also embarked on a campaign for health care professionals, including nutritionists and dietitians, about the updated fortification practices. Breakfast cereals should be back on the list of foods to recommend when looking for a good source of vitamin D in safe amounts.

Kellogg children's cereals can be found in 82 percent of households in the U.K. By adding vitamin D to these cereals, the company expects to have a sizeable impact in elevating levels of vitamin D for the U.K.'s children.

¹³ S.H.S. Pearce, & T.D. Cheetham, "Diagnosis and management of vitamin D deficiency," January 11, 2010, *BMJ* 2010; 340

Case Study: Micronutrient Fortification at Nestlé

Micronutrients such as iron, vitamin A, iodine and zinc are essential for growth and development. Yet, despite their vital role, approximately two billion people – about one-third of the world's population, mainly in developing countries, suffers from deficiencies in one or more of these micronutrients. ¹⁴

Iron deficiency is the most common and widespread of the nutritional deficiencies. Iron is present in all cells in the human body and has several vital functions. It is used by the body to make hemoglobin, which helps store and carry oxygen in red blood cells. Too little iron affects the body's immune systems and can result in impaired cognitive and motor development and function in children; cause fatigue resulting in decreased physical work capacity in adults; and affect memory or other mental functions in teens. Extreme cases of iron deficiency result in anaemia. In some countries in Central and West Africa up to 90 percent of children are anaemic. In Nigeria, the problem affects more than three-quarters of preschool-age children.

Vitamin A deficiency is a public health problem in more than half of all countries, especially

in Africa and South-east Asia, hitting infants, young children and pregnant women in lowand middle-income countries the hardest. 15 Vitamin A is needed for vision, healthy skin and mucous membranes, bone and tooth growth and for maintenance of the immune system. Vitamin A deficiency is the leading cause of preventable blindness in children and contributor to morbidity and mortality from infections. In pregnant women, it causes night blindness and may increase the risk of maternal mortality.

lodine is needed for the normal metabolism of cells, for normal thyroid function and for the production of thyroid hormones. Iodine deficiency, which affects nearly two billion people worldwide, can result in a form of physical and mental retardation called cretinism, goiter and hypothyroidism, and occurs more often in women than in men and in pregnant women and older children.

Zinc is a trace mineral important to the body in many ways – it keeps the immune system strong, helps heal wounds and supports normal growth.

Food fortification - the addition of one or more micronutrients (vitamins, minerals and trace elements) to food and beverages - offers one of the most cost-effective public health solutions to address population-wide nutrient deficiencies and improve the nutritional quality of foods.

Nestlé is committed to helping reduce micronutrient deficiencies on a global scale. With more than 140 years' experience in enhancing the nutritional profile of food products, today many of the company's products are fortified with micronutrients – especially in the most commonly occurring deficiencies such as iron, iodine and vitamin A.

The Science of Fortification

Balancing taste and nutrition is a science. Nestlé Research scientists, work in close collaboration with 28 Nestlé Product Technology Development Centres worldwide, local health authorities and regulatory agencies to support the

A balanced diet that contains foods from all the food groups – protein, carbohydrate, fat, fruit and vegetables - usually provides all of these essential nutrients. But many people do not, or are not, able to consume a healthy varied diet, particularly in developing countries where diets generally lack diversity.

¹⁴ Brian Thompson and Leslie Amoroso, ed., Combating Micronutrient Deficiencies: Foodbased Approaches. Food and Agriculture Organization of the United Nations and CAB International, Rome, 2011.

WHO. "Global Prevalence of Vitamin A Deficiency in Populations at Risk 1995-2005," WHO Global Database on Vitamin A Deficiency, Geneva, World Health Organization, 2009: preface vii.

development of fortified food through nutritional science and food technology. Nestlé scientists use information from local governments and international health authorities to identify the different nutritional gaps in diets. Based on this data, the company can "renovate" its product portfolio, producing readily available and affordable fortified foods for populations most at risk for micronutrient deficiencies.

nutritional components in the food may reduce the bioavailability of the fortified nutrient. Adding certain nutrients can also change the appearance and taste of the food. To address these issues, Nestlé has developed novel processes to reduce the organoleptic changes caused by certain micronutrients, while at the same time optimizing their bioavailability.

Popularly Positioned Products (PPPs) - high quality food products that provide nutritional value at a price people can afford. Currently, more than 4,000 PPPs are available around the world and sold under a number of well-known Nestlé brands, including Maggi, Nido and Nescafé. PPPs range from culinary products to beverages and dairy, and include commonly consumed food products such as bouillon cubes, flour and milk.

Fig. 3 : Nestlé Micronutrient Fortification		
2012 Results	2016 Target	
Over 150 billion servings worldwide	200 billion servings worldwide, with a special focus on children and women of child-bearing age	

To tailor product development and communications ever closer to consumers' nutrition and health needs, Nestlé developed a "Nutritional Landscaping" protocol in several pilot markets in 2010. This focused on key data on micronutrient deficiencies, obtained in collaboration with local nutrition and health experts and authorities, as well as detailed consumer research. This analysis allows the company to target its product portfolio and communications to meet the distinct nutritional needs of different consumer segments.16 A common problem with fortification is that other

The first Nestlé Micronutrient Fortification Policy was published in 2000 and was updated in 2011. ¹⁷ Today, Nestlé offers a range of products to consumers around the world fortified with micronutrients including iron, iodine and vitamin A.

Micronutrient fortification of Popularly Positioned Products

Fundamental to the success of Nestlé's fortification programme is the need to ensure that the fortified products reach the people who need them most. To accomplish that goal, products must be enjoyable, nutritious and affordable. The company markets a growing number of

Fortification of the *Maggi* brand products to address local needs

Nestlé has made significant progress in micronutrient fortification for people in developing countries through its *Maggi* brand, a range of products including bouillons, soups, seasonings, sauces and instant noodles. The company fortifies most of the *Maggi* range to help address the four most prominent micronutrient deficiencies worldwide – iron, vitamin A, iodine and zinc.

Over 90 percent of the *Maggi* product range carries added iodine – an estimated 105 billion individual servings (based on respective serving size) sold in 2012.

¹⁶ Nestlé, *Results of SA nutritional landscape research study*, 2011, <u>click here</u>

¹⁷ Nestlé Research Center, Micronutrient Fortification, <u>click here</u>

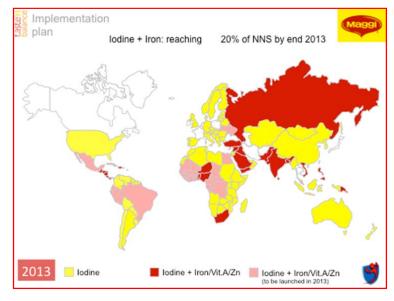
In addition to iodine fortification, the company has initiated an iron fortification programme of the Maggi product range in India, Pakistan, Sri Lanka, the Caribbean, Central America, Central West African countries and Pacific Islands. Of the approximately 100,000 tonnes of bouillons, seasonings and noodles sold in these countries in 2012, around 84 billion individual servings included iron fortification - a 61 percent increase over the previous year's servings of 51 billion.

In 2012, Nestlé introduced a new range of fortified bouillon cubes in Nigeria, adding iron to the already iodine-fortified *Maggi* brand seasonings. Bouillons are a staple part of many lower income consumers' diets in Central and West Africa and are consumed in a variety of traditional dishes. A single *Maggi* cube can serve two or more people.

The launch of fortified *Maggi* products are supported with advertising and information campaigns designed to promote the health benefits and affordability of these products, and highlight the gains of combining these with fresh, locally sourced products.

In Nigeria, Nestlé launched the iron-fortified *Maggi* cubes and tablets with communications activities to raise awareness locally about the health implications of micronutrient deficiency. The company produced simple educational

materials such as pocket cards and fact sheets in Nigeria's three main languages. cities week-by-week promoting region-specific activities, including interactive



Nestlé will conduct a longterm evaluation of the impact of the bouillon introduction to local consumers' diets on their health status and quality of life. The iron fortified *Maggi* cubes and tablets will be launched in 2013 in all countries in Central and West Africa following the same programme of activities and communication. In Central West Africa alone, several billion Maggi bouillon cubes and tablets were sold during 2012 reaching more than 300 million African consumers. Launched in October 2011, in Côte d'Ivoire, Maggi-branded "Cooking Caravans" went on the road in 2012 travelling through Cameroon, Nigeria and Ghana to provide nutrition expertise and healthy eating tips. The programme also aims to encourage cooking at home giving cooking tips and basic hygiene advice especially to younger women. The caravans travel to towns and

cooking demonstrations, women's forums, group discussions and presentations on micronutrient fortification. In 2012, more than 200,000 women participated in at least one of these programmes. The objective is to double the number in 2013. In India, more than 70 percent of the population consumes less that 50 percent of the recommended daily allowance of important micronutrients.

To make key nutrients affordable and attractive to consumers, the company launched *Maggi Masala-ae-Magic*, an affordable spice sachet which provides at least 15 percent of the recommended daily allowance for iron, iodine, zinc and vitamin A per serving, and has been designed to be easily combined with traditional dishes.

The launch was accompanied by an educational campaign targeted at families, television ads and street dramas.

Nutritionists were sent into Dharavi, the world's largest slum. To date, 380 million sachets of *Maggi Masala-ae-Magic* have been sold, and the concept has been rolled out in Bangladesh and Sri Lanka.

Nestlé has also identified states in India where deficiencies are the most prevalent and is developing a rural supply chain network to cater to these regions in partnership with the Drishtee Foundation (Drishtee), a charity whose mission is to make marginal communities more efficient, self-sufficient and equitable.

As part of their work in developing local capacity, Drishtee enables health franchisees in villages to offer diagnostics services, over the counter (OTC) medicines and other health products, which are then supported by qualified practitioners and local hospitals. Nestlé and Drishtee developed a

campaign to create micronutrient awareness in states where Drishtree was setting up "health camps."

The campaign was launched in Uttar Pradesh. Visitors to the health camps received information regarding micronutrients and their deficiencies, samples of Maggi Masala-ae-Magic and health services. During the pilot stage of the programme, 220 health camps were organized.

> To learn more, click here

CASE STUDY: Unilever and the Sodium Reduction Journey

Salt consumption in many countries remains much higher than the recommended daily amount, both in those with traditional and modern diets. Salt has since long been used for preservation and in preparation to enhance appearance, texture and sweetness and to diminish bitterness. However, too much salt can cause high blood pressure and associated cardiovascular diseases. Lowering salt intake has become a high priority for WHO. Current sodium intakes around the globe are, on average, two to three times higher than the WHO recommended daily maximum intake of 5 g of salt per day.

In industrialized countries most of the salt intake is derived from processed foods and restaurant foods. In developing countries, much of the population salt intake is from salt added during food preservation, food preparation, and at the table. The food industry has a key role to play, in partnership with governments and civil society, in efforts aimed at reducing population salt intakes.

Unilever has developed a multi-pronged approach to sodium reduction - combining a portfolio of sodium-reduced foods with tools to help educate and motivate consumers to adapt to reduced salt in their diets, and partnering with governments and NGOs on research and

public health campaigns to increase consumer awareness of the need to reduce sodium intakes.

Unilever's sodium reduction efforts began ten years ago. In 2003, Unilever started a programme to assess and optimize the nutritional composition of its entire food and beverages product portfolio, sold in over 190 countries worldwide. This "Nutrition Enhancement Programme" uses product criteria for salt, saturated fats, trans fats and added sugar, based on national and international recommendations and resulted, for example, in the removal of 9,100 tonnes of salt in the period 2005 - 2008. The salt content of dry soups in Europe and South America was reduced by 10-15 percent; Knorr and Lipton side dishes in the U.S. saw reductions of 10-15 percent; and the sodium content in Hot & Sour Vegetable Soup in India was reduced by 14 percent. In 2012, the company relaunched its European salad dressings, Knorr, Hellmann's, Calvé, Amora and Ligeresa brands with salt levels that meet the WHO 5 g per day target. In Argentina, Brazil and Chile, the sodium in several variants of Hellmann's mayonnaise has been reduced by up to 12.5 percent. In the U.S., Ragu Robusto tomato sauces have had up to a 22 percent sodium reduction, and 100 percent of red tomato sauces including

Old World Style, Chunky, Robusto and Organic contain 480 mg sodium per serving or less, due to the company's step-wise approach towards the 5 g salt target.

In lowering the salt level in its products to help consumers move towards the WHO recommended level of 5 g per day, the first milestone for the company was to reduce salt levels to an interim target of 6 g per day by the end of 2010. This required reductions of up to 25 percent. For the target of 5 g of salt per day by 2015 -2020, a further 15-20 percent on average across the portfolio will be necessary. Achieving this next 15-20 percent reduction level will be difficult without breakthrough technology, and a real shift in consumer demand for saltreduced foods.

In 2012, 80 percent of Unilever's Foods and Refreshment portfolio by volume met salt levels equivalent to 5 g per day; for the Foods portfolio alone, more than 50 percent reached 5 g per day. Although significant progress has been made in reducing salt levels, particularly in product categories, such as soups and meal sauces, and in countries where salt reduction is on the public health agenda, such as Australia, France, Canada and the U.S., much remains to be done in other parts of the world.

Unilever's global strategy to reduce sodium extends to every country where the company's products are sold. However, each country is at a different stage of its "journey" to reduce salt. Despite technology not currently being available to reach 5 g targets for most products yet, Unilever aims for the different countries to achieve that target between 2015 and 2020.

