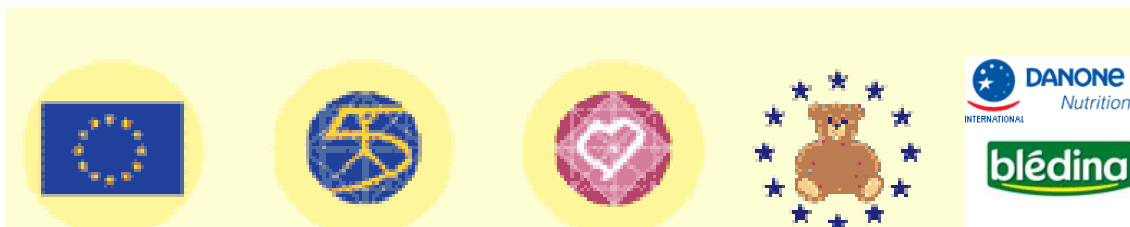




**PRESS KIT**  
**20 April 2007**

***An innovative European study  
to prevent childhood obesity...***





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### For further information, please contact:

Name:  
Tel:  
Fax:  
E-mail:

### You can also visit the following web sites:

[www.childhood-obesity.org](http://www.childhood-obesity.org) , [www.metabolic-programming.org](http://www.metabolic-programming.org)  
and [www.danoneinstitute.org](http://www.danoneinstitute.org)



## **The EU Childhood Obesity Programme**

### **First results support hypotheses**

**Budapest, 20 April 2007-** Emerging scientific evidence indicates that early nutrition can exert important long term effects on early development and later health. In this context, the first results of the EU Childhood Obesity Programme have been presented at the pre-congress EARNEST<sup>1</sup> satellite conference entitled “Early Nutrition Programming and Health Outcomes in Later Life: Obesity & Beyond”, held at the 15<sup>th</sup> European Congress on Obesity (ECO, Budapest).

The first results of the EU Childhood Obesity programme support the hypotheses on which the study was based and indicate that low protein content infant formulae<sup>2</sup> bring metabolic and endocrine benefits, as well as body growth rate close to that of breastfed babies. It is important to note that low protein content in infant formulae did not show any untoward effects and is considered safe. The further follow-up of the children as part of the EU project EARNEST<sup>1</sup> will indicate whether these changes are associated with lower risk indicators of childhood obesity at a later age.

*“These first results of the EU Childhood Obesity Programme support the importance of early prevention and long-term health promotion by appropriate choices of what we feed to our infants. This includes the promotion and support of breast feeding, and the right composition of infant formula and complementary foods”,* says Prof. Koletzko from the University of Munich, Germany, and Co-ordinator of the study.

### **Project funding**

The EU Childhood Obesity Programme is funded by the EU framework Five Quality of Life Programme (QLK1-2001-00389). The EU is providing about 80 % of the total funding which amounts to over 2 million EUR. Industries and academics contribute the remainder. The study continues under the Framework 6 EC funded project EARNEST (FOOD-CT-2005-007036).

<sup>1</sup> EARNEST – the EC funded Early Nutrition Programming Project [www.metabolic-programming.org](http://www.metabolic-programming.org)

<sup>2</sup> closed to the protein content of mother’s milk

## **Scientific partners of the study**

The EU Childhood Obesity Programme, which continues under the Early Nutrition Programming Project (EARNEST), brings together a multi-disciplinary team of international renowned scientists and leaders within the field of early nutrition:

- University of Munich, Germany (Prof. Dr Berthold Koletzko; Co-ordinator)
- Free University Brussels (ULB), Belgium (Prof. Daniel Brasseur)
- University of Milan, Italy (Prof. Marcello Giovannini)
- Children's Memorial Health Institute Warsaw, Poland (Prof. Jerzy Socha)
- Medical Research Council, Cambridge, UK (Dr. Andy Coward)
- University Rovira i Virgili, Reus, Spain (Dr. Ricardo Closa)

### Subcontractors

- Ashwell Associates, Ashwell, UK (Margaret Ashwell)
- Schauerte GmbH, Munich, Germany (Dr Till Richardsen)

## **Industrial partner of the study**

Blédina, the leader in infant nutrition in France, has developed the specific composition of the infant formulae tested in the European study EU Childhood Obesity Programme. The protein content of Blédina infant formulae today on the market correspond to the low protein formulae used in the study.

