Appendix 1: Author’s biographies and declarations of interest

The authors comprise BMA staff and senior members of affected professions who have demonstrated experience and interest in relation to the issue of child health.

Dr Jim Appleyard
Former Consultant Paediatrician at the Kent and Canterbury Hospital (1971 to 1998), Professor of Paediatrics St George’s University, Grenada (1985 to 1997)
Dr Appleyard founded the first Child Developmental Centre, named after Dr Mary Sheridan in 1972 and the Neonatal Special Care Unit in 1973. He has been a patron of the Dyspraxia Trust since its foundation 25 years ago. Dr Appleyard was the first Chairman of the Manpower Committee of the British Paediatric Association (now the Royal College of Paediatrics and Child Health) and, through the British Medical Association, worked towards the integration of the Child Health Services. He was Chairman of the Representative Body of the British Medical Association (1992 to 1995) and is currently the Vice President of the International Association of Medical Colleges.

Declaration of interests:
Jim Appleyard declares that he has no conflicts of interest.

Professor David J P Barker
Director, Medical Research Council Environmental Epidemiology Unit, University of Southampton
David Barker MD PhD FRS is a physician. He is Professor of Clinical Epidemiology at the University of Southampton, UK, and Professor in Cardiovascular Medicine at Oregon Health and Science University, USA. Twenty-five years ago he showed, for the first time, that people who had low birth weight are at greater risk of developing coronary heart disease and diabetes. This is now widely accepted. It has led to a new understanding that chronic adult diseases are ‘programmed’ by malnutrition in the womb. Dr. Barker’s work is relevant around the world. In the Western world, many babies are malnourished because their mothers eat diets that are unbalanced and monotonous, or because their mothers are either overweight or excessively thin. In low-and middle-income countries, many babies are malnourished because their mothers were chronically undernourished when they were young. Dr Barker has lectured and written extensively on nutrition in the womb and its lifelong consequences. He has received
a number of international awards, including the Danone Nutrition Award, the Prince Mahidol Prize and the Richard Doll Prize.

Declaration of interests:
David Barker declares that he has no conflicts of interest.

Dr Max Davie
Consultant Paediatrician, Mary Sheridan Child Development Centre, Lambeth.
Dr Davie is a consultant community paediatrician, working in Lambeth as part of Guy’s and St Thomas’ Hospital NHS Trust Community services. He has a special interest in the assessment and diagnosis of neurodevelopmental conditions in school-age children and in the mental health of paediatric patients more generally. He is academic convenor of the British Paediatric Mental Health Group and co-opted member of the mental health College Specialist Advisory Committee at the Royal College of Paediatrics and Child Health. He is a member of the Expert Reference Group for Child and Adolescent Mental Health Services Payment by Results and commissioning at the DH. He has a strong interest in medical education at all levels, and both teaches and leads educational programmes locally. He has three young children, and consequently has no spare time!

Declaration of interests:
Max Davie declares that he has no conflicts of interest.

Dr Jessie Earle
Consultant Child & Adolescent Psychiatrist, Haringey Child and Adolescent Mental Health Services Clinic
Dr Earle is a child and adolescent psychiatrist working in a multidisciplinary community Child and Adolescent Mental Health Services in Haringey, North London, which is an area of great cultural and socioeconomic diversity. Before training as a doctor at University College London, she studied social anthropology at Cambridge University. Her interest in young children’s emotional and behaviour problems developed over many years while writing and delivering a distance-learning postgraduate diploma for health visitors at St George’s Hospital Medical School, focused on promoting young children’s mental health. Her current interests include early intervention, developing effective inter-agency networks, and working with parents who struggle to parent successfully. In her spare time, she enjoys spending time with her teenage children, reading and walking.

Declaration of interests:
Jessie Earle declares that she has no conflicts of interest.
Ms Grace Foyle  
*Senior Policy Executive, British Medical Association*

Grace Foyle is a senior policy executive in the Science and Education Department at the British Medical Association. She leads the work of the Association’s Patient Liaison Group and undertakes research and policy projects for the Patient Liaison Group, the Equality and Diversity Committee, and the Board of Science. Grace has a bachelor of honours degree in Public Health Nutrition and a Diploma in Food Technology. Prior to joining the British Medical Association, Grace worked as a food policy executive at the Food and Drink Federation and also volunteered as a community nutritionist at Shoreditch Spa, providing nutritional advice to low socioeconomic groups in East London.

**Declaration of interests:**
Grace Foyle declares that she has no conflicts of interest.

Professor Ruth Gilbert  
*Professor of Clinical Epidemiology, the Centre for Paediatric Epidemiology and Biostatistics, University College London Institute of Child Health*

Professor Ruth Gilbert is a clinically qualified and accredited paediatrician trained in epidemiology. Her research includes a focus on the contribution of healthcare services to the detection of, and response to, child maltreatment. She has evaluated screening for child maltreatment in accident and emergency departments, patterns of maltreatment and other forms of victimisation in injured children admitted to hospital, and how general practitioners recognise and respond to child maltreatment. Most recently, she led an international comparison of trends in child maltreatment in six countries, based on multiple sources of routine data. She is currently involved in research that examines the trajectory of maltreated or victimised children and their risk of death in adolescence and early adulthood.

**Declaration of interests:**
Ruth Gilbert declares that she has no conflicts of interest.
Dr Elizabeth Rough (PhD)
*Research and Policy Executive, British Medical Association*

Elizabeth Rough PhD is a research and policy executive in the Science and Education Department at the British Medical Association. She supports the work of the Association’s Board of Science and undertakes research and policy projects for the Patient Liaison Group, the Equality and Diversity Committee, and the Board of Science. In 2011, she completed a PhD in science policy at the University of Cambridge, with a particular focus on the development of UK nuclear energy policy since the 1950s. Prior to joining the British Medical Association, Elizabeth worked as a researcher on a range of projects related to public health, including newborn screening, substance use, and human trafficking.