Sodium reduction is challenging. Different products require different sodium reduction strategies and the scientific, technical and consumer barriers are complex. Unilever adopts a multi-disciplinary approach. The company is reducing salt levels through recipe reformulations, the use of salt replacers, and herbs and spices. It is also researching sensory interactions between texture, colour, and flavor and the ability to affect the "sodium reception" in the body so that it gives a perception of saltiness without consuming sodium.

Salt substitutes contain less sodium, but do deliver a salty taste. However, their use has limitations. Typical salt substitutes include mineral salts, such as potassium chloride (KCI), which also fits with the WHO recommendation to increase potassium. While KCI use in Europe is permitted as a salt replacer, it has an undesired off-taste at higher concentrations, and the ingredient listing of

"potassium chloride" on the product label is not always appealing to consumers.

Salt boosters would be an ideal tool to reduce sodium levels. Natural ingredients that can trigger or increase the sensitivity of the sodium channel receptor, boosting the impact on our tongues of each salt molecule, delivering more salt taste with less sodium. However, we are not sure whether they exist.

Unilever is also reformulating its products with the use of aromas, herbs and spices to help compensate for the loss of taste in salt-reduced products. The "natural" perception of such ingredients makes them an attractive tool. For example, the company's German Feinschmecker tomato soup has added herbs and spices and reduced salt.

One of the major hurdles to salt reduction is consumer acceptance. Consumers like the taste of salt. When given a choice between a regular and a lightly salted product, people generally express a preference for the regular one. Unilever research reveals that price and taste generally trumps health as the most important drivers for consumers' purchases. Half of the people in the world would not give up taste for health; and a third would not give up convenience for health. ¹⁸ Consumer studies show that people are not motivated to reduce their salt

intake, unless they know they have a health condition. ¹⁹

Unilever has adopted a "stepwise" approach to helping consumers adapt to reduced salt in their diets. In the stepwise approach, the salt content in products is reduced gradually and incrementally, weaning consumers off the taste of salt over time. Studies have shown that consumers' taste can shift to products with a lower salt content and less intense (salty) taste after several consumption occasions. 20 Equally, the size of the reduction steps and the speed with which each step is introduced is product dependent and determined by consumption frequency (e.g. daily versus weekly). This step-wise approach is only effective when undertaken industry-wide with a whole food segment being lowered in salt simultaneously. If not, the impact on consumers will be minimal as they seek to substitute the lower salt product for another manufacturer's more highly salted alternatives. For example, Unilever successfully reduced the salt in its Knorr's soups in Turkey by 25 percent between 1999 and 2012 along with its competitors, but that was not the case for Flora No

Behaviour 38 (1986): 203-213.

 $^{\rm 19}$ J. Purdy and G. Armstrong, "Dietary

salt and the consumer: reported

¹⁸ Unilever, *Health focus, consumer research study,* unpublished, 2010.

consumption and awareness of associated health risks," Reducing Salt in Foods: Practical Strategies, ed. Kilcast, D, Angus, F. Woodhouse Publishing Limited (2008): 99-123. ²⁰ M. Bertino, G.K. Beachamp, and K. Engelman, "Increasing dietary salt alters salt taste preference," Physical

Added Salt Margarine mentioned below. The step-wise approach is limited by the amount of salt that can be removed before the product becomes unpalatable. Also, in many products salt is mainly delivered by ingredients (e.g. cheese, soy or fish sauce) so ingredient suppliers have to reduce salt in their products while keeping the taste optimal.

Improved nutrition labelling and consumer communications are critical to a successful sodium reduction strategy. Unilever aims to provide clear, simple labelling on all its products globally by 2015 to help consumers make choices for a nutritionally balanced diet. This includes energy per portion on front-ofpack plus eight key nutrients and % GDAs for five nutrients on the back of pack.²¹

Unilever encourages consumers to check food labels to see how much salt is contained in the product – and has developed three different salt calculators – for the U.K., the Netherlands and Asia respectively – to give people an indication of their average daily salt intake. ²²

On-pack labelling of sodium is key to increasing consumer awareness. Yet, with little clear consumer demand for lower-sodium products and a perception that "reduced salt"

claims equal less taste, product labelling presents its own set of marketing challenges. Some food manufacturers have been slowly lowering the levels of sodium in products in an attempt to retrain consumers' taste buds without calling it out on the product label. Studies show that nutritional labels and other on-pack information can influence consumers' taste expectations, as well as the actual taste experience and liking of a product. In a soup taste-test, the soup that had a label reading "now with reduced salt" was perceived as less salty than the other soups even though all the soups had the same level of salt. 23 The implication is that consumers won't even try the low-salt product when labelled as such. For example, in 2008, Unilever launched Flora No Added Salt Margarine in the U.K. but despite the great taste, sales gradually fell and by November 2011, continuing low sales led to the product being discontinued.

Consumers need to be educated not only about the health benefits of a reduced salt diet, but also about the good taste of lower salt products. In 2009, *Knorr* soups launched an advertising campaign in Canada with "Salty," a cartoon character in the form of a salt shaker, to

promote a 25 percent reduction in its *Sidekicks* range. The advertising campaign showed a downtrodden, dejected Salty coping with his new, underutilized life. Salty's popularity grew and demand for the lower-salt products increased. Salty was launched in Argentina in 2011.

Critical to Unilever's sodium reduction strategy is motivating a change in consumer behaviour towards a demand for reduced sodium products. Unilever and the International Union of Nutritional Sciences (IUNS) partnered together in an initiative aimed at reducing NCDs, with a current focus on reducing sodium intake. In 2012, they organized a series of six sodium reduction behaviour change workshops, led by IUNS, with public health experts and other relevant stakeholders to generate ideas for consumer-friendly approaches and actionable strategies to reduce sodium intake amongst the general population. Workshops were based on country-specific consumer insights from Austria, Brazil, China, Hungary, India and South Africa, that identified the barriers to people changing their behaviour. Within each country, a population representative sample of 1,000 adults (aged 18-65) completed an online questionnaire, adapted to local language, foods and habits. Overall results revealed that although salt reduction was an important

²³ D.G. Liem, and E.H. Zandstra,
Influence of nutritional messages front
of pack on consumers' perception of
soup, Presented at Nutrition Society of
Australia Meeting, Newcastle,
Australia, December 8-11, 2009.

²¹ Where applicable and legally allowed and in accordance with local or regional industry agreements.

²² To view Unilever's *Salt Calculator*,

topic and relevant to health, the majority of respondents believed their salt intake was satisfactory and had no intention of reducing their sodium intake. Perceived importance of low salt food choices grew with an advanced stage of behaviour change awareness.

Based on two pilot workshops in the U.K. and the Netherlands, Unilever developed a format for the six country workshops, which included a "step in the shoes of consumers" role-play exercise, where workshop participants first role-played a specific consumer in a focus group and then watched an actual focus group discussion of general consumers to see what the consumers' reactions and experiences actually were. Through this exercise, participants learned that education alone is not sufficient to drive consumer choice. This activity was followed by a split group structured brainstorm session, using Unilever's "Five Levers for Change" aimed at developing ideas linked to possible advertisements or campaigns that would drive behaviour change in consumers around salt usage and salt awareness. 24

For example, "You might think you are preparing a healthy meal for your children, but do you know how much salt you are really feeding them?" A cartoonist helped capture the ideas and campaigns. The workshop concluded with a mediated session where the brainstorm ideas were shared and concrete actions captured. The workshops represent a first step. Follow-up meetings and scaling up of the agreed consumer focused saltreduction approaches will be required. At a global level, output from the surveys and workshops will be used to identify common themes around the world and cluster countries where similar approaches could work.

Population salt reduction programmes are recommended by WHO and public health officials as a costeffective way of reducing the burden of cardiovascular disease nationally and globally. Working in partnership with industry, governments, NGOs and consumers is key to delivering successful local salt reduction activities. For example, in the U.K. Unilever participated in the Food Standards Agency's (FSA) salt reduction programme,

undertaken between 2003 and 2010, which included consumer awareness campaigns, food reformulation and monitoring, and successfully reduced the average salt intake of the population by about 10 percent. In 2011, Unilever pledged its support to the U.K. government's "Public Health Responsibility Deal," which aims to further reduce salt intakes in the U.K. in order to achieve the government recommended average intake of 6 g per day for adults. Unilever Food Solutions, the company's professional catering business, has been actively promoting the "Eatz4U" school meals support programme in the U.K. This programme helps reduce salt consumption in school meals by providing school caterers with nutritionally balanced recipes and ingredients designed to comply with government targets for schools. The company also participates in government initiatives in Argentina and Australia and in 2011, pledged its support of PAHO's strategy for "Dietary Sodium/Salt Reduction in the Americas," with the goal of working towards a consumption target of 5 g of salt per day by 2020.

²⁴ Unilever's "Five Levers of for Change," are a set of principles to encourage sustainable changes in consumer living habits.

NUTRITION INFORMATION TO CONSUMERS

Provide clear, fact-based nutrition information

Helping consumers make informed and healthy food choices is a key element of our commitment to WHO's 2004 *Global Strategy on Diet, Physical Activity and Health.*

We provide clear, easy-to-understand and factbased nutrition information using a variety of tools and media, including on-pack labelling, point-ofsale materials, social media apps, company websites, help lines, brochures and newsletters, and support nutrition literacy and education initiatives around the world to promote healthy food choices and behaviours conducive to a healthy, active lifestyle.

The product label and nutrition facts panel or table is a principal source of information for consumers. Experience has shown that the true value of nutrition labelling depends on increasing nutrition facts table literacy in a simple and easy-to-use format to help consumers understand the information to help them make healthier choices. We support a fact-based approach to nutrition labelling as set out in the principles IFBA adopted in November 2010. ²⁵

Fact- and science-based labelling systems, which provide meaningful and understandable nutrition information on overall diet, allow consumers to make the dietary decisions to meet their individual nutritional needs.

IFBA companies provide nutrition information on packages per serving and/or per 100 grams (depending on local regulations) on key nutrients of public health concern – calories, fat, saturated fats, sugar and sodium/salt. To provide information on how a portion contributes to an overall diet, members are also in the process of adding the percentage that each nutrient provides of the recommended daily amount (expressed as Daily Intake (DI), Daily Value (DV) or Guideline Daily Amount (GDA), or the local equivalent, where available) on the product label. (See Table 5

for examples of the nutritional information IFBA members place on packaging.)

Collaborating with others to increase nutrition literacy

Australia: Kellogg has partnered with The Gut Foundation, a nongovernmental organization dedicated to the treatment and prevention of gastrointestinal diseases, on a national consumer education campaign focused on the importance of dietary fibre in promoting regularity, especially among children. Kellogg has been affiliated with The Gut Foundation for a number of years, helping to help raise awareness of digestive health related diseases and educate Australian consumers on ways to minimize health risks.

Italy: In 2012, The Coca-Cola Foundation extended its support for "A Scuola inForma" ("At School In Shape"), which aims to educate Italian high school students about the importance of balanced nutrition and exercise. The programme has a presence in eight regions of Italy and reaches more than 11,000 students in 64 schools. The programme is overseen by Modavi, an Italian nongovernmental organization and informed by nutritionists, psychologists and sports trainers. Qualitative interviews with 1,200 students following the conclusion of the first edition of the educational programme revealed that 92 percent of students learned the meaning of a healthy lifestyle; 62 percent began to pay more attention to food and eating habits and had changed in favour of a more healthy and balanced diet and 15 percent had begun to practice regular physical activity.

Mexico: In November 2012, Kellogg's Instituto de Nutrición y Salud (INSK) launched an iPhone application to provide consumers with a tool to make better decisions about their food and health. The app counts calories and provides recommendations for food choices, water

 $^{^{25}}$ "Principles for a global approach to fact-based nutrition labelling." $\,\underline{\text{To view, click here}}\,$

consumption and physical activities. In the first days after its launch, the app ranked among the Top 50 apps in Mexico and No.1 in the health and shape category. > To link to the app, click here

U.S.A.: In October 2012, The Coca-Cola Company and PepsiCo joined the beverage industry to launch the "Calories Count™ Vending Programme." Beginning in 2013 and building on previous industry initiatives that removed fullcalorie beverages from schools and placed new calorie labels on the front of every bottle, can and pack, the programme will increase the availability of lower-calorie beverages in vending machines, provide clear calorie information for each beverage selection on the front of the vending machines and feature messages encouraging lower-calorie beverage choices and reminding consumers that "calories count" in all the choices they make. The programme will be launched in municipal buildings in Chicago, Illinois and San Antonio, Texas and is slated for national expansion after the initial rollout.

Front-of-pack labelling initiatives

Malaysia: In March 2012, in a joint press conference, the Malyasian Manufacturers (FMM) and Malaysian Minister of Health announced support for the industry's proposal for a voluntary single-face-based, front-of-pack nutrition label for "energy" (based on 2000 kcal). The format and presentation of the front-of-pack label will be determined by the industry and presented to the Minister of Healt for consideration. It will be used to educate consumers on how to make healthy food choices.

Mexico: In September 2012, IFBA associate, Alianza Por Una Vida Saludable (AVS), launched a new public education campaign, "Checa y Elige, claves de nutrición," which invites consumers to look at the nutrition facts of food and non-alcoholic beverages labelled with the "Checa y Elige" system. The labelling system provides consumers with a simple guide to the amount of key nutrients (per pack, item or portion) including energy (calories), saturated fats, sugars and sodium and percentage of the recommended daily intake, based on an average diet of 2,000 calories. The campaign is sponsored by 19 companies,

including IFBA members, Ferrero, The Coca-Cola Company, Grupo Bimbo, Kellogg, Mars, Nestlé, PepsiCo and Unilever who since 2011 have been implementing the "Checa y Elige" label.



