

Nestlé Research 

POPULARLY POSITIONED PRODUCTS  
AFFORDABLE AND NUTRITIOUS

2011



# AFFORDABLE AND NUTRITIOUS

## Popularly Positioned Products (PPP)



Nestlé's Popularly Positioned Products (PPP) are one of the main growth drivers for Nestlé in the years to come. Projects we monitor showed 12.9% organic growth and sales of over CHF 11 bio in 2010. PPPs unite five fundamentals of Nestlé's vision: Nutrition, Health and Wellness; creating shared value; meeting consumer needs; R&D innovation; and lean operations.

Nestlé Research ensures that our PPP innovations for our consumers in both emerging and developed economies focus on their specific wants and needs, through nutritious, high-quality and affordable products.

Paul Bulcke  
Chief Executive Officer

PPPs are high-quality food products that provide nutritional value at an affordable cost and in appropriate formats to address the needs of some 3 billion lower-income consumers worldwide. They involve much more than simply modifying existing products and packaging.



They start with a deep understanding of target consumer needs market by market. There is no 'one-size-fits-all' solution. Today, Nestlé has grown to be the world's biggest food and beverage PPP Company in both the developed and emerging worlds. Our current PPPs spread from culinary products to beverages, to dairy and confectionery: with over 4000 products overall, sold under a number of major global brands including MAGGI, NIDO and NESCAFÉ.

Our PPP focus aims to accelerate and capitalise on this evolving opportunity. In face of competition, the strength of Nestlé Research behind our markets, our Strategic Business Units and brands gives us an edge to win with consumers and customers. Our global Nestlé R&D Network of Research, R&D and Product Technology Centres works closely with application groups in Nestlé factories to ensure continuous PPP innovation across a range of Nestlé product sectors.

This brochure outlines the Nestlé Research effort behind our Group-wide PPP activity.

Werner Bauer  
Chief Technology Officer

## The PPP Business

3 Billion Consumers and Growing 3

## Science at the Service of PPPs

Harvesting Nestlé's Heritage 4

Affordable Nutrition 4

Building Nutrition In through Food Technology 5

## Meeting the Need for Healthy Growth

PPP Infant Formula – For Complete Nutrition 6

NIDO *Bunyad* – Unleashing PPP Potential for Kids 6

LACTOGEN *Recover* – Fighting Infant Diarrhoea 7

Nestlé PPPs in Indonesia – Profile of an Emerging Market 7

## From Neuroscience to Product

The Quest for Umami Taste 8

## Taste and Pleasure

75 Million Every Day 8

NESCAFÉ Coffee for All 9

Nutritious Pleasure 9

African Delight 9

## Packaging and Distribution

The Package 10

NESTLÉ PURE LIFE Water – Simply Efficient 10

## The Nestlé Research Contribution to PPPs

Know Your Consumer Deeply 11

Localise the Opportunity 11

Nestlé Research – Driving PPP Innovation 11

### Global R&D Network abbreviations:

NRC Nestlé Research Centre  
PTC Nestlé Product Technology Centre  
R&DC Nestlé Research & Development Centre

# The PPP Business

## 3 Billion Consumers and Growing

**Nestlé has long known that understanding our consumers is vital to making products that meet their real needs. The famous MAGGI *Cube* seasoning, now 100 years old, was always such a product: affordable; nutritious; bringing taste and pleasure to consumers.**

Over the years, Nestlé has had many such examples. So what's new in Popularly Positioned Products? In brief, Nestlé decided to bring a coordinated focus to PPPs through a structured and global business approach, so as to build on and accelerate excellent local Nestlé market initiatives.

PPPs target less affluent consumers in emerging markets (UN/World Bank definition – those with an annual purchasing power parity between US\$ 3 000 and 22 000 per-capita) as well as low food spenders in developed economies. Together, they represent some 50% of the world's population. Hence, PPPs target the biggest and fastest growing consumer base in emerging markets as well as important sub-groups in developed markets.

