



An educational forum on infant
and toddler nutrition and development

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A PRACTICAL APPROACH TO TODDLER FEEDING AND HEALTH

A Report from the Infant & Toddler Forum Study Days: Leeds 2005

Addressing Key Issues on the Nutritional Requirements
and Eating Behaviour of One to Three Year Olds

INTRODUCTION

Healthy eating and good nutrition are the foundations of growth and development. At no time of life are they more important than during infancy and early childhood. Parents want to be knowledgeable and confident about feeding their children at a time of rapid change in their acceptance and rejection of foods.

The nutritional advice and support offered by healthcare professionals and carers plays a critical role in helping parents meet this challenge. While information is available on feeding young infants and planning a diet for older children, it can be difficult to find reliable and practical nutritional advice for toddlers (children aged one to three years).

It was to help provide such information that the Infant & Toddler Forum last year launched a nationwide series of study days for health visitors, nursery nurses and other healthcare professionals who interact regularly with toddlers and their parents. Through presentations from specialists in child nutrition, case studies from local front-line practitioners and a number of lively discussion sessions, these meetings explored many of the issues surrounding toddler nutrition. Study days took place in Edinburgh, London, Birmingham, Bristol and Leeds.

The aim was to provide evidence-based information and best practice guidance for practitioners in the field. This supplement is based on the presentations at the Leeds meeting. I hope you will agree that we achieved our aim. For more information on our 2006 study day series see www.infantandtoddlerforum.org.

Professor Lawrence Weaver



Chairman, Infant & Toddler Forum

STUDY DAY SPEAKERS ACROSS THE SIX EVENTS

Anna Carling, Senior Dietitian, Royal United Hospital, Bath

Kathy Cowbrough, Dietitian and Public Health Nutritionist

Jan Cox, Registered Dietitian, North Warwickshire PCT

Ria Din, Children's Services Manager, Barnardo's, Paisley
Threads Project

Helen Glyn-Davies, Public Health Specialist Dietitian, Under
5's Healthy Eating Award, Bedfordshire

Kate Grimshaw, Research Dietitian, University of
Southampton

Dr Gillian Harris, Senior Lecturer in Applied Developmental
Psychology, School of Psychology, University of Birmingham
and Consultant Paediatric Clinical Psychologist, The Children's
Hospital, Birmingham

Jackie Heighton-Lewin, Registered Dietitian, Birmingham
Community Nutrition & Dietetic Service

Sarah Jorgensen, Paediatric Dietitian, Bristol Royal Hospital
for Children

Therese McSorley, Staff Nurse Health Visitor Support Midwife

Jackie Moores, Community Dietitian, Seacroft Sure Start

Judy More, Freelance Paediatric Dietitian, London

Dr Robert Moy, Consultant Community Paediatrician,
South Birmingham Primary Care Trust and Senior Lecturer in
Community Child Health, University of Birmingham

Dr John Puntis, Consultant Paediatric Gastroenterologist,
Leeds General Infirmary

Dr Atul Singhal, Honorary Consultant Paediatrician,
Whittington Hospital and Great Ormond Street Hospital,
Deputy Director, MRC Childhood Nutrition Research Centre,
Reader in Paediatric Nutrition at the Institute of Child Health
(ICH), London

Julie Steele, Senior Paediatric Dietitian, Leeds Teaching
Hospital NHS Trust

Isabel Skypala, Director of Rehabilitation and Therapies,
Royal Brompton & Harefield NHS Trust

Dr David Tuthill, Consultant Paediatrician, Children's Hospital
for Wales, Cardiff

Carina Venter, Senior Allergy Dietitian, David Hide Asthma
and Allergy Research Centre, Isle of Wight

Sarah Waddington, Registered Nutritionist, Birmingham
Community Nutrition & Dietetic Service

Allyson Watt, Project Worker, Barnardo's, Paisley Threads
Project

Pauline Waugh, Specialist Dietitian, Royal Hospital for Sick
Children, Glasgow

Professor Lawrence Weaver, Samson Gemmell Professor of
Child Health, University of Glasgow, Consultant Paediatrician

Julia Wolman, Registered Public Health Nutritionist, Larkhall
Sure Start Lambeth PCT

Tanya Wright, Specialist Registered Dietitian, Amersham
Hospital

WHAT THE DELEGATES SAID!