Fig. 4: FOP Label: Checa y Elige

The concept for the public education campaign was informed by market research that considered data about interests, attitudes and habits of Mexican consumers when choosing and consuming prepackaged foods. The research concluded that consumers have a growing interest in what, how and how much they should eat and drink; want to be empowered to choose products in an informed and responsible way; reject imperative messages and do not want to feel overwhelmed or judged; and want to identify with other consumers. Based on this research, the campaign adopted a playful approach led by two characters, Buzo and Caperuzo, with different eating habits and different levels of awareness towards good health, in everyday situations that represent moments of buying, preparing or consuming foods. The multi-media campaign consists of three television advertisements that are broadcast on national networks, two radio spots, print media and billboards in three of Mexico's largest cities.

The Philippines: Recognizing that front-of-pack labelling aims to improve renewed interest and heighten awareness of the energy content of products, in December 2012, the Philippines' Food & Drug Administration, under the Department of Health agreed to support an industry proposal on labelling and approved the first guidelines on voluntary front-of-pack declarations for energy or calorie content. The information, to be presented in a cylindrical format and at the lower right hand portion of the principal display panel must include the amount of energy per serving and percentage of the calorie value based on RENI (recommended energy and nutrient intakes) for energy. The directive also provides that industry should engage

in media campaigns to educate consumers' understanding of the label.

Thailand: Following the nation-wide introduction of new front-of-pack nutrition labels in the form of GDAs, several leading food and beverage companies in Thailand, including IFBA members, The Coca-Cola Company and Nestlé, joined forces to establish a Consumer Education Fund, which is administered by the Federation of Thai Industries (FTI). IFBA members, Mars, PepsiCo and Unilever contributed in-kind support and technical expertise. The fund was used in 2012 to support a successful public-private partnership with the Thai Food & Drug Administration, who launced a Consumer GDA Roadshow with the objective of "supplying consumers with sufficient and accurate information to enable them to choose food wisely."

U.S.A.: During 2012, IFBA members, The Coca-Cola Company, Ferrero, General Mills, Grupo Bimbo, Kellogg, Mondelēz International, Nestlé, PepsiCo and Unilever began implementing the "Facts Up Front" icon on their product labels.

Launched in January 2011 by IFBA associate, the Grocery Manufacturer's Association (GMA) and

Launched in January 2011 by IFBA associate, the Grocery Manufacturer's Association (GMA) and the Food Marketing Institute, the "Facts Up Front" label is a simple and easy-to-use labelling system that displays key nutrition information on the front of food and beverage packages.



Fig. 5: FOP Label: Facts Up Front (Minimum)

The label (*Fig. 5*) shows calories per serving and information on three nutrients the Dietary Guidelines for Americans recommend limiting in the diet – saturated fat, sodium and sugar.



Fig. 6: FOP Label: Facts Up Front (Discretionary)

Labels (Fig. 6) may also have information on one or

two nutrients that Americans need to have more of as part of a healthy diet ("encouraged" nutrients). Encouraged nutrients, such as fibre, protein, potassium, vitamin A, vitamin C, vitamin D, calcium and iron, will only appear on a package if the product contains 10 percent or more of the daily value per serving of the nutrient and meets the FDA requirements for a "good source" nutrient content claim.



Fig. 7: FOP Label: Facts Up Front (Small packs)

On small food packages with limited space, one nutrient fact may be used, representing calories in a serving of the food and beverages. (Fig. 7)

Promoting nutrition education among health care professionals

The Coca-Cola Company: The Coca-Cola Company's Beverage Institute for Health & Wellness is a resource for health professionals and others worldwide on the science, safety and benefits of beverages and their ingredients, as well as the importance of diet, nutrition and physical activity to health and well-being. Through its website, the Institute delivers information about hydration, exercise, beverage benefits and nutrition. In 2012, 26,904 health care professionals signed up for six Institute webinars. In addition, the Institute's newsletter had a clickthrough rate of five times the industry standard, reflecting the continued need that health care professionals have in getting information. As part of its ongoing effort to make its information relevant to health care professionals worldwide, the Institute created country-specific sites for South Africa, Turkey and Indonesia bring the number of countries with sites to eight.

Kellogg: In South Africa, the *Kellogg's® Corn Flakes®* nutrition education campaign trained nearly 600 health care professionals with the aim of improving knowledge of healthy eating among patients at primary health care clinics.

2012 Achievements and Targets The Coca-Cola Company Global In September 2009, The Coca-Cola Company was the first beverage company to commit to FOP energy lab	
	elling
globally on nearly all packaging; and the company has met the target.	
Ferrero	
Global Started to work on implementing the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling the "IFBA Principles for a global approach to fact-based nutrition labelling nutrition labelling the "IFBA Principles for a global approach nutrition labelling nutrition labellin	
EU Achieved full implementation of the Nutrition Labelling Voluntary Recommendation issued by FoodDrink E	urope.
Mexico Introduced the "Checa y Elige" label on <i>Kinder</i> and <i>Nutella</i> products.	
U.S.A. Introduced the "Facts Up Front" label.	
General Mills	
Global On-going implementation of FOP, portion-based nutrition information for five key nutrients (includes the c	contribution
each portion makes to reference intakes). China Wanchai Ferry products label give key nutrients BOP.	
Grupo Bimbo	. , ,
Mexico Started implementation of GDA system on all products in early 2011 with expectation for full implementat	
U.S.A. of 2014; currently approximately 50% of the portfolio carries GDA labelling. 100% of products provide ene per serving FOP, as well as saturated fats, sugar and sodium. In some cases, up to 3 beneficial ingredients	
Kellogg	also listea.
Global Full implementation of GDAs and/or "Facts up Front" in six core markets on Kellogg's ready-to-eat cereals	and many
snack products.	and many
Mars	
Global First company to commit to using GDA labelling (FOP and BOP) on confectionery products worldwide. 90%	
chocolate and confectionery products carry GDAs and by end 2013, it is expected 100% of these products	-
GDA labels.70% of food products carry GDAs and by end 2014, it is expected 90% of the global food portfo	lio will
carry GDAs.	
EU More than 95% of all Mars chocolate and ice cream brands have GDA labelling and the food portfolio has a	
labelling. GDA labelling was introduced by the chewing gum division of Mars on all relevant brands and su (Starburst, Skittles, Sugus, Solano Extra chewy mints) during 2012 in the EU and in Albania, Bosnia, Croatia	
Macedonia, Montenegro, Norway, Serbia and Switzerland. A new GDA label is being implemented in acco	
with new EU food labelling legislation (1169/2011/EC) and is expected to be carried on all brands by end 2	
Mondelēz International	
Global Since 2007, nutrition information provided on all products - calories plus protein, carbohydrates, sugar, fat	, saturated
fat, fibre and sodium. On small packs with limited space, calories, protein, carbohydrates and total fat, are	
CODEX. The amount of each nutrient in a given portion and/or per 100 g/ml is listed. In most cases, labels	
the %age each nutrient provides of the recommended DV, DI or GDA or the local equivalent. Provide calor	
all products in the U.K., EU and Australia; working with others on appropriate FOP options in Malaysia, Me	xico,
Singapore and the U.S.A.	
Nestlé	
Global 96.8% (sales value) of all relevant products worldwide feature the Nestlé <i>Nutritional Compass</i> label. By 20	16, further
product information and nutrition advice will be provided via QR codes on-pack.	
46.3% (sales value) of all relevant products worldwide feature GDA labelling on FOP. By 2016: i) 100% (sa all relevant products worldwide will have GDA labelling on FOP; and ii) GDAs based on children's reference	•
all products designed for children, where regulations allow, will be introduced. In 2011, Nestlé launched t	
Portion Guidance initiative – in 2012, CHF 26.2 billion sales of products with this specific guidance. By 201	
children and family products will have portion guidance, i.e. more than double sales coverage.	
PepsiCo	
Global FOP implemented in the U.K. and other European countries, Australia and New Zealand; expanding implemented in the U.K. and other European countries, Australia and New Zealand; expanding implemented in the U.K. and other European countries, Australia and New Zealand; expanding implemented in the U.K. and other European countries, Australia and New Zealand; expanding implemented in the U.K. and other European countries, Australia and New Zealand; expanding implemented in the U.K. and other European countries, Australia and New Zealand; expanding implemented in the U.K. and other European countries, Australia and New Zealand; expanding implemented in the U.K. and other European countries are the U.K. and Other European countries a	
to other countries, including, Argentina, Brazil, Chile, Malaysia, Mexico, Paraguay, Uruguay, and U.S.A. Vo	•
committed to display calorie count and key nutrients on packaging* for all products in key markets by end	
the application of this commitment was extended to all markets by the end of 2015. *Where feasible and I allowed.	egally
Unilever	
	ND *
Global Unilever will include energy per portion on FOP plus eight key nutrients and %GDA for five nutrients on BC Achieved full nutritional labelling in Europe, North America, Latin America, Australia and New Zealand; in 2	
progress made in Africa, Middle East and Asia. By 2015, this will be extended to cover all products globally	
*Where applicable and legally allowed and in accordance with local or regional industry agreements	

²⁶ DV = daily value; DI = daily intake; GDA = guideline daily amount; FOP = front-of-pack; BOP = back of pack

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MARKETING AND ADVERTISING TO CHILDREN

Extend responsible advertising and marketing initiatives to children globally

Tackling obesity and improving children's diets is a complicated and challenging task that requires the effort of all segments of society. Responsible advertising and marketing to children is a critical part of our commitment to address this challenge and to promote balanced diets and healthy, active lifestyles. In 2008 IFBA member companies voluntarily developed a strategy designed to change how and what they advertise to children under 12 years of age - reducing the impact of the marketing of foods high in saturated fats, trans fatty acids, sugars or salt and increasing children's exposure to foods and beverages compatible with a balanced diet and healthy, active lifestyle. This approach centers on three actions:

- Adopt and implement IFBA's Global Policy on Advertising and Marketing Communications to Children (the IFBA Global Policy);
- Encourage other industry players to adopt and implement regional and national pledges, based on the core tenets of the IFBA Global Policy, restricting advertising and marketing to children; and
- Monitor and evaluate compliance and trends.

This approach has proven effective in helping to drive change in the marketplace and in improving nutrition of foods marketed to children. In December 2012, the U.S. Federal Trade Commission (FTC or the Commission), in a review of food marketing to children and adolescents, noted that:

"[It] believes that food industry self-regulation is beginning to bring about important changes in the marketing of foods to children under 12. The Commission encourages companies to continue to enhance and expand upon these efforts." ²⁷ The FTC also noted the overall improvement in nutrition of products offered to children:

"For child-directed marketing, the overall nutritional profile improved from 2006 to 2009. Calories and the food components to reduce (sodium, sugar, saturated fat, and trans fat) all decreased, while all of the nutrients to increase showed improvements (namely, fibre, whole grain, calcium, Vitamin D, and potassium)...Overall improvements were due to a combination of reformulation of existing products and the introduction of new products in place of products either taken off the market or no longer advertised to youth." 28

The Commission also recognized that industry's efforts had continued since the 2009 data was collected:

"with the result that the overall nutritional profile of the children's food marketplace has continued to improve. The Commission commends industry for these efforts."

About IFBA's Global Policy on Advertising and Marketing Communications to Children

IFBA's Global Policy is in line with the aims of the 2010 WHO Set of Recommendations on the Marketing of Foods and Non-alcoholic Beverages to Children, and provides minimum criteria for advertising and marketing communications that are paid for, or controlled by, IFBA companies in every country where they market their products.

Members commit either to only advertise better for you products i.e. products that meet specific criteria based on accepted scientific evidence and/or applicable national and international dietary guidelines, or not to advertise to children under 12 years of age. ²⁹ Companies also commit not to engage in product marketing

²⁷ Federal Trade Commission, *A Review of Food Marketing to Children and Adolescents: Follow-up Report*, December, 2012, 4. This report is a follow-up to the Federal Trade Commission's 2008 report: *Marketing Food to Children and Adolescents: A Review of Industry Expenditures, Activities and Self-Regulation.*

²⁸ Ihid 30-3

²⁹ Dietary guidelines include, for example, CODEX Alimentarius (created by WHO and the Food and Agriculture Organization of the United Nations (FAO)), the U.S. Food & Drug Administration (FDA), the U.S. Institute of Medicine (IOM) and EURODIET, (a project funded by the European Commission).

communications to students in primary schools, except if requested by, or agreed with, the school administration for educational purposes.

Each year, IFBA engages a third-party to monitor and report publicly on members' compliance with IFBA's Global Policy. (See section on Monitoring & Evaluation of IFBA's Global Policy on Advertising and Marketing Communications to Children)

In 2011, IFBA's Global Policy was strengthened to:

→ cover more television programming - the policy now applies when 35% or more (versus the original commitment of 50%) of the audience is under 12 years of age; and

→ improve coverage in the online world - the policy now applies to all marketing communications on company-owned (corporate and brand-owned) websites in addition to third-party websites.

The enhanced commitment was implemented by members during 2012 and by the end of 2012 most members had applied this enhanced policy globally. Third-party monitoring exercises will measure against this new enhanced policy beginning in 2013.