The PPP consumer in emerging markets mainly comes from the lower tiers of the socio-economic pyramid. The buying power in many emerging

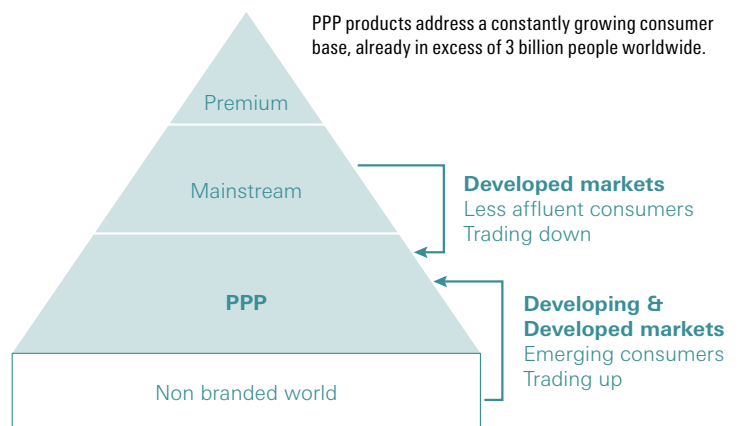
### In brief, PPP is a business strategy that:

- ✓ Starts with strong consumer understanding
- ✓ Provides nutrition and great taste with no compromise on quality and safety
- ✓ Is perceived as good value for money
- ✓ Creates financial value
- ✓ Promotes shared value

markets is increasing with the steady growth of local economies. However, food price inflation has a strong impact on PPP consumers for whom food accounts for a major part of their spending. Our focus is this big group of consumers, who are able to afford basic packaged food but whose needs are still unsatisfied.

In developed markets, our consumer tends to come from one of several groups that buy more affordable

products for pure budgetary considerations. They may be pensioners/seniors; youths/students; migrants; unemployed; single parents; large families. For these consumers, value for money is often linked to low price. There is active competition from private labels, store brands, discounters and market traders. Estimates suggest there are 0.5 bio less-affluent consumers in developed markets, plus those who consciously spend less on food to the benefit of other activities.



The PPP approach is essentially market driven. Each market is closest to its own consumers: to know their individual and social needs and to be aware that the less-affluent consumers are just as varied as the more wealthy. This is true not only from market to market, but also from urban to rural areas within a country or, in bigger markets, from region to region. We need to know our consumers, and look beyond their income situation to understand their real and perceived needs and to determine what type of products or services they value.

Affordability is only one of the goals. Our PPP range caters foremost for nutritional needs at all ages and stages of life, as well as for local consumer tastes and habits. It is a paradoxically simple but complex business model; one aligned to Nestlé's vision as the leading Nutrition, Health and Wellness Company and its approach of creating shared value.

Focussed in the markets, the PPP strategy is supported by all our business functions: our Strategic Business Units, Operations, Research & Development, Distribution, and many others.



# Science at the Service of PPPs

## Harvesting Nestlé's Heritage



Peter van Bladeren  
Director, Nestlé  
Research Centre

"Nestlé has been putting science into products for nearly 150 years. Our research on food and nutrition drives this heritage forwards, outpacing our competition. Our Nestlé Research Centre near Lausanne, Switzerland, along with satellites in the US, China and Japan, forms the Nestlé Science & Research network. Partnerships with top specialists in high-profile universities, research institutes, hospitals and start-ups worldwide ensure that our full resource is brought to bear for the benefit of our PPP

products, packages and services. This resource is complemented by the new Nestlé Institute of Health Sciences.

Knowing our consumers deeply and responding to their needs has always been the Nestlé way. Henri Nestlé's baby food aimed to reduce high rates of infant mortality. Julius Maggi's soups and seasonings helped women to feed their families. Both men created science-based products offering affordable nutrition, health and wellness.

The Nestlé Research Centre today unites two essential pillars for success in the PPP initiative – Nutrition Science and Food Science. The former identifies which macro- and micronutrients are needed, and in what quantities. The latter devises ways of optimising the

absorption of nutrients into the body once they've been consumed.

