

**Annual Report 2002 Probi AB** 

### A summary of the year

### **Result and turnover**

Probi's revenues increased by 29% during the year to a total of SEK 26.6 million (SEK 20.6 m). The result before depreciation and writedowns improved to SEK –4.7 million (SEK –7.7 m), and the result before tax was SEK –14.1 million (SEK –27.0 m).

### **Financial position**

Probi's financial position is good. At the turn of the year, the Group's shareholders' equity totalled SEK 66.5 million and its Balance Sheet total was SEK 75.3 million. The equity/assets ratio at the end of the year was 88%.

### **Partnership agreements**

2002 saw Probi conclude a partnership and technology agreement with Lallemand/Rosell Inc. The partnership is intended to enable Probi to offer interesting new product concepts to health and nutrition companies and will lead to Probi intensifying its investment in the development of products for the health and nutrition market.

### **Published studies**

Probi published four studies during the year:

a study published in the American Journal of Clinical Nutrition shows that Probi's patented Lp299v bacteria reduces a number of risk factors related to cardiovascular diseases. The study extends and reinforces previously published results in this field;
 three clinical studies in the clinical nutrition field have been published in well-known medical journals such as the British Journal of Surgery, Nutrition and Transplantation. The studies show that another of Probi's patented bacteria, Lp299, reduces infections in conjunction with severe illnesses, resulting, inter alia, in a reduced need for antibiotic treatment and, in the long-term, shorter treatment times.

### Research organisation strengthened

Probi has continued to expand its organisation over the past year with a view to strengthening its position as an attractive

	2002	2001	2000
Income, SEK k	26 600	20 600	18 500
Result before depreciati	on		
and writedowns, SEK k	-4 664	<i>–</i> 7 654	532
Net result for			
the year, SEK k	-14 128	-26 993	<b>-</b> 5 250
Shareholders'			
equity, SEK k	66 521	80 649	107 107
Cash liquidity, %	492	205	2 158
Equity/assets ratio, %	88	<i>7</i> 3	97

proposition for its partners. Per Bengtsson, a registered physician whose doctoral thesis was in cellular biology, has been recruited as Head of Research. His background is in both pharmaceuticals and biotechnology companies.

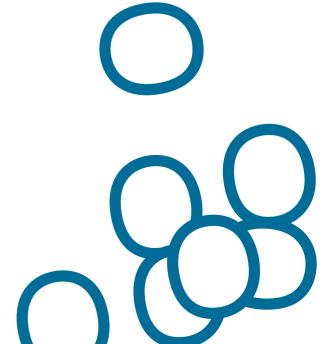
### Financial information and reporting dates

Probi AB issues the following financial reports:

Interim Reports:

Q1 13th May Q2 13th August Q3 6th November

Preliminary financial statement, 2003 12th February 2004 The Annual Report is distributed to all shareholders. All financial information is published on an ongoing basis at www.probi.se and can also be ordered in writing from Probi AB, SE-223 70 Lund, Sweden, by phone or fax at +46 46 286 89 20 or +46 46 286 89 28, respectively, or by e-mail from probi@probi.se





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### **Probi in brief**

Probi is a biotechnology company whose roots lie in medical research. Probi's patented bacteria, *Lactobacillus plantarum* 299v (Lp299v), was originally developed as part of a research project in Lund. The researchers were tasked with creating a totally new type of nutritional product for patients who needed nasogastric tube feeding or who needed extra nutrient supplies in conjunction with advanced surgery.

Probi was formed in 1991. Research led to the creation of a fruit drink, ProViva, based on Lp299v. ProViva was successfully launched by Skånemejerier in1994 and is nowadays regarded as one of the most successful products in the functional food sphere.

Probi's headquarters are in the Ideon research park in Lund and the company has a total of 18 employees. The organisation includes functions for research and development, commercial development, and production and product development. Probiotics are live microorganisms that have scientifically documented positive effects on people's health.

Probi's business model is based on the payment of licence fees for market exclusivity and royalty payments on ongoing sales for the use of Probi's patented and documented bacteria strains.

Skånemejerier is currently Probi's biggest licensee. In 1998, Probi was listed on the NGM Equity list (Nordic Growth Market).

### Research in four fields

Probi has conducted clinical studies of both healthy and severely ill patients, and it is in this respect that the company differs from its competitors, many of whom have conducted less comprehensive studies. Positive effects have been successfully demonstrated in all of the company's four fields of research:

- cardiovascular disease risk factors
- the immune system
- gastrio and ointestinal problems
- stress and performance recovery

Probi currently has 13 ongoing clinical studies and 58 approved patents in 13 patent fields. Probi works continuously to identify and document new and interesting bacteria strains, and a number of new bacteria strains have been studied in artificial systems in 2002.

### **Business concept**

Probi shall explore and develop probiotic products targeting special health requirements.

### Vision

Probi's vision is to help people feel better, stay healthy and live longer.

### Goals

Probi shall be a leading supplier of probiotics to the food and nutrition market by:

- offering high scientific value and high quality service
- successfully commercialising Lp299v internationally through partnership agreements
- developing new bacteria strains in order to reach new markets
- continuing to boost documentation levels within all research fields
- developing new product concepts for the food and nutrition market.

# Interview with the CEO and Executive Chairman of the Board

Probi's CEO, Monica Wallter **MW** and the Executive Chairman of the Board, Peter Zakrisson **PZ**, discuss the past year, studies conducted, the market and Probi's outlook for the future in the following interview.

### What were the most important events in the past year?

MW It was good to see Probi continuing to report significant growth. Turnover increased by 29% for the year and revenues at the year end totalled SEK 26.6 million. The increase is mainly due to increased royalty revenues from Skånemejerier, resulting from the sale of the ProViva products, and to tablet sales in Japan. Probi has also published several important studies in the fields of cardiovascular disease and nutrition research. The studies confirm that Probi's patented bacteria, *Lactobacillus Plantarum* 299v (Lp299v) reduces the incidence of a number of cardiovascular disease risk factors and that the *Lactobacillus Plantarum* 299 bacteria (Lp299) has positive effects in conjunction with serious illnesses.

### One of the goals in 2001 was for Probi to establish an agreement with a partner – what went wrong?

**MW** We underestimated the time element of the process. Our products are high quality ones and fall within the upper pricing segment. The high price is justified by our extensive documentation, which is where we differ from our competitors. Discussions with potential partners have simply taken longer than anticipated.

**PZ** What we are seeing now is a markedly increased interest in probiotic products, both in the research sector and in the market, and we are consequently very hopeful for the future. We are sticking to our long-term strategy of attracting international partners in the nutrition and food industries through wideranging, strong documentation.

### Have you achieved the other goals?

**MW** Starting the documentation of new bacteria strains and launching new clinical studies was another of our goals. The documentation of new bacteria strains has now begun and we will be applying for patents on the results we have achieved.

We also aimed to continue with our product development to improve our ability to cover the nutrition market's requirements. Our agreement with Lallemand/Rosell is an important step in this context, en route to the development of new products in the fields of nutrition and cardiovascular disease. The partnership gives us a variety of benefits, including access to new technology that enables us to offer the health and nutrition sector some interesting new product concepts.

**PZ** The goals achieved over the past year have substantially improved the chances for commercialisation in new areas. We are definitely on the right track.

### How is Probi's financial position?

**MW** Our partnership with Skånemejerier gives us a steady royalty income on sales. Skånemejerier's sales of the ProViva drink increased during the year, and this was, in fact, the seventh year in succession that sales of the ProViva drink rose by over 15%. The operating result also improved from last year, rising to SEK –12.5 million (SEK –29.0 m).

PZ To summarise, Probi's financial position is strong with stable revenue streams, and there are few research companies whose revenue streams from a commercial product are as stable as ours. Getting additional products on to the market and acquiring strong partners will give us an even better revenue stream. It's also important to bear in mind that Probi has currently only commercialised a small part of the total potential with regard both to products and geography. The developmental potential is huge.

### How do you see the future for probiotic products?

PZ We are seeing an increased health awareness in people as the number of lifestyle diseases increases. Who wouldn't want to improve their chances of a healthy life when people are actually far more vulnerable to these diseases than ever before? As a result, there is an increasingly strong trend towards better health and I believe that we have only seen the



tip of the iceberg so far. I should add that we are also seeing a clear increase in interest from the nutrition and food companies. And as people's acceptance of natural health products increases still further, the market for well-documented probiotics will really start to grow.

**MW** The technology for tracing and diagnosing diseases is also becoming more and more advanced, which increases the potential for preventing or ameliorating the course of a disease at an early stage with the aid of, amongst other things, probiotic products. Consumers' increased interest in health products is a strong driving force in the market.

### What sort of potential exists in Probi's research fields, other than gastrointestinal problems?

MW Risk factors for cardiovascular diseases are the second most extensively documented area, after gastrointestinal problems. Probi is the only company conducting such extensive research into the effects of probiotic products on a number of cardiovascular disease risk factors. We believe that existing levels of documentation are sufficient to commercialise Probi's bacteria, and Probi will also be continuing its focus on products for the nutrition market, by conducting new studies and developing new formulae. The potential in this area is huge.

# How has Probi prepared itself organisationally to handle both continued commercialisation and R&D?

**PZ** Probi has a strong and competent organisation, and one that is constantly being upgraded to meet new demands in the fields of research, clinical trials and product development. One example of this is the recruitment of our new Head of

Research, Per Bengtsson, a registered physician whose doctoral thesis was on cellular biology, and whose background includes both pharmaceutical companies and the biotechnology sphere. Established R&D networks give us access to cutting edge competence in a variety of areas. We also have an International Scientific Board of experts in all of our fields of research, and which has an important function for Probi with regard to strategic R&D issues.

