



Feeding young children:
practical advice from experts

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SMALL STEPS TODAY, FOR HEALTHY FEEDING, GROWTH AND DEVELOPMENT TOMORROW

A report from the Infant & Toddler Forum
Study Day 2013

Sharing Best Practice

Supported by an unrestricted educational grant from Danone Nutricia

FOREWORD

Evidence continues to mount supporting the need to embed early childhood nutrition in all aspects of family, child and health policy. What happens to children in their early life is key to health outcomes in adulthood.¹ Unhealthy behaviours develop over time, so replacing them with healthy behaviours requires time.

Many parents are anxious and confused about healthy eating for toddlers. Healthcare and childcare professionals are perfectly placed to provide practical advice and guidance to get families on the right track. Encouraging a stepwise approach to nutrition can help families instil healthier attitudes and positive feeding habits in their children.

However, practical guidance on how to achieve good nutrition through these Early Years can be difficult to find.

The Infant & Toddler Forum (ITF) annual Study Day has now been running for nine years, offering healthcare professionals (HCPs) and Early Years Practitioners (EYPs) guidance and resources to ensure parents receive the best possible advice on how to feed their children. This year's Study Day, held at The Royal Society of Medicine in London, took us back to basics to deliver clear, consistent messages on healthy eating for health and childcare professionals.

The morning session of lectures looked at issues affecting toddlers today as a result of excess or deficiency, a case study on vitamin D followed by panel discussion, and a lecture on the key developmental milestones toddlers go through. The interactive afternoon seminar programme provided practical guidance on conveying key messages to parents and carers, to instil healthier attitudes in their children.

For those who attended the Study Day, we hope this report offers a summary of the key issues raised and discussed. For those who weren't able to attend, we hope it gives you a flavour of the programme, and, perhaps, an incentive to attend next year.



Dr Atul Singhal

Professor of Paediatric Nutrition, Institute of Child Health, UCL and Chair of the Infant & Toddler Forum

INTRODUCTION

Professor Atul Singhal opened the Study Day and set out the programme with the aim of addressing three key questions:

- What are the key challenges in toddler nutrition in the early age-group?
- Why do common myths in nutrition make it difficult for us to respond to these challenges?
- How are we doing as a nation in terms of toddler health and nutrition?

To answer the first question, there have been huge improvements in diet in recent years, but we still have problems with nutritional deficiency as well as nutritional excess. A recent report from Chief Medical Officer Professor Dame Sally Davies² shows a major problem with vitamin D deficiency – up to 40% of toddlers have sub-optimal vitamin D levels, whilst 12.5% of toddlers are obese. For the first time in history, today's children may not live as long as their parents.

Common myths like the extraordinary iron content of spinach (exaggerated by a factor of ten due to a misplaced decimal point by a chemist in 1870)³ mean that parents don't know which foods are high in essential nutrients like iron. Another myth is that big babies are the healthiest, encouraging parents not to be mindful of portion sizes or overfeeding. The childhood nutrition group at the Institute of Child Health was one of the first groups to state that weight gain in early life may have adverse consequences in the longer term.⁴ Successfully dispelling myths and communicating these health messages to parents is critical.

How are we doing as a nation? According to the British Medical Association's report *Growing up in the UK*,⁵ we have the highest rate of childhood obesity in Europe. The problem is that when most people talk about childhood obesity, they think of older children, when actually this also affects children under the age of five.

Given all those challenges, how can we change things? Doing nothing is not an option. We can change things at a policy level, with initiatives like making the Healthy Start scheme a universal programme. We need to make nutrition central to policy.

Individual change is harder. NICE guidelines for obesity published in October 2013⁶ suggest HCPs should work with families, giving practical, simple, and consistent advice. The ITF *Ten Steps for Healthy Toddlers*, which has already reached 1.5 million families, provides this kind of information. Communication and acceptance are key – the NICE guidelines go as far as to state that families that deny their child has a weight problem are having a detrimental effect on the child's health.

There are three key messages from this Study Day. Firstly, that healthy toddler nutrition really is a foundation for health throughout life. Secondly, that we need to start early, and thirdly, that we must instil healthy eating habits in our children, one small step at a time.

DELEGATE INTERACTION

Do you think nutrition is important in relation to outcomes for children?

96% of delegates surveyed said that nutrition is extremely important in relation to outcomes for children.

Which topics in early nutrition do you need more information about?

The topics which delegates felt they need more information on are: dealing with difficulty in feeding toddlers, and how to communicate health messages effectively.

What do you consider to be the biggest cause for concern in toddler health today?

80% of delegates felt that obesity is their biggest cause for concern in toddler health.

What do you consider to be the main obstacles for parents and families to encourage healthy eating behaviours from an early age?

80% of delegates said that a lack of knowledge and skills in home cooking was the main obstacle, whilst 70% said that too much conflicting information causing confusion about healthy eating was a big obstacle for parents.

Would you recommend the Study Day to a colleague?

100% of delegates surveyed said yes.

WHAT THE DELEGATES SAID

"This is my fourth year at the ITF Study Day. Every year I leave with new ideas to apply to my work."

Food and Health worker

"I found Professor Terry Wilkin's lecture on excess nutrition and its effects extremely stimulating. He explained difficult medical and scientific concepts in a way which I found really accessible."

Dietitian

"The Foodtalk presentation was great – I really enjoyed the audience participation, and the use of a rap to get messages about vitamin D to parents was very novel."

Food and Health worker

"Two ladies rapping about vitamin D? That's certainly a first for the ITF, and probably for the Royal Society of Medicine as well."

Dr Atul Singhal commenting immediately after the Foodtalk presentation

"I use the Study Day as a way to revise my knowledge about infant nutrition. The pace of the lectures is just right."

Oral Health Practitioner

"The Study Day is a great initiative, and the RSM is a great venue. The programme is very informative for my work with the under-fives."

Oral Health Practitioner

"Vitamin D deficiency is a key topic in Wales. Dr Lanigan's presentation gave us a great overview of methods for preventing deficiency."

Dietitian

"I really enjoyed the seminar programme – it was good to be able to pick and choose topics that are of relevance to my work."

Dietitian

"I come to the Study Day every year. This has been the best year so far in terms of content."

Development worker for Healthy Eating

"My employer was unable to pay for my attendance or grant me study leave to attend, so I paid for myself and took annual leave so that I could come to the Study Day. It's really valuable."

[Asked to remain anonymous]

"I enjoyed Dr Harris' seminar on developmental milestones in toddlers and am looking forward to the release of the new ITF milestones factsheet."

Dietitian

"A good mix of topics and a great venue."

Dietitian

STUDY DAY SPEAKERS

Dr Atul Singhal

Professor of Paediatric Nutrition, Institute of Child Health, UCL and Chair of the Infant & Toddler Forum

Melanie Pilcher

Policy and Standards Manager, Pre-school Learning Alliance

Professor Terry Wilkin

Professor of Endocrinology and Metabolism, Peninsula Medical School, and Director of the Early Bird Study

Dr Julie Lanigan

Paediatric Research Dietitian, UCL Institute of Child Health

Melissa Little and Lindsay Miller

Foodtalk

Dr Gillian Harris

Consultant Paediatric Clinical Psychologist

Judy More

Paediatric Dietitian

Dr Mark Farrall

Director, Ignition Creative Learning

INFANT & TODDLER FORUM RESOURCES

To view our factsheets, posters, reports, portion size tables, and the Tot it Up food calculator, visit

www.infantandtoddlerforum.org

THE INTEGRATED REVIEW: AN EARLY YEARS PERSPECTIVE

Melanie Pilcher

Policy and Standards Manager – Pre-school
Learning Alliance

Melanie explained that her aim was to give a brief overview of the integrated review, putting the Early Years perspective onto it. In July 2011 the Department for Education (DfE) and Department of Health (DoH) jointly published *Supporting Families in the Foundation Years (FITFE)*⁷ which included a commitment for the two bodies to explore integrating health and education reviews for children aged two to two-and-a-half years by 2015. This process is on-going.