Around this nucleus, our science provides tools to understand consumers expressed and unexpressed needs, through epidemiological, sociological and behavioural studies of local populations. Our R&D and business colleagues throughout the globe use these tools to measure consumer health status and needs. These needs vary from one market and region to another, so we have to adapt our response accordingly. Our PPP capability draws on Nestlé's decades of experience in all aspects of food and beverage science. We find solutions to real consumer needs through nutritious, safe and affordable products that can make a genuine difference for health."



From top to bottom:  
millet, okra  
(or gumbo),  
cassava root,  
yam, quinoa,  
mung beans.

## Affordable Nutrition

All consumers need the same basic nutrients for healthy growth and development, and to live an active life. This said, individual requirements for specific nutrients vary and evolve with age, physical activity and state of health.

Nutrients fall into two principal categories: macronutrients, namely proteins, carbohydrates and lipids; and micronutrients, namely vitamins, minerals and trace elements. It seems obvious that consumers get their nutrients from their food and drink. Less obviously, the amounts of nutrients in food crops vary according to where they are grown, and to climatic change from year to year or even from season to season. So, for example, the composition of milk differs from summer to winter.

Identifying the nutritional needs of groups of PPP consumers is important. Consider pregnant and lactating mothers and their infants. An infant's early years are critical for normal growth and development. Chronic infantile nutritional deficiencies can have a lifelong impact. For the child, mother's milk or infant formula is their only food. So infant formulas must deliver optimum nutrition. While foods for mum must cater for her nutritional status. Another example is helping active people get through the day, where foods must provide the right level of energy.

A complex picture builds up. With crops and their nutrients varying on a regional, seasonal and harvest basis, and the consumer's basic needs differing according to local and life-style factors. Nestlé Research Nutritionists must handle this complexity to help develop nutritious and affordable products: by understanding the global nutrient composition of local crops and by selectively fortifying products with region-specific micronutrients.

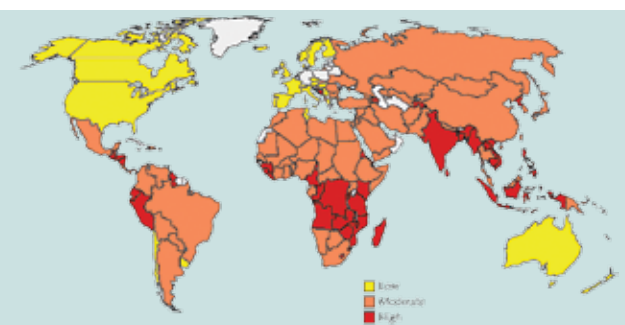
# “Consumers in both emerging and developed markets have the same basic nutrient needs”

## Building Nutrition In through Food Technology

No product, however nutritious, will be successful if consumers don't like it. When manufacturing a product, the ingredients, their formulation, the technology and processing used must ensure safety, nutritional value, shelf life and consumer preference. PPP products are no different. They must be tasty, high-quality and safe, as well as affordable.

One route to affordability is the use of locally available staple raw materials. For example: in South America, corn and quinoa; in South East Asia, rice and mung bean; in Africa, manioc, yam, sorghum, and amaranth. We must adapt our technologies to their different compositions and processing needs.

Fermentation is a key technology for PPP products in emerging markets. It is a traditional process for

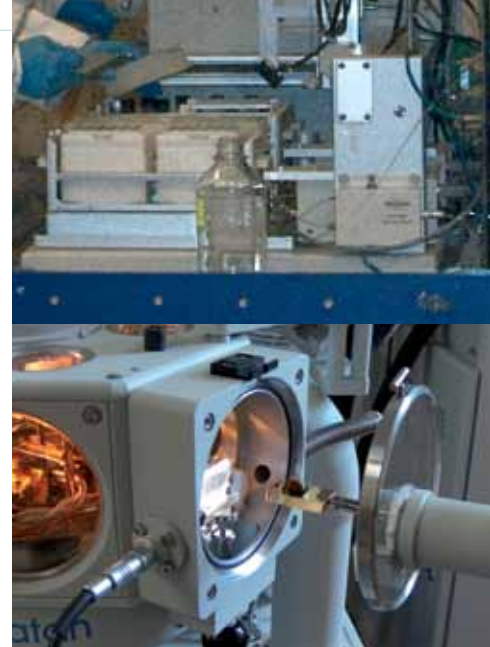


Micronutrient deficiencies vary regionally as shown here for zinc (Food and Nutrition Bulletin, 2004). In developing PPPs, Nestlé Research uses Micronutrient Deficiency Maps from WHO, FAO and other official agencies to pinpoint specific deficiencies market by market and provide appropriate nutritional solutions through fortified products

natural food preservation, taste and texture going back thousands of years. Today, we have many ways to use it to develop safe, convenient and nutritious products with tastes and textures crafted to give consumers what they like.