Childcare and Early Years Co-ordinator - Birmingham

*'I have learnt many, many
things - ideas for passing onto
practitioners.'*

Health Visitor - Leeds

*'I will take everything from the
day to my practice.'*

Health Visitor - London

*'Study day has shown me a new
place to get information from.'*

Nursery Manager - Bristol

*'Study day has given me
inspiration to help the parents
at the nursery.'*

EARLY INTERVENTION ACHIEVES LASTING RESULT

The importance of good nutrition during the toddler years was highlighted by consultant paediatric gastroenterologist Dr John Puntis during his introduction to the Leeds meeting.

Dr Puntis stressed that poor nutrition during this key stage of development could lead to an increased risk of chronic diseases in later life such as obesity, hypertension, diabetes and coronary heart disease¹.

"Nutrition during critical periods in early development may have fundamental and long-lasting effects resulting in lifelong influences on health and development," he said.

Dr Puntis presented data from the National Diet and Nutrition Survey which highlighted a number of areas where the current nutrition of toddlers was falling short of the ideal.

Half the children studied had daily intakes of vitamin A below the reference nutrient intake (RNI), only 5 per cent of children below four years were meeting their RNI of vitamin D, zinc values were generally below reference values and many children were reported to have iron deficiency or iron deficiency anaemia².

Further research from Scotland had also revealed worrying levels of both obesity and undernutrition in three to four year olds, both of which were associated with social deprivation, said Dr Puntis.

"8.5 per cent of these children were obese and 3.3 per cent were underweight"³.

The good news, however, was that making improvement to the diets of very young children could in some circumstances have a long lasting beneficial effect.

"Very, very minimal nutritional intervention in this age group can lead to quite striking and long-term effects," said Dr Puntis.

Healthcare professionals had a key role in helping to bring about these improvements, he said. To do this it was important that all professionals with an interest in toddler nutrition had access to practical and up-to-date information. It was the aim of the Infant & Toddler Forum to provide such information.

"Meetings such as this one are designed to allow sharing of best practice and learning from experts in the field," said Dr Puntis.

RELAX! TODDLERS' MEALTIME TANTRUMS CAN BE OVERCOME

The best advice for parents who are worried about their toddler's eating habits is simply to relax, paediatric dietitian Judy More told the meetings. Most dietary problems are short-lived, food refusal is commonplace and forcing the issue is only likely to make the situation worse, she said.

"If mealtimes have become a battleground, then the toddler may get anxious or even frightened, lose their appetite and not want to eat," she stressed. *"Toddlers don't need to eat well at every meal and every day, so help parents to take a step back and consider what they have eaten over the whole week. If they are growing and developing normally then you don't need to worry. They are eating enough."*

Ms More outlined the basic ingredients for a healthy toddler's diet. This should include a variety of foods from each of the five food groups (see box 1). Compared to infants under the age of one, toddlers should be offered less milk. They should also be offered more fat and less fibre than recommended for older children and adults.

Ms More stressed that most toddlers learn to eat healthily by copying the behaviour of their parents⁵ and older siblings⁶, so it was good practice for families to eat and enjoy their food together. Praising toddlers for trying a new food was likely to be far more successful than scolding them for refusing, she said.

It was also important not to offer too much food at any one sitting, said Ms More.

She pointed out that a typical toddler needs a huge amount of energy and nutrients to fuel his or her growth and development - 95 kcals per kg of body weight compared to 35 kcals per kg for an adult woman.

"This is the equivalent of an adult woman eating a breakfast of eight Weetabix, a mid-morning snack of four bananas, a lunch of two ham sandwiches, four pieces of cake, an afternoon snack of four fruit scones, and an evening meal of three portions of fish and mashed potato, five full fat yogurt drinks, three apples, three glasses of wine and one pint of full cream milk."

