



Practical help and information
on nutrition and development

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DEVELOPING POSITIVE EATING HABITS

A report from the Infant & Toddler Forum
Study Day 2010

A practical approach to sharing responsibility

Supported by an educational grant from Danone UK

FOREWORD

The Infant & Toddler Forum has now been working on the issue of early years nutrition and development for seven years. As health agendas develop, so must we evaluate the most effective ways to target parents and carers with the right information to enable them to make the best choices for their children's nutritional needs.

Public health is high on the coalition Government's agenda, and those of us with an influence on early years nutrition and eating habits have a significant role to play in terms of preventing long-term health problems.

Study Days such as this one are the perfect opportunity to share experience and best practice, and our delegates are often the vital link between the Infant & Toddler Forum's resources and the parents who need our advice. They also provide a chance to reflect on the progress made in the past year and the challenges that still face us in addressing early years nutrition going forward.

The title says it all: we all need to share a practical approach, allowing everyone with responsibility for caring for our children to help develop the positive eating habits that will stand them in good stead for healthy lives in the future.



Dr Atul Singhal

Chair of the Infant & Toddler Forum

INTRODUCTION

Infants and toddlers need a varied, balanced diet to thrive. But healthy eating in the early years isn't only important for growth and development; what and how parents feed young children affects their eating habits – and consequently their health – when they grow older. Current research suggests that improving early nutrition could prevent serious health problems later in life, such as obesity, cardiovascular disease, type 2 diabetes, and some cancers.

Poor diet causes health issues in the early years too. Obesity is a huge problem in young children; recent data shows that almost a fifth of two to five year olds in the UK are obese, while a further 14 per cent are overweight¹. Importantly, most of this excess weight is gained before the child reaches school age.

Some dietary deficiencies are also common. Fibre intake is below recommended levels, and iron deficiency – which can cause long-term development issues – is common, with 17 per cent of toddlers in the UK suffering from iron deficiency anaemia². Vitamin D intake in children aged 18 months to three years was at 28 per cent of what it should be according to the recommended nutrient intake (RNI)³. Dental caries are also widespread; by the time they are five years old, 30 per cent of children in the UK have dental decay⁴.

For these reasons, among others, the improvement of infant and toddler nutrition should be a priority on the public health agenda. To be successful, intervention strategies must have a broad scope. In the UK today, the diets and feeding habits of young children are no longer the sole responsibility of parents; nursery staff, nannies and other carers all play an important role in shaping a toddler's diet.

Presented by a multi-disciplinary group of experts with firsthand experience in child nutrition and development, the Infant & Toddler Forum Study Day '*Developing positive eating habits - a practical approach to sharing responsibility*' highlighted the importance of consistent, simple and sound advice that can be applied everywhere toddlers are fed, and explored the role we all play in providing children with the opportunity to develop positive eating habits.



Dr Gill Harris

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

STUDY DAY SPEAKERS

Dr Alison Lennox, MRC Human Nutrition Research, Cambridge, UK.

Dr Andrew Murrison, MP, Parliamentary Private Secretary to Andrew Lansley as Secretary of State for Health.

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.

Judy More, Paediatric Dietitian, London.

Fay Spence, Early Years Development Manager, Pre-school Learning Alliance.

Michelle Alexander, Nursery Manager, Happy Child Nurseries.

WHAT THE DELEGATES SAID

"I found the sessions informative. The knowledge I have gained will help me support and educate families."

Family Outreach Worker

"Lots of practical ideas to use with parents, and lots of research and information to build up my knowledge to pass on to clients and colleagues."

Nursery Nurse

"Excellent speakers. Ten Steps for Healthy Toddlers will be a really useful tool in the workplace."

Specialist Paediatric Dietitian

"Excellent day – refreshed my knowledge greatly. Enjoyed learning about new, important evidence."

Public Health Nutritionist

"Thank you for the programme, it was very informative and reassured my practice. I'm planning to use the Ten Steps as a group setting for the fussy eating programme in Hackney."

City and Hackney PCT

"I was told about your (Little People's Plates) site by my work colleague and we have started to include it in our sessions that we provide to families in children's centres."

Food and Health Worker

"Very informative and very useful as a practitioner."

Early Years Practitioner

"My first time today and it has been very informative and enjoyable. Some guidelines have been clarified for me."

Child Care Advisor

"Good atmosphere, good facilities, good variety of information from different professionals."

Community Nursery Nurse

WHAT ARE OUR TODDLERS EATING, WHO IS FEEDING THEM, AND WHERE?

Dr Alison Lennox,

MRC Human Nutrition Research, Cambridge, UK

Dr Alison Lennox began her engaging session with a simple question: are the nutrient intakes of toddlers changing in the UK? Her answer came from new figures coming out of the National Diet and Nutrition Survey (NDNS)³, and shed light on some critical issues in early years nutrition.

The NDNS is the biggest representative dietary survey in the UK, providing an accurate snapshot of eating habits across all age groups, and as a former Head of Population Nutrition Research at MRC Human Nutrition Research, Dr Lennox has worked on it since the initiation of the new rolling programme in 2006.