- Blédina SA, Steenvoorde, France (Dr Emmanuel Perrin)

## **Other partner of the study**

The EU Childhood Obesity Programme study and results are largely disseminated through the activities developed by Danone Institutes, a network of not-for-profit organizations

- Danone Institute International, France (Pr. Manuel Serrano Rios and Agnès Martin)

**You can also visit the following web sites:**

[www.childhood-obesity.org](http://www.childhood-obesity.org) , [www.metabolic-programming.org](http://www.metabolic-programming.org)

and [www.danoneinstitute.org](http://www.danoneinstitute.org)



## The EU Childhood Obesity Programme

### Context: Prevention of Childhood Obesity is key

- Childhood obesity is a major public health problem and is an identified priority concern for the EU. In Europe, one in five children is affected by overweight. Obesity in childhood and/or adolescence is a key predictor for obesity in adulthood.
- Obesity is a complex health issue<sup>1</sup> in terms of treatment and prevention and we know now that childhood obesity prevention is key to stop the spreading of the pandemic (often referred to as “globesity”).
- Early prevention is important because early obesity has severe short and medium term consequences in childhood and adolescence, as well as long-term effects that extend into adulthood.
- Up to now, prevention and treatment of childhood obesity involves eating less and being more physically active: novel and complementary approaches in prevention and treatment are required. The EU Childhood Obesity Programme<sup>2</sup>, which has tested the ‘early protein hypothesis’, supports innovative research on early prevention of obesity and will offer possibilities for improving advice given to parents and for updating the recommendations on the protein content in infant formulae in the European Union, if relevant.

### Objective

- The EU Childhood Obesity programme was set-up to test the novel, intriguing hypothesis that childhood obesity may be linked to high protein intake during infancy. It also aimed to collect new data on infant feeding habits and produce new practical nutritional recommendations for children (infants) that may help health professionals and parents better manage the condition.

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<sup>1</sup> Biological, genetics, physiological elements, psychosocial, lifestyle, cultural, economic factors may play a role in the development of obesity

<sup>2</sup> Acronym CHOP: Childhood Obesity Programme

## Partners

- The EU Childhood Obesity Programme is funded by the EU framework Five Quality of Life Programme (QLK1-2001-00389). The study continues under the Framework 6 EC funded project EARNEST (FOOD-CT-2005-007036)
- This research project is a unique long-term pan-European initiative between academics (7 universities are involved), the EU, industry (Blédina) and a non-profit-organisation (Danone Institute).

## Format

- The EU Childhood Obesity Programme starts with a one year double blind randomised multi-centre intervention trial on new born infants comparing isocaloric infant formulae with high and low protein contents within the recommended EU ranges<sup>3</sup>, balanced by fat.
- The trial is taking place in 5 EU countries: Belgium, Germany, Italy, Poland and Spain.
- Experts from France and the UK are also involved and they provide specific exploratory techniques, and provide analytical methods.
- The EU Childhood Obesity Programme collects and analyses, over the first two years of life, different scientific and medical information such as weight and height, body composition, hormonal status, protein metabolism, among other variables.
- Additionally, children will be followed-up until age 8 years, in order to assess the long-term impact on the prevalence of obesity. This includes a specific period of life where there is a window for a risk for obesity.
- The EU Childhood Obesity Programme is also studying the impact of parental attitudes to, and perceptions of, different practices of infant feeding in relation to infant behaviour (satisfaction, crying, sleep duration) in the same five EU countries as mentioned above.

## The intervention trial

- The clinical trial started on October 1<sup>st</sup> 2002 and ended in July 2006 when the last study infants reached the age of two years.
- About 990 infants were included in the study. About 335 children were randomised to formulae with low protein (1.8g/100kcal and then 2.25g/100kcal in follow-on formulae) and 350 children to formulae with a higher protein content (3g/100kcal and then 4.5g/100kcal in follow-on formulae). In parallel, some 305 breastfed children were followed.
- The intervention phase with infant formulae took 12 months and the children were followed up until they were two years old.
- It is important to note that the protein content of infant formulae used within the Programme was in accordance with the composition for infant formulae as authorised by the EU.