Beyond the sensory aspects, technology provides solutions to ensure that micronutrients are not

destroyed by processing or during storage. This is important for PPPs, because one of their roles is to help prevent nutrient deficiencies. With no 'one-size-fits-all' solution, local deficiencies relate to different micronutrients and vary regionally. Several decades of scientific research have gone into fortification technology to develop solutions that ensure good uptake of any added micronutrients. Among other solutions, micro-encapsulation of sensitive micronutrients ensures that, after ingestion of the food, they pass through the stomach and reach the small intestine where they can be absorbed.



Pierre Akely (right) from R&D Abidjan working on fermentation of cereals commonly consumed in West-Africa with Edwin Ananta (centre) and Carl Erik Hansen (left) from NRC. Carl says, “We are using our extensive knowledge on fermentation with microorganisms from the Nestlé Culture Collection to create safe, nutritious products that satisfy local tastes. Matching local taste preference is a major challenge”.

### One part of the challenge

#### The 'Big 4' micronutrient deficiencies worldwide

Iron	Zinc	Iodine	Vitamin A
Affects 1.6 bio people, including 600 mio children and 500 mio women	20% of world population at risk	Affects 2 bio people including 285 mio school-age children	Affects 190 mio pre-school children and 19 mio pregnant women
May cause mental impairment in children, maternal mortality, physical weakness	May lead to retarded growth, mortality in children (diarrhoea, respiratory infections)	May cause mental impairment (affects 18 mio infants annually)	May cause blindness, impaired immunity, child mortality

The 'Big 4' are considered by WHO to be the main micronutrients affecting global public health. Others like calcium, vitamin D, vitamin B12, folic acid are also concerned. Micronutrient deficiency is also referred to as 'hidden hunger'. It often goes unnoticed until symptoms become severe. Fortified products help prevent deficiencies.

# Meeting the Need for Healthy Growth

## PPP Infant Formula – For Complete Nutrition

In the first months of life, infants rely on a single food, milk. Breast milk is best but, when children need infant formula, this must provide them with all the nutrients they need for healthy growth and development. At this time of rapid growth, the brain, nervous system and eyes develop, along with other internal organs. So breast milk and infant formulas must both provide the right nutrients at the right time. Any chronic nutritional deficiencies during this period may be irreversible.

Mothers in South East Asia said, “I want to ensure my baby receives the best nutrition when I don’t breastfeed, but I can’t afford current infant formula regularly”.

Nestlé Nutrition asked PTC Konolfingen milk product experts to develop an infant formula providing optimal nutrition that is affordable every day, offering the consumer a choice.



NESTOGEN *Classic* in the Philippines was the result. A formula for infants that are not or are no longer breastfed: that provides for the basic nutritional needs of the growing child; is fully compliant with all national legislations; and is manufactured locally – in the Cabuyao factory, Philippines for South East Asia and in Ocotlan, Mexico for Central America.



Sold in 135 g aluminium sachets at a 15-20% lower price than mainstream products, it provides appropriate, affordable nutrition for less affluent consumers. The PPP infant formula is now selling well in the first wave markets: in the Philippines; in Indonesia as LACTOGEN *Klasik*; in Indochina as LACTOGEN *Complete*; and in Mexico under the NIDAL brand. Rollout to other markets is planned.

## NIDO *Bunyard* – Unleashing PPP Potential for Kids

Pakistani consumers link the NIDO brand to nutrition. But in a country where milk is delivered fresh every day, only 4% of the 21 million children in urban Pakistan were consuming NIDO milk products, mostly in the higher income families. Nestlé saw the opportunity to address NIDO milks to less affluent consumers.