### How do you see Probi in five years' time?

MW Probiotics will be established by then in a number of new spheres. The development of bacteria strains means that Probi's earnings potential will be huge, thanks to the commercialisation of Lp299v and new bacteria strains. In five years' time, the commercialisation of Probi's bacteria will have generated additional functional food products and new dietary supplement and clinical nutrition products. Continuous research, technological developments and commercial success will have enabled the ongoing establishment of new spheres of use for our patented bacteria.

PZ I believe that Probi will be profiled throughout the world in the field of probiotic products, both as a company and via our partners. We will have further demonstrated that our concept is of the highest quality, both in terms of its products and commercially, and we will be continuing to develop new solutions in the probiotics sphere. The results will range from new product applications and new user patents to new patentable bacteria.

### The Market

There is a clear trend towards a growing interest in products that improve people's health. Probi has a strong position in the market, thanks to its extensive research documentation on probiotics.

### **Probiotics and associated concepts**

Probiotics are living micro-organisms with scientifically demonstrated effects on people's health. Many probiotic organisms belong to the lactobacilli family, which are normally present in people's and animals' intestinal flora. The way we process food and our changing dietary habits mean that people nowadays ingest far fewer lactobacilli than before. Regular consumption of probiotic bacteria is one way of restoring the balance.

Before lactobacilli can be called probiotic, they must fulfil certain criteria, the primary ones being that they must:

- be medically safe
- survive in the product in which they are found
- have a high survival rate in the gastrointestinal tract
- demonstrate clinically proven positive effects on health.

There are, of course, other factors, apart from probiotics, that affect intestinal functioning etc. It is, for example, important to ingest the right amount of fibre. Some of the concepts closely associated with probiotics are:

Prebiotics – foodstuff components that stimulate the growth of beneficial bacteria in the colon, i.e. the food for lactobacilli. Fibre, as found in porridge or crispbread, for example, cannot be absorbed by the small intestine and is transported directly to the large intestine, where it is broken down by bacteria.

Synbiotics are products that combine probiotics and prebiotics.

### Driving forces behind the growth in probiotics

Our ever more stressed environment means that the body is increasingly exposed to a variety of diseases. Spastic colon, or Irritable Bowel Syndrome (IBS), as it is medically known, is one of the most common diseases today. The intestine also

affects many of the body's other functions and as much as 80% of the immune system is localised in the tissues in and around the gastrointestinal tract. The increasing number of stress-related diseases has resulted in people becoming progressively more health conscious and interested in how food can affect various bodily functions. From a consumer perspective, the most important driving forces behind the probiotic market are:

- our lifestyle gives rise to an increasing number of lifestylerelated diseases
- refined food products give rise to poor bacterial flora in the intestine
- the difficulty involved in changing lifestyle generates a demand for alternative products
- there is more and more interest in preventing lifestyle diseases by consuming effective products.

### Probi's market position

Probi currently operates in the fields of functional food, dietary supplements and clinical nutrition. As interest in the products grows, the food industry and the pharmaceutical sector are moving towards these areas, and there is a vast need for products in the borderlands between medical products and foodstuffs, whose common denominator is that they have a positive effect on our health.

Functional food is the name given to a foodstuff that contains a natural component with a well-documented physiological effect. Food that, in other words, in one way or another, has an effect on our health and which is marketed using this effect.

Dietary supplements is the term used to describe vitamins, minerals, herbs and other supplements that all have an effect on people's health. These various products cover a wide range – anything from a simple vitamin C tablet to advanced health products such as Probi's tablet containing Lp299v.

Clinical nutrition is a collective name for products designed for use in outpatient care and in hospitals for a range of nutritional

	Foodstuffs		<b></b>		<b>←</b>	—— Phari	naceuticals
	Strong growth area Better margins needed Legislation tightened a					Complements to ex	ards preventative care isting products needed cumentation increasing
	Foodstuffs	Foodstuffs with beneficial additives	Functional Food Yoghurt, fruit drinks etc.	<b>Dietary supplements</b> Tablets, capsules etc.	Clinical nutrition Nutritional solutions etc.	Nonprescription drugs	Prescription drugs
Research			<b>✓</b>	<b>~</b>	<b>✓</b>		
Development			<b>✓</b>	( <b>~</b> )	(V)		
nersialisation			( <b>~</b> )	<b>(✓)</b>			

Probi är idag verksamt inom områdena Functional food, Kosttillskott och Klinisk nutrition. Probi arbetar systematiskt med sin forskning och utveckling för att kontinuerligt bygga kommersiella erbjudanden, område för område.

Cor

requirements. The field currently ranges from nutritional products given to seriously ill people in conjunction with intensive care or pre-operative care, to products given to meet specific nutritional requirements, e.g. in conjunction with dialysis and chemotherapy.

### **Functional food**

The definition of functional food varies from one country to another. In Japan, for example, which is a groundbreaking country in this field, the concept is regulated by special legislation, and in Sweden, products' approval as functional food depends on their compliance with a newly instituted rulebook. The EU is also currently discussing more extensive legislation with regard to functional food. The rules will probably be tightened up in the next few years in a move that will, amongst other things, mean greater demands for documentation. Probi, which has extensive documentation in several fields, will probably benefit from more stringent requirements.

### The market's driving forces

Demand for functional food products from a consumer perspective is primarily driven by and dependent on the large numbers of people who are now aware that they can have a real effect on their own health. The realisation that the food we eat affects us in a number of ways is growing by the day, and the food companies are seeing interesting new commercial opportunities in the functional food market and the potential for higher margins. Increased knowledge and advanced technology mean that it is now possible to develop products that are not only good for you, but which taste good too.

### Market size and geographical areas

The global market for probiotic functional food is currently estimated at SEK 30 billion and is growing steadily. The most developed markets in terms of consumer maturity are Japan and Sweden, with Japan also leading the way in terms of volume, followed by Germany, the UK and France. The European and Asian markets are adjudged to have the biggest growth potential in the next few years.

Market potential within different product categories

From a global perspective, the yoghurt product category is the biggest carrier in terms of volume. The probiotic share of this





market is 30–40%. The highest percentage of probiotic products, however, (75%) is to be found within the category of shots – a probiotic shot being a small bottle containing a high concentration of probiotics. The shots market is currently valued at up to SEK 10 billion and has a very high growth rate. In the chilled fruit drink sector, functional fruit drinks (juices with additives, e.g. vitamins, iron or calcium) currently account for approximately SEK 25 billion and this sector, too, is reporting very sharp growth. Only 1% of these products are probiotic ones at present, largely as a result of there being virtually no probiotics that survive in the acid environment of fruit drinks. Probi's patented bacteria, Lp299v, is, however, one of the very, very few that can handle this acidic environment. The same is true of performance recovery drinks, a field in which ProViva Active is unique.



### Strong shot market development in Europe

The first "shot product" was introduced by the Japanese company, Yakult, back in 1955 in Japan. A daily intake of a "yoghurt shot", for example, meets the daily requirement for probiotics. The product has become a succcess, and Yakult currently sells 35 million shot bottles daily in 27 countries.

Demand has spread to Europe. A mere six years after the introduction of shot products, we are seeing a European market worth just over SEK 6 billion as a result of vigorous marketing investments by such players as Actimel (Danone), LC1 (Nestlé) and Yakult. Skånemejerier launched ProViva shots in Sweden in the spring of 2003.



### PROBIOTIC PRODUCTS

Sweden – fruit drinks and yoghurt

Europe – yoghurt and shots

Japan – shots, yoghurt and soya protein drinks

Australia – dietary supplements in the form of capsules and tablets

Brazil and Argentina – shots and yoghurt

USA – dietary supplements

### Market players

Probi's main competitors in the functional food sector comprise companies such as Valio and Biogaia that license out products, and other probiotics manufacturers, such as Christian Hansen and Danisco. Probi's competitors are also potential partners, as is the case with research companies in other industries. The food companies have the size and distribution chain needed to commercialise products in the market successfully. Probi complements the food companies with its research expertise and its documented product concepts.

Probi has a competitive advantage in that clinical tests are conducted on a finished product concept with the aim of ensuring the probiotic's function in the end product – which means that a commercial product can be put on the market more quickly.

### **Dietary supplements**

Dietary supplements differ from functional food in a variety of ways, including the way in which they are consumed: functional food forms part of the daily diet, whilst dietary supplements are taken as a complement in order to ingest a specific substance. The dietary supplement usually comprises "dry" products, such as tablets and capsules.

The market is characterised by substantial dispersal with regard to the distribution of the preparations. In some countries, pharmacies are a major distributor, whilst in others, the leading role is taken by health food shops. Direct selling is a new type of sales channel currently in the process of becoming established. The biggest driving force for dietary supplements is the fact that the quality of the products is continuously improving, and the potential for combination products is obvious. Extensive research and documentation also mean that certain products are moving closer towards therapeutic and registered preparations. Availability and ease of use are other important factors – you don't have to go to the doctor to buy dietary supplements, and there is a wide range of products with different effects to choose from.

### Market size and potential

The global market for dietary supplements is SEK 200 billion and includes every kind of dietary supplement, i.e. not simply those containing probiotics. The probiotic market only comprises a small part of the overall market at SEK 1–3 billion. Japan, the USA and Australia are the leading countries in this respect. The products are based on a freeze-dried bacteria that is added to various types of capsules, tablets and powders. The interest in dietary supplements as a potential market is increasing as the techniques for developing freeze-dried powders with probiotics improve.