FITFE underpins the government's vision (supported by a very strong evidence base), defining a child's journey through the Foundation years and the vision of the system of services which will be supporting these families and children. Pre-birth we have GPs, midwives and Health Visitors all supporting the preparation for birth and beyond.

For the first year of a child's life we have the transition to parenthood, with another 4,200 proposed extra Health Visitors, delivery of the healthy child programme, and the family nurse partnerships.

At two years-old we have free early education for the most disadvantaged 20% of children, based on the criteria for free school meals, with a proposal to roll this out to a further 40% of disadvantaged families by 2015.

At three to four years-old we have 15 hours a week of free early education universally in place for 38 weeks of the year. Finally, we have the child's transition to primary school, where hopefully parents will have more control over their choice of school, and the reception class will consolidate the child's learning before Key Stage 1.

We currently have two checks on children aged two to three years. The two year-old progress check – a statutory requirement since 2012 for all registered practitioners in childcare settings – reporting on the child's development in

the 'prime' areas of learning such as physical development and communication and language skills, working with parents to share this review.

There is also the healthy child programme check (commonly known as the Health Visitor check).

There is some overlap between these two checks, but unfortunately very little co-ordination between the two. Two years is a crucial age when speech, language and behavioural problems can be identified, but also a critical stage for early intervention to address these problems.

Two year-olds may struggle to reach these developmental milestones because of:


- Development problems
- Poor home learning environment
- Safeguarding issues
- Poverty
- Discrimination

All of this has a serious and significant effect on the development of a two year-old child, at a time when families who need help most face what Frank Field MP called "*fragmented services which are neither well-understood nor easily accessed by those who would benefit most from them.*"

The integrated review aims to align these two disparate reviews for the first time, meaning health and education will be working together. This will give a more complete picture of a child at a crucial time in that child's learning and development, identifying progress, strengths and needs, to promote positive outcomes and better facilitate intervention and support.

As an organisation with nurseries in every county, the Pre-school Learning Alliance knows that there are very different stories out there about the level of support that parents get. The Alliance has spoken to Early Years Practitioners who say that they've done their two year-old progress check, identified a child with speech and language development issues, but cannot get anyone to listen to them and give these families support.

There are two key messages. Firstly, early intervention is crucial. Secondly, the support needs to be there for Early Years practitioners to draw on. In one local authority there is a single speech and language therapist trying to support every child in the county. It's not enough. The integrated review will also generate more information to help us target services to where they're most needed.

<div> Timetable  </div>							
	JUL-DEC 2012	JAN-JUN 2013	JUL-DEC 2013	JAN-JUN 2014	JUL-DEC 2014	JAN-SEPT 2015	SEPT 2015
Develop content, Testing prep	■						
Testing		■	■				
Consultation				■	■		
Develop e-learning modules, Comms, Training					■	■	
Implementation							■

The timeline above shows that the integrated review is currently in the testing phase. Then it requires further consultation with Early Years Practitioners, and scoping of training for those who will be conducting the review. The integrated review will be in place in September 2015.

Who will conduct these reviews? Melanie said she believed it will be Health Visitors with Early Years Practitioners. Where will they take place? Sure Start children's centres? Early years settings? Family homes? Do we have the room? The other option is health clinics. We have to decide what works best for practitioners, children and families. Who will arrange these? Health Visitors, Sure Start Centres? This is being thoroughly tested to find out what works and how best to implement it.

How will staff be trained? Access to training is a huge issue, but everyone involved understands the value of the integrated review and is very much behind making it work.

How will information sharing work? The fact that health and education will be reviewed together will storm through barriers which currently exist.

Question: "How much time in the pilots do the practitioners get with the families and children?"

Answer: "With the two year progress check they get an hour or two hours, and the idea is that they're doing it with parents and a Health Visitor and an Early Years Practitioner. I think we're looking at two hours."

EXCESS NUTRITION AND ITS EFFECTS

Professor Terry Wilkin

Professor of Endocrinology and Metabolism, Peninsula Medical School, and Director of the Early Bird Study

Prof Wilkin stated that it's extremely important to understand the connection between excess nutrition and the metabolic outcomes that lead to disastrous health later in life. His aim was to dig a little deeper than merely the statistics which tell us how bad the problem is.

Obesity is a disease – a classic example of interaction between nature and nurture, genes and environment. We are a species which through our evolution has had to deal with privation. Very seldom have we been confronted with more nutrition than we need. More often than not we are confronted with deficiency, so we retain the genes which deal best with that situation.

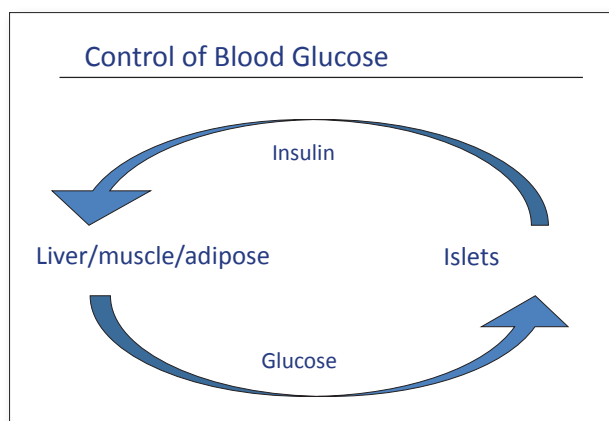
We entered the 20th Century a very robust species able to survive deficiency. The tipping point was in the 1950s where food availability became virtually total, and there was a huge dislocation between the environment we were made for, and the people we were. We're a totally maladapted species in a world we were never built for. So it's not the feckless few. Those who are overweight or obese represent the response of one end of the spectrum to all these calories that we're exposed to.

Nevertheless, obesity has its cost, and these are just some of the issues that arise as a result. It's important to forge a link between these metabolic outcomes, and excess, even in the early years. He said: "the two words I want to be ringing in your ears are 'insulin resistance'."

Insulin resistance is the mechanistic link between excess nutrition and the metabolic disasters which can result.

Prof Wilkin asked four questions:

- What is insulin resistance?
- What are its effects?
- What causes insulin resistance?
- How can it be prevented?

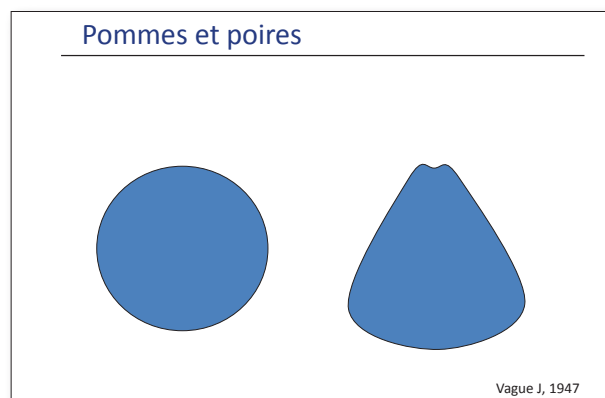


What is insulin resistance? This diagram represents a simple loop of what controls blood sugar in the human body. The islets are buried in the pancreas. They make insulin, which regulates the flux of glucose throughout the tissues of the body, to provide energy. This insulin then moves back through the islets in the blood stream and instructs the islets on how much insulin is needed. If more is needed, it is produced. There are only two components to this feedback loop so there are only two things that can go wrong. Either the islets can malfunction, or the tissues can go wrong.