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<sup>3</sup> The lower protein content within the recommended EU ranges is closed to that of mother's milk

## **Expected outcomes**

- Conclusive information on whether high protein intake in infancy is causally related to obesity risk at a later age.
- Up-dated European data on dietary intakes, energy expenditure and habits of infants in 5 European countries.
- Up-dated European nutritional recommendations for infants (re: protein content of infant formulae).
- Up-dated data on European parental attitudes to infant feeding.
- The provision of information for the training of health professionals to enable them to advise parents about infant feeding.
- Contribution to programmes of prevention against obesity, by facilitating early detection of obesity in children and application of appropriate dietary means.

It's worth noting that protein contents of most infant formulae today on the European market correspond to the formulae low in proteins used in the study. Indeed, for several years, producers have been reducing the protein content of their infant formulae, to take into account the most recent scientific knowledge and the potential risk for infants of an excess in protein consumption.



## First results

### Randomisation of the infants

- This was successful, as the lower and higher protein groups did not differ in the evaluated descriptors of socioeconomic status (percentages of foreigners and single mothers, persons in household, educational level, number of siblings), smoking habits and parental anthropometry.
- Also, there were no differences in gestational age, birth weight, birth length and head circumference at birth between the two formula groups.
- Compared to the formula fed groups, parents in the reference group of breastfed children were found to be of higher education and with lower smoking frequency.
- The evaluation of the infantile diet confirmed that it is possible to feed two groups of infants isocaloric diets; at the same time establishing a significantly different contribution of dietary protein and fat to the total energy intake.

### Diet results show compliance with study protocol

- The protein intake of infants fed higher protein formula was significantly higher than protein intake in the lower protein group at time points up to 12 months while fat intake was significantly lower. There were no significant differences in carbohydrate and total energy intake at all investigated time points. Between the age of 12 and 24 months, the study formulae were no longer fed, thus no significant differences between the two formula groups were seen for energy, protein, fat and carbohydrate intake.

### Anthropometrical results support the primary hypothesis

- Anthropometrical results were expressed as Z scores which are based on the international growth standards of the World Health Organisation for length, weight, weight-for-length and body mass index (at ages 6, 12 and 24 months).

#### i) Comparison of low and high protein groups

The two measures relating weight to length, i.e. weight-for-length and body mass index (BMI) showed significant differences between the groups, with the infants fed the higher protein diet having significantly greater values at 12 and 24 months.

ii) Comparison with the breast feeding reference group

The infants fed the lower protein formula showed growth patterns over the 24 months which were more similar to the breast fed infants. Expressed as BMI, there was no significant difference between the averages of the lower protein formula group and the breast fed group at 24 months.

It is also important to note that lower protein content in infant formulae did not show any untoward effects and is considered safe.

### **Possible mechanisms to explain these first results**

A further hypothesis to be tested in the European Childhood Obesity Programme was that a protein intake in excess of metabolic needs would increase the secretion of insulin and insulin like growth factor 1 (IGF1), possibly leading to enhanced growth during the first two years of life which might predispose to a higher obesity risk in later life.<sup>4</sup>

- Higher protein formula fed infants showed significantly higher plasma concentrations of IGF-1, as well as lower plasma concentrations of insulin like growth factor binding protein 2 (IGF-BP2). The urinary excretion of C-peptide related to urinary creatinine concentration to correct for differences in fluid excretion, tended to be higher in infants with higher protein intakes at 3 months of age and was significantly higher at 6 months, which also indicates a greater degree of insulin secretion.
- At 3 months, higher protein formula fed infants had a significantly higher urinary osmolarity, reflecting the higher renal molar load associated with the higher protein intake while the ability of concentrating urine is still limited in young infants.
- At 6 months, there was a similar trend but no significant difference, potentially because infants at this age already had started to diversify their diet and hence the difference in renal molar load was smaller, and also because of maturation of renal function and the ability to concentrate urine.

These preliminary results don't permit us to draw definitive conclusions today on the link between a high protein intake during the first months of life and a higher obesity risk in later life.

Only the follow-up of children up to 8 years of age will allow us to confirm this hypothesis or not.