#### **Players**

The players in this market are, to some extent, the same as those operating in the functional food market. Probi's main competitors are probiotics manufacturers such as Christian Hansen, Lallemand Rosell Inc and companies offering licenses, such as Valio and Biogaia. Other market players include companies who sell end-products, e.g. Sanofi, Ferrosan etc. There are also several smaller local players in the various countries.



### **Clinical nutrition**

The market's driving forces

Clinical nutrition can fulfil specific requirements in a wide range of situations. Well-documented probiotics are already being used to some extent in hospitals to ensure healthy intestinal flora in conjunction with long-term nutrition supply by means of an intravenous drip. The treatment is intended, amongst other things, to prevent other bacteria from penetrating the mucous membrane's protective barrier and invading the body, which can result in infections such as blood poisoning.

The driving forces behind the nutrition market are a desire to optimise the therapy to ensure fewer complications, shorter treatment times, reduced use of antibiotics, reduced treatment costs and, last but not least, increased well-being on the part of the patient.

### Market potential

Probiotics can have other effects, in addition to protecting against infection. There are numerous diseases where established pharmaceutical therapy functions sub-optimally and where the various functions of probiotics could be exploited. Chemotherapy, which eliminates the normal bacterial flora, increases the tendency towards infection and can cause inflammations, is one such example where the introduction of probiotics is desirable.

Irritable bowel syndrome is another area in which probiotics have massive potential, as is cardiovascular disease, where probiotics can have an impact on the associated risk factors. Interesting new results from Probi's research show that a tendency towards inflammation and disruption in the metabolism of fats and carbohydrates so common – and so dangerous – in





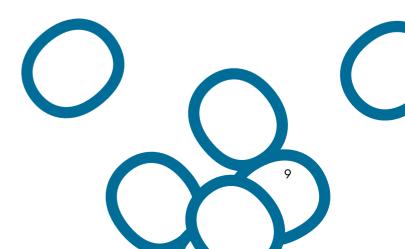
the West can be positively affected by probiotics. The potential in this area is vast, but at the same time, the requirement for documentation is even greater if this potential is to be achieved.

### Players

Pharmaceutical, food, and nutrition companies, e.g. KabiFresenius, Baxter, Novartis, Numico, Nestlé etc., are all active in this field.

These companies have a number of different products that can fulfil a range of nutrition requirements, from those of premature babies to those of the elderly. The potential for effective probiotics can be expanded considerably, as described above, and extends far beyond those areas currently exploited by companies operating in the clinical nutrition sphere.

Source for the Market section: Leatherhead Food RA, Datamonitor, Nutrition Business Journal, New Nutrition Business, press cuttings and internal estimates.



### **Probi's operations**

The company's operations can be divided into four research fields: gastrointestinal disorders, cardiovascular diseases, stress and performance recovery, and the immune system. The goal is to develop probiotic strains that are documented as being good for people's health. These bacteria are offered to licensees in the food and nutrition industry.

### Probi in the food shop

Food companies currently use probiotic bacteria in such products as tasty fruit and performance recovery drinks, and in yoghurt and ice cream. The developmental potential is believed to be considerable, due to the strong demand for health-giving foods that has developed over the last few decades. Probi's strategy is consequently based on helping the food companies to launch commercially effective concepts with products that are not only tasty and feel natural, but which demonstrably help to improve their users' health. This is done by granting the food company the right, under the terms of a licensing agreement, to use Probi's probiotics in a consumer product that is produced, distributed and marketed by the licensee. Skånemejerier's ProViva, which has seen 15% increases in turnover for seven years in a row, is one example of this approach. Probi's probiotic bacteria are primarily distinguished by the strong documentation that confirms the bacteria's healthgiving claims, and the fact that the bacteria strains and their applications are patented.

### Why Probi's probiotics are competitive

- Probi's bacteria have more health effects than any of today's other probiotics, according to published clinical trials. Source: Medline
- The bacteria are sufficiently robust to function in consumer products and are already being used successfully in fruit drinks, dairy products and tablets etc.
- The bacteria are documented as being safe
- Probi's patented bacteria stimulate other beneficial bacteria in the intestine and reduce the number of adverse bacteria
- The bacteria survive in the acidic environment of the stomach cavity, because they tolerate extremely low pH levels
- Probi's bacteria colonise and reproduce in the intestine
- The adhesion capacity, which enables the bacteria to stick to the mucous membranes of the intestine, is patented and documented.

#### Probi at the doctor's

Probi's bacteria are of interest to nutrition and pharmaceutical companies as a therapeutic approach to bowel irritation, in reducing risk factors associated with cardiovascular diseases, and in the field of clinical nutrition.

Probi's strong patent protection of both the bacteria and their applications is an additional advantage for the company's product offering to nutrition and pharmaceutical companies.

Probi has been developing products and concepts for a number of years now. Development work is already complete and clinical testing under way for one product, and the developmental phases of new concepts in nutrition are well advanced.

### Why are licensees interested in Probi in particular?

There are three main factors that make licensees interested in Probi's product portfolio. Firstly, Probi has extensive clinical documentation – Lp299v, for example, has more documented effects on health than other probiotics. Secondly, the products have strong patent protection, with both the bacterial strains and their applications protected. Thirdly, Probi's bacteria have been shown to stand up to the demands of commercial application and the bacteria can hence be offered in a wide range of consumer products, ranging from yoghurt and ice cream to tablets and performance recovery drinks.

Probi also possesses the knowledge and scientific expertise that is so critical in partnerships with regard to the marketing and production of probiotics.

The best example of successful product launches that include Probi's Lp299v is ProViva, which has been marketed by Skånemejerier since 1994.

Know-how is naturally another component of the partnership with the licensees. Probi's in-depth experience of working with probiotics has created a knowledge base of value to licensees with regard to the development of consumer products. Probi can, in other words, also offer R&D know-how – scientific competence for promoting public relations – in addition to a knowledge of the best way to engage in the production of probiotic products.

### **Probi's current partners**

Probi currently has four partners, with Skånemejerier as the biggest in Sweden. Skånemejerier launched the ProViva health drink way back in 1994 and it has proved a success, whilst in the UK, Skånemejerier, in cooperation with Food Brokers, has continued to market the ProViva products. Probi also has a partnership to produce the probiotic ice cream, "Godhälsa", with the Swedish ice cream manufacturers, SIA Glass AB, dating back to 1998. Just like the ProViva and ProViva Active drinks, the ice cream contains the probiotic bacteria, Lp299v.

A completely new product was launched at the start of 2002 on the Japanese market in partnership with Natural Group, which has 500 own-name stores and an organisation for direct sales to the consumer, namely a tablet containing the Lp299v bacteria.

A partnership and technology agreement was concluded with the French-Canadian biotechnology company, Lallemand Rosell Inc., in 2002. The agreement is designed to enable the two companies to jointly offer interesting new product concepts to health and nutrition companies.

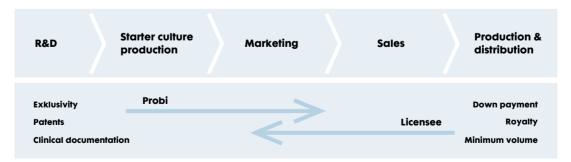
A decision has been taken to wind up the operations linked to probiotics for animals as part of the company's strategy of focusing on offering high-quality documentation of probiotics for people. Sales of the company's horse feed product will, therefore, cease in 2003.



### Probi's revenue model

Probi's revenue model is based on selling licenses to companies that produce, distribute and market products containing Probi's bacteria. Probi can grant the licensees exclusivity, thereby justifying a one-off payment. Once the licensee starts producing products containing Probi's probiotics, Probi receives ongoing royalty revenues for patents and clinical documentation, based on the market retail value.

Probi provides expert assistance with regard to product and concept development, production support and scientific advice.



Probi's revenue model, which is based on remuneration for exclusivity and ongoing royalty income, based on the market retail value.

### A knowledgeintensive organisation

Probi was founded in response to a medical need. Surgeons had discovered that leakage problems in intestinal walls caused severe infections in their patients. The leakage was due to a weakening of the intestinal mucous membranes when the patients received their nutrition via the intravenous route.

The foundations for Probi were laid in 1986 when a research project at the University of Lund was begun with the aim of developing a completely new nutritional product for patients whose condition necessitated nasogastric tube feeding or extra nutritional supplements. Bacteria strains that had a positive effect on the intestinal mucous membrane were identified: the Lactobacillus Plantarum 299v (Lp299v) bacteria proved to have the qualities sought and was consequently chosen as a nutrient culture.

### **Clinical documentation**

The medical perspective lives on at Probi in the sense that the company demands high standards of clinical documentation, and indeed, Probi's probiotics research is one of the most extensively documented in the global market. Clinical studies have enabled Probi to demonstrate effects in every single one of the company's four research fields: gastrointestinal disorders, cardiovascular diseases, stress and performance recovery, and the immune system. Probi owns a total of 58 patents in 13 distinct patent fields.

The research comprises Probi's first-generation probiotics, namely Lp299v, Lp299 and Lr271.