“It’s the cornerstone of what we know about what people are eating in the UK,” she explained. “We had intermittent dietary surveys during the 1960s and 1970s, and then in 1986 there was an adult survey that went on through the 1990s and laid the groundwork for the NDNS programme, looking at different age groups of the population, cross-sectionally and nationally representative.”

The most recent complete set of data on toddler eating habits dates from 1992–1993. However, following a review by the Food Standards Agency, the design of the NDNS was altered to a rolling programme, which will reduce the long gaps between data collection from the same age groups. NDNS participants are selected randomly and required to complete a food diary for four days, estimating the portions they – or their children – have eaten, based on household measures and photographs of typical portion sizes.

The first year of data was gathered in 2008–2009, and published in February 2010; it is this data that Dr Lennox presented at *‘Developing positive eating habits - a practical approach to sharing responsibility’*.

Dr Lennox emphasised that these results were preliminary and from a small sample size; the rolling programme involves 1,000 people a year,

500 adults and 500 children and of these only 121 were toddlers, aged 1.5-3 years. Nevertheless, the sample is representative of the UK population as a whole, she added.

Changes in eating habits

The first and most striking finding that Dr Lennox noted from the new data was that energy intake, despite a prevailing consensus to the contrary, does not appear to have risen dramatically since 1992–1993. However, protein intake has risen in all age groups including toddlers, she explained.

“When considering obesity, we have to take into account that we don’t see an increase in energy in our national surveys,” said Dr Lennox. “There has been a bit of a shift to eating more meat in this country. We’ve seen this in all age groups. We’ve gone up and down with the BSE crisis and so on, but we have seen a general tendency to increase protein intake as a percentage of energy.”

According to these year one results, fat intake has actually seen a small reduction, dropping from a total percentage intake of energy of 36.4 per cent to 34.3 per cent. Similar changes were seen across every age group.

The results also revealed that vitamin C intake among toddlers has risen significantly since 1992–1993, from 48 mg/d to 74 mg/d. Dr Lennox suggested that one reason for this leap may be due to the fortification of food and beverages with vitamin C. However, fruit intake has also increased dramatically among toddlers - almost doubling. Results show that over a four day period, nearly all toddlers will consume some fruit, and nearly half will consume some vegetables.

The figures showed that total sugar intake has shown little change, while toddlers’ intake of non-milk extrinsic sugars (NMES) has reduced from 48 g/d to 34.8 g/d. Looking at sources of NMES, Dr Lennox noted that the intake of preservatives, confectionery and chocolate have all reduced since 1992-1993 as well.



Moving onto drinks, Dr Lennox revealed: *“Soft drink consumption has gone down in toddlers, a little bit in four-10 year olds, nothing in teenagers and it has gone up in adults. So interestingly, we’re seeing changes mostly in those younger age groups, which I think is really encouraging,”* said Dr Lennox. She also explained that fruit juice intake has increased since 1992-1993.

Regarding the consumption of cheese across all age groups, Dr Lennox revealed that it has gone up. *“That’s not such a good thing,”* she said, *“We enjoy cheese in Britain, and we’ve seen an influx of very nice cheeses from other places. It’s very easy to eat and it’s very easy to give to toddlers. I think there are a number of types of foods that parents are giving often to avoid giving sugar-containing foods, and they’re probably giving cheese quite a bit. So there are still many foods that we have to pay attention to and work to modify intake.”*

Why the changes?

When analysing the new data, Dr Lennox and her group were surprised by how many positive changes they saw. The question they have asked is – why?

The first potential reason is public health campaigns. Encouragingly, the NHS 5 A DAY, Change4Life and Start4Life campaigns do seem to have had an impact, said Dr Lennox.

On the industry side, the big-chain supermarkets have been concentrating on healthy living campaigns too, so the general public is exposed to several health campaigns, she said. Healthy Start vouchers have helped make fruit and vegetables more available, and these are also

more accessible in convenience stores now. Dr Lennox also noted that there is an increasing market for healthy infant products.

Another potential reason for the apparent improvements in some aspects of toddler diet is access to information on healthy eating. With the internet, parents and carers now have access to more information than ever before.

Meal times

Dr Lennox went on to talk about a further study in which she’s involved - the Diet and Nutrition Survey of Infants and Young Children (DNSIYC)⁵. With a planned 1,800 participants, the survey focuses on the diets of four- and 18-month olds, and includes information making it possible to explore how socioeconomic circumstances and mealtime structure affect eating habits. She revealed some preliminary results from the DNSIYC ‘dress rehearsal’, from 188 participants in Cambridge, Newcastle, Manchester and rural Falkirk.

In relation to location of eating, results showed that 82 per cent of toddler eating occurs at home. The results also revealed that the most common locations of eating in the home were the living room - where 41 per cent of meals were consumed - followed by the kitchen at 31 per cent.