"Imagine eating all of that and then someone saying you have to have some more," said Ms More. *"Yet this is what some of us do to our toddlers and we wonder why we put them off their food."*

Ms More recommended breaking up the daily food intake by offering three two-course meals, two or three snacks and around six to eight drinks.



BOX 1

THE FIVE FOOD GROUPS

- 1. bread, potato and cereals (to be served at each meal)**
 - appropriate foods for toddlers include breakfast cereal, white rice, pasta, couscous, plantain, potatoes, white bread, bread sticks, crackers, other flour-based foods such as pancakes, scones and crumpets
- 2. fruit and vegetables**
 - offer at every meal
 - cut up fruit
 - stir fry, bake or roast vegetables or add them to pizzas, sauces and soups
- 3. milk, yogurt and cheese (three servings per day)**
 - one serving can be 120ml of milk in a cup or beaker, a small pot of yogurt, some cheese in a sandwich, a milk pudding or milk with cereal
- 4. meat, fish and alternatives (one to two servings per day, more for vegetarians)**
 - palatable sources for toddlers include good quality sausages and mince, stews and casseroles, chicken, fish cakes and fish pies
 - vegetarian alternatives include foods based on eggs, dhal, beans, nuts and seeds
- 5. foods high in fat and sugar**
 - oil, butter, margarine, cakes and biscuits, ice-cream
 - allow some but never instead of other food groups

The eating environment was also important, said Ms More. Toddlers were less likely to eat well if they felt tired, were over hungry or distracted by the TV. Lack of appetite could also be a sign that the toddler was feeling unwell, teething or anxious about something.

Ms More acknowledged that there were a number of tricky nutrients that it was difficult to get toddlers to consume. These included iron, vitamin D and the omega 3 fatty acids found in oily fish. She stressed that while dietary supplements could never replace healthy eating, daily vitamin A and D supplements are recommended⁷, especially for picky eaters and toddlers of Asian, African and Middle-Eastern origin. Furthermore, a follow-on formula can be considered in place of cows' milk for toddlers who are nutritionally vulnerable as this provides more iron. However milk should not replace other foods as learning to like and eat iron rich foods is very important in this age group.



HOW WE LEARN TO LOVE THE FOOD WE EAT

If it wasn't for picky eaters the human race might have died out thousands of years ago, according to Dr Gillian Harris from the School of Psychology at Birmingham University.

Dr Harris explained how the fussiness towards food exhibited by most toddlers was in fact a protective mechanism used to prevent the newly mobile child from eating anything that might be harmful.

"In the first year of life children will try food because they are hungry or because they are using their mouths to explore the environment. They are given safe and socially appropriate foods which they learn to like because they eat them repeatedly."

"Later, we become much less likely to put new foods into our mouths. We have to be motivated to do this, usually by modelling our behaviour on others around us."

From the age of around six to 12 months toddlers progress from readily accepting new foods through a period of suspicion and fear of new foods (neophobia) to exhibiting distaste responses, disgust responses and a fear of contamination⁹.

Toddlers often need to try new foods several times before learning to like them. After the age of two children's preferences for food hardly changed until around the age of eight, said Dr Harris.

Understanding this process could help when dealing with children who were particularly fussy eaters, she said (see box 2).

For instance, most toddlers learn to recognise food they like through its visual appearance. Thus a child might reject a broken biscuit simply because it does not look the same as a whole one.

Disgust responses tend to develop as the child learns about truly disgusting substances and recognises similarities with certain foods. Spaghetti may be rejected because it 'looks like worms', pasta becomes 'slimy', runny egg 'looks like snot'.

And a child's growing understanding of the concept of contamination can also inhibit their eating habits¹⁰.

"If a disliked food is placed on a plate beside a liked food, even from the age of three years, the toddler may reject the liked food because it has been 'contaminated'," said Dr Harris.

All of these were normal responses, she stressed. However, in some children they seemed to be more powerful than others¹¹. This was due to differences in children's temperament, and in their sensory sensitivity.