Regional & national pledges restricting marketing to children

Regional and national pledges, based on the core tenets of the IFBA Global Policy, have been launched around the world to encourage regional and local food companies that are not members of IFBA to improve the types of products advertised to children and to promote balanced diets and healthy, active lifestyles.

In 2012, Singapore joined the list of pledge countries. Pledges now cover 47 countries including the 27 countries of the European Union, the six countries of the Cooperation Council for the Arab States of the Gulf, Australia, Brazil, Canada, India, Mexico, Peru, the Philippines, Russia, Singapore, South Africa, Switzerland, Thailand, Turkey and the United States.

In December, 2012, the Ministry of Health (MoH) of Malaysia supported an industry proposal for the implementation of a new policy on Marketing to Children via self-regulation by the food industry. The scope of implementation for this policy is based on the IFBA Global Policy on advertising to children. The Federation of Malaysian Manufacturers (FMM) will come forward in August 2013 with an industry-wide pledge to cease advertising food products to children under 12 years unless they meet company-specific nutrition criteria. FMM will report on progress and compliance to this pledge at subsequent National Food Safety and Nutrition Council Meetings annually.

Pledge signatories agree to monitor compliance with the pledges. ³¹ In some countries, pledge signatories have also conducted monitoring studies to gauge the impact of the pledge on advertising and the types of foods marketed to children. (See Regional and National Pledges: Impact Monitoring Studies)

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A transition period was granted to PepsiCo until 31 December 2013 to ensure global implementation.

³¹ To read the compliance monitoring studies, <u>click here.</u>

Monitoring & Evaluation of IFBA's Global Policy on Advertising and Marketing Communications to Children

2012 Key Results

In 2012, IFBA commissioned Accenture Media Management (Accenture), a leading provider of media auditing services, and part of the Accenture Group, a global management consulting, technology and outsourcing company, to review members' compliance with the global policy.

For the 2012 monitoring exercise of child-directed media, Accenture reported an overall compliance rate of 98.9 percent for television advertising in a geographic sample of seven markets and 100 percent for print and internet advertising in a geographic sample of five markets.

Methodology

The monitoring exercise is performed on a random sample of companies' advertisements in the three most used media – television, print and internet (which account for between 80 percent and 95 percent of food and non-alcoholic beverage marketing communications spend in all markets worldwide) – and provides a "snapshot" of a globally representative sample of markets. To ensure transparency and credibility, all the media data analysed is obtained from sources independent of IFBA companies and their associated media agencies. The monitor chooses the period to be monitored after the advertising has already been purchased by the companies.

Print: Print advertising was monitored in five markets - Brazil, China, Russia, Singapore and South Africa. 57 publications in these markets were identified as targeting children under 12 years of age. Age-specific readership data for children's print titles is not available. Therefore, Accenture prepared a list of children's titles in each of the five monitored markets on the basis of national genre classifications used in the media industry. Accenture purchased the magazines from local newsstands and performed a spot check. Using advertising data from

national monitoring agencies (databases of all advertisements placed in print titles), Accenture reviewed these publications for products that IFBA members committed not to advertise to children under 12 years of age. Any advertisement for such products in any of these titles would be deemed non-compliant.

Internet: Internet advertising was monitored in five markets - Brazil, China, Russia, Singapore and South Africa. 87 websites in these markets were identified as targeting children under 12 years of age. There is no reliable demographic audience data for many websites. Therefore, a list of children's websites in each of the five markets monitored was developed by Accenture to represent a sample of child-oriented websites. The websites were accessed over a three-week period during the second half of 2012 to check for advertising for IFBA member's products not meeting their nutritional criteria. Any advertisement for such products on any of these websites would be deemed non-compliant.

Television: Accenture examined 448,144 advertising spots aired by IFBA members on more than 200 channels over a three-month period (1 July - 30 September 2012), in seven markets -China (Shanghai region), Colombia, Malaysia, Russia, Saudi Arabia, South Africa and Thailand. Advertising spots for products that do not meet IFBA members' nutritional criteria, where applicable, were identified on the basis of full product lists submitted by each member company for each market. For those member companies that do not apply nutritional criteria and do not advertise any products to children under 12 years of age, all spots were included. For all these spots, audience composition at the time each advertising spot was aired was analysed on the basis of national ratings data. This allowed Accenture to identify advertisements aired at a time when a majority of the audience were children under 12 years of age. 32 All advertisements for products IFBA members committed not to advertise to

³² In Colombia, Malaysia and Saudi Arabia the age threshold in the data analysed by Accenture was under 15 years of age instead of 12 years. In Thailand the age threshold in the data analysed by Accenture was under 14 years of age instead of 12 years. This is due to the fact that these are the demographic segments used by data providers and available to media agencies in those countries.

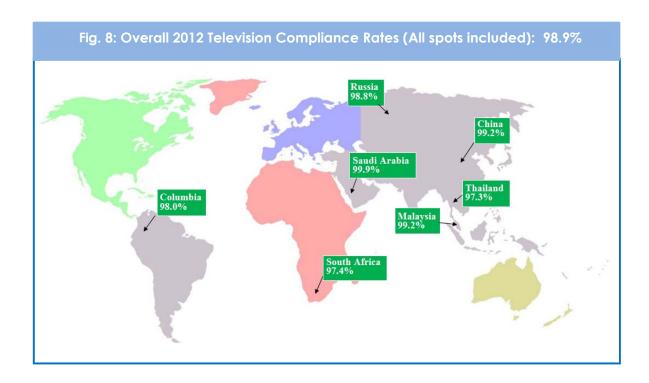
children under 12 years of age, aired at times when the audience was composed of a majority of children under 12 years of age, were deemed non-compliant. All instances of non-compliance were reported to the IFBA member concerned in order for corrective action to be taken, as appropriate.

4,769 instances of non-compliance were identified. Of these, almost all (4,743) were advertising spots aired at night time (21:00-05:00) or advertising spots with a small audience (i.e. less than 1 Gross Rating Point (GRP). GRPS measure the size of an audience.

For statistical reliability, advertising spots below 1 GPR are typically excluded, as the small sample of households can result in statistical anomalies rendering the demographic analysis of the audience unreliable.

Nonetheless, for the sake of transparency, these advertising spots were included in the analysis and considered to be non-compliant. All instances of non-compliance were reported to the IFBA member concerned in order for corrective action to be taken, as appropriate.

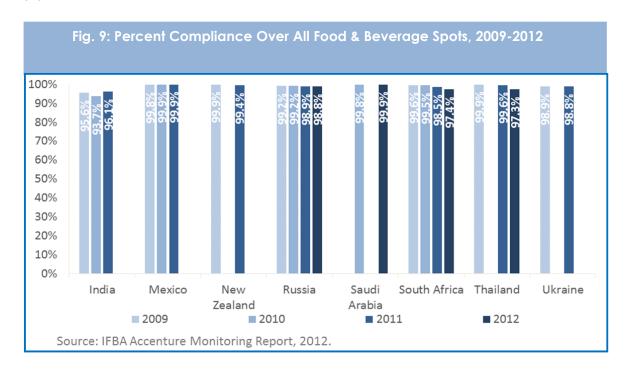
> To read the full report, click here



Measuring change: Trends in IFBA Member's TV Advertising

In order to measure the change in members' advertising compliance rates over time, Accenture compared the 2012 results with those of the three previous monitoring exercises conducted in 2009, 2010 and 2011. Compliance rates between 2009 and

2012 are stable for all countries, with only marginal variations from year-to-year. Since 2009, the television advertising compliance rate has been above 93 percent in every market analysed - averaging 98.17 percent in 2009, 96 percent in 2010 and 97.6 percent in 2011.



Regional and national pledges: Impact monitoring studies

Pledge members measure the change in the balance of child-directed food and beverage advertising in order to assess the impact of the pledge and the individual commitments. Impact monitoring studies following introduction of select regional and national pledges are showing a major reduction in the marketing of products high in fat, sugar and salt to children under 12 years. For example,

Australia: In May 2012, the AFGC released the results of an independent study undertaken in 2011 which indicated that the Responsible Children's Marketing Initiative was having an effect on reducing children's exposure to high fat, sugar and salt food and beverage (non-core foods) advertising. The study found that advertisements for non-core foods had fallen to 1.6 percent of all food and beverage advertisements targeted to children under the age of 12 years on children's television in Australia across eight channels and 0.7 percent across three channels. According to Commercial Monitors, an Australian advertising information service, this represented a 60 percent decrease compared with 2010. The data analysis covered free-to-air television (including digital TV) from five major capital cities - Adelaide, Brisbane, Melbourne, Perth and Sydney - over a 24 hour period over 92 days.

> To read the full report, click here

EU: Over the past four years, monitoring of television food advertising in the EU by companies participating in the EU Pledge, including IFBA members, confirms a downward trend in children's exposure to television food advertising since 2009. The four year average (2009 – 2012) shows:

→ a 83.5 percent reduction in exposure to advertising for products that do not meet nutrition criteria (in children's programmes defined as those with an audience composed of 35 percent of children under 12 years of age);

- → a 48.5 percent reduction in exposure to advertising for products that do not meet nutritional criteria overall (i.e. in all programme on all channels at all times); and
- → a 29 percent reduction in exposure to advertising for all EU Pledge member companies' products (regardless of nutritional criteria).

> To read the full report, click here

U.S.A.: In connection with the publication in December 2012 of the 2011 compliance and progress report for the Children's Food & Beverage Initiative, the Council of Better Business Bureaus also conducted a 2012 in-house review of advertisements aired in children's programming. This review found that almost all of the CFBAI participants' advertisements were for foods containing fruit, vegetables, non/low-fat dairy, whole grains, or at least a "good source" of what the 2010 U.S. Dietary Guidelines for Americans call "nutrients of concern" because they are not consumed in sufficient amounts (calcium, fibre, potassium and vitamin D).

> To read the full report, click here

PROMOTION OF PHYSICAL ACTIVITY AND HEALTHY LIFESTYLES

Raise awareness on balanced diets and increased levels of physical activity

Physical activity is vital to the health and wellbeing of consumers and essential in helping maintain energy balance – calories in and calories out.

IFBA members have a long and successful history of collaboration with public authorities, public health professionals and other stakeholders – at the global, regional, national and community level - in programmes aimed at increasing the understanding of the role nutrition, eating habits and physical activity plays in a healthy life.

We support school-based programmes to raise nutrition, health and wellness awareness of school-age children and help teachers and families to promote healthy eating and active living in children. We support community-based and workplace programmes and targeted marketing and education campaigns that raise awareness, and encourage consumers to adopt healthy habits and physical activity. We sponsor sporting and other athletic events and activities promoting physical activity among children and young people.

The U.S. FTC recently commented that over the past decade, children and teens have reduced their average daily caloric intake and their consumption of total fat, sodium and sugar, and increased their consumption of fibre, calcium and fruit consumption, a shift that the FTC has said, "may be attributable in part to the food companies' healthy eating initiatives and increased youth awareness of healthy eating." 33

These programmes number in the hundreds and span the globe. Following is a very small sample of new developments or new initiatives launched in 2012.



Italy: Kinder+Sport and FIPAV: Schools Volleyball

Ferrero promoting a healthy lifestyle through sports

In partnerships with the Italian Ministry of Education (MIUR), the Instituto di Medicina dello Sport (F.M.S.I di Torino), the Italian Volleyball Federation (FIPAV), CONI and other local institutions, Ferrero continued its support for the Kinder+Sport project - promoting a healthy lifestyle through the dissemination of sport as a daily activity. In 2012, the project touched more than 3 million young people, across Europe and in non-European countries — Brazil, China, Hong Kong, Israel, Russia, and Taiwan. With the aim of assessing the effect of sport on body mass index (BMI) over the medium- to long-term, Ferrero committed

EUR 250,000 to a five-year monitoring research project in partnership with the F.M.S.I di Torino. Monitoring has been carried out each year since 2009 on children attending schools involved in the Kinder+Sport Mini Volleyball Project (Kinder+Sport and FIPAV). The 2012 monitoring report confirms and reinforces the 2011 positive trend showing that children involved in Kinder+Sport and FIPAV have better coordination and speed skills compared to children of the same age not involved in the project. In 2012, a check to measure skinfold was added to measuring the BMI index. As for previous years, there was a slight, but steady decrease in BMI. The full research results of the five-year monitoring exercise will be available in the school year 2014-2015.

IFBA PROGRESS REPORT 2012

³³ Federal Trade Commission, *A Review of Food Marketing to Children and Adolescents, Follow-Up Report,* December 2012, 11-12.

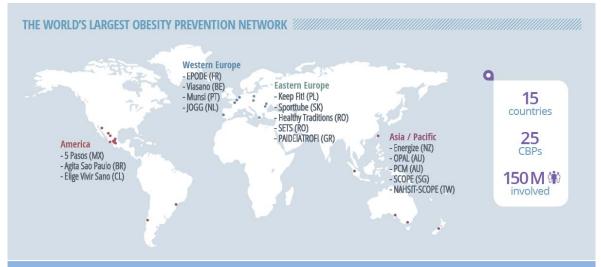


Fig. 10: Epode and EIN Worldwide Network

EPODE and EIN: Supporting obesity prevention efforts worldwide

With more than 20 years of experience and a rigorous scientific evaluation, the EPODE (Together Let's Prevent Childhood Obesity) methodology has been recognized by the international scientific community as innovative in tackling the problem of childhood obesity. Today, more than 25 large school community programmes are running in more than 500 cities and towns impacting more than 156 million people around the world.