In terms of who the children were eating with, the results showed that 45 per cent ate their meals with parents or carers, and three per cent with siblings and other children between the ages of four and 18 months. However, data from the NDNS showed that for older children aged 18 months to three years, 35 per cent of meals were eaten with siblings and other children. Data from the DNSIYC ‘dress rehearsal’ also showed that 54 per cent of four- to 18-month olds watched television while they were eating, versus 34 per cent who did not, while 25 per cent did not specify. Dr Lennox also explained that 41 per cent of children in this study ate at the table, versus 36 per cent who did not, with 23 per cent unspecified.

Dr Lennox concluded her session with a promise of more data to follow. *“We’re trying to put everything I’ve told you about together into a list of the factors that influence food consumption. We will carry out more complex analysis in future on how those things interact with each other and other socioeconomic factors such as social class, ethnicity and marital status,”* she concluded.

DISCUSSION

Question from the floor:

"My question is about social inequalities and what's happening in different parts of society. I imagine that your analysis will be looking at that and where the shifts are happening across class gradients. Is your understanding from this early examination that this is a shift through all elements of society, or is it certain elements that are leading the way?"

Dr Lennox:

"We will be looking at that. NDNS always reports its data by socioeconomic status as well. But when we have such small numbers, if you try and sub-divide them further into their socioeconomic categories, you can't trust the results. So yes, we will do that but we haven't done it yet."

NO DECISION ABOUT ME, WITHOUT ME

Dr Andrew Murrison,

*MP, Parliamentary Private Secretary to Andrew Lansley
as Secretary of State for Health*

In a provocative discussion about healthcare and its place in today's society, Dr Andrew Murrison MP outlined the coalition Government's approach to public health.

Healthcare is evolving very rapidly and there is a lot of interest in what role public health policy can play in modern Britain, explained Dr Murrison. Claiming that public health has long been complex, fragmented and ineffective, he went on to ask how we can reconcile our desire to improve public health – particularly that of the poorest sections of society – without creating a 'nannying' culture.

Going on to discuss the soon-to-be-announced Bill of Public Health, Dr Murrison revealed that it had been designed with the intention of putting patients at the heart of the NHS, and empowering their clinical advocates. The aim, he said, was to follow the maxim "no decision about me without me". Targeting infants and child health issues was especially important, he added. *"Public health rarely generates 'quick wins,'" he said. "This means working with youngsters, their families and their schools to provide services and information in readily accessible ways that can change behaviour, add length and quality to life, and in particular focus on communities that are the poorest and most deprived."*

Dr Murrison said there will be a deal between Government and business built on shared social responsibility, not state regulations.

He added that, for the first time, there will be a ring-fenced public health budget - a new health premium to target public health resources towards areas with the poorest health. He also said that there will be an enhanced role for local public health directors, giving them the resources and authority to improve the health of their communities.

Before discussing changes in the NHS commissioning structure, Dr Murrison revealed that the coalition is funding 4,200 new health visitor posts, with improved training. *"Families are becoming more complex and their needs more complex with time," he said. "Health visitors and the way the profession operates needs to reflect this. Together with their traditional role giving advice and support to new mothers, health visitors have an increasingly difficult and legally torturous place in safeguarding children and referring them to specialist services."*

However, Dr Murrison added that Sure Start will be refocused on early intervention and improving life chances of disadvantaged children. He concluded: *"Investing in health visitors is investing in the future health and wellbeing of tomorrow's adults and their children."*



BEHAVIOUR AND FEEDING: INFLUENCING THE DEVELOPMENT OF HEALTHY EATING HABITS

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*

"Why we eat what we eat is not 'hard wired'. It has to be learnt," began Dr Gill Harris in this enlightening session on the psychology behind eating behaviour in infants. "Children need to learn different food preferences because of the different cultures and climates we live in."

According to Dr Harris, there are two rules for how you learn the foods that you like: exposure and imitation. *"Some exposure occurs in utero,"* she explained. *"There's some evidence that what a mother eats when she's pregnant will get through in terms of taste recognition to the neonate. But it's a fairly weak effect."*

"There's also some exposure during breastfeeding; again relatively weak in terms of intake, but there's some evidence that if a mother eats fruit then there will be some increased fruit intake in the baby at the age of weaning." Predominantly however, children learn taste preferences through exposure in later infancy, she added.

Appetite

Infants learn to understand a food's calorie load, and that learning process takes some weeks, explained Dr Harris. In other words, infants learn to feel hungry for a specific calorie load from birth and will regulate when they breastfeed. If they don't receive it, then they will compensate and look for those calories at a later time. Interestingly, some children will regulate their calorie intake over the course of a week rather than a day, she added.

Appetites are governed by intrinsic and extrinsic cues, Dr Harris explained. Intrinsic cues tell us roughly how many calories we need, but around the age of four or five years we attend to extrinsic cues too. These are events that happen around us, such as social cues, which may lead us to eat when we're not hungry.

Extrinsic cues can lead to 'emotional eating', she said. For example, it is common for people to use food to change their mood – and unfortunately we often teach children to do this as well. *"Parents can encourage comfort eating. When the child is upset, naughty or stressed, they will provide some food,"* explained Dr Harris.