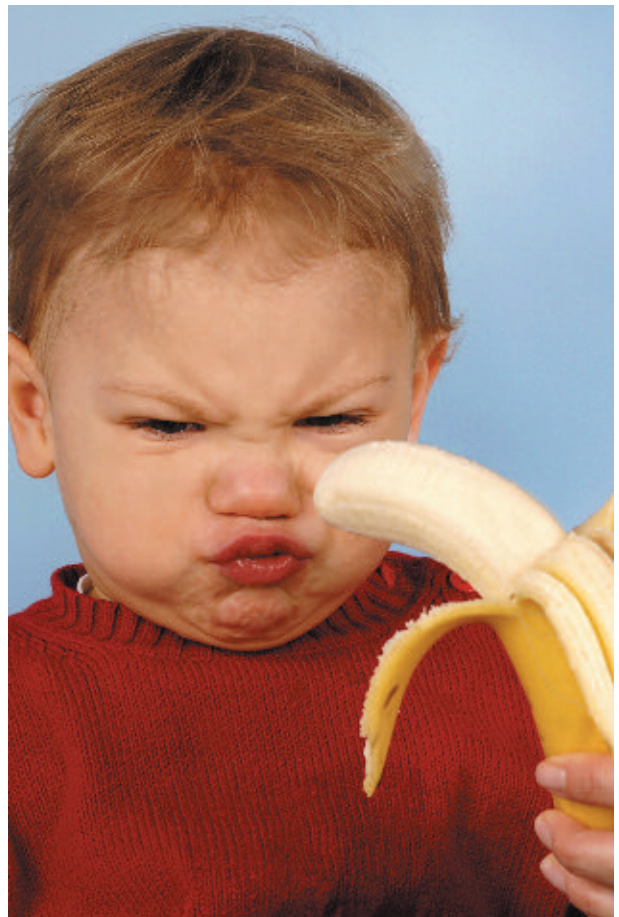
"Fussy eaters tend to score high on emotionality and low on sociability," said Dr Harris. *"Sensory-sensitive children dislike the touch, sound, taste and smell of new foods. Visually they are hyper-aware of changes to things like the food packaging."*

Overcoming these rejection responses was usually a matter of persistence, said Dr Harris. A child might need to be offered a new food 10 or more times before he or she accepted it¹².

Strategies such as skipping snacks to make the child more hungry at mealtimes or offering rewards for eating well, however, were less likely to be successful.

"What you shouldn't do is try to make a child more hungry by cutting out snacks, because that doesn't work. It makes them less hungry," said Dr Harris.

"Reward is not a good way of getting children to eat. Children have an internal cognition that a reward will be nice and the thing they have to do to get the reward will be nasty. The most effective thing is exposure not rewards."



BOX 2

ADVICE FOR PARENTS

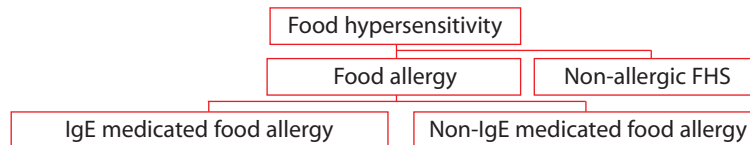
Do	Don't
<ul style="list-style-type: none"> • Introduce home prepared foods • Introduce your infant to food you want them to eat as a toddler • Keep trying new foods, even if they are rejected • Move from mash to bite and dissolve foods as quickly as possible (from seven months) • Encourage messy play • Set an example - eat the foods you want your toddler to eat 	<ul style="list-style-type: none"> • Force feed • Use one food as a reward for eating another • Put disliked food on the plate next to another • Expect all children to eat as well as one another • Panic - fussy children do grow out of it

THE DIAGNOSIS OF FOOD HYPERSENSITIVITY

Rising rates of allergic disease are posing a difficult challenge for healthcare professionals working with toddlers, reported Kate Grimshaw, a research dietitian from Southampton University.

Ms Grimshaw explained that food hypersensitivity was an umbrella term that included any unpleasant and reproducible reaction to food¹³. It included food allergies and non-allergic food, hypersensitivities (previously known as intolerances) such as colic, constipation and migraine (see 'definition' diagram).

DEFINITION



Source: Johansson SG et al. 2004

However as knowledge increases about the involvement of the immune system in food hypersensitivity, more reactions were being described as being allergic.