Research and development fields	Patent fields	Clinical studies	Indications
Gastrointestinal complaints	8	10 completed 11 ongoing	IBS (irritable bowel syndrome) IBD (inflammatory bowel disease) Gastrointestinal infections and surgery Side-effects of cytostatic treatment (chemotherapy)
Immune system	5	1 completed 1 ongoing	Immune modulation HIV
Cardiovascular disease risk factors	4	3 completed 1 ongoing	Cardiovascular disease risk factors, e. g. fibrinogen, cholesterol, blood pressure
Physiological stress/ performance recovery	4	1 completed	Physiological stress Antioxidative capacity

Probi conducts its research and development work within a number of indication fields and works actively to establish patent protection.

### Organisation and international partnerships

A total of 18 people work at Probi, the majority of whom work with research and development. The headquarters are located in the Ideon research park in Lund. Six of the company's research personnel have successfully obtained doctorates in their fields. Probi recruited a new Head of Research during the past year, namely Per Bengtsson, whose thesis was in the field of cellular biology, and who is a registered physician with a background in both pharmaceuticals and biotechnology companies.

Probi's research organisation is based on small, fixed resources, with a strong national and international network. In Sweden, for example, Probi works in partnership with the

20-30 31-40 41-50 51-60 Age breakdown 11% 27% 42% 20%

Education level: 33% with doctorates, 66% with further education. Staff turnover:11%

### Personnel statistics.

University of Lund in the area of pure research, whilst on the international front, the company has a number of important partnership projects in progress. In the USA, for example, Probi is involved in a long-term immunology project in partnership with Cornell University, whilst in Poland, the company is working in partnership with the Pomeranian Academy of Medicine as part of a project focusing on cardiovascular disease risk factors. An initial study was published in 1998, and in 2002, an additional clinical study was published in the respected periodical, the American Journal of Clinical Nutrition, which extended and reinforced the earlier finds in the field of cardiovascular disease risk factors.

## International Scientific Board with specialist expertise

Network-based research gives Probi the opportunity to research and clinically document probiotic effects in an extremely cost-effective manner. This gives considerable flexibility by generating the ability to intensify or reduce activity levels in various research fields. Probi has also formed an International Scientific Board made up of highly qualified research scientists, in order to gain access to additional expertise. The International Scientific Board's purpose is to look closely into topical research issues and to guide the company on strategic issues with regard to future research and development. The members have a wide range of differing spheres of expertise in the fields of immunology, nutritional research, microbiology, surgery, internal medicine and paediatrics.

### **High quality production**

Probi's patented bacteria are produced in the company's cultivation facility at the headquarters in Lund. Probi has a laboratory with an accredited control programme. Probi's patented oat base – fermented oats with live bacteria cultures – is manufactured in the production plant in Sösdala, outside Lund.

### Probi's research and development goals

Research is a constantly ongoing process that develops in tandem with the market's requirements. Probi is engaged in a continuous dialogue with market players and consequently applies its research to the products or concepts that are in demand. Above all, Probi works towards the following goals:

- to document the health effects of the probiotic bacteria and products produced, through both model studies and clinical studies
- to isolate interesting new bacteria strains for new markets and application areas
- to develop new probiotic products (either in-house or in cooperation with partners)
- to study the effect mechanisms of the bacteria
- to establish patent protection for research findings, bacteria and product concepts.

# Interview with the International Scientific Board



**Agnes Wold** 

Assistant Professor of Immunology, Clinical Bacteriology Department, University of Gothenburg, member of Probi's International Scientific Board.

# 1. What potential do probiotics have, from a scientific viewpoint, for curing diseases or alleviating their symptoms?

Probiotics have convincingly shortened diarrhoea conditions in studies, and the ingestion of probiotics has also been shown to activate immune functions. It should be possible to utilise the effects on the immune system in conjunction with immunological and inflammatory conditions, such as allergies, inflammatory bowel disease and atherosclerosis. If allergies are due to a deficiency in the intestinal flora, there is a potentially huge field in which bacteria could provide preventative treatment.

### 2. What is your view of probiotics from an immunological perspective?

There is a wide range of conditions where probiotics could be used if we can gain a better understanding of the way in which bacteria regulate inflammation and immunity. Inflammation is, after all, an important component of most diseases, and because the entire immune system is set to react to bacteria and viruses, bacteria and their products are also the most effective immune regulatory components. Which is why bacterial components are included in vaccines designed to boost the immune system's defences.

## 3. How has our knowledge of the importance of intestinal flora developed in recent years?

There are considerably more people nowadays who believe that the bacteria present in our intestinal flora and which we ingest in our food are significant in terms of the risk of developing allergies and inflammatory bowel disease than was the case 15 years ago. There is also a new awareness of the need to be a bit careful with the bacterial ecology and not to pump out too many antibiotics unnecessarily. Many doctors these days are, I believe, recommending that their patients eat some form of probiotics if they are being treated with antibiotics, in order to reduce the disruption to the intestinal flora.

### 4. In what areas do Probi's probiotics have the greatest potential, in your opinion?

Irritated bowel syndrome is one of the most common diseases today. Large numbers of overweight people are also affected by insulin resistance, high blood pressure and low-grade inflammation. These are all areas in which probiotics have considerable potential. It is, for example, very interesting that ProViva has been shown to reduce fibrinogen levels in the blood of smokers in Poland. Given that fibrinogen is part of the inflammatory response, this would suggest that inflammation can be regulated using probiotics, which could be significant for every conceivable inflammatory condition.

## Members of Probi's International Scientific Board:

Göran Molin (Chairman) Professor, Dep. of Food Hygiene, University of Lund, Sweden

David R. Mack Professor of paediatrics, Children's Hospital of Eastern Ontario, University of Ottawa, Canada

Susanna Cunningham-Rundles Professor of immunology, Dept. of Paediatrics, The New York Hospital, USA

Marek Naruszewicz Professor, Regional Center for Atherosclerosis, Pomeranian Academy of medicine, Szczecin, Poland

Agnes Wold Ass. Professor of immunology, Dep. for clinical bacteriology, University of Gothenburg, Sweden

Bengt Jeppsson Professor of surgery, Dep. of surgery, The University Hospital, Malmö, Sweden



### David R Mack

Professor of Paediatrics, Children's Hospital of Eastern Ontario, University of Ottawa, member of Probi's International Scientific Board.

### 1. Why do you think interest in probiotics is increasing?

I believe that there are several interacting factors. Firstly, a sufficient number of clinical studies have now been conducted to document the effects of probiotics. Secondly, there is substantial awareness amongst the medical profession of the problems created by antibiotics, problems that can be counteracted using probiotics. The extensive research into human cells is helping to establish an increased acceptance of therapies other than the traditional chemical ones. And as legislation makes it possible to produce biological pharmaceuticals, the driving force from the industry to create a new type of pharmaceutical is increasing.

### 2. What are the factors affecting individual people's interest?

Generally speaking, we are living longer these days. And many people are actively studying the latest research findings to ensure that they remain healthy for as long as possible – more and more people want the ability to influence their own health. It's also easier for individuals nowadays both to find and to study medical information, thanks to the numerous information channels offered by the Internet, amongst others. The effects of probiotics are equally important. The new therapies, of which probiotics are just one type, have been shown to reduce symptoms in conjunction with chronic diseases. People whom traditional medicine has been unable to help to date can now be offered an alternative.

## 3. How do you see the future for probiotics in terms of their potential?

Probiotics have huge potential as both primary and secondary therapy. Future spheres of use may well include preventing kidney stones, high cholesterol levels and allergies, for example. And for certain specific diseases, such as Clostridium difficile diarrhoea, probiotics can be used as a primary therapy, i.e. instead of traditional medicine. In some other cases, e.g. after operations or serious illnesses such as pancreatitis, probiotics can be used as a complement to other forms of treatment.

### **Report from the CEO**

The Board of Directors and the CEO of Probi Aktiebolag (publ.), company reg. no. 556417–7540, hereby present the Annual Report and the Consolidated Accounts for 2002.

### **Operations**

Probi is a biotechnology company that is among the world leaders in the field of probiotic research and development. The company conducts its own research and development in the fields of: gastrointestinal complaints, the immune system, cardiovascular disease risk factors and stress and performance recovery.

Probi's research has demonstrated positive medicinal effects in all of the company's research fields, and the company owns a total of 58 patents in 13 patent fields. Probi's revenue model entails the receipt of license fees paid for market exclusivity and of royalty payments on ongoing sales to the market for the use of Probi's patented and documented bacteria strains.

### **Research and development**

The biotechnology company, Probi, is continuing its research and development with a view both to supporting existing and future partners and to reinforcing the commercialisation of the company's first-generation probiotics, L. plantarum 299v, L. plantarum 299 and L. rhamnosus 271. Several new bacteria strains have been studied in in vitro systems, known as artificial systems, in 2002.

A number of new probiotic strains with interesting potential were registered in the fourth quarter and patent applications have been prepared. The company has 58 approved patents on respect of four patented strains within its 13 patent fields. The patent protection for the company's first-generation probiotics is strong and the patents do not expire for another nine years. Probi is continuing with its aggressive strategy of patenting existing and new bacteria strains in respect of their innovative clinical effects and functions. The R&D costs' percentage of total costs, excluding goods sold, was 47% (39%).

Extensive work aimed at augmenting the quality systems for laboratory operations and clinical trials has been carried out during the year. The laboratory is now accredited for microbiological analyses for the company's products.

### **Clinical trials**

13 clinical trials were in progress at the end of the year. Probi's research and clinical studies have demonstrated that the company's products have medicinal effects within the four research fields. Four clinical and one preclinical study were published in respected scientific journals during the year.

