

Adding value

Rapidly changing lifestyles are causing consumers to demand more from the products they buy – be they good food on-the-go or natural cosmetics. Our expertise in carbohydrate processing and blending, specialist R&D knowledge and insights into the market help us develop ingredients that add taste, nutrition and increased functionality to our customers' products.

Our high-volume commodity base allows us to run our plants efficiently and produce a low-cost substrate we can then use to make speciality, higher-margin products for both food and industrial customers. These products, some of which are branded, add value through the fact that they are either proprietary to Tate & Lyle, have greater functionality than alternatives, or come with an additional service for the customer.

Consumer insights

At the heart of our customer approach is the use of market research to understand the consumer (our customers' customer), the markets we operate in and our customers' needs. In 2005 we were one of the first food ingredients companies to go direct to the consumer to understand for ourselves what drives purchasing habits, and what consumers might look for in future products.

We use this insight to drive our own product development, to differentiate ourselves from our competitors and, importantly, to give our customers an advantage by working with Tate & Lyle.

Each year we run a programme of studies to canvass the views of consumers in Europe, the Americas and Asia. We typically use basic attitudinal research (such as focus groups) as a starting point, then complete the programme with detailed quantitative studies. In one of our more recent surveys, we canvassed more than 10,000 consumers in Europe, the USA, Mexico and Brazil on their attitudes to dietary fibre. This research demonstrated a growing understanding of the benefits of fibre in a healthy diet, which we are addressing with our PROMITOR™ range of dietary fibres.

Our Research and Development (R&D), marketing and regulatory teams work together to provide insights from consumer research, support on labelling requirements, and assistance on meeting product claims.

Research and development

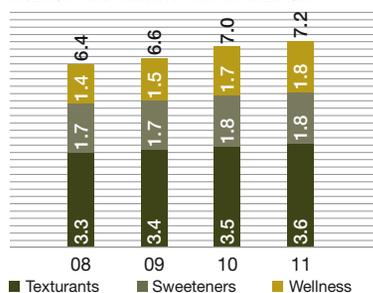
We have over 280 people in our R&D team worldwide working to develop innovative ingredients from renewable resources. Our R&D function is headquartered in our largest US facility, Decatur, Illinois. In September 2008 we opened our new Innovation Centre in Lille, France, and we also have application laboratories in countries such as China, India and Australia which are combined with our sales offices.

Our in-house research and development capability is organised into three primary groups: product development, technology, and customer solutions.

01. Market drivers

The key driver of long-term growth for our business is value added food ingredients. In this market we operate primarily within three categories: sweeteners, texturants, and wellness ingredients. In 2008, the addressable global market in these categories was estimated to be worth £6.4 billion, and is forecast to grow at a compound average annual rate of 4.3% to £7.2 billion in 2011. The food sector has proven to be relatively resilient to global recessionary pressures and therefore growth is currently expected to continue broadly in line with this forecast.

01. Global value added food ingredients market Addressable market size £bn



Sources: Leatherhead Food Ingredients Report 2007, SRI Flavours Report 2007, SRI Nutraceuticals Report 2007, Company estimates



Product development is divided into sweeteners, wellness, texturants, bio-products, industrial and animal feed. This group focuses on developing new products and improving existing products. The technology group covers process engineering, analytical and carbohydrate chemistry, and biochemicals. Its role is to determine how to create, analyse and manufacture ingredients. The customer solutions group includes applications and technical service teams. The applications teams develop prototypes and provide sensory analysis for customers using our ingredients, while the technical services teams work directly with our customers to incorporate our ingredients into their products.

Research partnerships

To give us fresh ideas and insights into the market, we develop partnerships with the external research community.

In October 2008, with the support of a £4.5 million contribution over five years from Tate & Lyle, a new Clinical Research Facility was opened by King's College London at St Thomas' Hospital to undertake research into areas such as gastrointestinal health, carbohydrate metabolism, and medical conditions such as obesity,

diabetes and cardiovascular disorders. Our partnership with King's College London will allow us to share knowledge and ultimately bring new products and technologies to market.

We also have a Research Advisory Group comprising a panel of six international industry and academic experts, chaired by one of our non-executive directors, Dr Barry Zoumas, which reviews our research and development portfolio and provides insight into how leading-edge technologies could apply to future developments.

Our venture capital fund, Tate & Lyle Ventures, which was launched in 2006, invests in early stage high-growth companies that specialise in renewable ingredients, food technologies, renewable resources and industrial processing technologies. Since 2006 the fund has made five investments, the most recent in May 2008 in Fugeia, a Belgian company focusing on gut health technology.

Commercial partnerships

One way of growing our business is to form joint ventures or partnerships to develop and distribute new products, and to enhance the capabilities of our existing portfolio of ingredients.

Using alliances and joint ventures can be an efficient way to lower our cost of investing in new areas and markets, and to help secure access to new and complementary technology and expertise. Examples include our partnerships with McNeil Nutritionals (a Johnson & Johnson company) on SPLENDA® Sucralose, and with DuPont on Bio-PDO™.

Food Systems businesses

In certain geographies where there is growth potential in the food ingredients market, we have taken the opportunity to invest in food systems, or blending and speciality ingredients businesses. These businesses open up new avenues for selling ingredients through their relationships with small- to medium-sized customers and their expertise in specific areas such as the dairy industry, gums and custom formulations. Primarily based in North America, Germany, Italy and South Africa, these businesses source ingredients and use them to develop solutions for customers. Their specialist knowledge supplements our existing in-house R&D capability. These businesses also often act as an R&D team for small- to medium-sized customers and, by building close working relationships, become trusted development partners.

02. Bringing innovation to our customers

Our new Innovation Centre in Lille, France, focuses on developing ingredients for four distinct fields: weight management; digestive health and immunity; vitality; and healthy ageing. This centre is not only used by our own scientists, but is also made available to our customers who, with the help of our technical service teams, can use our state-of-the-art facilities to develop and refine new food and beverage products.

03. Investment in R&D

Most of our spend is on internal capabilities – fundamental research, product development and process improvement. The remainder is spent on developing relationships with the external research community, through our venture fund and alliances with key academic institutions. Our target is to spend 4% to 5% of value added turnover on R&D. In the year ended 31 March 2009, we spent £28 million on R&D.

03. Target R&D spend