The question was how to provide the right nutrition. The National Nutritional Survey of Pakistan revealed that over 30% of children are iron deficient. This is more prevalent in lower income areas where the general diet is low in iron and health awareness is poor.

To know the consumer, a detailed study was run with lower income mothers. Mothers said, “I will ensure that, in spite of our difficult financial

situation, my children get the very best in life so that they are not left behind anyone else”. The consumer wanted more than just a product they could afford. They had an emotional need in their hope for a better future.

Working with PTC Konolfingen and the Dairy Strategic Business Unit, the application group in the Kabiriwala factory developed an affordable iron-fortified milk powder recipe for NIDO *Bunyard* milk – which means NIDO Foundation. It has the right taste and right nutrition at the right price. It provides a reliable and wholesome solution for kids at risk of iron deficiency, in line with local requirements and needs.

The product reaches out to consumers through interactive education on iron deficiency and the

## LACTOGEN *Recover* – Fighting Infant Diarrhoea

Many babies risk suffering from diarrhoea. This is especially true in the low socio-economic segment of emerging markets where the condition is widespread.

Most cases of diarrhoea result from acute gastrointestinal infection. The ensuing inflammation damages the intestinal lining: this reduces secretion of the enzyme lactase; the baby can no longer completely digest lactose – the main sugar present in

milk, including breast milk; the result is more diarrhoea. In this downward spiral, the digestive system no longer functions correctly, which can lead to weight loss and dehydration, and can be life-threatening.



In these severe cases, health professionals frequently recommend a lactose-free infant formula such as Nestlé’s *AL 110*. However, lactose-free formula is expensive and complex to make. So *AL 110* is made in a highly



## “Chronic nutritional deficiencies in infancy can have a lifelong impact”

effect of iron fortification on health, all backed up with TV advertising. NIDO *Bunyad* milk sales took off and 2009 closed at 936 tons. The volume in 2010 was 5 times more than in 2009, surpassing RIG, OG and market share targets.

Focussed research, based on the right taste, right nutrition and right



price produced splendid results, making NIDO *Bunyad* milk another promising star in the NIDO house.



specialized Nestlé Nutrition factory in Switzerland and exported.

Less affluent consumers often turn to ‘traditional cures’ like home-made rice-based feeds or diluting regular infant formula or cow’s milk with water to lower the lactose content. These options are nutritionally inadequate. They do not deliver enough energy and nutrients, resulting in malnutrition.

This is why Nestlé Nutrition and PTC Konolfingen developed LACTOGEN *Recover* infant formula with a low lactose content. The process is simpler, so the product can be manufactured locally avoiding import costs. It offers an affordable and

effective solution for the nutritional management of infants and children with diarrhoea, mal-digestion and slow weight gain.

Paediatricians want a choice for different patient needs so LACTOGEN *Recover* and AL 110 infant formulas are positioned to co-exist.

The new product is the lowest priced on the market compared to competitors’ infant formulas and is about 40% less than Nestlé *AL 110*. Since its launch in 2010 in Pakistan It has increased Nestlé Nutrition’s business substantially in a short time. We aim to become market leader in the low-lactose and lactose-free segment by 2015.

## Nestlé PPPs in Indonesia – Profile of an Emerging Market

PPP sales represent over 30% of all Nestlé sales in Indonesia. PPPs make a difference. Better nutrition positively impacts consumer health, development and education.

Local products address two of the main micronutrient deficiencies: iron and vitamin A. 40% and 35% of the population respectively consume less than half the recommended daily amount of iron and vitamin A, mainly among school children and pregnant women. Nestlé’s product range in Indonesia includes: MILO *Choco Blazz* cereal pillows fortified with iron; KOKO KRUNCH cereal with iron, 8 vitamins, calcium and whole grains; and IDEAL DANCOW milk with iron, calcium and proteins.

Indonesia is a key PPP market with many growth opportunities. About two thirds of the total food expenditure of these emerging consumers – from \$2.00 to \$8.00 a day – is spent on packaged food.