Cardiovascular disease risk factors are a prioritised area. The documentation of Lp299v is interesting in this respect, both as a preventative agent and as a complement to pharmaceutical usage. A study was published in 2002 in the American Journal of Clinical Nutrition, showing that Probi's patented bacteria, *Lactobacillus plantarum* 299v, reduces a number of cardiovascular disease risk factors. Marked and statistically significant reductions in leptin, fibrinogen and blood pressure were noted. The results have attracted considerable interest amongst medical experts.

Lp299 is another of Probi's patented probiotic bacteria. Three studies involving Lp299 were published in well-known medical journals such

as the British Journal of Surgery, Nutrition och Transplantation in the autumn of 2002. The studies were conducted on patients with serious conditions such as pancreatitis, and on patients who had undergone liver transplants and major abdominal surgery. Infections in conjunction with these conditions are a major problem in intensive care, leading to increased treatment times and increased mortality. The patients were given Lp299 in a patented nutrient solution based on oats. Lp299 reduced the frequency of postoperative infections which, in the long term, means a reduced requirement for antibiotics and shorter treatment times, and hence reduced health care costs.

#### **Personnel**

At the year-end, Probi had 18 employees, 9 of whom are female and 9 male. The average number of employees during the year was 17 (17). Six of the company's research staff hold doctorates in their field.

Per Bengtsson, who has an extensive background in pharmaceutical and biotechnology companies, was recruited as a new Head of Research during the year.

#### **Income**

Income in 2002 totalled SEK 26.6 million (SEK 20.6 m), corresponding to an increase of 29% over last year. Skånemejerier continues to report good growth in the sales of ProViva in their territory, with sales increasing by 18% in comparison with the corresponding period last year. SEK 5.6 million (SEK 0.3 m) of net turnover derives from tablet sales to lagan.

### Results, cashflow, and position

The Group posted a loss of SEK –14.1 million (SEK –27.0 m). The operating result was SEK –12.5 million (SEK –29.0 m), whilst the result before depreciation and writedowns improved during the year to SEK –4.7 million (SEK –7.7 m). Cashflow decreased in 2002 by SEK 29.9 million, SEK 20.0 million of which was attributable to the final payment for the European rights made to Skånemejerier, thereby reducing other liabilities by a corresponding amount. The cashflow at the period end was SEK 19.3 million (SEK 49.3 m). All research and development costs previously capitalised were written down in 2001, which impacted the comparative figures to the tune of SEK 15.1 million. The company has invoiced in Swedish kronor during the year and the majority of its purchases are also made in that currency.

The company's patents and the European rights acquired have book values of SEK 2.4 million and SEK 34.0 million, respectively. The management believes, based on the operations' outlook for the future, that the value of the intangible assets is reasonable. The company invests significant amounts in research and hence posts a planned accumulated loss. This planned accumulated loss generates, as of 31st December, a non-booked, deferred tax receivable of SEK 12.2 million (28%) that can be utilised in the coming years.

There are no undertakings in respect of former Board Members or senior executives. The company has not been involved in any legal proceedings in 2002.

### **Subsidiaries**

Probi AB has two wholly owned subsidiaries, Probi Food AB and Probi Feed AB. Both companies are dormant.

### The Board of Directors and their rules of procedure

Probi AB's Board of Directors comprises seven Ordinary Members and two Deputy Members, all elected by the Annual General Meeting. Peter Zakrisson is the Executive Chairman of the Board. The Board has met 6 times in 2002. The Board has adopted a set of rules of procedure that include an annual reporting plan and an instruction regarding the division of labour between the Board of Directors and the CEO. The Board of Directors has played an active part in pursuing the company's strategies and goals. Every year, the company's principal auditor reports his observations derived from the audit and his assessment of the company's internal checks and balances to the Board, in person. The Board has appointed a nomination committee to represent small and large shareholders alike ahead of proposals being made to the General Meeting with regard to the latter's election of Board Members. No remuneration or audit committees have been appointed: these matters are handled separately by the Board of Directors.

### Ownership structure

The company has 4,541 shareholders and is listed on the NGM Equity list. Probi has issued 428,000 warrants to its personnel and Board of Directors. Probi's two main owners control approximately 39% of the votes and 26.4% of the capital. They have declared a shared view of the company and its performance and have declared their intention to be long-term owners of the company.

### **Proposed allocation of accumulated loss**

The Board of Directors and the CEO propose that the Parent Company's accumulated loss be offset in its entirety against the share premium fund in the sum of TSEK –13,437.

The Group's accumulated loss, in accordance with the Consolidate Balance Sheet, totals TSEK 9,289.

No allocations to restricted reserves are required.

### **Income Statement**

		The Group		Parent	Company
	Note	2002	2001	2002	2001
Income	1				
Net turnover	2, 3, 21	26 063	18 992	26 063	18 992
Change in stock-in-trade		685	133	685	133
Other operating income		509	1 572	509	1 572
Total operating income		27 257	20 697	27 257	20 697
Operating expenses					
Raw materials and consumables		-3 532	-1 039	-3 532	-1 039
Other external costs	4, 6	-16 18 <i>7</i>	-16 917	-16 187	-16 91 <i>7</i>
Staff overheads	5, 6	-12 202	-10 395	-12 202	-10 395
Depreciation and writedowns of fixed assets	7	-7 847	-21 371	-7 156	-20 680
Total operating expenses		-39 768	-49 722	-39 077	-49 031
Operating result		-12 511	-29 025	-11 812	-28 334
Result from financial investments					
Result from receivables that are fixed assets	9	-2 509	0	-2 509	0
Interest income		1 149	2 146	1 149	2 146
Interest expenses		-257	-114	-257	-114
Total result from financial investments		-1 61 <i>7</i>	2 032	-1 617	2 032
Result after financial items		-14 128	-26 993	-13 437	-26 303
Tax on the result for the year		0	0	0	0
Net result for the year		-14 128	-26 993	-13 437	-26 303
EPS before dilution		-0,34	-0,66		
EPS after dilution		-0,34	-0,65		

# **Balance Sheet**

		The Group		Parent Compan	
	Note	2002	2001	2002	2001
Assets	1				
Fixed assets:					
rixed ussels:					
Intangible fixed assets					
Patents, licenses and similar rights	10	36 488	40 558	36 488	40 558
Goodwill	11	3 453	4 1 4 4	0	0
		39 941	44 702	36 488	40 558
Tangible fixed assets					
Buildings and land	12	4 438	4 180	4 438	4 180
Inventories, tools and installations	13	5 644	6 036	5 644	6 036
New construction work in progress	13	548	999	548	999
		10 630	11 215	10 630	11 215
Financial fixed assets					
Shares in Group companies	14	0	0	4 031	4 031
Other long-term receivables	15	0	1 075	0	1 075
Total financial fixed assets		0	1 075	4 031	5 106
Total fixed assets		50 571	56 992	51 149	56 879
Current assets:					
Stock-in-trade etc.					
Finished goods		1 625	940	1 625	940
Total stock-in-trade		1 625	940	1 625	940
Current receivables					
Accounts receivable		3 065	1 972	3 065	1 972
Other receivables		149	755	149	755
Prepaid costs and accrued income	16	581	454	581	454
Total current receivables		3 795	3 181	3 795	3 181
Cash and bank		19 327	49 273	19 327	49 273
Total current assets		24 747	53 394	24 747	53 394
Total assets		75 318	110 386	75 896	110 273

# **Balance Sheet**

		The Group		Parent	Company
	Note	2002	2001	2002	2001
Shareholders' equity & liabilities					
Shareholders' equity:	1 <i>7</i>				
Restricted shareholders' equity					
Share capital		41 113	41 113	41 113	41 113
Restricted reserves		34 697	61 691	35 328	61 631
Statutory reserve		0	0	60	60
		<b>75 810</b>	102 803	76 501	102 804
Non-restricted shareholders' equity/Accumulated	d loss			_	_
Non-restricted reserves/Loss brought forward		4 839	4 839	0	0
Net result for the year		-14 128	-26 993	-13 437	-26 303
		-9 289	-22 154	-13 437	-26 303
Total shareholders' equity		66 521	80 649	63 064	76 501
Long-term liabilities	10	4.05.4	4 100	4.05.4	4 100
Other long-term liabilities	18	4 054	4 100	4 054	4 100
Liabilities to Group companies				4 035	4 035
Total long-term liabilities		4 054	4 100	8 089	8 135
Common to the latest and					
Current liabilities		47	0	47	^
Current part of long-term liability		46 2 284	4 250	46 2 284	0 4 250
Accounts payable  Tax liabilities		2 284 57	4 250	57	4 250 4
Other liabilities		553	20 408	553	20 408
	19	1 803	975	1 803	20 408 975
Accrued costs and prepaid income  Total current liabilities	19		25 637		25 637
Total current liabilities		4 743	25 03/	4 743	25 03/
Total shareholders/ equity 9 limbilities		75 318	110 386	75 896	110 273
Total shareholders' equity & liabilities		75 318	110 386	/5 896	110 2/3
Pledged securities	20	4 100	4 100	4 100	4 100
-	20	None	None None	4 100 None	
Contingent liabilities		ivone	INONE	INone	Inga

# **Cashflow analysis**

	The Group		Parent	Company
	2002	2001	2002	2001
Operating activities				
Operating result	-12 511	-29 024	-11 812	-28 334
Depreciations and writedowns	7 847	21 371	7 156	20 680
Capital loss	307	0	307	0
Interest received	1 149	2 146	1 149	2 146
Interest paid	-257	-114	-257	-114
Cashflow from operating activities				
before changes in operating capital	-3 456	-5 621	-3 456	-5 621
Change in stock-in-trade	-685	-133	-685	-133
Change in receivables	-614	678	-614	678
Change in operating liabilities	-20 940	21 887	-20 940	21 887
Cashflow from operating activities	-25 704	16 811	-25 704	16 811
Investment activities				
Acquisition of intangible fixed assets	-619	-41 357	-619	-41 357
Acquisition of tangible fixed assets	-2 189	-6 211	-2 189	-6 211
Acquisition of financial fixed assets	-1 434	-1 075	-1 434	-1 075
Cashflow from investment activities	-4 242	-48 643	-4 242	-48 643
Financing activities				
Loans raised	0	4 100	0	4 100
Warrants	0	-65	0	-65
Cashflow from financing activities	0	4 035	0	4 035
Change in liquid assets	-29 946	-27 797	-29 946	-27 797
Opening liquid assets	49 273	77 070	49 273	77 070
Closing liquid assets	19 327	49 273	19 327	49 273

### **Notes to the Accounts**

#### Note 1 Accounting and valuation principles

The Annual Report is compiled in accordance with the Swedish Annual Reports Act and the recommendations of the Swedish Financial Accounting Standards Council, unless stated otherwise below.