"As time goes on many of the 'intolerances' are being reclassified as allergies."

Ms Grimshaw told the meetings that although food allergies were themselves divided into two groups depending on which part of the immune system was involved (IgE mediated and non-IgE mediated allergies), in practice either type of reaction could be provoked by remarkably similar foods (see box 3). The most immediate and severe allergic symptoms tended to present with IgE mediated allergy.

BOX 3

MOST COMMON PROVOKING FOODS

IgE mediated	Non IgE mediated
Milk Egg Wheat Soya Peanuts/nuts Fish/shellfish	Milk Egg Wheat Soya Chocolate Additives/colours

Diagnosis of food allergy was a difficult process, said Ms Grimshaw. This was because the mechanisms were often poorly understood, there could be many different symptoms and triggers and the onset could range from a few seconds to several hours after exposure to the problem food. There was also often a dose response which meant that the sufferer could tolerate small amounts of the problem food but reacted badly to larger amounts. The lack of a definitive diagnostic test for food allergy was also a problem.

Nevertheless, through a combination of thorough clinical assessment, skin prick and specific IgE tests and the use of elimination diets and food challenges, it was possible to identify the causes of most food allergy, said Ms Grimshaw.

Once a food allergy had been identified a treatment plan should be worked out, she said. This should take account of the severity of the patient's allergic reaction and their attitude towards it - some patients may be willing to put up with a mild reaction if it means not having to give up a favourite food. The dietitian may offer advice on avoiding the identified allergen and how to follow an exclusion diet. Finally, for those at risk of a severe reaction, medication should be prescribed and a rescue plan put in place.



HELP IS AT HAND FOR THE FOOD ALLERGIC TODDLER

Every toddler with a food allergy should be referred to a paediatric dietitian, according to Tanya Wright, a specialist dietitian from the Amersham Hospital NHS Trust.

Referral was essential to ensure that each child and his or her parents received the best possible advice, she said.

"The dietitian can help modify the child's diet while maintaining an adequate nutritional intake through varied and tasty meals," she said. "This will promote good health and normal growth in allergic children and give support to the child and family or carers."

The dietitian could also help with management advice for the child's nursery, school or childminder. Often the most valuable role of the dietitian was to offer practical advice on things like shopping, cooking, product information and reading manufacturers' labels, said Ms Wright.

"She stressed that following an avoidance diet could seem like walking through a minefield, with allergens hidden in the unlikeliest of places.

"Around 70 per cent of manufactured foods contain milk or dairy produce," she pointed out, while other allergens could be hidden by the use of obscure labelling terms. "How many parents would know that sodium caseinate was a milk derivative; that livetin was an egg protein or that baking powder often contained wheat starch?" she asked.

The recent introduction of new European Union food labelling laws should make it easier to identify food allergens, acknowledged Ms Wright (see box 4). Nevertheless she pointed out that the new regulations only applied to pre-packaged manufactured foods sold within the European Union and would not cover products that were already on the supermarket shelves before November 2004 and those sold loose such as bakery, delicatessen and butchery products.

Despite the difficulties in looking after a food allergic toddler, Ms Wright explained that parents could be reassured that most children do grow out of their allergies.

BOX 4

SUMMARY OF NEW EU FOOD LABELLING LAWS¹⁴

Packaged manufactured goods must identify the following allergens:

- Cows' milk
- Eggs
- Fish
- Crustaceans
- Sesame
- Gluten containing grains (e.g. wheat, rye, barley, oats)
- Peanuts
- Tree nuts
- Soya
- Mustard
- Celery
- Sulphites and sulphur dioxide (in specified amounts)

For more information see www.food.gov.uk

“Around 85 per cent of children grow out of their egg and milk allergy¹⁵ by the age of five¹⁶,” she said.

Meanwhile, by adapting recipes using allergen-free alternatives and, if needed, nutritional supplements, it was perfectly possible to provide a nutritious and tasty allergen-free diet.