Building on the success of EPODE, and EEN (the EPODE European Network), in 2012, Ferrero and Mars extended their support to a new three-year pan-European project, EPHE (EPODE for the Promotion of Health Equity). Co-funded by the European Commission's DG Sanco, this project focuses on the reduction of health inequalities in diet and physical activity. It aims at analysing the added value of the implementation of an adapted EPODE methodology and exploring further opportunities for the implementation of EPODE in new countries. Other partners in the project include the WHO Regional Office for Europe, the Free University of Amsterdam (VUA),

the University of Gent (Belgium), University of Windesheim (the Netherlands), University of Porto (Portugal), University of Zaragoza (Spain), University of Athens (Greece), Directorate General de Saude (DGS), the Spanish Nutrition Foundation (FEN), EPODE France, JOGG Covenent on Healthy Weight (the Netherlands), EPODE Communautre de Communes Flandre Lys, Viasano (Belgium), Paideiatrofi (Greece) and the Bulgarian Association of the Study of Obesity and Related Diseases (BASORD).

The Coca-Cola Company and Nestlé are global partners in EIN (EPODE International Network), the world's largest obesity prevention network. EIN's mission is to reduce childhood obesity prevalence through sustainable strategies to support based pm Community-Based Programmes (CBPs). In June 2012, EIN hosted the first Global Obesity Forum, bringing together more than 100 obesity and public health experts, policy makers, health and education professionals, and industry from 25 countries, including the U.S. Centers for Disease Control, PAHO and the EU Commission to discuss the dynamics of community-based obesity prevention programmes.



U.S. veteran leading a workout, Chicago, November 2012

The Coca-Cola Foundation helps Chicago Get Fit

In November 2012, the Cocoa-Cola Foundation provided USD 13 million in grant support for fitness and nutrition programmes across the U.S., including a USD 3 million, multi-year grant to the Garfield Park Conservatory Alliance in Chicago, creating the "Park Families Wellness Initiative" – the city's largest affordable wellness programme. The initiative which will be run by the Chicago Park District (CPD), will allow the Park District to hire U.S. veterans to teach military-style fitness classes called "Coca-Cola Troops for Fitness." The programme, in conjunction with the CPD's "Fund with Food" nutrition education curriculum, will be available in more than 60 community facilities reaching 125,000 residents annually by 2016.

Kellogg's and nutrition education in U.S. schools

In the U.S., Kellogg's nutrition experts offer several types of support for schools, including providing products that meet the U.S. Department of Agriculture's School Meal regulations for nutrition; supporting School Nutrition Professionals with relevant tools, programmes and education; and being Patron members of the School Nutrition Association. The company's "build a better plate" programme teaches schoolchildren about MyPlate, which helps individuals follow nutritional recommendations of the 2010 U.S. Dietary Guidelines and build better eating habits. Lunchroom materials show children the nutritional value of the foods they are choosing in a simple and interesting way. The programme has been implemented at more than 800 schools across the U.S.





Los Angeles, U.S.: Giving students a lesson on nutrition and heritage in the garden

PepsiCo supports edible teaching garden

In partnership with LA Plaza de Cultura y Artes, the

PepsiCo Foundation supports the "Edible Teaching Garden and Culinary Arts Program". Located in the heart of Los Angeles, the grassroots programme is centered on a 30,000 square foot garden and aims to teach Mexican and Mexican-American children about the nutritional value of fruits and vegetables, while discovering Mexican-American history and culture. The programme also provides daily food and nutrition classes to children living on the outskirts of Los Angeles, often below the poverty line. Furthering PepsiCo's commitment to helping people lead healthier lives, the programme challenges children to take ownership of their health through food choice, and has touched more than 6,000 students to date.



IAAF/Nestlé Kids' Athletics event in Barcelona, November 2012

Nestlé supports worldwide development of children's athletics

In January 2012, Nestlé signed a multi-year partnership with the International Association of Athletics Federations (IAAF) for the Kids' Athletics Programme. The global initiative encourages school

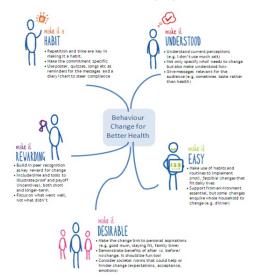
children to participate in athletics and educates them about sport and a healthy lifestyle. Nestlé's support for Kids Athletics complements the company's Healthy Kids programme, a global initiative which promotes nutrition education, a balanced diet, greater physical activity and a healthy lifestyle to children between the ages of six and 12. It reached an estimated 5.4 million children in 64 countries in 2012. Created in 2005, the IAAF Kids Athletics Programme had reachd a cumulative audience of 1.5 million children across 100 territories by the end of 2011. Nestlé's sponsorship will further boost the programme allowing the IAAF to set up new Kids Athletics programmes or extend existing ones and provide additional training for athletics lecturers and coaches. In 2012, Kids Athletics was activitated in 21 countries.

Unilever collaborating for better health

Creating a sustainable future will require fundamental changes in attitudes and behaviours across society. In acknowledgement of this challenge, Unilever organized a "Behavior Change for Better Health" symposium in June 2012. Public health and behaviour change experts joined Unilever scientists, technologists, marketers and management, to discuss strategies for how to encourage consumers to make positive changes in nutrition, hygiene and sustainability. Over two days, participants discussed: key challenges in achieving behaviour change for better health (health transition; sustainability, the consumer and lifestyles; and the prevention of nutrition and physical activity-related diseases); the art of putting theory into practice (how multi-disciplinary science can be deployed in designing, implementing and measuring behavioral change intervention; the role of technology and products as drivers of change); and the role of collaboration (between industry, governments and NGOs for creating effective behavior change.

INSPIRING SUSTAINABLE LIVING

Five levers to make people act





General Mills and Champions for Healthy Kids

The "Champions for Healthy Kids" programme is a grassroots approach to help improve the nutrition and physical fitness behaviours of America's youth. Since 2002, this programme has distributed more than \$5 million in grants to non-profit organizations reaching over 1 million youth across the United States. The programme is a partnership between the General Mills Foundation, the Academy of Nutrition and Dietetics Foundation and the President's Council on Physical Fitness, Sports and Nutrition.

Grupo Bimbo promoting healthy lifestyles

Grupo Bimbo is committed to promoting healthy lifestyles based on getting physically active and eating right. During 2012, the company promoted approximately 67 events or programmes impacting more than 1 million people. These programmes included activities in Latin America -"Bimbo Honduras Junior soccer, "Lose to win" in El Salvador, the "Bimbo Cup" in Uruguay, and in Argentina, the 8K Marathon at the University of San Andres ABA and National Nutrition Days. In Mexico, the company sponsored Bimbo Junior Soccer: Interschool Seven-A-Side Children's Soccer Tournament; ¿Estás en el Juego? (Are You in?) a weight reduction programme and "Barcel moves your world." Eleven of the 67 programmes focused on promoting healthy lifestyles within the company, including a tobacco cessation programme in the U.S. and reached more than 100,000 associates.





Mondelēz International and Health in Action

In January 2010, Mondelez International partnered with INMED Partnerships for Children (INMED) to deliver a school-based health and nutrition programme, "Health in Action", to youth in Northeast Brazil. The four-year programme reaches 675,000 people — including over 160,000 school children (ages 5 - 14) who learn about the importance of good nutrition, physical activity, basic hygiene and sanitation. Working closely with the local and regional Departments of Health, INMED trains volunteer community health agents — who are vital to linking families with the public health system — in nutrition, food safety and oral health. In spring 2011, INMED added "Bate-Bola", a youth sports programme, and is working to promote and encourage healthy habits through high quality sports and physical education in schools. Programme results to date:

- improved nutritional intake 100 percent of participating schools have either large scale full gardens or smaller container or suspended gardens that are managed by the children. Among schools with full gardens, over half harvest enough to incorporate fresh produce into daily school meals;
- improved Body Mass Index (BMI) 65 percent of children improved their BMI, with one third achieving normal BMI;
- decreased anaemia average anaemia rates reduced from one in five children to one in ten children;
- decreased parasitic infections reduced in children By 85 percent; and
- increased nutrition and health living knowledge increased awareness and understanding of good nutrition and active lifestyles among children by 21 percent.

> To learn more, <u>click here</u>

Mars and the Olympic Youth Run in Poland

Since its beginnings in 1994, Mars has been supporting the annual Youth Olympic Run, a large mass sports event for children and teenagers from the area of Sochaczew, Poland. The Olympic Youth run is intended to motivate children and teenagers to be physically active and aims to promote the Olympic spirit among young people. This event, which is part of Mars' long-term strategy to create strong corporate social responsibility, sees Mars partnering with local authorities, local businesses and sports associations to promote healthy lifestyles to young children by encouraging them to take up running. The programme involves 3,500 children and teenagers, including at least 200 disabled children, a mini-marathon (distance of 4,219.5 m) for runners 16 years of age and over, and additional outdoor activities for children who do not take part in the run. The initiative also focuses on educating and motivating disabled young people to choose a healthy lifestyle and become as active as their abilities allow, and to create a trusted group of Mars volunteers to work with these young people throughout the year.



PARTNERSHIPS

Actively support public-private partnerships that support the WHO's Global Strategy on Diet, Physical Activity and Health

By 2050, the global human population is expected to exceed nine billion. Currently, 12.5 percent of the global population, or one in eight people, are undernourished – the vast majority of whom live in developing countries, where the prevalence of undernourishment is estimated at 14.9 percent. ³⁴

With the global demand for food, feed and fibre set to nearly double there is an urgency about how to feed the world. Producing 70 percent more food for an additional 2.3 billion people by 2050 while combating poverty and hunger; using scarce natural resources more efficiently and adapting to climate change are the main challenges facing world agriculture. ³⁵

Responding to these challenges will take investments in innovation, research and development, in affordable technologies and in smallholder farmers, who are essential to stable, productive and equitable agricultural development. In many regions fewer people will be living in rural areas and even fewer will be farmers. Making farms more productive and more resilient through sustainable and genetic intensification systems - increasing crop yields with improved nutrition levels and resistance to disease and climate change, while using less water, pesticides and fertilizers and lowering greenhouse gas emissions is critical.

Working in partnership with governments, academic and scientific communities, nongovernmental organizations, communities and farmers, IFBA members are committed to implementing policies and practices that advance the goals of sustainable agriculture, improve the livelihoods of smallholder farmers, secure the stability of rural communities and help ensure the future of the world's food supply.

In this section we present five case studies from IFBA members illustrating these efforts:

- → Ferrero and its hazelnut business development and procurement strategy.
- → **General Mills** and its work mapping the oat genome and improving the health profile of cereals with whole grains.
- → Mars and its efforts to secure the future of cocoa farming.
- → Mondelēz International and its initiatives to secure the long-term stability of the cocoa and coffee supply chains.
- → PepsiCo and its sustainable farming initiative, an on-farm assessment and verification programme.

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³⁴ Food and Agriculture Organization of the United Nations, The International Fund for Agricultural Development and the World Food Program, *The State of Food Insecurity in the World*, 2012.

³⁵ Food and Agriculture Organization of the United Nations (FAO), "How to Feed the World in 2050," presented to a high-level expert forum, Rome, October 12-13, 2009.

CASE STUDY: Ferrero and Hazelnut Business Development







Ferrero is one of the world's largest users of hazelnuts. Many of its most well-known products, such as Nutella, Ferrero Rocher and Kinder Bueno, contain hazelnuts. The majority of hazelnuts used in Ferrero products are sourced from Italy and Turkey, which together cover about 85-90 percent of worldwide production. Chile and Georgia are among the main emerging countries where a major increase in hazelnut cultivation has been experienced during the last five years.

In early 2000, with a view to diversifying its hazelnut procurement strategy, Ferrero launched the "Hazelnut Business Development Unit" (HBD), founded with the objectives of developing hazelnut cultivation, establishing long-term partnerships with producers and implementing development projects with local governments, financial institutions and private investors.

HBD operates through two business models. Ferrero either purchases land directly where hazelnuts can be cultivated and processed

through its own techniques and resources, or supports third-party operators intending to independently develop cultivation projects. In this second model, Ferrero sells to local producers different varieties of selected hazelnut plants at cost, provides technical and agronomical consulting support and enters into longterm contracts for the purchase of the hazelnuts. Presently, HBD operates in Argentina, Australia, Chile, Georgia and South Africa.

HazeInut Plantations

In Argentina, 300 hectares of hazelnut plantation have been established in the lower Rio Grande valley, and a nursery having 300,000 plants/year production capacity is operating to develop outsourced hazelnut farming.

The Chilean business, established in 1996, presently manages about 3,000 hectares of hazelnut orchards, a nursery of 1 million plants production capacity and post-harvest facilities (dryers) for a capacity of 300 tonnes/day. Due to the promotion activity of Ferrero (operating locally as "Agrichile") about

10,000 hectares have been planted by private farmers, who will supply Ferrero through long term procurement contracts.

The hazelnut farming business in South Africa was established in 2010, with the objective of developing the cultivation of hazelnuts through cooperative projects with the support of local governments and local investors. Today, 600 hectares of hazelnut plantation are under development and it is expected to start, by 2014-2015, a promotion activity aimed at developing hazelnut farming in the region.

Historically, the country of Georgia is acknowledged as one of the first countries where this tree was cultivated, with its dozens of unique local varieties, old traditions of cultivation and hazelnut-based recipes which are part of the national cuisine. Local growers have been supplying Ferrero with hazelnuts since 1997. In 2007, following researches carried out by HBD's team in the Black Sea. Ferrero established its own hazelnut production centre in western Georgia. The 500 hectares originally cultivated with local varieties in 2007

have increased to 3,400 hectares and a nursery has been established for research and development.