Children may also be prompted by parents to finish what's on the plate or to eat when others are eating, even when they are not hungry. However, the 'finish what's on your plate' approach of feeding is not always a good idea, Dr Harris said.

"If you're eating to an intrinsic cue, you can eat halfway through the plate and stop," she explained. *"What's more, you can be no longer hungry for your first course but hungry for your pudding; you've got sensory-specific satiety."*



Ironically, by exerting pressure to eat, parents induce a reduced preference for the pressured food, Dr Harris explained. *"If you push somebody to eat, you actually reduce a preference for that food,"* she said. *"You negate the intrinsic cues and you instil a negative preference for the food you're trying to get the child to eat."*

Although food preferences are learnt, there is one taste preference that is innate, and that is sweet taste. This is what leads the child to drink breast milk as opposed to water. One possible exception is the taste of umami, said Dr Harris; there might be a preference in the neonate for umami because this taste is also present in breast milk.

Solid foods

Exposure to new tastes will guide preferences in infants. Around the ages of four to six months, when most parents are introducing solid food, only a few exposures are necessary to establish a taste preference. However, when being weaned onto solids, infants will be more accepting of a sweet or palatable food than they are of food that has a slightly stronger, bitter or sour taste.

New bitter foods, like vegetables, may even induce the gag reflex in infants, said Dr Harris. Some parents may, erroneously, take this as a sign to stop offering the food. *“What we need to do is to educate parents that children do have to get used to different and more difficult tastes. These will be the tastes that lead the child to eat food we actually want them to eat – vegetables and fruit,”* explained Dr Harris.

Although it has been suggested that introducing new foods one by one is a good way of checking for allergies, new studies have shown that offering a range of vegetables resulted in infants learning to eat them more rapidly, Dr Harris said. *“Rather than this idea of being cautious, and introducing bland food, you need to actually encourage mothers to introduce things that are quite strong tasting, quite quickly and with frequent changes – that’s going to have the better outcome,”* she explained.

As part of her research into food preferences, Dr Harris and her team analysed the ALSPAC database, which is run by a team at Bristol University and aims to identify ways in which the health and development of children can be improved. This resource was consulted for information on early fruit and vegetable consumption at six months. They found that this early consumption predicted levels at the age of seven⁶.

Preparing homemade food for the toddler was also linked with a better diet in later years. *“We found that it was what was being eaten at the early stage that predicted what was eaten later on. And where the parents are preparing foods themselves you get children who are eating better at seven years; where they rely totally on baby food jars, then you don’t,”* she explained.

However, Dr Harris stressed that processed baby food is improving. *“This data was collected 10 years ago. The baby food companies have and are*

trying to change so that they’re getting more pure and more difficult tastes. But parents should be encouraged to choose jars that have a wider range of foods in them,” she added.



Textures

Texture exposure is also incredibly important, said Dr Harris. The ‘tongue stage’, where toddlers move food around their mouths, as well as ‘messy food play’, are key.

Lumpy food has to be moved to the side of the mouth, processed by the teeth or gums, moved back around, and swallowed. When a child is given lumpy solid food, they have to learn to cope with this – if they aren’t offered lumpy food, they won’t learn, she explained. Such chewing skills develop between the ages of six and 10 months, but only if the infant has experience with food in the mouth.

“Oral motor skills at this age may not be good enough to separate out the lumps,” said Dr Harris. *“You will often get a sort of cough and gag when babies are first introduced to lumpy foods.”* However, this is natural and shouldn’t be taken as a sign to stop offering the foods, she added.

“A couple of studies looked at the timing of solid foods, and prior to six months you get 29 per cent reporting feeding difficulty at 15 months, but where it’s delayed that goes up to 52 per cent⁷. A delayed introduction of lumpy solids would lead to food refusal,” Dr Harris explained.

“The take home message is that it’s important to get textures in, and it’s important if you’re working with mothers to get that messy play exposure in as early as possible. Getting the food all over the head, face, hands and floor is critical,” she added.

12 to 18 months

In the second year, feeding toddlers becomes more difficult, as this is the start of the neophobic response stage, when some new foods, and even some previously accepted foods, are rejected on sight, Dr Harris said.

The neophobic response is thought to be of evolutionary benefit – you don't put a food in your mouth if you look at it and you aren't sure whether it's safe⁸, said Dr Harris. Toddlers are especially likely to reject foods that appear different at subsequent presentations, and this unfortunately includes fruit and vegetables.

During this phase, toddlers gradually learn to eat new things by imitation⁹, said Dr Harris. They will try new foods if they see their parents eat them, and research shows children of nursery school age will copy the eating habits and food preferences of other children. By the age of five, there should be very few neophobic responses.

Parenting styles

According to Dr Harris, there are three basic styles of parenting: authoritarian, permissive and authoritative.