The regular calculation of the Body Mass Index (BMI) and the follow up of the corpulence curve during children's growth will allow us to detect not only overweight children, but also children with an early adiposity rebound<sup>5</sup>. The adiposity rebound is the rise of the corpulence curve that happens physiologically around 6 years. It is demonstrated that the earlier the adiposity rebound happens, the higher the risk of becoming obese.

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<sup>4</sup> It is important to note that IGF-1 favours the development of adipocytes

<sup>5</sup> Rolland-Cachera MF, Deheeger M, Bellisle F, Sempé M, Guilloud-Bataille M, Patois E. Adiposity rebound in children: simple indicator for predicting obesity. *American Journal of Clinical Nutrition*, 1984; 39: 129135



## Childhood obesity: a global emergency

### Defining childhood obesity<sup>6</sup>

- Obesity can be described as an excess of fat mass in the body, a condition associated with higher morbidity and mortality. The amount of body fat mass can be fairly estimated with the body mass index (BMI). The BMI is defined as body weight (expressed in kg) divided by height (in meters) squared.
- In adults, obesity is defined as a BMI equal to or greater than 30 kg/m<sup>2</sup>.
- For children, reference curves for BMI are needed because body composition is affected by age-dependent physiological variations.
- The highest percentile<sup>7</sup> curves delimit thresholds used to define excess fat in children. A BMI above the 97th percentile is generally considered to be a sign of obesity. However, weight status must be interpreted differently at the different ages. After the age of 8 years, most children will remain in the same BMI category

### The prevalence of childhood obesity in Europe and worldwide

- According to the European Charter on Counteracting Obesity<sup>8</sup>, obesity poses one of the most serious public health challenges in the WHO European Region. Half of all adults and one in five children are overweight. Of these one third is obese, and numbers are increasing rapidly. The trend is particularly alarming in children and adolescents, thus passing the epidemic into later adulthood and creating a growing burden for the next generation. Experts have noted a rapid acceleration in the increase of overweight and obesity prevalence: from 0.2% in the 70s, it is rising by 2% a year today, i.e. 400,000 additional overweight or obese young Europeans each year.
- In the United States, the number of overweight children and adolescents has doubled in the last two to three decades, and similar doubling rates have been observed worldwide, including developing countries.
- Today, it is estimated that, worldwide, 22 million children under five years of age are overweight<sup>9</sup>.
- “Globesity” is unfortunately a fashion concept because obesity is the only one non-infectious worldwide epidemic.

<sup>6</sup> Childhood Obesity, Screening and prevention, Synthesis and recommendations. This report was published in French under the title “Obésité, dépistage et prévention chez l’enfant”, Editions Inserm, 2000, 325 p.

<sup>7</sup> A percentile is defined as the percentage of subjects with a BMI below the defined level. For example, 3% of the population has a BMI below the 3rd percentile and 97 % have a BMI below the 97<sup>th</sup> percentile.

<sup>8</sup> WHO European Ministerial Conference on Counteracting Obesity, Diet and physical activity for health, Istanbul, Turkey, 15-17 November 2006.

<sup>9</sup> [www.childhoodobesity.net](http://www.childhoodobesity.net)

## Complications of childhood obesity

- Obesity is a medical condition with potential life-threatening complications even at an early age. Recognising obesity as a cause of these pathologies is crucial because mortality and morbidity can be prevented or at least minimised with timely effort.
- Serious complications arising from obesity include type 2 diabetes, insulin resistance syndrome, asthma, gallbladder disease and sleep apnea. Cardiac concern also exists with increased left ventricular mass, left ventricular hypertrophy and hypertension. Obstructive sleep apnea can also be related to neurocognitive dysfunction and even hyperactivity disorder. Long term obstructive sleep apnea may lead to chronic hypoxemia, pulmonary hypertension and cardiomegaly.
- Obesity and rapid weight gain may be serious warning signs of a metabolic or endocrine disease such as hypothyroidism, Cushing syndrome. Physical examination of the obese child may show some criteria including acne, central obesity and hirsutism.
- Psychosocial complications also are of concern. Obesity can affect school function, cause poor self-esteem, denial, lack of social experiences and result in depression or hyperactivity disorders.

## Causes of childhood obesity

Childhood obesity is a multi-factorial and complex disease and generally, each factor is linked to another.

