

EU CHILDHOOD OBESITY PROGRAMME

Project Title: Childhood Obesity: Early Programming by Infant Nutrition?

Acronym: CHOPIN

Project Number: QLK1-2001-00389

www.childhood-obesity.org

NEWSLETTER 1 - AUTUMN 2002

Focus on Work Package One Experimental Formula development and distribution

Bledina sa are part of the Danone Group and are partner number 8 in the CHOPIN project. They have 35 years experience in the manufacture of infant formulas and infant foods. Their factory in Steenvoorde in Northern France is responsible for producing the experimental formulas which are being used in the CHOPIN project.

Within Work Package One, Bledina have developed and produced two isocaloric (70kcal per 100ml) infant formulas and follow on formulas (73 kcal per 100ml) that will be used in the intervention trial. The first batch has low protein content: 7% of energy in infant formula and 9% in follow on formulas respectively, and the second batch has high protein content: 12% of energy in infant formula and 18% in follow on formulas respectively. The difference in protein content is compensated for by adaptation of the fat content, but the diets have an equal energy density, similar carbohydrate and micronutrient composition and similar organoleptic properties. The overall protein quality and the fatty acid profiles are also similar in the two experimental formulas. The composition of all study formulas are within the ranges recommended by the EU Directive on Infant Formula and Follow-on Formula (1991).

During the development period, Bledina performed pilot studies to check quality and preservation properties of the products, to check their consumer acceptance of products and to refine composition if necessary.

All shipments of the formula to the study centres took place within September and October 2002. Each centre received 10000 tins of formula which should be enough for the 250 babies who will be recruited in each centre. If more formula is needed, unlabeled tins of formula can be labelled appropriately and distributed as needed. Bledina will start to manufacture the follow on formulas for the Project during November 2002 and will distribute this in early 2003.



CHOPIN partners visit the Bledina factory during the project meeting held in Paris in October 2002.

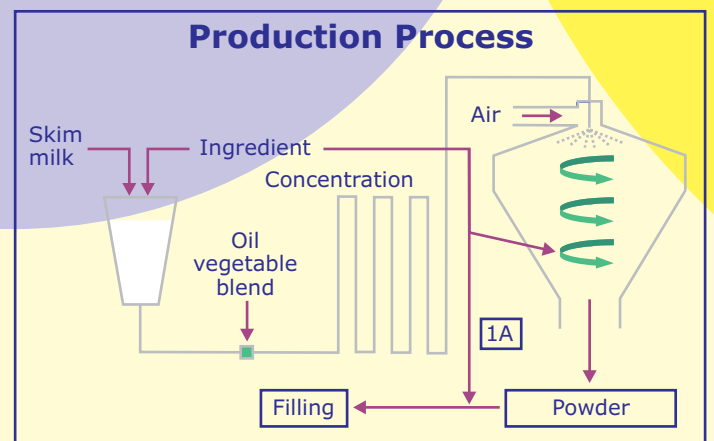
Left to right, back row: L. Clement, responsible for the milk group R&D at Bledina, Dariusz Gruzfeld, Margaret Ashwell, Bert Koletzko, Ricardo Closa, Hans Demmelmair

Left to right, front row: Emmanuel Perrin, Jean-Michel Antoine.



Bledina developed the logistics for labelling products in such a manner that they can be used in a double-blind randomised trial and for their randomisation and distribution to trial centres.

The labels on the products are in five languages: French for the intervention taking place in Brussels and Liège, Spanish for the study taking place in Tarragona, German for the study taking place in Munich and Nuremberg, Italian for the study taking place in Milan and Melegnano and Polish for the Warsaw study.



The production process is essentially one of blending skimmed milk with vegetable oil, concentrating the blend by evaporation and then spray drying to produce a milk powder.



Project Progress Meetings

Spring 2002

This was held in Schloß Höhenried, near to Munich on April 11th 2002. Representatives from all eight CHOPIN partners attended. The purpose of this Kick-off meeting was to ensure all partners understood the various study protocols. Logistics issues such as the shipment of test infant formula from France to other countries and the shipment of biochemical samples to Poland for analysis were discussed. A presentation on the Remote Data Entry (RDE) system to be used to record all data across the five study centres was provided by the subcontractor with this responsibility

A training session for some partners and colleagues was held in September 2002 in Munich. A special presentation was made on the use of the doubly labelled water technique which will be used to measure energy expenditure of a sub set of the babies at age of 6 months with special emphasis on how to adapt the procedure locally. Anthropometric measurements were demonstrated including those for sitting height, skinfold caliper: triceps, subscapular, sliding caliper: wrist breadth, knemometry: heel-knee-length, circumferences: head, mid-arm, chest, waist, lengths: crown-sole, crown rump. Finally, the evaluation of nutrients of the study formula milk after unblinding was discussed.