Authoritarian parents force the child to sit and eat what they say. Permissive parents do not challenge the toddler with new tastes or textures. Authoritative parents sit between permissive and authoritarian – they make confident suggestions to their children. Ideally, parents should be aiming for an authoritative style, said Dr Harris.

“Poor parenting style can affect food intake negatively. It can also affect child BMI negatively, in that you can either get children that are overweight

or whose growth falters. Health visitors working with an individual family need to think about parenting style,” she said.

Restriction and reward

Dr Harris concluded her talk with a discussion about food restriction and the use of food as a reward. When parents restrict a preferred food, it actually increases preference for it. *“If we withhold something, we don't think it's not going to be nice... it becomes more desirable. So when the restraints are off, we choose the food that has been restricted,”* she explained.

How can parents and carers manage the use of food as a reward? *“The best solution is to allocate some time in the day to give children things like chocolate and sweets. This way you remove the emotional component that goes with eating them.”*

Conclusion

At home, families can help by introducing healthy foods at the weaning stage, including a variety of textures. Families need to model appropriate eating behaviour and attitudes, so a big role of any healthcare professional is getting parents to eat healthily, and to introduce those healthy foods to their children. Teaching parents to adopt an authoritative eating style, and to avoid using food as reward, is also key.

Day care can also play an important role in helping to establish healthy eating habits in infants and toddlers. When they move into day care, they are exposed to a wider range of foods – and will copy other children who are eating well, said Dr Harris. Day care can help to ensure good authoritative mealtime practice, and help to limit the reward/restriction paradigm, she concluded.



INTRODUCING 'TEN STEPS FOR HEALTHY TODDLERS'

Judy More,

Paediatric Dietitian, Infant & Toddler Forum

Given the challenges of feeding toddlers, the Infant & Toddler Forum (I&TF) wanted to produce a resource that would provide consistent, evidence-based guidance for parents and carers at mealtimes, explained Judy More at the beginning of her informative session.

She went on to introduce the result – 'Ten Steps for Healthy Toddlers'¹⁰ – which offers easy-to-follow advice in a format that healthcare professionals can use as a tool to discuss good practice with parents.

Before detailing the guidance, Ms More explained how the I&TF worked with several professional bodies and charities during the development of the 'Ten Steps for Healthy Toddlers'. *"We consulted a wide group of professional bodies, charities and patient groups, including the Department of Health and the Food Standards Agency,"* said Ms More. The British Dental Health Foundation, National Obesity Forum, and the Pre-school Learning Alliance were also sounded out and have subsequently endorsed the Ten Steps, she added.



Ms More then talked the Study Day delegates through each of the 'Ten Steps for Healthy Toddlers':



1. Eat together as a family and make mealtimes relaxed, happy occasions

"Don't make mealtimes stressful unhappy times for your toddler," Ms More explained. *"Food neophobia is a normal developmental stage, not something you need to get a battle going over. You have to accept it's a normal stage and that you must praise your child when he or she tries something new, and give him or her time to learn to like new foods."*

"Make food easy to eat," she added. *"Finger foods are good; this is about putting toddlers in control of what they eat and how much they eat, and making their own decisions."*

It's important for parents to be role models, Ms More stressed. *"Eat the foods you would like your toddler to eat. Toddlers will learn by copying and will begin to eat the foods that you're eating."*



2. You decide which nutritious foods to offer but let your toddler decide how much to eat

"This point is about not insisting your child eats everything on his or her plate. Again, it's about not forcing the child into overeating, and giving them the respect and allowing them to decide when they're full," explained Ms More.

The I&TF conducted a poll¹¹ on parents' attitudes to feeding and what they find difficult about it. It showed that overall, 29 per cent of parents insist on their toddlers finishing all the food on the plate. This does mean that we're pushing our toddlers into obesity, she said.

"This is something that goes on and it is something that we need to tackle; certainly in terms of the rise in obesity, because if you're forcing children to eat more than they need you're overriding their self regulation of appetite and sense of satiety," said Ms More.



3. Offer foods from all five food groups each day

The five food groups are:

- bread, rice, potatoes, pasta and other starchy foods
- fruit and vegetables
- milk, cheese and yoghurt
- meat, fish, eggs, nuts and pulses
- foods and drinks high in fat and sugar.

"If you give a combination of those food groups throughout the day, then you'll be giving your toddler the right mix of nutrients," Ms More explained. "So this is just a step to alert parents that there is a way to ensure toddlers are getting a nutritious diet."



4. Have a routine and offer three meals and two to three snacks each day

"It's really important that you have a routine," said Ms More. "You will never get enough calories and nutrients into a toddler in just three meals a day, because their stomachs are simply too small to take a large quantity of food in just three meals."

Instead, parents should give two or three snacks each day between meals, she said. *"This should be a routine arranged around their sleep; you don't want to try and feed a toddler when they're tired because the effort of eating is just too much for them."*



5. Offer six to eight drinks a day

"This step is to make sure that children are offered enough drinks, so that they can drink when they're thirsty," explained Ms More. "They should always be offered one – whether they drink it or not is really up to them, but children do dehydrate quite quickly."

