**The unrepentant chocolatier**

**The world’s biggest food company is betting on an emerging class of health and nutrition products to spur its growth. But risks abound**

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Illustration by Robin Chevalier

IT IS a curious blend of kitchen and laboratory. From one room wafts the bittersweet smell of chocolate being gently heated and stirred by chocolatiers. Around the corner it is all science. A double row of cubicles contains human guinea pigs who sniff and taste from little tubs, scoring each on criteria such as sweetness or bitterness to produce complex flavour charts. Down the corridor, women in comfortable chairs talk about how chocolate makes them feel. Cameras and microphones record their most minute gestures for the scrutiny of psychologists and anthropologists.

This is the science behind Nestlé’s 110-year-old chocolate factory next door, which each morning exhales the aroma of roasting almonds and cocoa beans over Broc, a chocolate-box-perfect Swiss village where even the weeds in an overgrown lot seem orderly. It is in these laboratories, where a pinch of art is mixed with SFr25m ($23.6m) of technology, that new chocolate recipes are devised. At another Nestlé research centre in Lausanne, meanwhile, researchers have been working out how chocolate affects metabolism and the behaviour of gut microbes—in other words, analysing chocolate as a pharmaceutical product, rather than a treat.

Investment in this kind of research may seem indulgent, particularly in a recession. But it exemplifies Nestlé’s strategy for future growth. Although the company is best known for chocolate, ice-cream and sugary snacks, Peter Brabeck-Letmathe, the firm’s chairman, and Paul Bulcke, its chief executive, hope to transform the food company into the world’s leading health, nutrition and “wellness” firm. It is tempting to dismiss this as a mere marketing stunt—an effort to make people feel better about eating things they really shouldn’t. Yet there is a sound commercial logic behind Nestlé’s shift towards health and nutrition.



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Sales of foodstuffs that have been intentionally modified and improved by manufacturers to provide claimed health benefits—known as “functional foods”—are, in many cases, growing far more quickly than foods sales as a whole. Sales of functional foods in western Europe grew by 10.2% a year between 2004 and 2007, whereas sales of packaged food grew by 6.3% a year over that period (see chart 1), according to Euromonitor, a market-research firm. Some categories are growing even faster. In America, sales of functional foods that promote “gut health”, for example, grew by an average of 15.8% a year between 2002 and 2007, according to a recent PricewaterhouseCoopers report, compared with overall food-sales growth of 2.9% a year, according to Datamonitor (see chart 2). The PricewaterhouseCoopers report predicts that the global market for functional foods will grow in value from $78 billion in 2007 to $128 billion in 2013.



Looking further ahead, Nestlé sees great potential in the idea of “personalised” nutrition. Just as drugs companies have long talked of devising drugs that take account of genetic variations between people, the firm wants to do the same with food. That is why it is investing in the nascent fields of metabolomics and proteomics with the aim of providing foods, diets, devices and even services for particular subgroups of the population. It forecasts that by 2017, global sales of nutrition for “specific need states” could reach $100 billion. Existing examples include Musashi whey-protein supplements and PowerBar snacks for athletes; Sondalis and Nutren Glytrol liquid diets for diabetics; and Optifast powders and shakes for dieters.

**Switching to a new diet**

This shift in emphasis towards health and nutrition will, Nestlé hopes, transform it from a purveyor of low-margin, commoditised foodstuffs into a provider of high-margin products and services. (It already owns Jenny Craig, a chain of American weight-loss centres, which it is now expanding globally.) The firm needs new sources of growth. Sales of bottled water, which are about 10% of its business, are falling in rich countries because of the recession. They may yet bounce back, but analysts fret that bottled water, which is now firmly in the sights of environmental groups, may go the way of the fur trade.

Nestlé also seems to be losing market share in other products, though company officials dispute the assertion. Pablo Zuanic, an analyst at JPMorgan, reckons that in the second quarter of 2009, 44% of Nestlé’s product lines lost market share in America, and none of its products gained market share there, according to surveys of retail-data by ACNielsen, a market-research firm. Scepticism about Nestlé’s prospects can also been seen in its share price: its shares trade at a lower multiple of earnings than those of its main European competitors. One reason is that investors are concerned that it may invest some or all of the SFr30 billion it is likely to receive next year from selling its share in Alcon, an eye-care firm, in businesses that are less profitable than the ones it already has.

Investors are also worried that Nestlé has become too large and unwieldy. The firm has 30 product lines that each generate more than SFr1 billion in annual sales, from Nescafé coffee and Nesquik milk to Purina pet food and Pure Life, a bottled water that is sometimes made from stuff that comes out of taps, rather than out of the ground. Consumers have been trading down to cheaper, unbranded foods in recent years, a trend that accelerated in the recession, potentially undermining the value of owning big brands.

So the company has seized upon evidence that incorporating healthier ingredients into its products could help it get its sales moving in rich countries again, and win over hearts and minds in emerging markets, too. These ingredients include live bacteria in yogurt, extra calcium of a form that is more easily absorbed by children’s bodies, and sterols (a kind of plant fat) that reduce blood cholesterol.