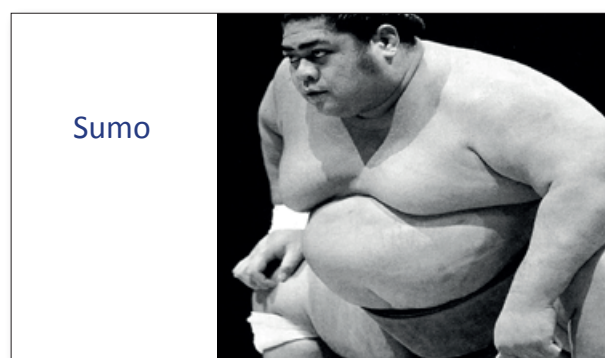
Prof Wilkin said: *"If the islets go wrong, this is Type 1 diabetes in childhood, where insulin is no longer produced. Without insulin the body can't get glucose into the cells, without glucose in the cells it builds up in the circulation, and when it builds up to a particular level, you have childhood diabetes. Over time the glucose damages blood vessels causing micro vascular disease – retinopathy, nephropathy, uropathy."*

What happens when tissues go wrong? When you gain weight, the tissues become less sensitive to the action of insulin. This means the glucose level will go up. It's almost the same as not having insulin. They're not able to respond. Glucose levels rise, but the islets are healthy. They respond to this increase in glucose with an increase in insulin. This is Type 2 diabetes. What characterises this state is the high insulin level.

It's important to keep the mindset that diabetes is the *result*, not the process. Insulin resistance is the process.

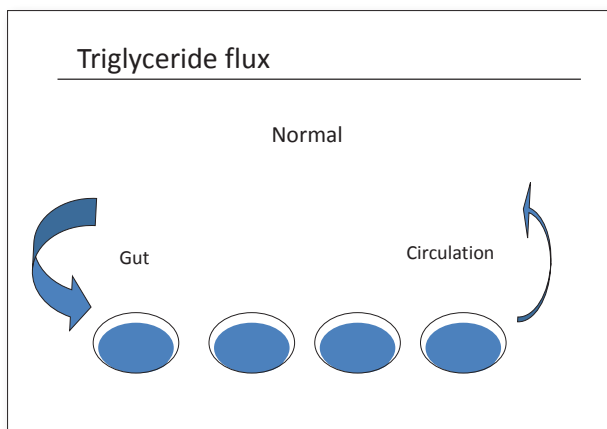


If you apply the shapes of the Pommes et poires slide (above) to the human body, an 'apple' is someone with upper body obesity, whilst a 'pear' is someone with lower body obesity. There's a fundamental difference between these two types of obesity. People don't have normal fat storage cells in their upper body, or not many. Upper body fat storage is not in specialised fat cells, it's in the cavity of the abdomen, around the organs, in cells which don't normally store fat. If you have lower body obesity, the hips and the thighs contain large numbers of specialist fat storage cells. So there's a big difference between these two situations.



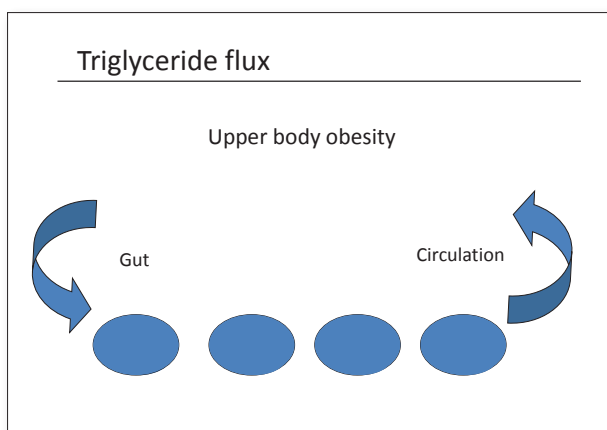
Is a sumo wrestler likely to be insulin resistant? If a person has upper body obesity, fat is occupying the abdominal cavity, but if they exercise (as a sumo wrestler does), they'll 'chase it out' to the subcutaneous tissues where it's ok to store it. Most of sumo's girth is subcutaneous rather than inside the abdominal cavity. He has 13,000 mm² of fat inside his abdomen, and 38,000 mm² of fat outside the abdomen where it's not doing any harm.

Understanding what happens to fat is important. Triglyceride flux is how we store fat in fat cells. The slide overleaf shows fat cells for a person between meals – partially empty.



Give them a good hearty meal, and fat from the gut fills the cells, but not completely. These cells act as a sump, so the release of fat into the circulation as a result of the meal is minimal. After the meal, there's another period of four hours of fasting. The fat will leach out of the cells into the circulation, to be used as energy for the body.

In upper body obesity, these cells are already full. The person has no capacity to store the triglycerides, so the fat goes into the circulation, as shown in the slide below, causing hardening of the arteries. In lower body obesity, there is still a surplus of specialised fat cells which can absorb the meal, so the release of fat into circulation is minimal.



But if you weren't fat in the first place, surely there wouldn't be these problems?

Not necessarily. It's the distribution of fat that's important, and where this fat comes from. The Bristol-based ALSPAC study⁸ showed a correlation between mothers/daughters and fathers/sons regarding obesity which immediately tells us several things.

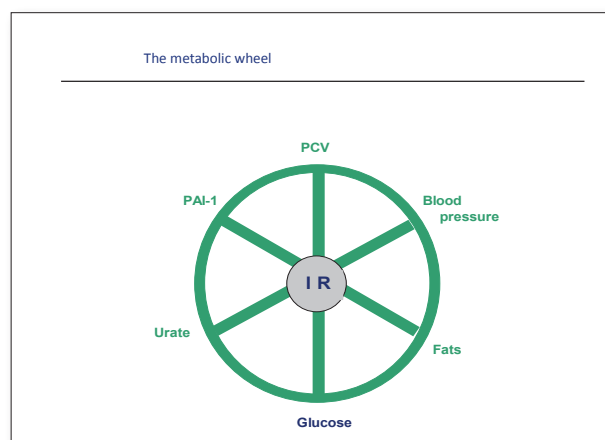
Firstly this has happened between birth and five years old. Secondly, that it's a dynamic change – the older the child, the wider the divergence.

Thirdly, the daughters of normal weight mothers are no different than daughters were 25 years ago. The same pattern exists for father/son correlation.

If we could break the relationship between father/son or mother/daughter, whatever that relationship is, we would be left with normal weight children. He said *"this gender link may well be due to behavioural patterns which need to change. Parents of normal weight offspring are no heavier than a generation ago, so there's hope."*

The effects of being an overweight child go beyond diabetes and lead to a much wider range of disorders known as the metabolic syndrome (also known as the deadly sextet):

- Hyperglycaemia
- Hyperlipidaemia
- Hypertension
- Hyperviscosity
- Hypercoagulation
- Hyperuricaemia



Prof Wilkin highlighted the spokes of the metabolic wheel (see slide above) saying: *"As insulin levels rise, each of these spokes become more intense, the wheel begins to turn and you have a syndrome – disparate changes occurring with a central cause. After a few years unchecked, it will cause major problems for the blood vessels in the heart."*

An increase in insulin levels also leads to polycystic ovarian disease (PCOS).⁹ But the cysts aren't as important as the thickening of cells in the ovary which secrete more testosterone which prevents ovulation. Increased insulin levels are also linked to breast and bowel cancer, low mood and dementia.

Can this be prevented? Prof Wilkin said that if we reverse the wheel, things will begin to work properly. Insulin sensitivity will decrease and the associated conditions will reduce. In terms of lifestyle interventions, there are only two – physical activity and nutrition.

The audience were asked if increasing physical activity should decrease weight. The consensus was yes. Prof Wilkin outlined two systematic reviews^{10,11} which found that the effect of exercise on weight was so close to no effect as to make little difference. Modelling a nine year-old child based on this analysis would mean that after 18-months of a physical exercise intervention, the child would only have lost 80g. It may be that children have an ‘activity-stat’ (like a thermostat), so if they’re more active at school, they will be less active at home.