Ferrero supports the Georgiabased "Economic Prosperity Initiative" (EPI), a four-year programme funded by the U.S. Agency for International Development (USAID) and aimed at increasing Georgia's growth and competitiveness, including in the hazelnut sector. In 2012, with a shared vision to assist hazelnut production and increase rural incomes in the country, Ferrero and EPI formed the "Global Development Alliance" (the Alliance) for the design and implementation of a joint hazelnut training programme for small-holder farmers. The Alliance focuses on introducing modern technologies and best practices in hazelnut production tailored specifically to small-holder farmers. The partnership is designed to assist more than 2,100 hazelnut farmers increase both the quantity and quality of production, ultimately resulting in higher prices for their products and increased incomes.

In furtherance of Ferrero's commitment to minimize the environmental impact of its operations, from 2007, the company committed to establish and manage plantations of hazelnuts in Georgia with a view to certify their CO₂ sequestration.

Established in accordance with the methods developed under the 1997 Kyoto Protocol

framework and UN Framework Convention on Climate Change guidelines, and through responsible farming practices, Ferrero's plantation was certified by the German organization TÜV SÜD in 2011 and in 2013, providing the company with approximately 500,000 tonnes of verified emission reduction credits. Ferrero also committed to ensure that 10 percent of the total area it owns in Georgia will be managed as a natural conservation area with an undertaking to respect, enhance and preserve plant and animal biodiversity. Ferrero expects to extend the carbon credits project to other areas where the company has farming businesses.

Ferrero has been sourcing hazelnuts from Turkey for more than 30 years. The company works closely with its various local suppliers and national authorities on initiatives designed to ensure high quality and safety standards, to promote environmentally sustainable sourcing and to improve labour conditions and production practices. The Turkey sustainability project, involves two phases: the development of responsible sourcing standards, an audit methodology and reporting protocols, followed by an implementation phase which will assess labour practices among hazelnut farmers and processors and encompass environmental performance and economic transparency indicators through field visits. To provide independent

verification of Ferrero's efforts, the company is working with SCS Global Services, a leading global provider of third-party scientific certification, auditing and testing services focused on the development of science-based standards in support of sustainable development. ³⁶

HBD has implemented longterm partnerships with some of the world's leading scientific institutions, including: Rutgers University (New Jersey, U.S.), the U.S. Department of Agriculture/Agricultural Research Service Lab (Texas), Turin University (Italy), Padua University (Italy), Milan University (Italy), Fruit Tree Research Centre (Rome, Italy), **Edmund Mach Foundation** (Trento, Italy), Fruit Tree institute (Tbilisi, Georgia), Cooperative Unicoque (France) and numerous local growers and nurseries, with the goal of becoming a centre of excellence for research and development on hazelnut production and harvesting. The research projects explore the cultivation of new hazelnut varieties more resistant to abiotic and biotic factors, the acceleration of the production process and more efficient cultivation systems.

With a focus on finding quantitative traits that could be expressed for a higher resistance to pathogens and increased productivity Ferrero collaborates with

IFBA PROGRESS REPORT 2012

³⁶ For more on SCS Global Services, <u>Click here.</u>

Prof. T. Molnar of Rutgers University in his high level breeding experiment on Georgian hazelnut varieties. The study is the first of its kind on Georgian germoplasm and is set to bring enormous improvement to hazelnut performance, due to the number of trials in a multi-year project. Similarly, Ferrero is collaborating with Prof. R. Botta of Turin University in defining molecular markers that will lead to a better understanding of the dynamics occurring in the interactions between the tree and the environment.

Sustainable and Ethical Sourcing

Ferrero is committed to sustainable and ethical sourcing and has introduced a strategy and plan to achieve this before 2020 for all the main ingredients used in its products: cocoa, coffee, palm oil and hazelnuts. The plan also aims to improve the living conditions of farmers in certain key developing areas of the world. The company expects, over time, that this strategy will contribute to increased productivity from the same harvesting sources, enhanced farmers' skills, and help to address climate change challenges.

Ferrero's "Code of Business Conduct", which governs its relationships with its suppliers, includes clear requirements governing quality and freshness of raw materials and compliance with the principles of ethics and sustainability. To ensure sustainability

throughout the supply chain and further strengthen the company's relationships with raw material suppliers, the "Code of Business Conduct" is accompanied by "A Business Code Dialogue Engagement Plan" (the ABCDE Plan). Through the ABCDE Plan (which will be fully implemented by the end of 2013) and other accompanying measures, the company, alongside the farmers and other suppliers of its raw materials, promotes a commitment to support good farming practice, which is defined as: "the application of available knowledge to the utilization of the natural resource base in a sustainable way for the production of safe, healthy food and non-food agricultural products, in a humane manner, while achieving economic viability and social stability" (FAO, Good Agricultural Practices, June 2002).

In consultation with its Turkish suppliers, Ferrero has developed a sourcing strategy for hazelnuts which encompasses environmental, social and governance platforms and is guided by the following principles:

- ensure excellence in processing nuts in order to strictly respect freshness, quality and safety standards;
- sustain farming practices in respect of the environment and biodiversity, minimizing the use of chemicals and encouraging eco-

- sustainable farming practices;
- respect work safety and salary in full respect of all applicable laws, regulations and local rules, in addition to the requirements established by applicable International conventions;
- avoid any use of child labour, starting from the worst forms, or forced or prison labour;
- sustain the stability of farmers' income also through the application, whenever possible, of specific commercial schemes (for example, long term contracts); and
- encourage fair and transparent pricing policies for both parties in compliance with the "Principle of Independence," which provides that trading partners recognize that they are independent economic entities, respecting each other's right freely to set their own strategy and management policy, in terms of production, distribution, sales, marketing and finance, including the freedom to determine independently whether to engage or not in any agreement.

To fully implement these Principles, Ferrero has adopted a plan called "Ferrero Farming Values" (FFV), aimed at achieving, by 2020, 100 percent of hazelnuts traceability. Such plan includes detailed programmes for the various countries where the company sources its hazelnuts: it will start in Turkey during 2013 and will focus on four areas- Good Agricultural Practices, Good Social Practices, Post-Harvest Quality and Traceability. Through targeted training sessions Ferrero aims to

improve the management of the Turkish hazelnut orchard while raising awareness on the social status of seasonal workers that are involved with agricultural operations. The outreach of the multi-annual programme is to the farmers which are involved with Ferrero's operations and all the stakeholders that play a role in the complex supply chain. While collaborating with national and local authorities, Ferrero further is engaged in an International Labour Organization (ILO) project in Turkey to combat child labour in agriculture and to improve work conditions for both farmers and seasonal workers.

CASE STUDY: General Mills Securing the Future Supply of Oats





Oats are a cereal grain that provides complex carbohydrates, B vitamins, fibre and minerals such as magnesium, potassium, zinc, copper, manganese, phosphorous, iron, selenium and calcium. The grain is a good source of total dietary fibre, low in calories and high in protein. Whole grain oats also contain more lipids than other cereal crops, are rich in unsaturated fats, including essential fatty acids and contain unique antioxidants. In the food industry oats are rolled or crushed into oatmeal, or ground into fine oat flour. Oatmeal is eaten as porridge, but also used in a variety of baked goods and in many cold cereals.

The multiple health benefits of oats are well-documented, particularly for their cholesterol-lowering power. Whole grain oats have a much higher percentage of the dietary soluble fibre betaglucan – the specific fibre that is clinically proven to reduce cholesterol – than any other commonly eaten grains such as whole wheat, rice or corn.

Lowering cholesterol is known to lessen the risk of stroke and heart disease. In 1997, the U.S. Food and Drug Administration approved the use of a health claim on foods with oats saying it may reduce the risk of heart disease.

Beta-glucan has also been shown to promote a healthy digestive system, to boost defenses of the immune system against bacteria, viruses, fungi and parasites, to help reduce hypertension and control blood pressure. The fibre in cereal that contains whole grain oats may also help to reduce the risk of type 2 diabetes. Control of blood glucose and insulin levels is essential in preventing many of the complications associated with diabetes and research has shown that betaglucan helps stabilize blood glucose levels. Oats contain phytochemicals (plant chemicals) which have been associated with protection from chronic disease such as cancer.

Studies also show that the fibre in whole grain oat

products can aid in weight maintenance and/or the prevention of weight gain and subsequent obesity. In weight loss studies conducted with oats, there are also consistent reports of increased satiety.³⁷ Researchers have also found that the risk of obesity is lower - almost 50 percent - for children and teens who consumed oatmeal regularly compared with those that did not.³⁸

Oats, like all cholesterollowering agents, are most effective when consumed as part of a low-fat, high-fibre diet taken together with plenty of exercise.

Mapping the oat genome

Oat ranks as the fifth or sixth most important cereal crop in the world. Yet, production around the world has steadily

B. Burton-Freeman, "Dietary fiber and energy regulation," *J Nutr.* 130 (2000): 272S-275S.

³⁸ Dr. Christine Williams, MD, MPH, Professor of Clinical Pediatrics and Director of the Children's Cardiovascular Health Center at Columbia University and Quaker Oats, Presentation at Experimental Biology 2003, San Diego, April 11-15. Researchers analysed the study data from the National Health and Nutrition Examination Survey (NHANES) sample of 9,814 children aged 2 – 18 years old.

declined over the last forty years. ³⁹ Production in the U.S. as declined to the point where the nation imports virtually all of its oats for food usage. ⁴⁰ Historically, basic research in oats has not kept pace with research in other crops such as corn, soybeans and barley. As a result, oat production has become less economically viable relative to other production options.

General Mills is working to ensure that oats remain a sustainable and quality crop and to improve on the already positive health attributes of oats. As one of the largest users and handlers of oats in North America, the company has invested in two ground-breaking research projects with the goal of improving the health characteristics and agronomics of the crop by better understanding its genetic makeup.

Mapping the oat genome is important to the preservation of U.S. production and vital for innovation. The map will identify new ways of measuring traits and use markers to develop new varieties resistant to disease and with positive health benefits, which can aid in reducing childhood obesity, diabetes and cardiovascular disease. The results of this research will also play a critical

role in ensuring a future supply of quality oats for General Mills.

The company's research efforts began in 2009 when it funded an initiative at the U.S. Department of Agriculture to promote public research on oats in order to produce a genetic road map for the crop to be shared through a publicly accessible database for oat breeders around the world. That investment triggered investments from other groups, including the North American Millers Association and the Prairie Oat Growers Association, and the Collaborative Oat Research Enterprise (CORE) was born. With a research fund of more than USD 1.7 million and a global research partnership of more than 30 scientists from 17 institutions across Australia, Canada, Europe, South America, the U.K. and the U.S., CORE is focused on mapping specific genes in oats and developing varieties, through traditional breeding techniques, with improved nutrition and resistance to drought and pests.

In 2010, the first CORE project field plots were grown - in the U.S. (in Idaho, Indiana, Illinois, Louisiana, Minnesota, New York, North Carolina, North Dakota, Texas and Wisconsin), and in Canada (Ottawa, Saskatoon and Winnipeg) and in the U.K. - from about 600 different genotypes representing the diversity important to North American oat breeding programmes. Researchers are collecting

information from these field trials that will contribute to identifying molecular markers linked to the traits that can be used in breeding programmes. For example, several agronomic traits directly valuable to the farmer, such as yield and resistance to diseases, are being evaluated. End users such as General Mills are interested in quality traits such as beta-glucan and total dietary fibre content. Researchers are also looking at potential new traits, such as oils, fatty acids and micronutrients to boost the health benefits. Once these markers are available they can be immediately used in oat breeding programmes. An internet interface is being developed to assist in the **CORE-associated database** which will house all general project information and an interactive toolbox for molecular and breeding applications. The project will assist to merge CORE genotype and phenotype data and aims to be a valuable resource for potential areas on oat innovation.

In 2010, General Mills established a partnership with the North Carolina Research Campus (NCRC), a state-of-the-art research facility in Kannapolis, N.C., to advance the understanding of the oat genome. This public-private venture of university, corporate and government organizations is aimed at preventing, treating and curing disease through the advancement of human health, nutrition and

³⁹ E. Islamovic, USDA-ARS Aberdeen ID, "Collaborative Oat Research Enterprise – CORE Project," Presentation to POGA's 15th Annual Conference, Saskatoon, SK, December 6. 2012.

⁴⁰ CORE (The Collaborative Oat Research Enterprise) estimates this to be as much as 100 million bu/year.

agriculture. As a complex, hexaploid genome, the oat is more difficult to map than other grains. However, the collaborative research undertaken by this partnership has advanced the understanding of the oat genome to the point that it equals that of other grains such as wheat and barley. The project has paired more than 80 years of agricultural research expertise at General Mills with the cutting-edge technology and genomic and bioinformatics expertise at the NCRC. Based on this successful and ongoing research, General Mills is currently working on additional projects at the NCRC to identify solutions that could improve the nutrition of food, including whole grains and vegetables.

Improving the health profile of cereals with whole grains

General Mills is committed to providing people with nutritious foods that - when combined with exercise and activity - can help them to live healthier lives. In 1998, the company created the Bell Institute of Health and Nutrition, whose mission is to influence the development of quality products that nourish lives and contribute to healthy living. Working with leading scientists from universities around the world, the Bell Institute's staff of scientists and registered dietitians is committed to advancing the knowledge of health and foodservice professionals through research in nutrition

and health and continuing education programmes. The Health & Wellness Center of Excellence was established in 2005. In the same year, the company began to systematically measure improvements in the health profile of its products.