Six drinks corresponds to one with each meal and snack, with the option of extra hydration after a lot of running around or active play, she said. *"Drinks should be given in a beaker or cup, not bottles. This is to emphasise that bottles of milk should stop being offered at around 12 months."*

Toddlers under 12 months old shouldn't be offered bottles of milk first thing in the morning, just before bed or the middle of the night, Ms More explained. *"Too much milk in a toddler's diet tends them towards iron deficiency anaemia," she said. "In fact, most of the iron deficiency anaemia in toddlers is due to overconsumption of milk, as it means they fill up on the milk and don't eat enough of the foods that do contain iron."*



6. Give vitamins A and D each day

We make vitamin D in our skin when we are outside in the sunlight. *"It's important for absorbing calcium, and building it into the bones. It also has an equally important role in boosting the immune system," said Ms More. "Toddlers are developing and growing very quickly, so calcium going into the bones is critical."*

In food, vitamin D is only provided by oily fish and margarine, and some toddlers are not getting enough of it due to limited sun exposure. *"In this country we rely on supplements and we've done that for many years. First we did it through cod liver oil and now we do it through vitamin drops for children," she said.*

She went on to explain that vitamin A is important for the immune system - young toddlers are prone to infections - and that it is also good for eyesight.

Ms More stressed that health visitors should be recommending a vitamin supplement of vitamins A and D to the parents of all toddlers. This has been Department of Health policy for several decades.



7. Respect your toddler's tastes and preferences – don't force feed

"This step is about emphasising the fact that neophobia is a totally normal developmental stage in toddlers," said Ms More. "Understand that some children eat almost everything, while others are much more picky - but you've got to accept that. That's the way the toddler is genetically determined in growing up."

She continued: "Children are different in the way they like their food, and they are not necessarily doing something to annoy you. It's the way they see their food and like to take it. Some like it all kept separate on the plate. Some like it very dry. Other children will be quite happy to eat soup and casserole and things like that."

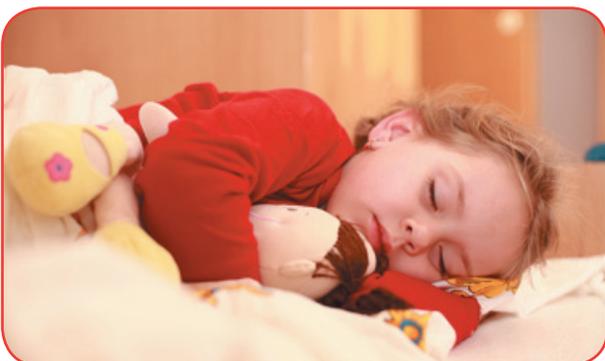


8. Reward your toddler with your attention – never give food or drink as a reward, treat, or for comfort

70 per cent of parents admit to using sweet foods or puddings as a reward or to encourage their toddlers to eat up their main meal¹². But this is not a good approach, said Ms More.

"You should reward your toddler with your attention," she said. "Never give food or drink as a reward or treat, or for comfort. Otherwise you're setting them up for comfort eating and obesity later in life. So just as an example for parents, play, read or talk to your toddler as a reward - they enjoy this just as much as a sweet jelly bean."

She added: "This is about emphasising food as being a pleasurable occasion. So always give a nutritious pudding or some fruit at the end of a meal; don't use it as a reward for eating up other foods first, or for good behaviour."



9. Limit...

- fried food, crisps, packet snacks, pastries, cakes and biscuits to very small amounts
- sweet foods to four times a day, e.g. as part of the three meals and one snack.

... and avoid

- sweetened fruit squashes, fizzy drinks, tea and coffee
- undiluted fruit juices – only give juice well-diluted at meal times
- whole nuts, which may cause choking or be inhaled.

Ms More said: "We felt that we couldn't put out the Ten Steps without saying there were certain limits, so this is the only slightly negative Step. We tried to make all of the others quite positive and about reassuring parents that they are doing the right thing."

By limiting sweet foods and drinks, dental decay can be reduced, she explained. "Then there are certain foods that the Food Standards Agency restricts in toddlers, and the main one is whole nuts because they can be inhaled or can cause choking."



10. Encourage at least an hour of active play every day and about 12 hours sleep

"If toddlers are getting less than 10 hours sleep a day at three years old then they're much more likely to be obese at seven years of age," said Ms More. "We should be encouraging children to sleep for about 12 hours in total over 24 hours. So they might sleep a certain amount at night and then some more during the day."

"This step is also about encouraging about an hour of active play every day. Some households have a garden and the children can run in and out all day, so you're probably not going to be counting. But if you're in a small flat, once you've walked up the stairs there is very little opportunity for the toddler to be active," she said.

Ms More suggested that parents should be encouraged to go to the playground for half an hour, perhaps on the way home from shopping.

DISCUSSION

Question from the floor:

"We are a pill-popping society in my opinion and going back to the vitamin A and D question, I strongly believe in the food-first approach, rather than supplementation. Do you not think we should be educating parents to let children watch less TV, get out into the sunlight and introduce more vitamin A into the diet, rather than taking supplementation?"