Unless specifically stated, all amounts are reported in SEK thousand.

#### Income

Sales of goods are reported in conjunction with the delivery of the products to the customer, in accordance with the conditions of sale. Sales are reported net after VAT and discounts in conjunction with sales in foreign currencies. Other revenues earned are reported as income as follows:

Royalties and similar incomes are reported in accordance with the financial import of the agreement in question.

#### Income taxes

A deferred tax receivable attributable to a fiscal loss deduction will not be reported until such time as an additional significant commercial agreement has been concluded.

#### Receivables

Receivables are booked in the amount which, after individual assessment, will, it is calculated, be paid.

### Stock-in-trade

The stock-in-trade is valued, in accordance with the first-in-first-out principle, at whichever is the lower of the acquisition value and the true value on the closing date.

### Tangible fixed assets

Tangible fixed assets are reported at the acquisition value less depreciation. Expenses arising from improvements in assets' performance, over and above the original level, increase the reported value of the asset. Repair and maintenance expenses are reported as costs.

Tangible fixed assets are depreciated systematically over the estimated useful life of the asset.

A linear depreciation method is used for all types of tangible fixed assets. The following depreciation periods are applied: buildings, 25 years, and inventories, tools and installations, 3–10 years.

In the event of the reported value of an asset exceeding its estimated recovery value, the asset is immediately depreciated to its recovery value.

### Intangible assets

### Research and development

Research and development expenses are booked as costs on an ongoing basis.

### Goodwill

Goodwill comprises the amount by which the acquisition value exceeds the true value of the Group's share in the acquired subsidiary's net assets at the time of acquisition. Goodwill is depreciated linearly over the estimated useful life. Goodwill is depreciated over 10 years.

### Other intangible assets

Expenses for patents and licenses acquired are capitalised and written off linearly over their contractual useful life. The following depreciation periods are used: patents, 5 years, and licenses, 12 years.

### Depreciation of intangible assets

When the indications are that an asset has declined in value, an evalu-

ation of the asset's reported value, including goodwill, is carried out. Should an asset's reported value exceed its estimated recovery value, the asset is immediately depreciated to its recovery value.

#### Cashflow analysis

The cashflow analysis is compiled using the indirect method. The reported cashflow comprises only those transactions that entail a flow of monies in or out.

### Note 2 Breakdown of net turnover and operating result by geographical market

The net turnover is broken down by geographical market as follows:

	, 0	<b>U</b> 1			
	Th	ne Group	Parent Company		
	2002	2001	2002	2001	
Europe	20 423	16 638	20 423	16 638	
Other	5 640	354	5 640	354	
Total	26 063	18 992	26 063	18 992	

#### Note 3 Breakdown of income

The net turnover includes income from:

	The Group		Parent Company	
	2002	2001	2002	2001
Products	6 785	2 688	6 785	2 688
Royalties, licenses etc.	19 278	16 304	19 278	16 304
Total	26 063	18 992	26 063	18 992

### Note 4 Remuneration to the auditors, Öhrlings PricewaterhouseCoopers AB

	The Group		Parent Co	mpany
	2002	2001	2002	2001
Audit	11 <i>7</i>	77	11 <i>7</i>	77
Commissions,				
other than the audit	0	18	0	18
Total	11 <i>7</i>	95	11 <i>7</i>	95

### Note 5 Employees and staff overheads

Note 5 Employees and statt of	verneaas	
Salaries and remunerations	2002	2001
Board of Directors & CEO	1 697	1 268
Other employees	6 278	5 504
Total	7 975	6 772
Staff welfare expenses, total	3 723	3 342
Of which pension costs for		
the Board of Directors and CEO	341	399
Of which pension costs for		
other employees	815	736

### Board of Directors/CEO

Directors' fees are payable up to and including the next Annual General Meeting, in accordance with a resolution of the Annual General Meeting, in the sum of SEK 535 thousand. Of this sum, SEK 383 thousand has already been paid out, SEK 147 thousand of it to the Chairman of the Board.

The salary paid to the CEO of the company in 2002 totalled SEK 1,116 thousand. A total of SEK 326 thousand in pension premiums has also been paid by the company on behalf of the CEO.

A contract of employment with a mutual period of notice of six months governs the relationship between the company and the CEO. The CEO shall, in the event of notice of termination being given by the company, be entitled to receive severance pay corresponding to two years' salary.

The company has no pension obligations in respect of the Board of Directors and the CEO.

### Note 6 Research work

The year's cost for research work totals SEK 13,433 thousand (SEK 11,013 k) within the Group and SEK 13,433 thousand (SEK 11,013 k) within the Parent Company.

### Note 7 Depreciation and writedowns of fixed assets

Depreciation and writedowns of tangible and intangible fixed assets total SEK 7,847 thousand (SEK 21,371 k) in the Group and SEK 7,156 thousand (SEK 20,680 k) in the Parent Company.

### Note 8 Operational leasing agreements

The nominal value of future minimum leasing charges in respect of operational leasing agreements breaks down as follows:

	The Group		Parent Company	
	2002	2001	2002	2001
Falls due for payment				
within 1 year	1 286	1 236	1 286	1 236
Falls due for payment after more				
than 1 but fewer than 5 years	1 355	2 400	1 355	2 400

### Note 9 Result from receivables that constitute fixed assets

	Th	e Group	Parent (	Company
	2002	2001	2002	2001
Depreciations	2 509	0	2 509	0

Depreciation of financial fixed assets totals SEK 2,509 thousand (SEK 0 k). The company is depreciating a convertible debenture loan from DevRx in line with a decision to terminate sales of the horse feed product.

### Note 10 Patents, licenses and similar rights

	TI	ne Group	Parent (	Company
Patents and licenses	2002	2001	2002	2001
Opening acquisition value	48 661	7 307	48 661	7 307
New acquisitions	619	41 354	619	41 354
Closing accumulated				
acquisition value	49 280	48 661	49 280	48 661
Opening depreciation	-8 103	-4 026	-8 103	-4 026
Depreciation for the year	-4 689	-4 077	-4 689	-4 077
Closing accumulated				
depreciation	-12 792	-8 103	-12 792	-8 103
Closing residual value				
according to plan	36 488	40 558	36 488	40 558

### Note 11 Goodwill

	TL	ne Group	Parent Co	
	11	ie Group	rareni C	ompany
Goodwill	2002	2001	2002	2001
Opening acquisition value	6 907	6 907	0	0
Closing accumulated				
acquisition value	6 907	6 907	0	0
Opening depreciation	-2 763	-2 072	0	0
Depreciation for the year	-691	-691	0	0
Closing accumulated				
depreciation	-3 454	-2 763	0	0
Closing residual value				
according to plan	3 453	4 144	0	0

### Note 12 Buildings and land

itolo iz bolialiigo alia iali	-			
	Tł	ne Group	Parent C	Company
Buildings and land	2002	2001	2002	2001
Opening acquisition value	4 224	0	4 224	0
Purchases	418	4 224	418	4 224
Closing accumulated				
acquisition value	4 642	4 224	4 642	4 224
Opening depreciation	-44	0	-44	0
Depreciation for the year	-160	-44	-160	-44
Closing accumulated				
depreciation	-204	-44	-204	-44
Closing residual value				
according to plan	4 438	4 180	4 438	4 180
Rateable values, land in Sweden Rateable values,	561	561	561	561
buildings in Sweden	1 339	1 339	1 339	1 339

### Note 13 Inventories, tools and installations

Tł	ne Group	Parent (	Company
2002	2001	2002	2001
1 308	11 63 <i>7</i>	11 308	11 63 <i>7</i>
1 223	1 071	1 223	1 071
999	0	999	0
2 995	-1 401	-2 995	-1 401
0 535	11 308	10 535	11 308
5 272	-5 099	-5 272	-5 099
2 307	-1 490	-2 307	-1 490
2 688	1 31 <i>7</i>	2 688	1 31 <i>7</i>
4 891	-5 272	-4 891	-5 272
5 644	6 036	5 644	6 036
	2002 1 308 1 223 999 2 995 0 535 5 272 2 307 2 688 4 891	1 308 11 637 1 223 1 071 999 0 2 995 -1 401 0 535 11 308 5 272 -5 099 2 307 -1 490 2 688 1 317 4 891 -5 272	2002       2001       2002         1 308       11 637       11 308         1 223       1 071       1 223         999       0       999         2 995       -1 401       -2 995         0 535       11 308       10 535         5 272       -5 099       -5 272         2 307       -1 490       -2 307         2 688       1 317       2 688         4 891       -5 272       -4 891