A study by Harvard Business School found that between 2004 and 2007, sales of Nestlé’s products containing such “functional” ingredients increased by 23.7% a year, compared with growth of 6.2% a year for its ordinary foods. Sales of Nestlé’s functional foods grew by 20% in 2008. And on October 22nd the company announced that in the difficult year to September 2009, in which the underlying growth rate (stripping out price changes and currency movements) across its food and beverage product lines was 0.7%, functional foods still managed to eke out growth of 4%.

Other companies are benefiting from the same trend. Results released on September 23rd by Danone, a French diary and yogurt company, showed that its bestselling yogurts are those with live bacteria that are said to strengthen immunity or ease constipation. Even drugs companies are eyeing this new market. In March the chairman of Sanofi-Aventis, a French drug firm, mused about acquiring food and nutrition firms as a way to pursue growth.

Few companies, however, are spending the sort of money that Nestlé is to develop foods that are tailored to improve health. Even so, Mr Brabeck-Letmathe’s grand plan to reinvent his company must navigate several dangers. Does it make sense to invest in costly, long-term research for a market that may not materialise? Another risk is that a sceptical public will not be convinced by Nestlé’s grand health claims, prompting a backlash from the public or activists. There is also a danger that the new strategy might damage the firm’s blockbuster legacy brands, such as Nescafé, which have taken decades to build.

**Profit or peril?**

Start with the cost of research. If Nestlé were content to battle it out with Kraft, the world’s second-largest food firm, in the business of just selling food, then its outlay on research and development (R&D) would be difficult to justify. But Mr Brabeck-Letmathe saw a decade ago that the food industry was becoming a commoditised grind with diminishing margins and little scope for disruptive innovation. So he began pushing Nestlé to develop functional foods with higher profit margins, and he increased spending accordingly. In 2008 Nestlé spent just under SFr2 billion on R&D, a sum that has more than doubled since 1998. At about 2% of sales, this is considerably more than rivals are spending: in 2007 Danone spent about 1% of its sales on R&D, and Kraft spent about 1.2%.

Richard Laube, the head of Nestlé’s nutrition business and a former pharmaceuticals executive, describes a “pipeline” of some 75 research projects. Borrowing terminology from the drugs industry seems appropriate, given the time required to develop these new products. Unlike the quick development cycles usually seen in fast-moving consumer goods, which typically take one to two years, products in Nestlé’s nutrition pipeline may take four to six years to develop.

Mr Laube acknowledges that the pursuit of functional foods means that R&D expenditure must go up, not least because regulators on both sides of the Atlantic are taking a tougher line towards them. In October, America’s Food and Drug Administration warned that it was reviewing health claims made by food companies; it plans to announce stricter guidelines soon. The European Commission has forged ahead with strict rules on nutrition claims, and is in the process of tightening up the claims allowed on health grounds too. Companies wishing to make claims related to disease (“reduces blood pressure”, “cuts risk of heart attacks”, and so on) will have to provide solid scientific evidence to back them up. That takes time and money.

But it will be worthwhile if consumers prove willing, as they seem to be, to pay more for products with health benefits. Another benefit to such long-term research, observes Mr Laube, is that it tends to produce the sorts of innovations that pay dividends for longer than the minor, fleeting improvements made to consumer goods. He points to the formulas for whey protein, used in Nestlé’s PowerBar range, and for hypoallergenic baby food. In both cases consumers continue to pay premium prices for these products a decade after their initial introduction.

Nestlé is used to playing a long game. Take Nespresso, an almost instant espresso that is made by machine from a little capsule of coffee. Nestlé started working on the technology in 1970 and filed its first patent in 1976. It was another decade before it was ready to start selling Nespresso pods and machines. Thereafter the business lost money for a decade. But now it is one of Nestlé’s fastest-growing products. Sales have been increasing by 30% a year (even though Nespresso is a premium brand) and are expected to reach nearly SFr3 billion this year. Consumers are, presumably, making coffee at home and trading down from more expensive coffees sold by the likes of Starbucks. “It took off very, very slowly,” says Mr Bulcke. “It was 20 years of conviction that got us there.”

The tighter regulatory outlook for functional foods could, in fact, benefit Nestlé because few of its rivals have the deep pockets necessary to invest in such research. The Swiss firm could end up in a strong position—provided, that is, it can develop functional foods with genuine benefits that consumers are willing to pay for. “The more science wins, the stronger Nestlé’s position,” reckons Peter Killing of IMD, a Swiss business school.

Another risk to Nestlé’s strategy is that of overreach, arising from two particular vulnerabilities. One is the legacy of the firm’s past scandals involving the sale of milk powder in poor countries, which led to painful boycotts. The other involves the food industry’s experience of a backlash against genetically modified (GM) crops.