Ms More:

"The only reasonable food sources for vitamin D are oily fish, and margarine. These tend not to be foods that all families eat regularly. In addition, oily fish such as mackerel and sardines have quite a strong, challenging taste for some children. Growing up milks and some breakfast cereals and yogurts are fortified with vitamin D, although these still have relatively small amounts compared to oily fish and margarine.

"It's difficult to get enough vitamin D for toddlers from food alone, and the best source is still sunlight. Of course, this can be challenging in the UK because we only make it between April and September.

"Ethnic groups with dark skins make less vitamin D in their skin and need more sunlight. Also, due to skin cancer fears, parents are very wary of letting their children have a lot of sun exposure.

"With vitamin A, you tend to get that in full fat milk, and that's one of the reasons full fat milk is encouraged until at least two years. The other source of it is betacarotene – which is in fruit and vegetables. It's challenging to get toddlers to eat enough betacarotene because of the bitter taste of vegetables.

"We could encourage a food-first approach, but you wouldn't reach your reference nutrient intakes for vitamin A and D in all children. Some will satisfy them but not all. Whether we challenge that policy or not will be something for the scientific advisory group on nutrition to consider, but we should be encouraging workable solutions for parents and healthcare professionals."

USING THE TEN STEPS IN PRACTICE

Fay Spence,

*Early Years Development Manager,
Pre-school Learning Alliance*

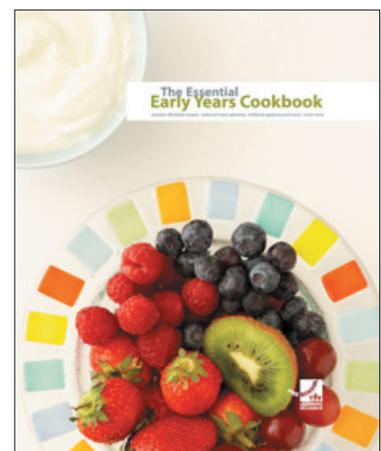
"Every child deserves a healthy start in life." So began Fay Spence's inspirational account of how the Pre-school Learning Alliance (PLA) has been using the 'Ten Steps for Healthy Toddlers'.

Mrs Spence, who works in the PLA's Birmingham subcommittee office, went on to explain what they have been doing to tackle childhood obesity. *"Recognising the challenge, we have developed a range of practical resources for cooks planning and preparing menus, practitioners working with young children, and commissioners responsible for early years' nutrition," she said.*

"The Alliance's campaign, 'Feeding Young Imaginations', supports parents and early years groups by providing information to promote

a balanced diet for under fives. A good diet is particularly important for young children as early food experiences will impact on eating patterns and habits in their adult life."

The campaign includes a nutritional book, with simple guidelines for ages 0 to five years. The PLA also produced 'The Essential Early Years Cookbook' which gives recipes for weaning, healthy eating and ideas for menu planning and cooking with children, Mrs Spence explained.



She went on to introduce the 'Building Foundations Project' in Birmingham, set up in April 2009, which sees a team of development workers go into parent and toddler groups to assist them. However, in many cases the group has problems explaining healthy eating, and it was here that the Ten Steps for Healthy Toddlers have proven invaluable, she said.

"We managed to secure some funding so that we could order 150 posters and 2,000 Ten Steps fliers," said Mrs Spence. "The fliers were for the development team to use when they go out and talk to the parents.

"We've found in the past that simple fliers are often ignored, but the team used them as a discussion tool in the groups of parents and said 'let's go through this, let's talk about it, have you got any questions?'

"It sparked some really great conversations and debates in the groups. What we found was that parents were going away and trying something and then next time they were in the group they couldn't wait to tell us they had tried it and share their experiences, like 'we let him cut the fruit up, a little knife and a banana and he mushed it all up,'" she explained.

"One of the things we really liked about the Ten Steps was how it emphasises the difference between the toddlers and the young children. It's nice the way it breaks it down and makes it simpler for parents. And of course there's the website, which is on the bottom of the flier, which they can access if they've got internet access to answer some of their own questions," said Mrs Spence. The emphasis on routine is also something they have adopted, she added.

Mrs Spence went on to explain how the PLA plans to use the Ten Steps in another project, funded by Big Lottery, Local Foods, called 'Healthy Tots Growing Together'. The project encourages community plant growing and healthier lifestyles, and it accesses 200 families a year. Participants receive a resource bag with seeds and recipes. *"We wanted something in there that was going to be really simple and straightforward, so we've now organised it so the Ten Steps fliers and posters are part of the resource bag that we put together for next year."*

TEN STEPS FOR HEALTHY TODDLERS – A CASE STUDY

Michelle Alexander,
Nursery Manager, Happy Child Nurseries

Michelle Alexander began her session describing her role working for Happy Child, for whom she manages both a baby nursery and a day nursery situated in West Ealing, London.