For further information see www.anaphylaxis.org.uk

CASE STUDIES - SMALL STEPS TOWARDS A MAJOR HEALTH IMPROVEMENT

Changing people's eating habits is a notoriously difficult task. But experience at the Seacroft Children's Centre in Leeds has shown that even the smallest change in behaviour has the potential to make a major impact on people's health.

Jackie Moores, who has worked for Sure Start for four years, described how a 'Good Grub Club' was helping local parents make small, but significant changes in the way they feed themselves and their children.

“The Good Grub Club is a cook and eat club for parents, carers and their children and takes place at the Seacroft Children's Centre once a week. It is run on a six week cycle [by Jackie and Barbara (Family Worker) with childcare support] with the aim of moving people on to other groups within Sure Start.”

The club provides childcare while the parents and carers are helped to cook a range of meals. Information is given on issues such as food hygiene, healthy eating and how to manage on a budget. The club also goes on shopping trips and is currently producing a recipe book.

The benefits of the club are wide-ranging, said Ms Moores.

“The club helps increase parents' self-esteem. It offers an opportunity to tackle children's feeding problems and for parents to share ideas. We do see a change in eating behaviour - for many children just sitting down at a table is something new for them. The club also provides an opportunity for quite isolated parents to develop friendships and relationships.”

A long-term benefit of the club would be health improvement, although Ms Moores stressed that it was important to remain realistic about what could be achieved.

“One of the problems that community programmes have had in the past is that they expect to get huge health improvements during the first two years. It’s just not possible to do that.”

“Health improvement is a very long-term outcome as there are a lot of other things that need to happen before you are going to be able to show a real improvement in people’s health.”

Nevertheless even small changes could have a major effect on health. Ms Moores gave the example of encouraging parents to switch from a bottle to a cup when feeding their toddlers milk.

“This is such a simple change yet it could result in reduced dental decay, reduced gastrointestinal problems (as it prevents infections from dirty bottles), increased learning opportunities, improved language acquisition and increased food intake.”

“Sometimes when you are working with communities you can think ‘oh it’s just an impossible task’. But even a very small change in behaviour such as this can have a very big impact in terms of the health and opportunities for children.”

MANAGING MULTIPLE ALLERGIES IN A 15-WEEK OLD CHILD

Paediatric dietitian Julie Steele from the Leeds Teaching Hospitals NHS Trust described the case of a 15-week old child who had been admitted to hospital with an urticarial rash and breathing difficulties after having formula milk.

The child was initially changed to an extensively hydrolysed formula with advice also to avoid soya, egg, gluten, wheat and fish. At 24 weeks the child was managing five to six bottles of the hydrolysed formula per day. Banana baby rice, potato based baby foods and pureed fruit were also offered as weaning food¹⁷.

At 12 months the child was referred for a food challenge which was conducted at 20 months. A topical milk challenge resulted in a large wheal and rash extending up the arm.

At 22 months a wheat challenge was conducted with no reaction. At 23 months an egg challenge resulted in skin blisters. The mother was advised to continue to avoid milk, egg and fish in the diet¹⁸.

At two years and four months the child attended for a soya challenge and tolerated 100ml of soya formula milk. Two weeks later the child was tolerating soya ice-cream, soya yogurts and normal bread.

At four years and two months the child was assessed by a dietitian to check calcium intake. Advice was given to replace the hydrolysed formula with calcium enriched soya milk.

At four years and six months the child underwent a successful fish challenge and is currently awaiting a further egg challenge. This case study highlights the importance of continued monitoring of children with food allergies, said Ms Steele.



KEY LEARNING POINTS

- Good nutrition is essential in the toddler years
- National diet and nutrition surveys of children show some toddlers are eating a high energy dense and/or low nutrient diet
- Disease such as coronary heart disease (CHD) and diabetes, are linked to excess consumption of energy dense foods
- Iron deficiency anaemia remains to be a problem in toddlers
- Making small improvement to the diets of these very young children can have an immediate and lasting effect
- It is important for toddlers to have positive experience with food
- A healthy diet for toddlers is based on a combination of foods from all five food groups
- Faddy eating is a normal phase toddlers go through and parents must accept this and work through it. Food should not be used as a reward/punishment
- Toddlers learn by copying so parents and carers should not underestimate themselves as role models. They must set a good example
- Food hypersensitivity is a general term describing reproducible adverse reactions to a food. A dietitian should be consulted to ensure any dietary exclusion is nutritionally balanced to support normal growth and development