So what can we do? Dietary interventions haven’t been proven effective, but early parental intervention may be. He said *“I’d like to see a study using a maternity clinic to recruit obese parents-to-be and educate them to ensure, if possible, that a child born on a particular centile weight did not deviate from that centile for the first five years, and whether this would have a more permanent effect on their further development.”*

Question: *“I run a nursery. We’re under a lot of pressure from parents that a child shouldn’t be allowed to go hungry – parents feed them ‘little and often’ with snacks between meals.”*

Answer: *“There is a debate as to whether obesity in children is sugar-driven or fat-driven. I think that it is sugar-driven. What we’re seeing nowadays is that children are eating rapidly absorbable, high calorie content and high calorie density foods which sustain them for no length of time. Our genes are the memory of our environmental past, and in our environmental past there were no chocolate bars. We’ve only been farming for 3,000 years! Children would not need to be snacking if they had an elemental diet – one where you can recognise what’s on the plate. I suspect this would sustain a child for a long time, but this isn’t what they’re being fed nowadays.”*

Question: *“I do quite a lot of talks with mums. What are your thoughts about getting the message about insulin resistance and sugars, and refined carbohydrates, and their dangers, through to parents? There is still a lack of knowledge and surprise when I talk about sugar. A lot of women think a low fat diet is the key for losing weight.”*

Answer: *“You are an audience of professionals. When you’re talking to a population of very varied education and awareness, it becomes very difficult. The art of communication is judging who you’re speaking to. Trying to communicate to Joe Public about insulin resistance is difficult – they won’t understand. But education is the only way forward. There has to be an understanding and an awareness of what the implications are. I thought Melanie’s talk was very interesting – bringing together education and health is such a strong bond. I hear my grandchildren educating their parents about what’s healthy. That’s rather a good idea. A child has no fixed ideas, so maybe that is a way to educate mums through their children, but the idea of bringing together education and health is a strong one.”*

Question: *“Coming back to the physical activity meta-analyses. Did any of the studies look at the distribution of fat or the body composition post-activity interventions?”*

Answer: *“Some did and were able to look at the body composition of the child. The changes were no greater, or more focussed, than they were for body fat generally. There are children of all body shapes who take lots of exercise, and likewise those who don’t. The problem is getting those children at the bottom to do more.”*



THE IMPACT OF DEFICIENCY ON TODDLER DEVELOPMENT

Dr Julie Lanigan

Paediatric Research Dietitian,
UCL Institute of Child Health

Dr Lanigan presented a summary of what we know about infant nutrition, the impact of nutritional deficiency on toddler development, and what we can do about it.

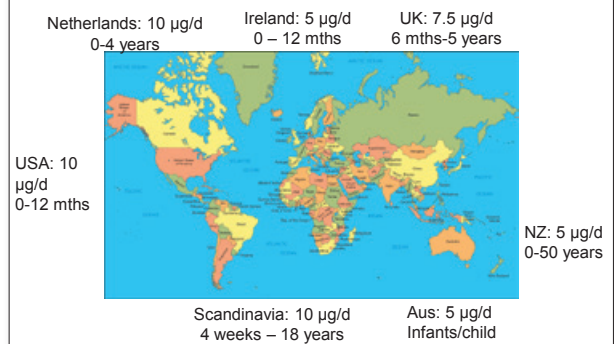
There is confusion over how to define what a toddler is. Different surveys and guidelines define them differently – sometimes they are the under-fives, sometimes the under-tuos, or sometimes lumped together as 'pre-schoolers'. They are a really difficult group to work with as they're not particularly good at communicating, so as dietitians we're reliant on the people who care for them for assessment.

The toddler years are a critical period for the development of dietary and behavioural habits. Even as young as the age of three, children are showing distinct dietary patterns, and these are carried forward into adulthood. It's also a time of transition from milk-only food to family food.

Several surveys from which Dr Lanigan had drawn information about toddler nutrition and deficiency were: the National Diet and Nutrition Survey (NDNS),¹² providing data on infants aged one-and-a-half to four-and-a-half years old, and the Diet and Nutrition Survey of Infants and Young Children (DNSIYC),¹³ which provided data on the four-months to 18-months age group. With a lack of randomised controlled trials on dietary intake and outcome, using data from both these surveys combined provided the most accurate insight into the impact of deficiency on toddler development.

Dr Lanigan said: "There is no set worldwide consensus for the correct level of vitamin D – it's quite a muddy picture." (See diagram opposite).

Vitamin D Guidelines



The RNI for vitamin D is (7 µg/day) but children in the UK are only achieving 1.9 µg/day, or 27% of their RNI. In younger children, intake of vitamin D was higher at 4 µg/day, perhaps due to infant supplements or the use of formula milk, but this is still only 57% of their RNI.¹²

Observational studies show links between vitamin D deficiency and a range of diseases such as cancers and cardiovascular disease. There is an alarming resurgence of diseases caused by vitamin D deficiency that had long been thought to be eradicated, such as rickets. Dr Lanigan set out a list of groups particularly at-risk from vitamin D deficiency and factors which contribute to deficiency:

At-risk groups

- Women who are pregnant and breastfeeding
 - Especially teenagers and young women
- Children under five years
 - Especially those aged six months to three years
- Adolescents
- The elderly
- Strict vegetarians and vegans

Contributory factors

- Prolonged breastfeeding
 - *Poor weaning*
- Exclusion diets
- Malabsorption
- Disease states (liver, renal)
- Some drugs
- People with low sun exposure
 - *Covering up for cultural reasons*
 - *Housebound*
- People with darker skin
 - *Cannot convert to active form so well*

How do we assess vitamin D status? There are two levels: An 'insufficient' level of ≤ 50 nmol/l which will affect bone growth in the long term, and a 'deficient' level of ≤ 25 nmol/l which is associated with disease states such as bone disease and rickets.¹²

Looking at blood levels in toddlers from the DNSIYC survey, at 5-11 months of age, mean active vitamin D is 68.6 nmol/l, and at 12+ months of age it was 64.3 nmol/l. This is above the 'insufficient' level of ≤ 50 nmol/l. Only a small percentage of this sample were deficient in vitamin D.¹³

There are several potential reasons for the resurgence of vitamin D deficiency and associated conditions – children playing more indoors, a culture of applying sunscreen and covering up infants, and a lack of supplementation.

Measures to combat this are:

- Adequate exposure to sunlight
 - *0-30 minutes 2-3 times per week in summer*
 - *Dark skinned need greater exposure (2-10 times longer)*
- Sunscreens – avoid overuse, but also avoid redness/burning

A report from the RCPCH in October 2013 entitled Guide for Vitamin D in Childhood¹⁴ set out the recommended amount of supplementation for preventing and treating deficiency and listed brands of supplements which may be suitable for each age group. See following tables.

Preventing Deficiency

Category	Dose IU	Dose ug	Examples of supplements
Newborn up to 1 month	300 – 400 units daily	7.5 – 10 daily	Abidec, Dalivit, Baby D drops and Healthy Start
1 month – 18 years	400 – 1,000 units daily	10 – 25 daily	Abidec, Dalivit, Boots high strength vitamin D drops, Holland and Barrett Sunvite D3, Dlux oral spray, SunVitD3 and Vitabiotics tablets

Treating Deficiency

Category	Dose IU	Dose ug	Duration
Up to 6 months	1,000 to 3,000 units daily	25 – 75 daily	4 – 8 weeks
6 months – 12 years	6,000 units daily	150 daily	4 – 8 weeks
12 – 18 years	10,000 units daily	250 daily	4 – 8 weeks

Healthy start vitamins are recommended for:

- All children up to age 5
- Pregnant & breastfeeding mothers
- Infants who are:
 - *Breastfed where mothers may have low vitamin status*
 - *Formula fed, receiving <500 millilitres of formula milk daily*

The Healthy Start Scheme provides pregnant or breastfeeding women who are on benefits or under 18 with vitamins C, D and folic acid. The scheme also provides vitamins A, C and D, and food vouchers to buy cow's milk, formula milk and fruit and vegetables for infants up to four years old.