Improving the health profile of its products is integral to General Mills' success as a company. Nearly 70 percent of the General Mills U.S. retail sales volume has been nutritionally improved since 2005. Product improvements are measured against an internal "health metric" which looks at:

- increasing nutrients such as whole grain, fibre or vitamins and minerals by at least 20 percent;
- increasing key food groups such as fruits, vegetables, low- or nonfat dairy, to reach at least a one-half serving;
- reducing calories, fat, saturated fat, trans fat, sugar or sodium by 10 percent or more;
- formulating or reformulating a product so it qualifies for government-approved nutrient or health benefit claim; and
- formulating or reformulating a product to meet specific internal requirements, including limiting calories.

In the single biggest healthdriven product improvement in the company's history, in 2005, General Mills began a multi-year reformulation effort to convert its entire line of Big G cereals - Cheerios, Wheaties, Fibre One, Total, Trix, Kix, Lucy Charms, Monster, Chex, Cascadian Farm and Cinnamon Toast Crunch - to include at least 8 grams of whole grain per serving. 41

Today, all Big G cereals have at least ten grams of whole grains, per serving, more than 20 have at least 16 grams and all contain more whole grain than any other single ingredient. In 2012, the company delivered almost 38 million whole grain servings per day, In the U.S., via Big G cereals alone – a 50 percent increase over 2005.

The company's joint venture with Nestlé - Cereal Partners Worldwide (CPW) - is also making significant improvements in the health profile of its many cereals. As the second largest cereal provider in the world, CPW has increased global consumption of whole grain by more than 3.4 billion servings since 2003. All of the CPW brands -Fitness, Cheerios, Chocapic and Nesquik - now have at least 8 grams of whole grain per serving.

As opposed to refined grains, whole grain cereals use the entire grain seed (the bran, germ and endosperm) of wheat, rye, rice, barley, corn or oats. The bran, the outer

⁴¹ "Big G" was first used in 1960. General Mills cereal packages features a new design built around "Goodness" and the white triangle was the focal point for the letter "G."

layers of the grain, contain much of the B-vitamins, minerals and dietary fibre, the germ contains B-vitamins, heart healthy oils, minerals and some protein and the endosperm, the inside of the grain, contains most of the carbohydrate and protein and smaller amounts of vitamins and minerals. The health benefits of whole grain, which play an important role in lowering the risk of chronic diseases, such as coronary heart disease, diabetes and cancer and contribute to weight management and gastrointestinal health, come from those three components working together in their natural proportions.

CASE STUDY: Mars Securing the Cocoa Future





Cocoa ranks as one of the top ten agricultural commodities in the world and provides a livelihood for between five and six million farmers worldwide. Consumer demand for chocolate, which is derived from cocoa powder made from the seeds of the cacao tree, is on the rise. But the cacao tree is under threat and production volumes and quality have consistently declined over the last decades due to a number of factors, including climate changes, aging farms, pests and diseases and declining soil fertility. However, as the demand for cocoa increases the industry expects a shortage of cocoa by 2020 if global demand continues at its current growth rate - the future of cocoa farming faces a number of economic, social and environmental challenges.42

In a highly fragmented industry, with cocoa farmers working worldwide, many in remote parts of the Americas, Asia and West Africa, addressing these challenges is difficult and requires a systematic, industry-wide

For more than a decade Mars has worked with partners across geographies, sectors and industries to empower cocoa farmers to thrive alongside suppliers and manufacturers. 2012 was a singularly important year for Mars' effort to make sustainable cocoa the industry standard by 2020. Not only were significant improvements seen in certification, productivity, community development and monitoring and evaluation, more members of the industry and other stakeholders engaged to discuss the real challenges -

and opportunities – associated with cocoa sustainability.

The Mars Sustainable Cocoa Initiative

Under the guiding principle of "putting cocoa farmers first" the "Mars Sustainable Cocoa Initiative," launched in 2009, is focused on enabling farmers to create sustainable businesses, ensuring the future of cocoa farming and improving the incomes and livelihoods of tomorrow's cocoa farmers. "The Mars Sustainable Cocoa Initiative" is working across three areas:

- certifying its entire cocoa supply and encouraging other industry players to buy certified cocoa to reach as many farmers as possible;
- investing in research to improve cocoa breeding,(including mapping the cocoa genome), farming methods, pests and disease control; and
- investing in critical cocoa sourcing regions to provide farmers the knowledge and technology they need to increase their yields, and

strategy. 43 Transforming the cocoa industry and achieving a sustainable future for the cocoa industry requires a multisectoral approach and the collective expertise and resources of governments, non-governmental organizations and industry.

⁴³ Cacao trees generally grow in regions located within 20 degrees latitude of the Equator and in three main growing areas: Africa provides 73 percent of the world's cocoa supply (from Côte d'Ivoire, Ghana, Nigeria and Cameroon); Asia and Oceania supply 14 percent (from Indonesia, Malaysia, Papua New Guinea) and 13 percent of the world's supply comes from the Americas (from Brazil, Colombia and Ecuador).

World Cocoa Foundation, *Cocoa Market Update*, March 2012.

by extension, their incomes.

Mars believes sustainability certification is the best tool industry currently has to provide consistent and continued support to reach millions of cocoa farmers at scale. The company's coca certification practices aim to go beyond existing activities relating to environmental, ethical and social issues, by introducing productivity measures that will ensure certification directly increases growers' incomes. Certification also allows the company to independently verify that the cocoa it uses is produced in a sustainable way that benefits both farmers and the environment. Mars works with three leading certification organizations - Fairtrade International, Rainforest Alliance and UTZ Certified - to help farmers achieve certification for their products and to certify the company's cocoa purchases. At the end of 2011, 350,000 farmers had been certified worldwide.

In 2009, Mars pledged to purchase 100 percent of its cocoa supply from certified sustainable sources by 2020. The company met its interim goal of purchasing ten percent certified sustainable cocoa in 2011 and exceeded its target of 20 percent in 2012, purchasing nearly 90,000 metric tonnes of certified cocoa, making it the largest user of certified cocoa in the world.

Research into cocoa cultivation has long been under-resourced, unlike some other common crops such as rice, corn and wheat where research has led to improved yields for these crops.

Estimates indicated that cocoa farmers produce just 10 percent of the output they could achieve if conditions were improved.

Mars funds and leads innovative programmes designed to advance the industry's understanding of how to increase the quality and performance of cocoa plants with the goal of ultimately helping increase growers' productivity and incomes. The company believes that in order to operate more effectively and efficiently, the industry needs to work together both to increase and share its knowledge. Mars' primary goals to advance global cocoa research are:

- to increase collaboration between cocoaproducing and cocoaconsuming regions through stronger regional links and increased contact;
- to create an effective common agenda across the industry to prioritize key issues within genetics, quality and agronomy;
- To increase funding available to cocoa researchers; and
- to enhance the publication and

dissemination of cocoa research.

This work is led by the Mars Center for Cocoa Science in Bahia, Brazil, which opened in 1982. The Centre is a hub for world-class science and collaboration and leads the company's work on cocoa breeding, agroforestry systems and biodiversity-rich environments and land rehabilitation.

As part of the commitment to furthering the industry's understanding of genetics and in an attempt to breed hardier, higher-yielding and disease-resistant cocoa trees, Mars is working on sequencing and annotating the cocoa genome in a public private partnership that includes IBM and the U.S. Department of Agriculture (USDA). In 2010, the consortium unveiled the initial results of its two-year effort. By analyzing the DNA of hundreds of cocoa trees in South America, Mars' scientists identified the genome of the so-called Matina 1-6 variety of T.cacao which many experts consider to be the progenitor of 96 percent or more of the entire cacao grown in the world. The gene sequences have not been patented. Instead, the findings were released into the public domain through the **Public Intellectual Property** Resource for Agriculture (PIPRA) and the Cacao Genome Database. The research will lead to quicker, more accurate breeding and allow farmers to plant betterquality cocoa that is healthier,

stronger, highly productive and more resistant to pests and other threats. By making the results available to the industry and scientific community, the project partners are helping accelerate future cocoa research and the application of knowledge on the ground.

Vision for Change Projects in the Soubré region of Côte d'Ivoire

Mars has developed an innovative approach to strengthening local economies and helping communities to improve their living standards - the "Vision for Change" (V4C) programme. To achieve the greatest benefits for the largest number of farmers, Mars is building Cocoa Development Centers (CDCs), in partnership with international donor agencies, governments and other stakeholders, in several cocoagrowing regions of Asia and West Africa. At these centers, best agronomic practices are demonstrated and tools, training and distribution support is provided in a smallhold farmer environment. Planting materials from CDCs are used by local farmers to establish Cocoa Village Clinics (CVCs) local nurseries that facilitate the commercial distribution of the cocoa plant, providing an additional source of income.

In 2010, Mars signed a Memorandum of Understanding with the government of Côte d'Ivoire, the world's largest cocoa producer, committing to set up 25 CDCs in the country to

reach 50,000 farmers. By the end of 2012, 17 CDCs were established in Soubré, the country's main growing region, four of which are franchised CDCs set-up by industry partners, ECOM Agroindustrial Corporation and Barry-Callebaut. In addition, five CVC operators were identified as community leaders and entrepreneurs to provide the services and materials farmers need to establish sustainable businesses.

In a landmark achievement in 2012, Mars and the Côte d'Ivoire government body Le Conceal du Café et Cacao, through the Ivorian government's innovative Public Private Partnership Platform, signed a letter of agreement, bringing industry and government together in an initiative to directly benefit communities using sustainable cocoa production as the engine for economic and social development. Previously, reaching a significant number of communities was prohibited due to the lack of infrastructure. This arrangement will directly benefit many cocoa communities, through co-investment in education, health, water, and protective environments for children and through the development of a partnership platform open for collaboration or replication by other donors and partners. Community development plans for eight areas were elaborated and 316 microprojects were validated during the year.

In 2012, a monitoring and evaluation strategy was finalized, data collection methods were developed and baseline data on the first group of CDCs was collected. Recognizing "Vision for Change" as an effective model for sector transformation, the World Bank and the Agency Françoise de Development (AFD) are complementing the ongoing efforts with their own in Soubré.

Mars also served as the lead sponsor of the World Cocoa Conference in Abidjan, Côte d'Ivoire in November 2012, which brought together over 1,200 participants from 46 countries and culminated in the adoption of a "Global Cocoa Agenda" and "Abidjan Cocoa Declaration" with the aim of moving the entire sector onto a path of sustainable development for the benefit of all stakeholders along the cocoa value chain. 44

Mars is working in a targeted way to strengthen programmes to empower women in cocoa communities which it believes is critical to ensuring that cocoa is sustainable. In the V4C programme in Cote d'Ivoire, the company has worked with women community leaders to help develop community engagement plans that will improve their lives and the lives of their families and neighbors. The company has

⁴⁴ To read the Global Cocoa Agenda and Abidjan Cocoa Declaration, click here

funded six economic development projects to train women in developing local enterprises in areas such as animal rearing and crop production, which benefits the nutritional needs of families and the income of women who sell surplus production in local markets. Building on this work, in March 2012, the company announced an

agreement with Oxfam

America for a plan of action to improve the lives of women living in villages where cocoa farming is dominant. Under the plan, Mars has committed to a set of short, medium, and long-term actions that will

help the industry evaluate and strengthen their current programmes to ensure that women are able to fully contribute to and benefit from development programmes in cocoa. ⁴⁵

⁴⁵ Andrew Harner, "Mars Chocolate and Oxfam America Agree to Intentional Approach to Empower Women in Cocoa Growing Communities," *Sustainable Cocoa Initiative*, March 26, 2012.

CASE STUDY: Mondelez International and Coffee and Cocoa Farming Projects





Mondelēz International is investing in developing sustainable farming practices for a number of its raw ingredients. Promoting sustainable farming practices delivers a number of benefits, including a growing supply of sustainable raw materials from thriving communities on the ground. Through partnership programmes with governments, civil society and commodity suppliers, the company's current efforts focus on two key crops coffee and cocoa - and on farming communities in Africa, Latin America and South Asia.

The long-term supply and viability of both coffee and cocoa is under pressure.

Consistency of supply, in terms of volume, quality and price is important for Mondelēz International's business, but the long-term stability of the cocoa and coffee supply chains are critical to the future of farmers and farm communities.

To address this, Mondelēz International launched two initiatives in 2012 designed to help secure the futures of cocoa and coffee farming communities: "Cocoa Life" and "Coffee Made Happy."
Both initiatives go beyond the purchase of sustainably-sourced ingredients. The programmes will help secure the livelihoods of the growing communities, the future of farming and the health of the planet.

Women's empowerment is an important theme in Mondelez International's programmes, as experience has shown that gender equality benefits everyone and is essential if rural communities are to thrive. Increased involvement of women in the supply base leads to improved financial management by farmers, better education for youth, more sustainable, thriving communities and, over time, reduced child labour. As a means to put its actions in writing, Mondelēz International has signed the United Nations Women's **Empowerment Principles in** support of advancing the equality of women.

Cocoa Life

Cocoa is a valuable crop that is essential to the livelihoods of millions of people worldwide. Unlike larger, industrialized agribusinesses, more than 90 percent of world cocoa production comes from small, family-run farms — and is the livelihood for five to six million cocoa farmers worldwide.