### Genetic factors

- Today, five genetic mutations, responsible of obesity, have been identified<sup>10</sup>.
- It appears that predisposition to obesity is caused by a complex interaction between at least 250 obesity associated genes, and perhaps, perinatal factors<sup>11</sup>. But, gene defects account only for a small fraction of currently explainable human obesity<sup>12</sup>.

### Early-programming and perinatal factors

- Nutritional factors during early life may modulate later obesity risk: phenomenon called *metabolic programming* or *metabolic imprinting*. Animal studies have shown that dietary manipulation in the perinatal period, in particular an alteration of *protein intake*, have lasting effects on body weight in adult animals.
- Studies in humans suggest that maternal undernutrition during the last trimester of pregnancy or the first months of life is associated with significantly less obesity in their children at young adulthood.
- Epidemiological studies have suggested a possible relation between the excess of proteins at the beginning of life and later obesity, as they observed that overweight or obese children had consumed more proteins than the others during their first year of life.<sup>13</sup>

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<sup>10</sup> Farooqi IS, O' Rahilly S. Recent advances in the genetics of severe obesity. Arch Dis Child 2000;83: 31-34.

<sup>11</sup> Rakinen T, Perusse L, Weisnagel SJ, Snyder EE, Chagnon YC, Bouchard C. The human gene map: the 2001 update. Obes Res 2002;10: 196-243

<sup>12</sup> Farooqi IS, O' Rahilly S. Recent advances in the genetics of severe obesity. Arch Dis Child 2000;83: 31-34.

## **Lifestyle factors**

### *Diet*

- Dietary habits and patterns play a key role in the maintenance of a healthy weight, or the development of overweight and obesity. They have dramatically changed over the last decades all over the world, with more people consuming energy-dense food, eating more calories than they need and, for some of them, eating often in the day even if they are not hungry.
- These feeding behaviours can lead to high dietary intakes and may contribute to child overweight.

### *Physical activity*

- Children who lead a lifestyle characterised by lack of physical activity and excessive inactivity (television viewing, computer games, etc.) might become overweight or obese.
- Lack of physical activity doesn't develop the physiological system of regulation (including appetite), so the child doesn't develop his muscular mass and accumulate fat mass instead.
- The influence of the changing environment may be profound in that high energy dense food is cheap and widely available, opportunities for energy expenditure may be reducing, and the attractiveness and availability of home screen entertainment is rapidly increasing. Whatever the age of onset, obesity will only develop if energy intake exceeds energy expenditure over a prolonged period of time. It is counterproductive to investigate the impact of eating or inactivity in isolation. The two combine to influence degree of fatness in the individual.

### *Family factors*<sup>14</sup>

- Parents and other carers shape the child's early food environment by determining what foods will be offered, the timing and size of meals and snacks, and the social context of eating occasions. The latter includes peers, siblings and parents, who may serve as models for the child's eating habits.

## **Management and treatment of childhood obesity**

- The child is first assessed for the degree of overweight or obesity. BMI is calculated and compared to the population rates in order to determine the severity of obesity and its future evolution. The child is evaluated for the cause and possible complication of obesity. Specific tests may be required for specific genetic and hormonal conditions in order to eliminate diseases from which obesity is a complication.
- The main criterion of treatment is weight control in all overweight children of 2 years of age, i.e. maintenance of baseline weight. It allows a gradual decrease in BMI as the child grows in height.
- For children more than 7 years of age, weight maintenance may be continued if there are no important secondary complications.
- If there are secondary complications, a gradual weight loss of 0.5 kg per month is recommended. The goal should be to achieve a BMI below the 85<sup>th</sup> percentile.

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<sup>13</sup> Rolland-Cachera MF, Deheeger M., Akrouf M, Bellisle F. Influence of macronutrients on adiposity development: a follow-up study of nutrition and growth from 10 months to 8 years of age. *International Journal of Obesity*, 1995; 19: 573578

<sup>14</sup> Food Selection: From genes to culture. Acquisition of food preferences and eating patterns in children/Leann Birch, Edited by Danone Institute

- If weight loss is very rapid and the diet not adequate, then there is risk of developing gallbladder disease and malnutrition. Also, growth, seen as a gain in height, may start slowing. Emotional problems may arise in the child. The child may develop eating disorders and develop low self-esteem.
- Evaluation of the diet and of the level of inactivity during the treatment process is important.
- It is key that family and caregivers should participate in the treatment programme.
- The family should be taught to monitor eating and activity in the child.
- The best way to achieve all this is through diet modification and an increase in the activity level of the child and whole family.
- The ultimate goal is that the child engages in healthy eating and increased activity and not the attainment of ideal body weight.