Products are manufactured locally at the Keyajan factory in East Java. As part of the policy of sharing value, Nestlé Indonesia assists over 30,000 milk farmers who supply the factory with milk.



Nestlé Indonesia also has a programme to educate emerging consumers on Nutrition, Health and Wellness so they can make better-informed food choices. This includes a DANCOW parenting centre and the sponsorship of MILO Sports activities for kids through the National Badminton Schools Championship.

# Neuroscience to Product

## The Quest for Umami Taste

Johannes le Coutre is a neuroscientist. When he joined the Nestlé Research Centre, he asked, "What is the neurological pathway that allows consumers to taste food?" He continues, "In 2001, genes for the receptor of umami taste – linked to meat flavour – were discovered. Working with an external partner, we used these genes to identify flavour components that interact with the umami taste receptor. Two components were of particular interest. Then came the key question. Would they really have a clean umami taste? Or would they also activate other taste receptors like 'bitter' or 'acid'? The only way to know was to try them with tasters! Taste tests at NRC, R&D Singapore, PTC Singen, R&D Shanghai and R&D Solon gave excellent results. Our fundamental science had given a clear winner".



After approval by food legislation authorities, the Food Business Unit in Vevey pushed for this innovative flavour to be incorporated into MAGGI products where the meat taste is important. After six years of research followed by development of new recipes, the first products with the new flavour were launched in Singapore in 2007. The innovation has since been rolled out to 15 other markets in Asia, Africa and Latin America. The MAGGI brand is carrying the fruits of science and technology to consumers in both developing and developed economies by bringing the pleasure of great flavour to both worlds.

# Taste and Pleasure

## 75 Million Every Day

Nestlé's oldest PPP is the MAGGI *Cube* seasoning. For a hundred years, cubes have fulfilled consumer needs for taste and nutrition. The scenario behind their creation parallels day-to-day life for many PPP consumers today.



Most PPP consumers in Africa buy one MAGGI *Cube* per day

Julius Maggi was a miller. He started making seasonings and soups in the 1880s when the health authorities in Zurich, Switzerland, asked him to help resolve a public health problem. For economic reasons, many women were going out to work and had no time to cook wholesome meals. The nutritional status and health of families was declining.

Maggi used his mill to grind peas, beans and lentils into vegetable flours that cooked quickly to make nutritious soups. But there was something missing. Taste. He knew that most people could not afford meat but craved for the meat taste – a heritage from our carnivore ancestors. This was his starting point for his legendary MAGGI *Liquid Seasoning* made from vegetable protein, then, in 1908 for his MAGGI *Cube* seasoning, now sold worldwide.

PPP consumers in Africa buy the famous cube on open markets. The stall holders – the Mamas – build up pyramids of individual cubes, eye-catching even in a crowd. They get their supplies from local independent traders and distributors, who buy in bulk from the factories, repack the cubes in smaller boxes and sell them on to the Mamas.

With each cube individually wrapped, most PPP consumers buy just one a day, contributing to astonishing global sales of more than 75 million cubes every day in Africa alone.





## “PPP consumers enjoy the sensory indulgence they get from the simple pleasure of great taste”

### NESCAFÉ Coffee for All

NESCAFÉ Mixtures, such as SUNRISE, delight consumers from India to South Africa by combining the sensory benefits of coffee and chicory. A dedicated R&D continuous improvement programme aims at making this affordable, high quality product even better.



It builds on plant science research for coffee and chicory quality at Nestlé R&D Tours, and process innovation at PTC Orbe for improved extraction and lower raw material use. This support has helped NESCAFÉ SUNRISE to about CHF 50 mio sales in 2010, with over 5 mio cups drunk every day.

NESCAFÉ 3in1, soluble coffee perfectly blended with creamer and sugar, is proving an ever greater hit with our PPP consumers. They find it convenient as it offers the ingredients for their favourite coffee beverage in one product. The single serve formats, the sticks or sachets, really fit their needs.

Large packs can be too expensive and difficult to keep fresh, so single packs are a good answer. Displayed individually or in chains in traditional outlets, singles play a critical role in helping these consumers enjoy their coffee.

