

→ **Danone Vitapole: focus on nutrition and health.** Research at DANONE is carried through four main units: Vitavaleur (raw materials and cultures) • Nutrivaleur (nutrition) • Sensovaleur (assessment of organoleptic properties, tastes and preferences) • Technovaleur (new developments in technology and in prototype formulation and production).

**Danone Vitapole—home of the Daniel Carasso Research Center—is housed in an impressive metal, glass and wood structure in Palaiseau to the south of Paris.**

Set on a 10-hectare site near the elite Ecole Polytechnique and a large number of private and public-sector laboratories, the complex has 600 employees from 25 different countries, including nearly five hundred researchers, developers and quality engineers.

Teams at Vitapole explore raw materials, cultures, textures, aromas, nutritional properties, production processes and more. This high-level scientific community benefits from access to facilities that include not only research labs but also pilot lines to simulate full-scale production runs and test innovative ideas in a real-life setting. The Center keeps close track of markets to detect emerging needs and offer DANONE customers and consumers products that exactly match their increasingly high expectations.

“When the marketing department sends us specifications, our job is to see what is feasible and what not in terms of nutrition, technology and cost,” explains Cecilia Heizenreder. Heizenreder is group leader at the food hub<sup>1</sup> in charge of extruded<sup>2</sup> and filled products. Originally from Argentina, this food engineer and her team work at the cutting edge of innovation, analyzing recipes, conducting in-depth reviews of production processes and

testing the feasibility of full-scale production. One example of results is Oro Ciok Power, a sandwich cookie launched in Italy at the end of 2004. Combining chocolate and caramel in a rich mixture of aromas and textures, this new biscuit took months of work and the installation of an all-new production line to bring to market.

**Scientific expertise**

Danone Vitapole is also a center for research serving the Group’s companies around the world, and is the Group’s ultimate authority for nutrition and health. The Nutrivaleur team headed by Nicolas Gausserès takes special responsibility in this area. One of its projects was a response to the popularity of low-carbohydrate diets in the United States. “People on low-carb diets eat no sugars or other carbohydrates at all, and in theory avoid dairy products as well,” says Gausserès. “Our role was to help local teams position our offer in this market while remaining true to DANONE values. We suggested tackling one of the problems associated with these diets: calcium deficiency. So we recommended developing a low-carb yogurt with very limited sugar content. This is compatible with the diets but gives people following them the calcium they need.”

US teams went on to develop the product using special filtration to keep lactose content to a minimum. The result is Light’n Fit Carb Control, a yogurt with 80% less

sugar than regular low-cal products. DANONE now leads this market with 25,000 metric tons sold in the first nine months of last year.

Danone Vitapole also plays a central role in facilitating the exchange of know-how within Groupe DANONE. “The challenge is not to bring all research resources together on a single site, but to help subsidiaries set up local R&D units that are both effective and responsive,” explains Moïse Riboh, Director of Scientific Relations and Communication.

Illustrating this approach, local teams in China combined their own expertise with that of Vitapole units specializing in beverage development to bring out Maidong, a new drink based on a product developed by New Zealand subsidiary Frucor. “Rapid growth in Asian markets calls for additional resources and professional skills to take quick advantage of opportunities,” says Moïse Riboh. “Our role is to help local operations acquire those different skills, giving them the benefit of our expertise in sensory analysis, nutrition and technology.” ●

<sup>1</sup> Central hubs, one per business line (Fresh Dairy Products, Beverages, Biscuits), bringing together experts in formulation, processes and packaging.  
<sup>2</sup> Light-weight products produced by forcing dough through forming nozzles.

# Vitapole

Danone Vitapole is not just another research facility. It is a worldwide scientific community with over 800 specialists sharpening the Group’s **focus on health and developing innovative products.**



→ **Top left:** Technician installs equipment on a biscuit production line. **Top right:** Mini-fermentation reactors are used to compare ferments and cultures. **Below:** Pilot line—Biscuits being taken out of the oven; tests allow efficient scaling up of production runs. The oven here features one of the most flexible modular designs anywhere in Europe. → **Next page:** Biotechnology pilot unit—This totally automated system helps define specifications for exclusive DANONE cultures and optimize the end product. Danone Vitapole combines probiotic cultures with other ingredients to expand probiotic product offerings.



→ **Opposite page:** Microbiologists test probiotic cultures for purity and count. → **Above, this page:** Testing biscuits in a lab environment; flours are analyzed to regulate quality. Measuring product dimensions and texture allows adjustments to the balance of ingredients. **Below left:** Pouches are tested for seal resistance to ensure optimum product conservation. **Below right:** Control screen for pilot production lines.