There are shortcomings, for example many at-risk families may not find themselves eligible for the scheme. Parental awareness of the Healthy Start Scheme and the need for vitamin D supplementation is also low. The table overleaf shows examples of foods high in vitamin D.

Food Sources

• Oily fish (trout, salmon, mackerel, herring, sardine, tuna)	5-10 µg/100g
• Egg yolk	5 µg/100g
• Red meat	1µg/100g
• Breast milk	0.07µg/100ml

Fortified Foods

• Breakfast cereals	3-8 µg/100g
• Margarine	7.5 µg/100g
• Infant Formula	~1.2 µg/100ml

What can HCPs do about this? Dr Lanigan said: *"It's in transition at the moment – we're lobbying the DoH to make these vitamins free. In the meantime we can work with EYPs and in Sure Start Centres to raise awareness of the need for supplementation and the availability of supplements to families. Finding out where Healthy Start vitamins are available in your local area and passing this information on to families can also be helpful."*

Highlighting that it's vital for HCPs to have the correct information about vitamin supplementation, Dr Lanigan recommended the following publications: *A practical approach to vitamin D supplementation in pregnant and breastfeeding women, infants and toddlers*, available at: <http://www.feedingforlifefoundation.co.uk>, and *Preventing vitamin D deficiency in toddlers*, available at <https://www.infantandtoddlerforum.org>.

Vitamin D and iron deficiency are often found together and although low vitamin D levels have been linked to anaemia in children,¹⁵ it's unknown whether there is a causal link between iron and vitamin D deficiency.

What is the current iron intake?

- NDNS 2011 – age 1.5-4 years
 - Median intake 6.1 mg/day
 - 88% of RNI (6.9 mg/day)
- DNSIYC 2011 – age 12-18 months
 - Mean intake 6.4 mg/day
 - 82% of RNI (7.8 mg/day)

Globally there is a high rate of iron deficiency. Pregnant women and toddlers are most at risk, and the prevalence of iron deficiency in the UK is estimated at between 12 – 30% depending on the population and screening method.

What can be done to reduce toddler deficiency and its impact?

There are conflicting results from studies into the benefits of iron supplementation – some showing a small benefit to those given supplements, and others showing no benefit, or only benefit to those with an existing condition such as anaemia.

In summary, Dr Lanigan said that iron deficiency is a risk in toddlers. It is associated with cognitive and behavioural deficits. Supplements may help at-risk children and early screening may be helpful, but there have only been a small number of trials in this area, and these have been lacking objective measures and long term follow up. Further randomised controlled trials of iron interventions are needed.

Iodine is important for fertility, conception and during pregnancy. Pregnant women need more iodine during pregnancy as maternal thyroid hormones increase. Iodine is required for normal foetal neurodevelopment and iodine deficiency during pregnancy is associated with miscarriage in the mother and, in extreme cases, goitre. In infants, iodine deficiency is associated with intellectual impairment, growth retardation and cretinism.¹⁷ See below and overleaf for WHO recommended intakes for iodine, and foods rich in iodine.

WHO Recommended Intakes for Iodine

	Iodine µg/day
Adults	150
Pregnant women	250
Breast-feeding	250

Generally, adults are not deficient but supplements containing the equivalent of 150µg a day are often recommended for pregnant and breast feeding women

Iodine sources

	portion	Average Iodine content µg
Cows milk	200ml	50-80
Organic cows milk	200ml	30-65
Yoghurt	150g	50-100
White fish	100g	115
Oily fish	100g	50
Shellfish	100g	90
Meat/poultry	100g	10
Fruit + veg	80g	5

Conclusions

Dr Lanigan concluded by saying that toddlers are at risk of deficiencies in vitamin D and iron in the UK. The risk is greater for certain groups – especially those with darker skin.

Supplementation can bridge the gap for vitamin D but there is insufficient evidence to recommend universal supplementation with iron. HCPs have an important role to play in providing appropriate advice to parents and carers of young children.



Question: “Does cow’s milk actually reduce iron absorption or is it just that it fills an infant up and displaces room for other foods?”

Answer: “Both. Having a lot of cow’s milk fills you up, but it also has a direct effect on the utilisation of iron. The problem is really with excessive intake of cow’s milk which can inhibit iron absorption but can also cause loss of iron from the GI tract.”

Question: “You said that vitamin D requirements are different around the world. How has the UK come to decide upon the correct amount of vitamin D to recommend?”

Answer: “This is based on a recent report from the US Institute of Medicine which shows that 25 nmol/ltr is the level that you start to see deficiency happening. This is the best research we have at the moment.”

Question: “You mentioned vitamin supplementation and the two types of vitamin D. Are supplements all the same, and are they a mix of the two types?”

Answer: “Not all supplements contain vitamin D3. Most of the newer supplements and the Healthy Start supplements contain D3, but you need to check that the supplement contains the right types of vitamin D.”

Question: “Today we’ve heard about nutritional excess and deficiency. Is vitamin deficiency higher or lower in obese children?”

Answer: “Certainly vitamin D deficiency is higher in obese children. There are lots of social confounders however, so we can’t say causally whether there’s a link.”

Answer 2: “We have evidence that people with bad diets have both deficiency and excess. That’s quite clear cut.”

Question: “If breast milk is low in vitamin D and iron, what effect will that have on encouraging women to breastfeed?”

Answer: “It shouldn’t discourage women to breastfeed, it just emphasises two things: the importance of vitamin supplements in this country, and that you need to wean at the right time for your child, and onto the correct food.”

Question: “I run a weekly clinic at a health centre. We used to be able to buy in Healthy Start vitamins to sell to mothers. Now we can’t buy them in. Why is this?”

Answer: “This is to do with rules regarding keeping cash on health centre premises, and also in directing people to the local community pharmacists who may experience difficulties in maintaining adequate stocks. That’s why many healthcare professionals are lobbying the DoH to make these vitamins free.”

VITAMIN D CASE STUDY

Melissa Little and Lindsay Miller

Foodtalk

Foodtalk is a not-for-profit community interest company set up in 2013 to tackle nutritional issues at a grassroots level. Foodtalk is run by three paediatric dietitians with over 25 years of experience in the NHS and private practice and a business manager with a background in sports development. Foodtalk developed and delivered training on the importance of vitamin D to Early Years Practitioners in Croydon. The vitamin D project was funded by a grant from the Feeding for Life Foundation.

Why Croydon? 40% of residents are of black minority ethnic background and 26% of the population are young people – two of the risk factors for vitamin D deficiency. There are also high rates of teenage pregnancy, and a recent study of 6,000 people in the borough showed 88% have insufficient levels of vitamin D. There is also poor uptake of supplementation, with only 3.5% of eligible families taking advantage of the Healthy Start scheme.¹⁸

An initial consultation with children's centre managers in Croydon to poll their knowledge of vitamin D showed unanimously that knowledge and confidence when talking about vitamin D was low. The Foodtalk training programme addressed the misconception that a healthy diet can provide all the nutrients a child needs. Foodtalk quizzed children's centre staff on whether certain foods were a good source of vitamin D or not, coming to the conclusion that even for foods which are a useful source of vitamin D, it is difficult for a child to get enough vitamin D from diet alone.

The Foodtalk team confirmed that sunshine is the best source of vitamin D, but that when discussing this with parents they had met resistance to allowing children to play in the sun without sunscreen due to the fear of skin cancer. Children's play habits have also changed in recent decades with a move away from outdoor to indoor play. Foodtalk's training encourages parents to become more aware of their children's skin, for example how long it takes to redden, and judge how long to let children play outside without sunscreen based on this.

The amount of time it takes for skin to make vitamin D is less than the amount of time it takes to redden so children with lighter skin need less exposure than those with darker skin. Between the months of April and September is the only time when UK sunlight is powerful enough to make vitamin D. Sunscreen, window glass, air pollution and cultural reasons for covering up, along with latitude, will affect how much vitamin D a child makes from sunlight.