The future of cocoa farming communities is hindered by a number of challenges. In addition to growing demands to improve yields, farmers are challenged by low productivity due to limited knowledge of modern farming techniques and management skills; a lack of young people interested in becoming the next generation of cocoa farmers; limited access to finance for the purchase of input supplies and quality planting material; marketing challenges; aging trees that are past their peak cocoa pod production; decline in soil fertility; and pests and diseases which account for an estimated 30-40 percent of lost crops.

These farming challenges are part of a wider community development challenge in many cocoa growing areas, which lack the basic

infrastructure needed to enable communities to thrive in the long term. Improved access to quality, relevant education - functional literacy, agricultural livelihoods training, youth leadership and teacher training programmes - is essential to sustain cocoagrowing communities in the long-term, along with broader community development activities.

In collaboration with governments, civil society and suppliers, Mondelēz International is committed to transforming the cocoa supply chain through economic and social development and environmental stewardship in cocoa-growing communities. In November 2012, Mondelēz International launched "Cocoa Life," the company's largest and most comprehensive cocoa sustainability effort to date, designed to improve the lives of cocoa farmers, reduce the use of child labor, create thriving cocoa communities and help secure the future of the cocoa industry. The programme builds on the company's successful Cadbury Cocoa Partnerships in Ghana, India and the Dominican Republic, and draws on years of experience and expertise.

Through "Cocoa Life" Mondelēz International will invest USD 400 million over the next ten years to improve the livelihoods and living conditions of more than 200,000 cocoa farmers and about one million people in

cocoa farming communities.46 As part of this, it will invest USD 100 million in Côte d'Ivoire - supplier of approximately 40 percent of the world's cocoa and a key source of cocoa for the company - and help 75,000 farmers double their productivity, improve yields and increase their income. In Côte d'Ivoire, a multistakeholder design workshop involving government, suppliers, civil society, farmer groups and communities has informed the programme design, whose aim is to create a framework for effective collaboration among key stakeholders in the cocoa sector. And together with its partners, Mondelēz International is currently developing a set of principles to measure progress and the success of this project.

Working with the United
Nations Development
Programme, the World
Wildlife Fund and Anti-Slavery
International, "Cocoa Life"
focuses on five main elements:

- Farming: helping farmers improve their yields and livelihoods to earn larger incomes.
- Community: empowering cocoa farming families to create the kind of communities they and their children want to live in, while promoting gender equality.
- Livelihoods: Providing business knowledge and skills to create farming entrepreneurs and support farmers to increase incomes from other sources.
- Youth: working towards eliminating child labour by helping communities tackle its root causes.
 Making cocoa farming a more attractive profession for the next generation.
- Environment: protecting the landscapes in which cocoa is grown to maintain eco-systems and provide viable environments and farming land for future generations.

⁴⁶ In January 2008, the Cadbury team established the Cocoa Partnership in collaboration with the United Nations Development Programme, local governments, farmers and communities, and international nongovernmental organizations, with a mission to improve the economic, social and environmental conditions of one million cocoa farmers and their communities in Ghana, India, South East Asia and the Caribbean. The Cocoa Partnership is now active across 200 Ghanaian communities, helping create a 20 percent increase in cocoa yields, a 200 percent increase in household incomes and an 80 percent increase in government-backed development projects in the first phases of the project during 2009-2011.

Coffee Made Happy

Coffee is the second most traded commodity after oil, and the world's most important agricultural commodity. Its cultivation, processing, trading, transportation and marketing provide employment for hundreds of millions of people worldwide. And it is crucial to the economies of many developing countries and for many of these countries, exports of coffee account for more than 50 percent of their export earnings.47

Increasingly scarce resources, lack of infrastructure and development in farming communities, lack of agricultural and business skills, and the increasing pressure from the impacts of climate change - higher temperature, long droughts punctuated by intense rainfall, more resilient pests and plant diseases have made coffee supplies become dramatically more volatile in recent years. In addition, there is a lack of young people interested in becoming the next generation of coffee farmers.

As a sustainable coffee industry needs young coffee farmers to be productive and entrepreneurial drivers of society, improving the living standards of coffee producers, especially smallholders, is a priority for governments and industry. Sustainably-grown coffee can conserve wildlife, protect farm workers and help

farmers improve their incomes and quality of life.

In October 2012, Mondelēz International announced "Coffee Made Happy," an investment of USD 200 million to empower one million coffee farming entrepreneurs by 2020. The programme is focused on boosting yields, farmer skills and infrastructure in origin countries like Brazil, Colombia, East Africa, Indonesia, Peru and Vietnam. It is also an important part of Mondelēz International's goal to sustainably source 100 percent of its European coffee by 2015, as the company is more than halfway towards that goal.

"Coffee Made Happy" will help upgrade farmers' agricultural and business skills; strengthen sustainable and socially responsible agricultural practices; and improve livelihoods - helping farmers get access to basics like clean water and decent schools, while demonstrating the viability of small-scale farming for new generations.

"Coffee Made Happy" is focused on three main pillars:

- Skills: increasing yields through better farming and entrepreneurial practices.
- Society: developing a metric for measuring the company's impact on its origin communities.
- Stewardship: advancing environmental and labour protections based on 4C standards.

Building on its current relationships with Rainforest Alliance and the 4C Association and new collaborations, Mondelēz International will administer training starting in Vietnam and Peru. 48 "Coffee Made Happy" will help coffee farmers to be productive and entrepreneurial drivers of society and make coffee farming attractive from an income and pride perspective for the next generation of coffee entrepreneurs.

⁴⁸ Mondelēz International is the largest buyer of coffee from Rainforest Alliance Certified™ farms. A portion of the purchase price for the coffee beans goes back into local programmes to help farmers learn how to protect the environment and wildlife on their farms; improve conditions for workers; and improve growing practices. Mondelēz is a founding member and financial supporter of the Common Code for the Coffee Community (4C). 4C is a coalition of producers, trade, industry and non-governmental organizations aimed at improving basic producers' income and living conditions by helping famers lower their costs, improve quality and efficiency, and gain access to markets and credits.

⁴⁷ For more on the International Coffee Organization, <u>click here</u>

CASE STUDY: PepsiCo and the Sustainable Farming Initiative



As a food and beverage company that both depends on food production for its raw material and seeks to deliver nutritious, delicious foods and beverages to its consumers, PepsiCo is helping support the transition to a sustainable food future - innovating more food choices by using fewer natural resources.

Making the transition to sustainable agriculture - which seeks to integrate environmental health, economic profitability and social and economic equity - is a process and the responsibility of all participants in the system, including farmers, labourers, policymakers, researchers, producers, retailers and consumers. Each group has its own part to play and its own unique contribution to make to strengthen the sustainable agriculture community.

PepsiCo is committed to respect and responsibly use natural resources in its business and in the local communities it serves, including the application of proven sustainable agricultural practices on its farmed land. It is working across the supply



chain to ensure its practices are efficient and sustainable sharing knowledge about best sustainable agricultural practices to increase the supply of affordable crops and improve efficiency; investing in, applying and scaling new technology; researching and testing hearty new varietals of crops, such as potatoes and oats that can adapt in unforgiving climates; and providing funding, technical and business support to farmers. Through these practices, PepsiCo is raising farm productivity, increasing farmers' incomes and improving the quality of life in many communities.

In 2009, PepsiCo launched the "Global Sustainable Agriculture Policy." The policy was developed to encourage the company's growers to operate in a way that protects their land and communities. It aims to help ensure the long-term economic viability of its business and its growers.

The company's decisions, processes and actions – and those of its growers – are guided by this global policy. The policy compliments the company's "Performance with



Purpose" vision and commitment to generate shareholder value and economic growth while improving communities and driving environmental stewardship. ⁴⁹ The policy is grounded on a set of six principles:

- optimize the use of resources to improve farm productivity and eliminate the use of unnecessary resource;
- support increased farm productivity, improving crop yields and nutritional quality to meet existing and future global business growth;
- preserve and maintain soil fertility, water and air quality and biodiversity within the agricultural activities;
- enable local farming communities to protect and improve their wellbeing and environments;
- integrate approved and credible science and technology, where applicable; and
- comply with governmental laws,

IFBA PROGRESS REPORT 2012

⁴⁹ For more on "Performance with Purpose," <u>click here.</u>

regulations and industry standards.

Underpinning these six principles are six broad-based objectives covering water management, soil conservation and preservation, agrochemical management, energy management, farm economics and land management and social and community improvement. Specific, measurable goals and programmes vary by commodity, geography and business relationships. Where PepsiCo has a direct relationship with the farmer or grower, the company will implement specific programmes and measurement processes to improve overall performance. Where the company works through third-parties or agents, it will work with these partners to improve and embed best practices in their operations. 50

The Global Sustainable Agriculture Policy in Action

The company has launched a number of initiatives globally that demonstrate the Global Policy in action:

Peru Agriculture Development Center:

In 2012, PepsiCo announced the creation of PepsiCo's Agricultural Development Center (CEDAP) in Peru. The USD 3 million investment over the next three years will focus on the development of new varieties of potatoes and other tubers and roots, and benefit Peruvian farmers by creating new income opportunities through the development of new crops. The center, which is the first of its kind in Latin America, will house research on the current Peruvian varieties of roots and tubers with an ultimate goal of developing new varieties that can be used to improve the company's product portfolio. The knowledge and experience gained will be shared with other PepsiCo businesses around the world, especially those in tropical and subtropical zones similar to Peru. CEDAP will also create programmes of research on other roots and tubers, such as sweet potatoes, to develop healthier products and encourage commercial cultivation of these species in ways that preserve biodiversity. The centre will also provide innovative technical support to the 300 Peruvian potato farmers who supply PepsiCo, helping them to optimize resource use and increase agricultural production; improve plant performance and nutritional quality, maintain soil fertility, water and air quality and biodiversity in agricultural activities.

High Oleic Sunflower Sustainable Agriculture Project in Mexico:

At a time when Mexico is suffering from severe drought and water scarcity, sunflower crops are more sustainable than other crops as they use less water. The project's objective is to promote sustainable agriculture by integrating 850 low-income farmers in PepsiCo Mexico's supply chain while increasing the local supply of hearthealthy oil to advance PepsiCo's human sustainability commitment of reducing saturated fats in its portfolio. The project seeks to significantly expand sunflower production in Mexico, through a multi-year public-private partnership with the Inter-American Development Bank (IDB), the largest multilateral provider of development financing for Latin America and the Caribbean, and create a sustainable market for sunflowers - a once-thriving commercial crop which has diminished in recent years while providing technical support, training, loans and a source of income for some 850 small Mexican farmers and their families. The sunflowers will provide a source of hearthealthy high-oleic sunflower oil to be incorporated into product lines from PepsiCo's regional brands including Sabritas and Gamesa-Quaker. The public-private partnership, launched in February 2011, marks the first time a private sector organization has participated in the IDB's innovative regional trust funds for development activities.

Potato contract farming in West Bengal:

PepsiCo Potato collaborative farming is designed to provide a sustainable agriculture solution to 10,300 West Bengal farmers through potato

⁵⁰ For more on the Global Sustainable Agriculture Policy, see *PepsiCo Global Sustainable Agriculture Policy,* January 2009, <u>click here.</u>

cultivation to improve farm economics. 40,000 individuals including farmers' family members spread out across 1,460 villages in six districts of West Bengal have been impacted by tripling the potato procurement from 22,000 metric tonnes in 2009 to 60,000 metric tonnes in 2012. PepsiCo Potato collaborative farming has given assured and consistent income to farmers over the years which in turn has uplifted living standards, provided better education for children and invested back in mechanization of farming.

The Sustainable Farming Initiative

Building on the Global
Sustainable Agriculture Policy,
PepsiCo has developed a
"Sustainable Farming
Initiative" (SFI), an on-farm
assessment and verification
programme for the company's
suppliers. The SFI addresses
the three components of
sustainability: environmental,
social and economic.

The environmental pillar contains nine environmental sustainability indicators – soil, water, air, energy,

agrochemicals, nutrients, greenhouse gases, waste and biodiversity. The social pillar includes four sustainability indicators - health wellness and safety, employment conditions, employment practices and community. The economic pillar also includes four indicators - management practices, efficiency, commercial relationships and legal compliance. All indicators include detailed criteria and best practices that can be implemented to meet those criteria. To avoid duplication and leverage best practices, the SFI is designed to complement existing certification schemes, such as Rainforest Alliance and Globalgap under which a number of growers have already achieved certification.

In 2011 and 2012, 36 pilot projects were completed across 14 countries — Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Egypt, India, Mexico, Spain, Turkey, the U.K. and the U.S. to check global relevance across core commodities, including potato, citrus, oats, rice and corn crops and adaptability for

all size of growers in both mature and emerging markets.

In 2012, the SFI was peerreviewed by Ceres, a nonprofit organization whose mission is to mobilize investor and business leadership to build a thriving, sustainable global economy, and shared with industry experts, Cornell University and BSR (Business for Social Responsibility).

A web-based platform has been established that allows growers access to complete the SFI and includes a comprehensive library of definitions, explanations and solution sets used to demonstrate continuous improvement. The solution set is designed to include access to a wide range of farm-based tools, new technologies and measurement capabilities that create a continuous journey of improvement and compliance.

In January 2013, the SFI was launched in the North American market for *Frito-Lay* potatoes and will be launched across global markets for core raw materials through 2013 and beyond.



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To learn more, please visit our website at https://ifballiance.org or contact us at secretariat@ifballiance.org

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