### New construction work in progress and advances in respect of tangible fixed assets

	The Group		Parent Company	
	2002	2001	2002	2001
Opening balance	999	0	999	0
Costs defrayed during the year	548	999	548	999
Redistributions implemented				
during the year	-999	0	-999	0
Closing balance	548	999	548	999

Note 14 (see below	Note 14
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### Note 19 Accrued costs and prepaid income

Note 15 Other long-term receivables					
	The	e Group	Parent C	Company	
Other long-term receivables	2002	2001	2002	2001	
Opening acquisition value	1 075	0	1 075	0	
Additional receivables	1 434	1 075	1 434	1 075	
Closing accumulated					
acquisition value	2 509	1 075	2 509	1 075	
Depreciation for the year	-2 509	0	-2 509	0	
Closing accumulated					
depreciation	-2 509	0	-2 509	0	

0 1 075

0 1 075

	2002	2001	2002	2001
Accrued holiday pay	212	263	212	263
Staff welfare expenses	295	31 <i>7</i>	295	31 <i>7</i>
Other items	1 296	395	1 296	395
Total	1 803	975	1 803	975

The Group Parent Company

### Note 20 Pledged securities

	Th	e Group	Parent C	Company
	2002	2001	2002	2001
Real estate mortgages	3 300	3 300	3 300	3 300
Charges on company assets	800	800	800	800
Total pledged securities	4 100	4 100	4 100	4 100

### Note 16 Prepaid income and accrued costs

	The Group		Parent Company	
	2002	2001	2002	2001
Prepaid rent	379	216	379	216
Other items	202	238	202	238
Total	581	454	581	454

There are no contingent liabilities.

### Note 21 Transactions with associated companies

No purchases or sales have occurred between Group companies. Sales of goods and royalty incomes from associated companies (reported under net turnover):

	I i	ne Group	Parent Company		
	2002	2001	2002	2001	
Skånemejerier (Royalty)	19 278	16 304	19 278	16 304	
Total	19 278	16 304	19 278	16 304	

### Note 17 (see below)

Closing residual value

### Note 18 Other long-term liabilities

	The Group		Parent Company	
	2002	2001	2002	2001
Liabilities to credit institutions,				
1–5 years	546	455	546	455
Liabilities to credit institutions,				
over 5 years	3 508	3 645	3 508	3 645
Total	4 054	4 100	4 054	4 100

The transactions have been conducted on strictly commercial terms and conditions and at the market value. Royalties from Skånemejerier are based on long-term agreements. Skånemejerier owns 14.45% of the capital and 24.76% of the votes in Probi AB.

Operating receivables/liabilities in respect of associated companies:

- there are only operations-related receivables or liabilities between Skånemejerier and the company;
- the Parent Company has an agreement with Skånemejerier comprising licensing and service agreements.

### Note 14 Shares in Group companies

Parent Company	Share in capital	Share in votes	No. participations/shares	Book value
Probi Food AB	100 %	100 %	10 000	3 931
Probi Feed AB	100 %	100 %	1 000	100
Total				4 031

Not 17 Eget kapital			Non-restricted	Net result	Total share-
The Group	Share capital	Restricted reserves	shareholders' equity	for the year	holders' equity
Shareholders' equity, 31-12-2001	41 113	61 690	4 839	-26 993	80 649
Transfer between non-restricted					
and restricted shareholders' equity		-26 993		26 993	0
Net result for the year				-14 128	-14 128
Shareholders' equity, 31-12-2002	41 113	34 697	4 839	-14 128	66 521

				Non-restricted	Net result	Total share-
Parent Company	Share capital	Premium reserve	Statutory reserve	shareholders' equity	or the year	holders' equity
Shareholders' equity, 31-12-2001	41 113	61 631	60	0	-26 303	<i>7</i> 6 501
Profit allocation as per AGM resolut	tion	-26 303			26 303	0
Net result for the year					-13 <b>4</b> 37	-13 437
Shareholders' equity, 31-12-2002	41 113	35 328	60	0	-13 437	63 064

The share capital comprises 7,870,312 class A shares with a nominal value of SEK 1 and 33,242,188 class B shares with a nominal value of SEK 1. The dilution effect in conjunction with the full exercise of all outstanding warrants corresponds to approximately 1.2% of the share capital and approximately 0.4% of the votes.

### The Board of Directors



Peter Zakrisson, Chairman of the Board, Lidingö (born 1961). MD of H&B Capital. Board Member since 2001. Other directorships: Boblbee, Besthand.



Rolf Bierndell, Malmö (born 1951), CEO and President of Skånemejerier. Board Member since 1996. Other directorships: Sykon AB, Ellco AB, Aspekta AB, etc. Shareholding: 33,875 class B shares, 30,000 warrants.



Sören Gyll, Saltsjö Duvnäs (born 1940). Chairman of the Confederation of Swedish Enterprise. Board Member since 2001. Other directorships: Skanska, SKF, SCA etc. Shareholding: 50,000 warrants.



Birgit Stattin-Norinder, London (born 1948). Board Member since 2002. Other directorships: Swedish Foundation for Strategic Research.



Berthold Lindqvist, Malmö (born 1938). M.D. hc, Director. Board Member since 1998. Other directorships: Munters AB, Pharmacia Inc, Securitas AB, Trelleborg AB, JM AB etc. Shareholding: 287,500 class B shares, 25,000 warrants.



Göran Molin, Lund (born 1949). Professor of Food Hygiene. Board Member since 1998. Shareholding:1,167,250 class A shares, 1,554,325 class B shares, 25,000 warrants.



Bengt Jeppsson, Lund (born 1946) Professor of Surgery. Board Member since 2001. Shareholding: 452,812 class A shares, 1,876,187 class B shares.

### **Deputy Members**

Kåre Larsson, Bjärred (born 1937). Professor of Food Technology. Board Member since 1991. Other directorships: GS Development AB, Camurus AB, Heptahelix AB, Ordio AB etc. Shareholding: 825,125 class A shares, 2,409,375 class B shares via companies.

Jan Persson, Tygelsjö (born 1945). Head of Marketing Division, Skånemejerier. Board Member since 1996. Other directorships: Saturnus AB. Shareholding: 27,187 class B shares, 25,000 warrants.

### **Auditors**

Öhrlings PricewaterhouseCoopers AB Principal auditor: Lars Helgesen, Malmö.

### **Signatures of the Board of Directors**

Lund, 18th March 2003

Peter Zakrisson, Chairman

Rolf Bjerndell

Sören Gyll

Berthold Lindqvist

Batter Normales Birgit Stattin-Norinder

Joan Malin

Burg Offma

Bengt Jeppsson

Monica Wallter, CEO

Our Auditors' report was submitted on 20th March 2003.

Öhrlings PricewaterhouseCoopers AB Lars Helgesen, Authorised Public Accountant



Senior Management: Per-Ola Forsberg, Per Bengtsson, Monica Wallter and Niklas Bjärum

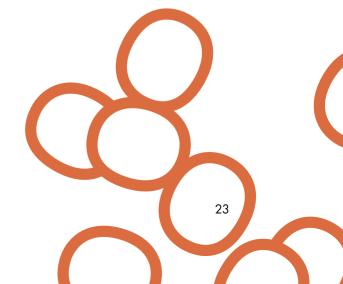
# **Senior Management**

Monica Wallter, CEO (born 1956). Shareholding: 12,000 class B shares, 100,000 warrants.

Per Bengtsson, MD, PhD, Head of Research and Development (born 1954). Shareholding: 9,500 class B shares.

Niklas Bjärum, Head of Marketing and Sales (born 1963). Shareholding: 10,000 class B shares, 45,000 warrants.

Per-Ola Forsberg, CFO and Head of Administration (born 1961). Shareholding: 12,000 class B shares, 45,000 warrants.



### **Auditors' Report**

To the Annual General Meeting of Probi AB (publ) Company registration number: 556417-7540

We have examined the Annual Report, pages 14–21, the Consolidated Accounts, the bookkeeping and the administration of the Board of Directors and CEO of Probi AB for the financial year of 2002. The Board of Directors and the CEO are responsible for the accounting documents and the company administration. Our responsibility entails commenting on the Annual Report, the Consolidated Accounts and the administration, on the basis of the audit we have carried out.

The audit has been conducted in accordance with generally accepted accounting principles in Sweden. This means that we have planned and carried out the audit in order to assure ourselves to a reasonable degree that the Annual Report and the Consolidated Accounts contain no significant errors. An audit entails reviewing a selection of the source documents for amounts and other information contained in the accounting documents. An audit also includes examining the accounting principles, together with the Board of Directors' and CEO's implementation of the same, and evaluating the overall body of information contained in the Annual Report and the Consolidated Accounts. As a basis for our statement concerning a discharge from liability, we have examined significant decisions, actions and circumstances within the company in order to be able to determine whether any compensation liability exists on behalf of the Member of the Board or the CEO towards the company. We have also examined whether any Member of the Board or the CEO has, in any other way whatsoever, acted in breach of the Swedish Companies Act, the Swedish Annual Reports Act or the Articles of Association. We believe that our audit provides us with reasonable grounds for the following statements.