### **Prevention of childhood obesity**

- Prevention of childhood obesity is key to stop the spreading of the pandemic. Obesity in childhood or adolescence is often a key predictor for obesity in adulthood<sup>15</sup>.
- Early prevention is important because childhood obesity has severe short and medium term consequences in childhood and adolescence, as well as long-term effects that extend into adulthood. A recent French study shows that, amongst children who were obese at 5-6 years of age, 88% are still overweight or obese during adolescence, underlining the persistent characteristic of early obesity<sup>16</sup>.
- Novel and complementary approaches in the prevention and treatment of childhood obesity are urgently required: up to now, prevention and treatment of childhood obesity only involves eating less and being more physically active.
- With the strong evidence that a lifecycle perspective is important in obesity development and its consequences, consideration must also be focused on prevention of obesity in women of child-bearing age, excessive weight gain during pregnancy, and the role of breastfeeding or adequate composition of infant formulae and complementary foods in reducing later obesity in children and adults<sup>15</sup>. The first results of the EU Childhood Obesity Programme underline the importance of early prevention.

**You can also visit the following web sites:**

[www.childhood-obesity.org](http://www.childhood-obesity.org) , [www.metabolic-programming.org](http://www.metabolic-programming.org)  
and [www.danoneinstitute.org](http://www.danoneinstitute.org)

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<sup>15</sup> [www.obesityresearch.org](http://www.obesityresearch.org)

<sup>16</sup> Epidémiologie de l'obésité infantile en France et dans le monde, M-A Charles – Obésité (2006)



## Danone Institute and Blédina, partners of the EU Childhood Obesity Programme

### Danone Institute International

The partnership of Danone Institute with the EU Childhood Obesity Programme fully complies with the core mission of this organisation, i.e. supporting nutrition research and promoting the diffusion of the latest advances in nutrition, on topics of major concern for public health.

#### Danone Institute, an international network of nutrition experts

Danone Institutes are forum where internationally renowned scientists in nutrition and Danone collaborators can encourage research in the field of nutrition, promote the dissemination of relevant information on diet and health to professionals and the general public, and therefore improve the quality of the general diet. The Danone Institutes are committed to taking a multidisciplinary approach combining medicine, biology, and human sciences.

#### A strong ethical organisation

Danone Institutes are non-profit organisations. They define their own programs in order to be relevant in their local environment.

- They have no commercial objective;
- They act freely and independently;
- They function on the basis of guidelines which guarantee a clear and democratic organisation;
- Danone Institute publications contain no commercial information.

#### Danone Institutes today

Today, more than 220 international experts in diet and nutrition are involved in the 16 Danone Institutes located around the world, where they develop programs on diet and nutrition for researchers, health professionals, educators and the general public. In Europe, Danone Institutes are present in 7 countries.

#### Danone Institute overall activities

- *Sponsorship of research related to health & nutrition:* Up to date, Danone Institutes sponsored more than 700 research studies which accounted for more than 10 million EUR.
- *Prizes and awards:* more than 50 prizes and awards have been attributed to outstanding research works and other professional initiatives for 1.3 million EUR.

- *Symposia, workshops and educational meetings:* Danone Institutes frequently organise scientific conferences, involving top level scientists within the field of health & nutrition. Since 1991, 140 events have reached more than 30.000 health professionals.
- *Publications related to health & nutrition:* 75 publications and 7 newsletters present professionals with overviews of recent developments, promote consensus and/or explore controversy of relevant issues.
- *Education programs for the general public:* Danone Institutes believe that is crucial to help people become aware of the importance of adequate diet and lifestyle. In this light, almost 70 programs towards the general public such as nutrition lectures, distribution of folders and brochures, etc. have been organised.

### **Early nutrition, a topic of focus for Danone Institute**

Early nutrition and consequences on later health have been at the centre of Danone Institutes activities for the last 10 years.