Mrs Alexander first discovered the "Ten Steps for Health Toddlers" as part of a training course in October 2010, and decided they were well suited for her nursery. She described how, using the Ten Steps, she hoped to achieve several key objectives:

- Improve Happy Child's service provision
- Support Ofsted evaluation
- Overcome challenges that Happy Child staff face day-to-day related to feeding children

- Improve awareness of how to deal with fussy eaters
- Evaluate the effectiveness of Happy Child's policies and procedures
- Work in partnership with parents
- Educate children to make healthy choices.

Overall, the Happy Child group has 13 nurseries. Noting how the Ten Steps have a number of clear links with Early Years Foundation Stages, Mrs Alexander commented: *"Using the Ten Steps was about the emotional attachment and involvement each child has with food. So we gave the children opportunities to really step back and look at food and touch food and tell us how they felt about it."*

She added: *"We also gave our staff the opportunity to speak about how they felt about food, and educate them on the impact they have on whether a child likes a certain food during mealtimes.*

"We discussed likes, dislikes, healthy and unhealthy food, and encouraged staff and parents to do this too. One of the Ten Steps mentions not to reward the children with sweet things – so it was about saying 'it's OK to have a small sweet every now and then.'"

Mrs Alexander went on to explain how following the Ten Steps had encouraged a more inclusive approach to mealtimes with the children. *"We started to try and take a next step of actually including them in the mealtime preparation... to include them in a part of the mealtime in each day as much as possible,"* she said. *"We spoke to parents in terms of the issues they face and what we can particularly help them with. We have quite a few parents that come in to do talks and cookery sessions with the children. It helps, especially if the child is a particularly fussy eater."*

She described how her nursery approached a particular fussy-eating child, by observing what he preferred to eat and giving him more options. She explained that they used the Ten Steps in terms of portion size and assessed whether the plate was too full or whether the problem was something in terms of presentation. *"The first conclusion we made was that actually he doesn't really like food that's wet."*

"So in terms of breakfast, we've monitored over a period of time that if we have milk on it he won't eat it, but if we give him a bit of dry cereal he will eat it. So we're trying to encourage it over time, but if we're giving him a glass of milk that's not a problem – he's still getting the same nutritional values."

Mrs Alexander also detailed how effective the Ten Steps had been in her nursery. *"My job as the manager is to oversee the key problems and*

challenges that the staff are facing. So through supervision I was able to go back and think – 'how can we make it more enjoyable, based on the Step of mealtimes being a family time?'" she explained. *"As part of the project we deliberately included the children every step of the way: they were part of the decision making process."*

As part of continuing evaluation on the use and impact of the Ten Steps, Happy Child are submitting details of their activities in Ofsted Self Evaluation Forms (SEF), which are updated on an ongoing basis.

Little Peoples Plates
Feeding the under 3s the food they need

Ten Steps for Healthy Toddlers
Good habits for health, growth and development

- 1. Eat together as a family and make mealtimes relaxed, happy occasions**
Make food easy to eat – finger foods are good.
Eat the foods that you would like your toddler to eat.
Praise your toddler when he or she eats well or tries something new – toddlers take time to learn to like new foods.
- 2. You decide which nutritious foods to offer but let your toddler decide how much to eat**
Never insist your toddler eats everything on his or her plate.
- 3. Offer foods from all 5 food groups each day**
Together they give the right mix of nutrients your toddler needs.
- 4. Have a routine and offer 3 meals and 2-3 snacks each day**
Offer 2 courses at each meal and only offer nutritious snacks.
Don't allow grazing on food.
- 5. Offer 6-8 drinks a day**
Give all drinks in a beaker or cup – not bottles. 3-4oz or 100-120ml is about right. Water is a good choice.
- 6. Give vitamins A & D each day**
Choose a vitamin supplement suitable for toddlers – most toddlers don't get enough in their food.
- 7. Respect your toddler's tastes and preferences – don't force feed**
Understand that some children eat almost everything while others are much more picky.
Some like foods kept separate at a meal and others are happy with foods mixed in together.
- 8. Reward your toddler with your attention – never give food or drink as a reward, treat or for comfort**
Play, read or talk with your toddler as a reward. Always give fruit or a nutritious pudding – don't use it as a reward for eating other foods first or for good behaviour.
- 9. Limit...**
fried food, crisps, packet snacks, pastries, cakes and biscuits to very small amounts.
sweet foods to four times a day e.g. as part of the three meals and one snack... and avoid
sweetened fruit squashes, fizzy drinks, tea and coffee.
undiluted fruit juices – only give juice well diluted at meal times.
whole nuts which may cause choking or be inhaled.
- 10. Encourage at least an hour of active play every day and about 12 hours sleep**
Active play can be in short 5-10 minute bursts, such as playing outside, dancing and walking. Limit TV and other screen time like computers to just 1 hour a day.

Interested in finding out more? Visit www.littlepeoplesplates.co.uk

If you have any questions or concerns about your toddler's health speak to your GP or health visitor.
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