Ultimately, the Foodtalk team hope that there will be an increased uptake in Healthy Start vitamin drops in Croydon as a result of their programme. Their training is a two-and-a-half hour session to educate Early Years Workers and designed to have longevity – giving workers an action plan that they can take away and use after the training is complete.

The action plan encourages Early Years Workers to look individually at each child who comes to their centre, identifying any risk factors, and considering what they could do as a vitamin D intervention, considering questions such as: who are the stakeholders, what is the process, and what are the barriers they might face? This guidance is coupled with resources for centre staff to use with parents and carers. As part of this initiative, the Foodtalk team developed a story and rap song lyrics for use with parents and toddlers (see below).



The Vitamin D rap

Case study: Woodlands Children's Centre, Croydon

Woodlands took Foodtalk's action plan and ran with it. They liked the ability to use the plan after the training module was complete, and implemented it in their centre. The centre manager identified the biggest barrier to children getting vitamin D drops – access to the Healthy Start vitamins. Parents simply didn't know where to get them. The manager liaised with Public Health to make their centre a distribution outlet for Healthy Start vitamins, allowing parents to get them on the premises. They secured funding and are setting up a pilot scheme to become a distribution centre. If that works, other centres will follow suit.

Woodlands also lobbied to get vitamin D re-added to the borough-wide child poverty policy and for more training for HCPs. They have requested the appointment of a vitamin D keyworker to work with at-risk groups in the borough and co-ordinate vitamin D distribution, all as a result of the Foodtalk two-hour training session.

Feedback from Early Years Centres on Foodtalk training:

"Staff are reinforcing the need for vitamin D all the time when talking to families. Parents are now saying 'Enough! We know about vitamin D!'"

"Staff are now adding vitamin D to their two-year reviews."

"I knew the Public Health Principal before but now we are actually working together to promote vitamin D strategy in the borough."

"We have used the song in the book. The kids really like it. Creating resources for children helps them influence their parents."

Foodtalk trained 22 children's centres in Croydon, along with private nurseries, child minders, strategic managers, breast feeding support groups and midwives. They are training 40 Health Visitors in December 2013. 100% of those trained reported an increase in knowledge and confidence. Three month reviews showed every centre had implemented all or part of their action plan.

The Foodtalk story and rap won an award from the British Nutrition Foundation for communicating vitamin D messages to children and young people, and they were shortlisted for Best Service Team of the Year at the Nutrition and Health Live conference.



Panel Discussion:

Professor Atul Singhal, Dr Julie Lanigan, Alison Wall, Lindsay Miller, Melanie Pilcher

Judy More (from the audience): "I want to add to Melanie Pilcher's talk. I was at the CPHVA conference and saw a presentation by one of the pilot schemes for the co-ordinated review. The key points were that they were doing the co-ordinated review in Early Years centres – the parents' already knowing and trusting the Early Years staff was key in facilitating the review, and although there were a lot of administrative meetings required to set up the reviews, the results so far have been very positive."

Melanie Pilcher: "That's absolutely what we're hearing anecdotally – Early Years Practitioners who are working with these children and families day in, day out, are able to draw on a huge amount of knowledge gathered over a long period of time."

Question: "Could you elaborate on the fact that green leafy vegetables, and especially spinach, are not a great source of iron, but are a good source of other nutrients?"

Atul Singhal: "Green leafy vegetables are very important for nutrition, but there are two problems with them as a source for iron. Firstly, the iron is very poorly absorbed, and secondly, you need to take them with a food high in vitamin C, so if you're doing a public awareness message about raising intake of iron, don't do it using leafy vegetables."

Melanie Pilcher: "This is a really important transition period, so we need to encourage all foods in their right place, but there's a message to maximise all sources of iron."

Question: "What are your thoughts about fortified foods and the role they can play?"

Lindsay Miller: "In the USA and Canada, milk is fortified with vitamin D. I'm often asked why this isn't the case here and it's hard to give an answer. I think there is a case for fortifying milk with vitamin D, especially in areas such as Croydon where vitamin D deficiency is very high. Having said that, we need to promote Healthy Start vitamins first, along with safe sun exposure, so this is me sitting on the fence."

Atul Singhal: "There is a lot of discussion in public health as to whether to fortify foods or not. The classic one is folate. 50 countries around the world fortify folate, but the UK doesn't. There are pros and cons for both. The distinction here is between public health and personal health. Public health is the maximum good for the maximum amount of people. In that situation there is no doubt that supplementation and fortification of food works. Folic acid is a good example, even though many mothers may already have enough in their diet."

I think there will be a lot more fortification of food in the future – for example with folate, the question was whether we were causing an increased risk of cancer, because cancers need folate to grow, but 20 years of experience tell us that this isn't the case. Once we get more evidence I think we'll be moving towards more fortification of foods."

Alison Wall: "An issue is that policy is so slow to change, but it may be that with new bodies in place like Public Health England, that we will have more opportunity to push for policy change."

Question: "Professor Wilkin talked about it being healthiest for a baby to stay on the same centile. How do we know when a baby is on the correct centile?"

Atul Singhal: "The way you know is that a couple of weeks after birth a baby settles on a centile and starts to grow along it. What you should do is try to get babies to grow along that centile for as long as you can. Mothers like their babies to be bigger so that's the public health message, that crossing centiles upwards is not healthy, that the biggest babies aren't the healthiest."

Question: "I have two young children who were born quite small. I was told by a Health Visitor to add fat to help them grow up the centiles. Is this something that you think is right to do?"

Dr Julie Lanigan: "As long as your children were growing roughly along their centiles and not falling away, they're just following their normal growth trajectory. The problem comes if you reach four – six months and they're falling away from their centiles. Then you may need to think whether they need more nutrition, but if they're growing along their centiles and are healthy and well, you won't need to do so."

SEMINAR 1 – A GUIDE TO DEVELOPMENTAL MILESTONES IN TODDLERS

Dr Gillian Harris

Consultant Paediatric Clinical Psychologist

Parents are often unsure about when their young child should be moving on through the stages of feeding and food acceptance. Dr Harris outlined a developmental milestones tool that the ITF is developing for 2014 to give HCPs an evidence-based document to help them address queries from parents and provide an understanding of the stages healthy, full term infants and toddlers will go through. The tool will be available as a factsheet, online resource and potentially a poster.

Literature research has been conducted on developmental milestones looking specifically at skills relating to feeding and eating, feeding-specific skills, taste and food preferences and appetite regulation, including oral motor skills, acceptance of lumpy textures, and the gag response.

The resource is currently undergoing peer review. Dr Harris researched conversations amongst mothers in online forums and support groups, and cross-referenced these against the developmental milestones to see how currently held views related to the developmental milestones, focussing on four areas regarding the development of skills relating to feeding:

1. Development of skills relating to feeding and eating
2. Development of feeding-specific skills and physiology
3. Development of food preference (*acceptance and rejection*)
4. Regulation of appetite and intake

This does not come with an owner's manual!



1. Development of skills relating to feeding and eating

Innate taste is important. Babies are born with an innate taste for sweet and fat.¹⁹ This is innate to mammals, but without introducing new tastes, an infant will not grow out of liking only this taste. In nature, bitter tastes are often linked to poisonous items.

Case study: advice from one mother to another on a forum which said: *"chewing her hands, watching your food and making mouth actions – not signs that she needs weaning – all are just normal developmental stages."*

Dr Harris outlined the shortcomings of this comment, saying *"in the past when humans were less developed, what signs would they rely on when looking to introduce solid food? They didn't know the guidelines for weaning so they'd watch out for signs of more extreme hunger as an indicator when looking to introduce solid food."*

Imitation of mouth movements is expressed in neonates, as highlighted in the developmental milestones tool. Likewise sucking of fists presents in neonates. These behaviours occur very early, but come together, perhaps with night waking, to suggest when to wean. The interactive tool will have lots of information about how and when these behaviours occur.

