

The export rate is high across the entire sector. Denmark has 1/10 of a percent of the world population, yet accounts for 1% of world trade. The health industry alone commands 3-5% of the world trade in health products, which secures for Denmark a position among the ten most important suppliers of such goods on the international arena. This has been accomplished by companies 80% of which employ fewer than 100 people. This illustrates another important element of the infrastructure of the Danish biotechnology industry. Like Canada, Denmark has a large small-to-medium sized enterprise (SME) industrial base. These companies take advantage of the ability of the small firm to adapt to changing conditions, utilize developing technologies and meet changing market demands. As a result of this industrial structure, Danish exports have been a lead factor in the development of niche production to overcome competition from major industrial neighbours.

Exhibit 2

Several of the companies within the Bio-Industrial Complex are well established on the world market and form a strong base of the Danish biotechnology industry. This is particularly the case for companies such as the Carlsberg breweries, the Danisco concern, Chr. Hansen Laboratories and Novo Nordisk.

Danisco is one of Denmark's foremost, international industrial groups. With net sales of CAD 2.3 Billion, the company is the largest Danish supplier of ingredients, products, packaging, and technology to the international food industry. The business units in Danisco's sector for food and beverages include Danish Sugar and Danish Distillers. The food ingredients sector comprises Grindsted Products and Danisco's biochemical research division now merged with the company Maribo to become the unit where long-term biotechnological research and development is carried out. The Danisco Group produces a range of well-known, high-quality foods and brands which are marketed in Denmark and on selected European and global markets.

Already in 1874, the Chr. Hansen Laboratories were the first in the world to market pure cultures of bacteria and enzymes for industrial production of cheese. Today the company has diversified into diagnostics and the production of food ingredients. The products are marketed throughout Europe and North America, with annual sales of CAD 200 Million.

Novo Nordisk is one of the world's leading biotechnology companies. It is a major force in insulin manufacture and diabetes treatment and is the world's largest producer of industrial enzymes. In 1923, just one year after the discovery of insulin, Denmark became the first country to mass-produce insulin from pig pancreas. Today Novo Nordisk produces 50% of the world's insulin. The company also manufactures and markets a variety of other pharmaceuticals and bioindustrial products.