“Breastfeeding is best! We will salute and say this every day, but the world won’t believe us,” laments Mr Laube, describing the lingering suspicions harboured by some about the company’s behaviour in the developing world. The firm’s founder developed its trademark milk substitute not to replace mother’s milk, which health experts agree is the best food for babies, but to feed only those newborns who cannot be breast-fed safely. This is not company propaganda: the World Health Organisation confirms that “there will always be a small number of infants who have to be fed on breast-milk substitutes.” But the firm was caught in Africa and elsewhere promoting its milk powders so aggressively that they did, in fact, replace mother’s milk inappropriately—hurting the health of babies and, when the powder was mixed with unsafe water or in too weak a dose, leading to malnourishment or death. The firm insists it has mended its ways.

Nestlé’s deep reach in the developing world goes back decades and gives it a head start over most of its rich-world competitors when it comes to exploiting growth. Its early embrace of globalisation had less to do with planning than with the coincidence of being based in a small country and selling a highly tradable commodity. As early as 1919 Nestlé’s condensed-milk business had exhausted the supply of milk from local farmers, forcing it to open factories in Australia, England, Germany and Norway. Soon afterwards it bought the leading 27 condensed-milk factories in America, prompting this newspaper to note that year that Nestlé “is no longer a Swiss milk company; it is a very powerful international investment trust.”

Today less than 2% of Nestlé’s sales are in its home market, compared with 60% of Kraft’s. Enforced globalisation taught Nestlé far earlier than its rivals just how markedly tastes differ across the world. Its trademark line of Nescafé instant coffees, for instance, comes in a bewildering array of more than 500 flavours. The legacy of its powdered-milk scandals, however, is that Nestlé actions in poor countries are scrutinised like those of few others. That means any grand new effort to rebrand the firm’s offerings as “healthy” will face scepticism, in emerging markets in particular.

Nestlé’s strategy this time round is to work more closely with health authorities across the world. Its aim is to localise “wellness” in much the way it has adapted its coffees to various markets. It is, for instance, greatly expanding its efforts to add essential micronutrients—ranging from iodine and iron to vitamin A and zinc—to its basic foodstuffs. Some 2 billion people suffer from deficiencies of such vitamins and minerals, with impacts ranging from blindness to premature death. The firm had dismissed infant cereal as a niche product, but now its researchers are using that product as a “carrier” for probiotics and vitamins for children. It is also developing cheap, single-serving packets of nutrient-rich food for the very poor, another market it had previously stayed out of. Mr Laube says the defensiveness of the past is gone: “Now we have a noble cause.”

Illustration by Robin Chevalier

That may help in the poor world, but could Europe’s hysteria over Frankenfoods (as the British media dubbed GM foods) also stand in the way of Nestlé’s wellness products, if they are perceived to involve too much scientific meddling? The firm is treading carefully. Peter van Bladeren, head of Nestlé’s main research centre in Lausanne, insists its functional foods will “only improve nature” by adding healthy ingredients: “no weird stuff”. Unlike GM crops, which mainly benefit farmers, functional foods are intended to provide benefits to consumers. And the need to produce solid evidence of benefit to satisfy regulators should reassure shoppers, says Eric Scher of Sanford Bernstein, a research firm.

**Stretching the brand**

Finally, there is a risk that Nestlé’s new strategy could damage the firm’s blockbuster brands, which have taken decades to establish. This could happen in several ways. If some of the firm’s functional foods fail to pass muster with the regulators or, worse, turn out to cause harm rather than do good, then consumers could turn against all its products, even those that make no health claims at all. That could hurt, because most of its revenues will still come from selling treats like chocolate, ice-cream, coffee and flavoured milk.

That points to another potential snag. If a company known for selling indulgence wants to reinvent itself to symbolise wellness, does that not send mixed messages to the consumer? Mr Bulcke insists that there is no contradiction, and that taste will always trump nutritional benefits in the development of new products. Carmakers, after all, see no problem with marketing new cars on the basis that they produce fewer greenhouse-gas emissions without compromising on performance.

Mr Brabeck-Letmathe is convinced that all of Nestlé’s brands can be made to fit into the wellness strategy. “You don’t have to stretch,” he insists, “if the discipline of every product is to be healthier.” Every product must undergo what he calls a “sixty-forty-plus” analysis: at least 60% of those tasting it must prefer it to a rival product or the one it is replacing, and it must also be more nutritious. The company has, for instance, produced a new way of churning its ice-cream that produces much smaller ice crystals than the usual method. As a result it can still taste creamy even though it has half the fat.

Critics question, however, whether, in aggregate, Nestlé can deliver on its ambitious health and wellness promises. “The goals of food companies and the goals of public health are fundamentally different,” says Marion Nestle (no relation), a nutrition expert at New York University who is a noted critic of big food firms. “There is very little evidence that eating these things makes people healthier. If you want to do something for your health, you don’t eat as much, and you don’t eat processed food.”

That might indeed be healthier—but for many, perhaps, less pleasurable too. Mr Brabeck-Letmathe, a former ice-cream salesman from Austria, is unrepentant. Every single morning, he says, he enjoys dark chocolate and coffee made by Nestlé: “We don’t have to be ashamed.”