2. Development of feeding-specific skills and physiology

Looking at the development of feeding-specific skills and physiology is important. This is helpful for mothers for insight into elements such as when to introduce different textures of food. The data will come from a review collected from experimental and observational studies.

Case study: a case study from an internet forum discussion which stated: *"As I understand it the only genuine signs they are ready [to wean] is being able to sit with minimum support, being able to get food into their own mouth and having lost the tongue reflex that pushes anything that goes into their mouth out."*

Dr Harris used this as an example of a mother having some information, but not the whole picture, and stated that there is no reflex to push food out of a baby's mouth, but this can be the result of an infant getting used to pushing food to the back of the mouth using the tongue. If pureed foods are introduced early in the four – six month period, there may be some tongue protrusion as if the infant is pushing food out, but they may be trying to push food to the back of the mouth, not out.

3. Development of food preference (acceptance and rejection)

Growing infants and young children not only adapt physically and mentally to the challenges of eating, but also develop taste and texture food preferences that have a significant impact on the types of foods they are willing to eat.

Case study: a conversation between a mother of a nine-month old struggling to introduce solid food to her child, and her Health Visitor who said *"and if he's still not eating she will refer us to a speech therapist to check his mouth, maybe there is something wrong."* Dr Harris highlighted the innate preference for sweet tastes, and that infant taste preferences are learned through experience with those tastes offered to them, but that trying too many tastes and textures too rapidly with an infant might be confusing. This infant is unlikely to have any delay in motor skills which is leading to food refusal. An infant will reject complementary food if taste preferences are not established and texture acceptance is not developed. Responsive parenting is therefore very important – force-feeding an infant who has not learned food preference will lead to further food refusal.

Audience suggestion: *"Stick with one texture such as fruit puree or fromage frais, something sweet, and assess whether the child is hypersensitive to lumpy food."*

Recent research suggests that four – six months is the correct time to introduce family foods to an infant,²⁰ as long as the parent thinks the child is ready, and unless the child is sensory hypersensitive. The 2011 DNSIYC survey showed that 80% of infants had been given their first foods by the age of five months.

There is no evidence to support baby-led weaning. Dr Harris suggested puree on a spoon as a first-step, which also provides face-to-face interaction between parent and baby. If parents are using the baby-led weaning technique, it's important to use soft foods in order to prevent a choke hazard. Infants also display the gag response if they are given firmer food textures that they are not yet able to cope with. Repeated gagging can also lead to a parent becoming afraid of the weaning process.

Case study: a case study of a mother weaning her child who said *"I think that fussy eating in toddlers and older children is about control, attention and independence. I don't think it has anything to do with weaning method or whether the child actually likes or dislikes particular flavours."* It's important to consider the neophobic response which engages after the first year of life due to an evolutionary response to an infant becoming more mobile and able to put potentially dangerous items in their mouth. This may cause infants to reject foods that they previously accepted. An exact visual match is important for previously accepted foods, and hiding one food inside another will not work.

4. Regulation of appetite and intake

Case study: an online conversation in which one mother advised another *"the thing here is to be very careful, if he's increasing his milk intake it's because he's having a growth spurt and needs that extra milk... if you fill him up on solids which don't provide anywhere near as much calories he may drop his milk intake (and lower your supply) and possibly lose weight or stunt his growth spurt."*

Dr Harris stated that *"an infant can begin to regulate the calorie intake of their milk to accord with their growth needs from birth. At first this compensation, taking more or less feed according to the calorie density or energy intake of the feed offered, is only partial. However, as the infant gets older (six weeks), so this ability improves and infants can regulate their intake well. Four to six-month-old infants are capable of regulating their food intake and maintaining an appropriate calorie load."*

SEMINAR 2 – WHAT IS A HEALTHY BALANCED DIET?

Judy More

Paediatric Dietitian

Toddlers require a varied and well-balanced diet to thrive and grow – it's one of the foundations of child health. Poor diets can lead to obesity, dental decay, iron deficiency, and constipation. Vitamin D deficiency is also a risk in the UK when supplements are not given to toddlers.

Eating patterns have changed over the last few decades, with the availability of a widening range of convenience foods, greater ethnic and cultural diversity of the population, and less time spent preparing food in the home. Parents and carers should offer toddlers nutritious meals and snacks of appropriate portion sizes, but allow them to decide how much they eat.

Judy More discussed the essential components of a healthy diet, and how to avoid excess and deficiency.

Delegates answered the question “*what is healthy eating?*”

Answer 1: “*A diet that incorporates all of the food groups, appropriate portion sizes and supplements.*”

Answer 2: “*The right balance of micro and macro nutrients.*”

Answer 3: “*A diet that ensures all the food groups from the eatwell plate feature in daily intake.*”

It was agreed that there is no single definition for healthy eating and people interpret it in different ways. A balanced diet requires adequate energy and an adequate intake of nutrients, and each country sets its own guidelines. In the UK:

- Adequate energy (calories) is defined by:
 - *EAR (Estimated Average Requirement) for age*
- Adequate intakes of all nutrients are defined by:
 - *RNI (Reference Nutrient Intake) for each nutrient for different age groups*

Ms More and the delegates brainstormed all of the nutrients which the body requires, and the function each provides for a healthy body.

The group discussed some of the nutrients and the issues that arise in conversation with clients, including:

Protein: delegates were concerned that parents don't give newly weaned infants enough protein as they're feeding them mainly fruit and vegetables.

Ms More explained that infants meet their protein needs mainly from their milk and that low iron intakes are of more concern during weaning. It would be very unlikely for a person of any age not to be receiving enough protein in the UK. Most protein comes from meat, fish, eggs, nuts, pulses and milk products but about a third is from cereals. Vegetarians need to combine cereals with nuts or pulses to get the same combination of amino acids that are provided by the protein in meat, fish, eggs and milk.

Fat: all foods have a combination of saturated, unsaturated and complex fats e.g. 50 – 60% of fat in milk is saturated and the rest is unsaturated. Whole milk should be given to toddlers under two years-old as semi skimmed and skimmed milks do not contain enough vitamin A for them.

The two types of fats that we can't produce in our body are omega-3 and omega-6 fats. Omega-3 fats have a less inflammatory response than omega-6 fats, and the reduction in omega-3 intake could be one of the many reasons why we see increasing cases of allergy in our society. Ms More said that omega-3 supplements could be given to toddlers who did not eat fish, but stated that the link to an increase in reading age for children given omega-3 supplementation is based on anecdotal evidence of children who were deficient in omega-3 fats.

Fibre: there is no fibre recommendation for young children in the UK. Fibre tolerance varies in each individual child as some young children tend towards loose stools while others have a tendency towards constipation.

Ms More highlighted that a laxative treatment such as Movicol or Lactulose is the first-line treatment for constipation followed by dietary changes once the constipation is well controlled. However some health care professionals aren't aware of this.

Sugar: the three most common sugars are –

1. Fructose which is in honey, fruit and fruit juice
2. Sucrose which is table sugar
3. Lactose which is the sugar in milk

A high fructose diet with a lot of fruit juice is just as bad as adding sucrose to a child's diet in terms of tooth decay and insulin resistance (fructose also provides a quick rise in blood glucose provoking a high insulin response).

Question: "Is the large amount of sweet-tasting baby products promoted as organic, predisposing children to favour sweet flavours?"

Ms More answered: "Infants are born with a preference for sweet tastes, and during weaning parents should be offering non sweet tastes so that the infant learns to like those other tastes as well. Infants who don't have that learning opportunity take much longer to accept non sweet tastes as toddlers. However most children tend to always prefer sweet tastes throughout childhood."

Vegetables: the five-a-day guidance is based on studies of adults and the main benefits are to ward off long term diseases. Toddlers are in a different physiological phase and for them it is a time of learning to like fruit and vegetables rather than needing to eat specific or large amounts. Offering fruit and vegetables to toddlers helps them learn that it is normal to eat them at meals and snacks.