The idea to achieve a study on the relation between early protein intake by infants and the later risk of obesity came in the late 90's from members of 5 different European Danone Institutes. An official research project was then formalized and obtained funds from the European Union. Danone Institutes therefore committed to diffuse information originating from the EU Childhood Obesity Programme towards the scientific and medical community, through different channels such as newsletters, web site, scientific events, publications, communication to media, etc.

Since then, several other initiatives have been developed by Danone Institutes in the domain of early nutrition, especially at the international level, in order to stress the importance of the early nutrition public health issues to the scientific community as well as to decision makers:

- co-organisation of the symposium « Early Nutrition and later consequences : new opportunities » in 2004 on the occasion of the *2<sup>nd</sup> World Congress of Pediatric Gastroenterology, Hepatology and Nutrition* and publication of the proceedings as a special issue of *Advances in Experimental Medicine and Biology*
- awarding of the 2005 Danone International Prize for Nutrition to Professor David Barker for his outstanding research works of the foetal origin of chronic adult disease on the occasion of the *18th International Congress of Nutrition*
- organisation of the symposium « Novel concepts in the developmental origin of adult health and disease » on the occasion of the *Experimental Biology 2006* congress and publication of the proceedings in *The Journal of Nutrition*
- organisation of the symposium « Risks and benefits of rapid early growth » at the *Europediatrics2006* congress and production of on-line conferences available at: [www.danoneinstitute.org](http://www.danoneinstitute.org)

For more information, visit: [www.danoneinstitute.org](http://www.danoneinstitute.org).

## Blédina

### Key figures

- Sales: **565** million Euros in 2005
- **1,500** Blédina employees (in France)
- Over **200** references for babies up to **age three**
- Present in more than **50** countries
- Research team of **50** scientists

### Blédina, the industry partner of the EU Childhood Obesity Programme

To carry out this study, Blédina had to come up with experimental infant formulae based on the range values authorised by EU Regulations, and implement complex logistical arrangements, as no fewer than 40 products were eventually created. The development stage lasted over six months, with 20 pilot trials and 70 tonnes of infant formula dispatched to five European countries.

Blédina was able to draw on its unique expertise in the fermentation of infant milks, its scientific research (four to five studies per year), and its close links with over 7,460 paediatricians and GPs, and 600 maternity clinics.

### Blédina, 100 years of research in infant nutrition

For a century, the company has remained committed to its number one priority: simplifying life for parents by offering nutritionally appropriate, practical products. In the future, Blédina will ceaselessly strive to offer ever more innovative products, to accompany babies as they discover a new world of tastes and flavours.

Blédina is the leading manufacturer of infant foods in France with 50% of the market. It maintains a research division staffed by scientists, experts and nutritionists who monitor every nutritional and socio-cultural development to anticipate the needs of parents and provide them with the nutritional answers they require.

With years of experience and constant innovation, Blédina has developed unique expertise in every baby food segment: infant formula, cereals and baby foods for a diversified diet.

Since its creation, Blédina has had a universally acknowledged reputation for innovation, and has won a host of awards, becoming the market leader.

Today, Blédina's Research & Development division works closely with the manufacturing and marketing departments of the company at all times. Blédina is justifiably proud of the products it has pioneered, which include **Gallia Calisma 2**, the only infant follow-on formula on the French market whose benefits for babies' natural defences were formally acknowledged by the scientific experts committee at the French Agency for the Safety of Food Products (AFSSA) in 2002.

**A long-standing relationship with healthcare professionals: Blédina has maintained close links with the medical world since 1920**

Every year, our medical representatives visit 600 maternity clinics and 7,460 paediatricians and GPs, to share information and build sound partnerships.

Blédina is committed to working with young paediatricians' associations to avoid a vocational crisis and safeguard the future of this important medical discipline.

Blédina is also proud to be joining forces with health professionals and local communities, to organise special events aimed at diagnosing childhood obesity.

**Proximity with consumers**

Every year our qualified nutritionists answer 40,000 calls from parents of young children, demonstrating Blédina's commitment to helping mothers raise their families.

*For more information about Blédina: [www.bledina.com](http://www.bledina.com)*



## NOTES