The Annual Report and the Consolidated Accounts have been compiled in accordance with the provisions of the Swedish Annual Reports Act and hence provide an accurate picture of the company's results and position, in accordance with generally accepted accounting principles in Sweden.

We recommend that the Annual General Meeting adopt the Income Statement and the Balance Sheet for the Parent Company and the Group, that the loss in the Parent Company be allocated in accordance with the proposal contained in the Report from the CEO, and that the Members of the Board and the CEO be granted a discharge from liability for the financial year.

Malmö, 20th March 2003

Öhrlings PricewaterhouseCoopers AB

Lars Helgesen Auktoriserad revisor

### The Probi share

### Probi's class B share has been quoted on the NGM Equity's list since December 1998.

On 31st December 2002, the closing price for the share was SEK 3.00 (SEK 5.9), corresponding to a market value of SEK 123.2 million (SEK 242.6 m). The highest price paid during the year was SEK 8.00 (12th Feb. 2002), whilst the lowest price quoted was SEK 2.50 (19th Dec. 2002).

A total of 1,920,118 (3,950,704) shares were traded during the year. The average turnover rate per trading day was 7,385 shares (15,195). The rate of turnover during the year was 4.7% (9.6%).

### **Share capital**

The company's share capital at the year end 2002/2003 was SEK 41,112,500 thousand (SEK 41,112,500 k), spread over 7,870,312 class A shares with 1 vote per share and 33,242,188 class B shares with 1/10 vote per share. All shares grant entitlement to the same share in the company's profits and assets.

The nominal value of the shares is SEK 1. The Group's shareholders' equity totals SEK 66.5 million after the net result for the year.

#### **Number of shareholders**

The total number of shareholders registered with VPC (the Swedish Securities Centre), as of 31st December 2002, was 4,541 (4,731). Probi had no Swedish institutional owners during the period.

### **Principal owners**

Probi's two principal owners control approximately 39% of the votes and 26.4% of the capital. They have declared their shared view of the company and its performance and have declared their intention to be long-term owners of the company.

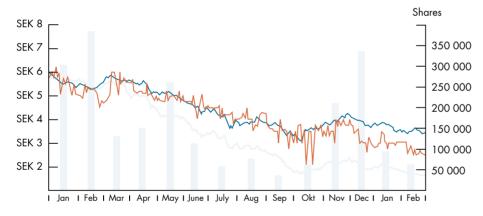
### **Options programme**

In 2001, Probi's employees and key personnel were given the opportunity to subscribe to an options agreement that expires between 1st and 31st May 2004, with a redemption price of SEK 9. The agreement comprised the opportunity to subscribe for 500,000 options granting the right to subscribe for a corresponding number of class B shares. The subscription price was SEK 1.15 and a total of 428,000 options were subscribed.

If all outstanding warrants are exercised in full, the dilution effect will correspond to approximately 1.2% of the share capital and approximately 0.4% of the votes.

### **Dividend policy**

Probi's dividend policy is based on the fact that the company is still in the initial stages of its career and is utilising all available resources for the further development and commercialisation of the results of its research, in the form of bacteria strains, patents, products and entire concepts. There are, therefore, no plans to pay any dividends during the next few years.



### Comparison between biotechnology and general index, 2002



### Key ratios per share

Share data	2002	2001	2000	1999	1998
No. shares as of 31/12, thousand	41 113	41 113	41 113	32 890	32 890
No. outstanding warrants	428	428	279	0	0
No. shares as of 31/12, inc. subscribed options	41 541	41 541	41 392	32 890	32 890
Average no. shares during the year, thousand	41 113	41 113	37 687	32 890	16 503
EPS	-0,34	-0,66	-0,13	0,00	0,00
Shareholders' equity per share	1,62	1,96	2,62	1,00	2,00
Shareholders' equity per share after full dilution	1,60	1,94	2,60	1,00	2,00
Share price as of 31/12 (final price paid)	3,00	5,90	9,50	10,00	14,50
Market value as of 31/12, SEK m	123 339	242 567	390 574	328 900	476 905

### **Shareholding per shareholder**

Share allocation	No. owners	No. shares	Percentage shares (%)
1–500	1 526	391 444	1,0
501–1 000	854	696 877	1 <i>,7</i>
1 001–5 000	1 804	4 011 347	9,8
5 001–10 000	280	2 083 701	5,1
10 001–15 000	118	1 499 121	3,6
15 001–20 000	31	545 962	1,3
20 001–	118	31 884 048	77,6
Total	4 731	41 112 500	100,0

### The ten principal shareholders, December 2002

Owner	No. class A shares	No. class B shares	Percentage of capital (%)	Percentage of votes (%)
Skånemejerier Ek För	2 419 689	3 520 937	14,5	24,8
H&B Capital	1 974 062	3 720 725	13,9	21,0
Göran Molin and companies	1 167 250	1 544 325	6,6	11,8
Kåre Larsson via companies	825 125	2 409 375	7,9	9,5
Bengt Jeppsson	452 812	1 876 187	5,7	5,7
Siv Ahrné	452 812	1 104 487	3,8	5,0
Clas Lönner	372 312	1 589 337	4,8	4,8
Syn Biotech AB	206 250	0	0,5	1,8
Kaj Vareman	0	<i>7</i> 45 121	1,8	0,7
Eskil Johannesson	0	560 750	1,4	0,5
Other	0	16 170 944	39,3	14,5
Total	7 870 312	33 242 188	100	100

### **Share capital development**

Year	Event	Increase in share capital	Share capital	No. shares
1991	Formation	50 000	50 000	500
1997	Scrip issue 1:1	50 000	100 000	1 000
1997	New share issue	15 000	115 000	1 150
1997	Split from 100 to 1		115 000	115 000
1998	Scrip issue 34:1	3 910 000	4 025 000	4 025 000
1998	New share issue	1 006 250	5 031 250	5 031 250
1998	Scrip issue 15:10	7 546 875	12 578 125	12 578 125
1998	New share issue	1 <i>7</i> 21 8 <i>7</i> 5	14 300 000	14 300 000
1998	Scrip issue 13:10	18 590 000	32 890 000	32 890 000
2000	New share issue	8 222 500	41 112 500	41 112 500

Shareholder contact: the CFO, Per-Ola Forsberg, tel. +46 46 286 89 20, is responsible for shareholder contacts. One of the stated goals of the Probi management is to maintain an ongoing dialogue with the media and capital market. The company's press releases are distributed through NGM and are available from Probi's website, www.probi.se.

## **Key ratios**

	2002	2001	2000	1999	1998
Growth, %	29	11	26	21	10
Operating margin, %1	-55,1	-140,2	-37	-1,5	-0,9
Return on shareholders' equity, %2	-19,2	-28,6	-7	-0,8	1,3
Return on total capital, % <sup>3</sup>	-15,2	-24,4	-7	-0,2	1,1
Equity/assets ratio, % <sup>4</sup>	88,0	73,0	97,0	93,8	92,0
Cash liquidity, % <sup>5</sup>	492	205	2 158	553	663
Average no. employees	17	17	15	13	10

<sup>1.</sup> Operating result as a percentage of turnover

<sup>2.</sup> Result before tax as a percentage of average shareholders' equity
3. Operating result plus interest income as a percentage of average total assets

<sup>4.</sup> Shareholders' equity as a percentage of Balance Sheet Total

<sup>5.</sup> Total current assets, excluding stock-in-trade, as a percentage of current liabilities

### **Risk factors**

Probi's operations are associated with a number of risks with regard both to research and development and commercialisation.

### **R&D** uncertainty

It is, of course, of the utmost importance that Probi successfully produces additional bacteria, products and concepts that live up to the market's demands on health-giving bacteria. The bacteria should also be produced at a price regarded as competitive in the future.

One proof of the company's probiotics working commercially is provided by the partnership with Skånemejerier, who produce, distribute and market ProViva, amongst other things.

It is also vital, over and above the market's requirements, that Probi's bacteria live up to the demands that will be imposed in future from official quarters.

### **Documentation and patent protection**

Probi has established wide-ranging patent protection for its bacteria strains and the applications linked to them. The documentation of the clinical trials is also amongst the most extensive available for today's probiotics. Probi is, in other words, well protected from infringements for the duration of the patents. The company's Board of Directors and management believe that the existing protection is sufficient. There are also routines in place to protect the company's future research and development through patents.

### Political and legal risks

Probi is dependent on developments in the field of laws and regulations governing health-giving products in general and probiotic preparations in particular. The company monitors these developments continuously to ensure that it can live up to the requirements imposed. Japan has special legislation governing what may be classified as functional food. Sweden, too, has recently introduced rules governing the approval of a product as functional food, and discussions are in progress within the EU concerning more extensive legislation in this field.

The rules will probably be tightened within a few years, and more extensive documentation will consequently be required. Probi, which has extensive documentation in a number of spheres, will probably benefit from a development of this kind.

It should be added that the company has not been involved in any legal proceedings during the period.

#### **Personnel**

The personnel risk in Probi lies in the risk of one or more key individuals leaving the company – a risk that also includes people tied into the company's network.

In order to minimise this risk, Probi strives to offer its personnel stimulating and interesting work. Personnel and key individuals are also given the opportunity to take part in an incentive programme.

External key people can be tied to the company via agreements. The fundamental loyalty must, however, be based on mutual respect and on both parties having something to gain from the partnership.

### **Capital requirement**

The future capital requirement constitutes a risk in any development company. Probi already has ongoing revenue streams, primarily from the partnership with Skånemejerier. The Board of Directors and the company's management believe, given the current rate of growth, that the company has no need for additional capital contributions.



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