You can now register for our 2006 study days at www.infantandtoddlerforum.org

The Forgotten Years - A practical approach to overcoming deficiencies in the toddler diet

- Glasgow Wednesday 20 September
- Cardiff Wednesday 11 October
- Birmingham Thursday 26 October
- London Wednesday 15 November
- Manchester Wednesday 29 November
- Plymouth Wednesday 6 December



GENERAL FORUM INFORMATION

- The Infant & Toddler Forum brings together representatives from paediatrics, neonatology, health visiting, dietetics, midwifery and child psychology all of whom share a common professional interest in infant and child health nutrition
- A goal of the Forum is to improve the access of healthcare professionals to reliable, evidence-based nutritional information relevant to their practice, which will equip them to advise and support the parents of infants and young children
- For further information on educational materials and study days please visit our website www.infantandtoddlerforum.org
- The Forum is funded by an educational grant from Danone UK.

References:

- 1 Singhal, A. & Lucas, A. (2004) *Early origin of cardiovascular disease: is there a unifying hypothesis?* Lancet, 363, 1642-1645
- 2 Gregory, J. et al. (1995) *National Diet and Nutrition Survey: Children aged 1.5-4.5 years*. London: HMSO
- 3 Armstrong, J., Dorosty, A.R., Reilly, J. & Emmett, P.M. (2003) *Coexistence of social inequalities in undernutrition and obesity in preschool children: population based cross sectional study*. Archives of Disease in Childhood, 88, 671-675
- 4 Lucas, A., Morley, R. & Cole, T.J. (1998) *Randomised trial of early diet in preterm babies and later intelligence quotient*. British Medical Journal, 317, 1481-1487
- 5 Harper, K.U. & Sanders, K.M. (1975) *The effect of adult's eating on young children's acceptance of unfamiliar foods*. Journal of Experimental Child Psychology, 20, 206-214
- 6 Birch, L.L. (1980) *Effects of peer models' food choices and eating behaviours on preschoolers' food preferences*. Child Development, 51, 489-496
- 7 Department of Health (1994) *Weaning and the Weaning Diet*. Report on Health and Social Subjects 45. HMSO
- 9 Koivisto, U.K. & Sjöden, P.O. (1996) *Reasons for rejection of food items in Swedish families with children aged 2-17*. Appetite, 26, 83-103
- 10 Cooke, L., Wardle, J. & Gibson, E.L. (2003) *Relationship between parental report of food neophobia and everyday food consumption in 2-6-year-old children*. Appetite, 41, 205-206
- 12 Johnson, R. & Harris, G. (2004) *A preliminary study of the predictors of feeding problems in late infancy*. Journal of reproductive and infant psychology, 22 (3), 183-188
- 13 Johansson, S.G. et al. (2004) *Revised nomenclature for allergy for global use: Report of the Nomenclature Review Committee of the World Allergy Organisation, October 2003*. JACI, 113, 832-836
- 14 Food Labelling (Amendment) (No.2) Regulation 2004 implements Directive 2003/89/EC
- 15 Thong, B.Y. & Hourihane, J.O. (2004) *Monitoring of IgE-mediated food allergy in childhood*. Acta Paediatrica 93 (6), 759-764
- 16 Host, A., Halken, S., Jacobsen, H.P., Christensen, A.E., Herskind, A.M. & Plesner, K. (2002) *Clinical course of cow's milk protein allergy/intolerance and atopic diseases in childhood*. Paediatric Allergy and Immunology 13, Suppl 15, 23-28
- 17 Carter, C., Shaw, E., Lawson, V. & Chapter, M. (2001) *The immune system*. In: *Clinical Paediatric Dietetics*, second edition, chapter 13, p211 Blackwell Science Publications: London
- 18 Puntis, J.W.L. & Wardley, B.L. (2002) *Nutrition in the under 5's*. Current Medical Literature Ltd, London., chapter 6, p45