Ms More suggested delegates take away ITF Factsheets *Portion Sizes for Toddlers*, *Healthy Eating for Toddlers*, and *Planning Meals for Toddlers* – which contain much of the information she covered in her seminar session.

Food groups



Ms More discussed the five food groups and portion sizes using the eatwell plate.

Said Ms More: "It's important to note that the proportions on the eatwell plate weren't designed for children under five but that it is a guide to the food groups to combine for a balanced diet. For toddlers, the fruit and vegetables section could be smaller, and the milk, cheese and yogurt section would be larger."

One important factor in good toddler nutrition is that parents are role models for their toddlers and need to eat with them, eating the foods they would like their toddlers to eat, so that children learn good nutritional habits from a very young age.

Considerations for menu planning for toddlers

Each day	
3 meals, 2 courses at each meal	6-8 drinks
2-3 planned nutritious snacks	A supplement of vitamins A and D



The combination of food groups to provide all required nutrients is:

- Starchy foods at every meal and some snacks
- Fruit and vegetables at every meal and some snacks
- 3 servings of milk, cheese or yogurt per day
- Meat, fish, eggs, nuts or pulses at the two main meals each day
- Very small amounts of foods high in fat or sugar just to add flavour and palatability to meals

Question: "What if a child is allergic to a food group?"

Ms More answered: "Usually it is just one food in a food group that causes an allergy so other foods from the same food group can be substituted. However with an allergy to milk protein, all milk, cheese and yogurt must be avoided and the suitable substitutes are calcium enriched soya milks and desserts and tofu."

SEMINAR 3 – PROMOTING LIFESTYLE CHANGE THROUGH MOTIVATIONAL INTERVIEWING

Dr Mark Farrall

Director – Ignition Creative Learning

Motivational interviewing (MI) is an approach to counselling developed by clinical psychologists Professor William R Miller, Ph.D. and Professor Stephen Rollnick, Ph.D. Its focus is to inspire internal motivation from a client in order to facilitate behavioural change. MI explores the concepts of ambivalence and resolution, encouraging a client to think about a better future, and become motivated to achieve it. MI is an evidence-based, strengths-based approach to help facilitate change effectively.

Dr Farrall summarised some basic principles of MI – having respect for the interviewer/interviewee, and agreeing to listen confidentially to another person's comments.

MI can help with the following key tasks:

- Building relationships
- Rolling with resistance
- Exploring ambivalence
- Agenda matching
- Effective information exchange
- Change planning

The spirit of MI can be summed up in the following quote from Winnie the Pooh:

"What day is it, Pooh?" asked Piglet.

"Ohh, err – why it's today!" Said Pooh.

"Today!" squeaked Piglet "Why that's my favourite day!"

MI focuses on working positively with a client, but with a base in reality, to make them want to change.

Delegates split into pairs to discuss something in their lives that they'd like to change, taking care to really listen to their partner, and then choose which of the following statements described their partner's progress in making that change:

Thinking about it

I'm not entirely happy with what I'm doing, and I'm thinking about making some changes. I'd rather stay as I am. I'm aware of the pros and cons and I'm weighing it all up.

Giving it a go

That's it – I'm going to do something. I have a plan and I'm trying it out – I feel a bit scared or excited or both.



Keeping it going

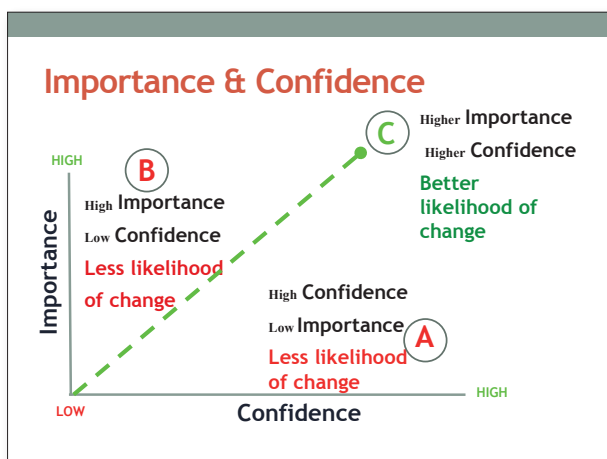
I have made the change and I'm keeping it going. It's hard work and I wonder sometimes if it was worth it? Sometimes I really like the 'new me' and sometimes I really miss what I was doing before and I forget why I tried to change.

Slipped up

I couldn't keep it going and went back to familiar ways. I feel a bit of a failure but it's also a relief. Not sure what to do next – give up or try again?

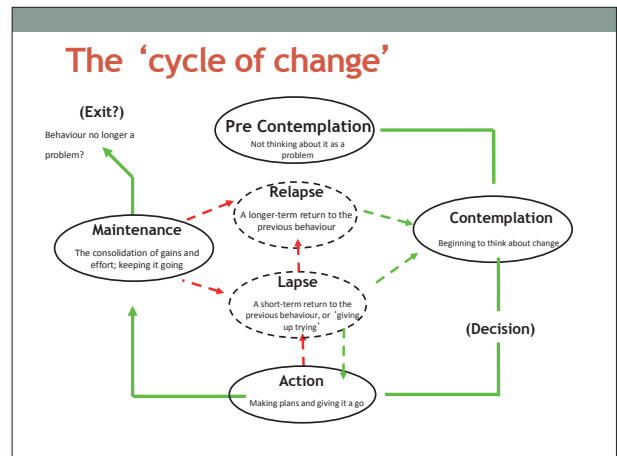
Delegates practiced not just listening, but hearing their partner. Dr Farrall stated that empathy is key. Really hearing your clients will help you understand them, rather than just waiting for the next opportunity to ask a question.

Dr Farrall asked delegates to rate the change they wanted to make for importance (1 – 10) and how confident they are that they can make the change (1 – 10) and measure their results on the graph below. For most delegates, importance was higher than confidence.



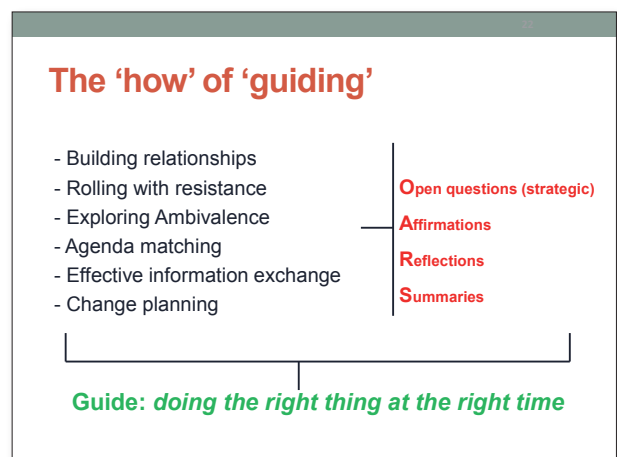
Instilling the importance of a change to a client, and helping boost their confidence are key to making people want to change their lifestyle or habits.

Look at the Cycle of Change (see below) and apply it to your clients. If you are listening carefully, you can hear where a person is in the cycle, and tailor your actions based on that knowledge.



Ambivalence is the greatest barrier to the cycle of change, and it is important to have a mix of intrinsic (internal) motivation, and extrinsic (external) motivation. A balance needs to be struck between allowing someone to do something for themselves, and directing them to do it. The principal must be to guide the person to making the change for themselves.

In conclusion, to successfully guide a client to making a change, an interviewer must ask open questions, provide affirmations, invite reflection and provide summaries for a client. As you can see below, this is the 'how', of guiding.



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GENERAL INFORMATION

The Infant & Toddler Forum brings together representatives from paediatrics, neonatology, health visiting, dietetics and child psychology who share a common professional interest in infant and child health and 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.

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