Our R&D programme keeps the quality ingredients intact but ensures affordability via more efficient processing and lower packaging costs. More affordable laminates protect the product, while improved machines lower manufacturing costs, minimize packaging use, reduce weight variation and improve operational reliability.



### Nutritious Pleasure

MILO is an immensely popular brand among kids and mothers. Nestlé saw an opportunity to extend the brand into the fast growing sweet snacking segment in Indonesia, through an affordable, nutritious, light snacking product for school children.

The sweet snacking segment is highly competitive, with many popular local brands at very low prices, but not always high on nutrition.

Our challenge was to make a product, easy to afford but with a high nutritional value, aligned with the essence of the MILO brand.

We identified extrusion as the key technology to get the right balance between price and nutrition, using whole grains and low saturated fats. Extrusion can process high volumes at relatively low capital expenditure. Consumer tests showed a clear consumer preference for the MILO product compared to local competitors' products.

We started producing MILO Choco Blazz in Indonesia as bite-sized cereal pillows: coated with MILO; filled with chocolate cream; fortified with iron and vitamin C. They were launched in February 2010 at a price equivalent to 12 US Cents for 14 grams.

The product is very popular. Volumes are growing strongly, so Nestlé has a good profit margin despite the low price. A 'win-win' situation for PPP consumers and Nestlé alike.



### African Delight



The NESTLÉ CHOCOLIM instant hot cocoa product is a popular breakfast drink in Africa. Apart from the pleasing chocolate taste, it contains sweet whey powder, which offers the benefit of soluble whey protein.

We manufacture it in the Tema factory in Ghana using vacuum oven drying. Oven drying is a relatively low cost and robust batch-processing technology, well adapted to the production volumes required. This, along with using a plastic pouch package, contributes to affordability.

# Packaging and Distribution

## The Package



Packaging innovation revolves around consumer satisfaction. We must provide quality packaging that delivers not only on price, but also protection, convenient use and minimal impact on the environment.

Consumer communication demands that we design visually attractive packages. These must clearly show Nestlé branding through packaging systems that are easy for retailers to display in their shops and markets.

The package is much more than a container. It must protect from heat, light, humidity, contaminants and microorganisms. It must maintain product quality and safety right up to the moment of consumption. It must be as light as possible. Yet be resistant enough to withstand mechanical forces in packaging machines, and shocks and abrasion during handling.

Nestlé Research packaging designers develop novel solutions that provide aesthetic and functional benefits for the PPP retailer and consumer. Packaging engineers and scientists look for alternative materials that do everything existing packages do, but with less cost and lower environmental impact.

A package is more than what you see. It is a world in itself. Nestlé Research is part of that world.



## NESTLÉ PURE LIFE Water – Simply Efficient



NESTLÉ PURE LIFE water was launched in the emerging-consumer environment of Pakistan to provide healthy family hydration with great taste. But PPP low food-spend consumers in developed markets form an ever-growing segment in developed economies and have the same needs.

The product was created based on PPP thinking: take a local water supply; remove impurities; microorganisms and off-flavours; and add minerals to the pure water for nutrition and a locally adapted taste profile. Getting the right taste was the hardest part. Different geographical regions have different tastes, so Nestlé Research flavour scientists had to tailor waters to suit regional tastes.

Launched in the US in 2003 as 0.5 litre bottles at about half the price of NESTLÉ international brands it quickly carved a place in the PPP segment. Local production, lightweight bottles and limited secondary packaging ensured a competitive price as the

brand established a name for quality and value. It became US market leader in 2008/09, contributing some 10% of NESTLÉ WATERS' global turnover in 2009. It now sells in 40 countries across five continents, as NESTLÉ PUREZA VITAL water in Latin America, as NESTLÉ AQUAREL water in most of Europe, as NESTLÉ VERA water in Italy and as NESTLÉ PURE LIFE water elsewhere.

Turkey provides a recent example of a local PPP water, ALACAM, launched in 2010 and offering its economic, smooth tasting and healthy image. ALACAM water is sold through 143 Water Shops, owned by our distributors or by Nestlé, in 19 Turkish cities. The shops are like warehouses with a reception desk. They sell water in 20 litre bottles, which are delivered to offices and homes or collected by customers at the reception desk: simple, efficient, and with a high-quality, affordable product.