Autumn 2002

This was held in Danone headquarters in Paris on October 11th and was attended by all partners. Since the recruitment of babies into the trial started in September 2002, each centre gave a progress report. The randomisation list is on the website and the formula has been successfully shipped to all centres. All the questionnaires and Case Report Forms are now ready to be used in the trial. Certain issues about recruitment were clarified and presents for mothers of participating babies were also suggested. Further discussion about study protocols took place to ensure standardisation of all procedures.

Dissemination was reviewed (brochure and website) along with progress of the Infant Nutrition Cluster. There are plans for a large cluster meeting (**Perinatal Nutrition and Its Later Consequences: New Opportunities**) to be held in July 2004 after a successful application to EU for an Accompanying Measure. On the second day of the meeting, some of the partners visited Bledina sa to visit the factory where the formulas for the trial have been produced.

Relevant meetings

12th European Congress on Obesity (12 ECO) to be held on 29 May to 1 June, 2003 in Helsinki, Finland. Organised by The European Association for the Study of Obesity (EASO) and the Finnish Association for the Study of Obesity (FASO) Details available at www.eco2003.net.

9th European Nutrition Conference (9 ENC) sponsored by FENS, to be held on 1-4 October 2003 in Rome. Details available at www.fens2003.org.

36th Annual Meeting of European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) will be held from June 4-7, 2003 in Prague, Czech Republic. Details available at www.espghan2003.cz/.

Perinatal Nutrition And Its Later Consequences: New Opportunities (a conference organised by the EU Infant Nutrition Cluster) will be held in Paris on July 1st and 2nd, 2004. Details available at www.wye.ic.ac.uk/Cluster/Projects.html

2nd World Congress of Paediatric Gastroenterology, Hepatology, and Nutrition hosted by Federation of the International Societies of Pediatric Gastroenterology, Hepatology and Nutrition (FISPGHAN), and the European Society for Paediatric, Gastroenterology, Hepatology, and Nutrition (ESPGHAN) be held on July 3-7, 2004, in Paris. Details available at www.wcpghn2004.com/gastroenterology.html

Editorial Co-ordinator:

Dr. Margaret Ashwell
www.ashwell.uk.com

Design:

Business Presentations
www.business-presentations.co.uk

Printing:

Imprimerie J. Chauveheid
www.chauveheid.com

Partner profile

The Belgian Team

The Belgian team act as the Leader of Work Package 6 in charge of the co-ordination of all the five trial centres. In their own centre, they have to recruit a full group of infants (150 in Brussels, 150 in Liege and another 75 breastfed babies in each centre) and they will be one of the centres working on a subset of babies for energy expenditure measurements in close collaboration with the UK partner in Cambridge (WP5).

The group in Belgium consists of 2 separate teams, one working in Brussels (B), the other in Liege (L). Both teams have a similar composition, headed up by two senior paediatricians, D. Brasseur (B), J-P Langhendries (L), working full time in a hospital setting. Brasseur is at the University Children's Hospital Queen Fabiola, affiliated to the Free University of Brussels (ULB) and Langhendries is at the Clinic Saint Vincent in Rocourt (suburb of Liege) affiliated to the Catholic University of Louvain (UCL). Both hospitals have a maternity ward which sees about 1500 (B) and 2600 (L) deliveries a year.

In each team, a junior paediatrician has been appointed for the full duration of the project, They will work half time, recruiting and following patients and families. Further, 2 junior dieticians are involved in the teams, on a half-time basis. I. Thiebaut (B) and F. martin (L) work under the supervision of a senior dietician (M-J Mozin), who is active at both centres. They have a major task in following diets, providing milks, collecting food surveys and transferring their dietetic calculations into a programme capturing and analysing the raw data. An IT specialist implements this conversion program transforming food items into nutrients using Food composition tables. This task is under responsibility of F. Neven working at the Catholic University of Leuven (KUL). A secretary (D. Maes)(B) is also on duty to organise shipments of products (powder milks), samples, paper copies, to make appointments with the patients and their family, to help with meetings, to maintain contact with other study centres and to deal with the German sub-contractors (CRO) in Munich. In total, nine people are in some way involved in the CHOPIN project.