# The Nestlé Research Contribution to PPPs

## Know Your Consumer Deeply

Nestlé Research works closely with our partners in our businesses and markets to build an ever clearer picture of our 'PPP/low food spender consumers' and their specific needs. We have developed tools to chart consumer behaviour: their expressed and unimagined needs; their micronutrient status; how they shop; what they buy; how they use products. This input gives us a strong basis for creating innovative ideas and concepts.

Great concepts need to be validated before development begins. For this, we have other tools to measure consumer response, such as assessing their preferences and measuring their nutritional status.

We must develop recipes meeting regional tastes and textures, whilst delivering solutions providing for the nutritional status of a population in specific nutrients. All geared to local circumstances and affordability.

With a constantly growing world population, especially in emerging markets, Nestlé Research is also concerned with macronutrient security linked to water availability. Water is often a major issue in the ability to grow crops and process products. Micronutrients prevent the ravages of hidden hunger. Macronutrients provide the proteins, carbohydrates and lipids people need for growth and as the fuel for their daily activities.

## Localise the Opportunity

Often an imperative part of PPP success is moving processing closer to the consumer by using simple, easy to operate, transportable manufacturing and packaging lines. Then we can do as much processing as possible with local raw materials and packaging solutions close to where the product will be sold.

We are working with thousands of local farmers on Good Farming Practices, e.g. with East African farmers who lose up to 40% of their wheat crop due to fungal plant diseases. Nestlé Research's plant scientists in Tours, France are world leaders in plant selection, breeding and multiplication. They provide valuable support in Nestlé's coffee and cocoa plans, but also to farmers of root and grain staple crops.

## Nestlé Research – Driving PPP innovation



Remaining the world's leading Nutrition, Health and Wellness Company demands that we offer products our consumers want and love all around the globe.

For decades to come, major growth potential lies in the emerging markets and affordable products. For Nestlé Research this means a significant part of our innovation drive throughout our R&D Network must favour emerging consumers. We recognised this long ago. Our PPP strategy support is strongly complemented by our R&D Centres in Abidjan, Beijing, Queretaro, Santiago and Shanghai.

Our centres in China focus on the world's second largest and most rapidly growing economy. They work on bringing innovative science to traditional Chinese remedies and translating Chinese approaches to nutrition and cuisine into benefits and delights for consumers worldwide. Through them, we can also benefit from the long reputation of China as a reliable source of affordable machinery and materials.

To accentuate our drive, we are now building a new R&D Centre in India dedicated to PPP innovation in culinary, beverage, dairy and cereal products. It will work with other Nestlé R&D centres to create relevant innovations and disseminate know-how. India offers a great diversity of consumer demand with over 14 different major cuisines and a variety of nutritional needs. It has excellent universities and research institutes for strategic alliances and to provide local scientists and engineers. It offers raw material expertise in spices, cereals, vegetables, tea and Ayurvedic ingredients. In a fast-growing economy that will soon be more urban than rural, its food consumption market today is a massive \$300 billion annually.

We have so many reasons to be confident in Nestlé Research, its range of R&D facilities and their ability to make the difference in meeting the highly specific needs of emerging and low-food spend consumers.

Johannes Baensch  
Senior Vice-President, Head of R&D



“Our Nestlé Markets have created innovative approaches to reaching their consumers”



Whilst innovative science & technology are vital building blocks in PPP innovations; the business opportunity is realised market by market .

Our Markets must have the right organisational set-up for success. This involves not just product and package, but also lean operations, branding and communication, pricing, and great routes to market.

Our technical innovations are matched by creativity in manufacturing, marketing and sales, and making our products available to our valued consumers.

Frits van Dijk  
Executive Vice President for Zone Asia, Oceania and Africa

**Editorial References**

Direction and editing:  
Clive Barnes  
Texts:  
Ian Horman,  
Visualising Complexity, Blonay  
Graphics:  
Danielle Wulliemier,  
Just4You, Pully

Printing:  
Presses Centrales Lausanne, Renens