**Declaration of interests:**
Elizabeth Rough declares that she has no conflicts of interest.

Dr Anthony Williams
*Reader in Child Nutrition & Consultant in Neonatal Paediatrics, Clinical Sciences*
*St George’s, University of London*

Dr Williams MBBS DPhil studied medicine at University College London and the Westminster Hospital, qualifying in 1975. He was appointed a consultant in neonatal paediatrics at St George’s Hospital in 1987 after further training in London, Leicester, Liverpool and Bristol. His interest in child nutrition developed while he was undertaking research in Oxford during the early 1980s. He is currently an adviser to UK Government departments and in the past has also advised the European Food Safety Authority and World Health Organization. Tony is an honorary Fellow of the United Nations Children’s Fund, a trustee of Women and Children First and professional adviser to a number of UK charities supporting parenting and early child nutrition.

**Declaration of interests:**
Anthony Williams declares that he has no conflicts of interest.
Dr Ingrid Wolfe  
Consultant Child Public Health, Guy’s and St Thomas’s Hospital; Programme Director Evelina London Child Health Project; Honorary Senior Lecturer, King’s College London.

Ingrid Wolfe is qualified in public health and paediatrics, and divides her time between child health services, systems, and policy research with the European Observatory on Health Systems and Policies, and the NHS where she is developing an integrated health service model for children in Lambeth and Southwark. Ingrid’s main academic interests are in child health services research and policy in the UK and Europe. Ingrid is a child public health policy advisor for the European Pediatric Association and Strategic Pediatric Alliance, and Chair of the Faculty of Public Health’s Child Public Health Interest Group.

Declaration of interests:
Ingrid Wolfe declares that she has no conflicts of interest.

Dr Jenny Woodman (PhD)  
Medical Research Council Centre of Epidemiology for Child Health, Institute of Child Health

Jenny Woodman is a public health researcher trained in epidemiology and qualitative methods. She is nearing the end of a Medical Research Council/Economic and Social Research Council funded interdisciplinary PhD studentship that uses mixed methods to investigate different dimensions of GP responses to concerns about possible child abuse and neglect by GPs in England. Her research combines qualitative interviews with GPs and health visitors and observations of team meetings, with analyses of a cohort of 1.5 million children registered at GP practices in the UK (from The Health Improvement Network (THIN) database) to estimate the frequency and type of recorded concerns in children’s health records. She has previously undertaken systematic reviews on the recognition of child maltreatment in accident and emergency departments and in primary care. Findings will inform future projects to develop and test a complex intervention to improve outcomes for children who prompt concerns about possible abuse and neglect in primary healthcare settings.

Declaration of interests:
Jenny Woodman declares that she has no conflicts of interest.
Appendix 2: BMA policy on child health

The BMA has produced several evidence-based reports which specifically focus on children’s health, including:

- Early life nutrition and lifelong health (2009)
- Under the influence: the damaging effect of alcohol marketing on young people (2009)
- Forever cool: the influence of smoking imagery on young people (2008)
- Breaking the cycle of children’s exposure to tobacco smoke (2007)
- Domestic abuse (2007)
- Fetal alcohol spectrum disorders – a guide for healthcare professionals (2007)
- Child and adolescent mental health (2006)
- Preventing childhood obesity (2005)
- Smoking and reproductive life (2004)
- Adolescent health (2003)
- Injury prevention (2001)
- Eating disorders, body image and the media (2000).

It is worth noting that as part of the wider remit, much of the Board of Science’s other work also considers children and young people. This includes the Board’s work on:

- alcohol misuse
- smoke-free public places
- gambling addiction
- risk.

The BMA’s Ethics Committee have also produced a toolkit for doctors on children and young people. Their work also includes information on:

- child protection
- parental responsibility.
BMA ARM policy on child health

2012

That this Meeting asks the BMA to highlight the under-investment in transition care for disabled children (from the paediatricians to adult physicians) and actively promote investment in transition by commissioners.

That this Meeting believes that one of the primary goals of any society is to promote the welfare of children and protect them from harm, and that doctors have a key role in this regard. This Meeting therefore believes:

i) it is essential that the dissolution of primary care trusts and their replacement by Clinical Commissioning Groups does not damage multi-agency arrangements to safeguard children;

ii) that Clinical Commissioning Groups should be required to fund an appropriate number of sessions for a Designated Doctor for Safeguarding Children, and a Named Public Health Professional for Safeguarding Children, in each area served by a Local Safeguarding Children Board;

iii) that the BMA should work with other relevant stakeholders to ensure that doctors undertaking child protection work have comprehensive access to appropriate training and mentoring programmes.

That this Meeting calls on the UK governments: i) to promote the culture of children playing outside in view of the health benefits associated with outdoor play; ii) to instruct local authorities to stop selling off outdoor play spaces for development purposes and instead invest in the development and maintenance of these spaces to ensure they are safe, stimulating and easily accessible to all children in the UK.

That this Meeting notes:

i) the findings of the Marmot review on health inequalities which found that those living in poorest areas live an average seven years less than those in the richest ones;

ii) that the Marmot report believes the provision of a good start for children, free from poverty, is the single most important recommendation it can make. This Meeting believes that child poverty is unacceptable at any level in one of the world’s richest countries and resolves to ask the governments across the UK to take action on this issue to ensure that it is addressed both in terms of policy and resources by the administrations in London, Edinburgh, Belfast and Cardiff.

That this Meeting urges:

i) the BMA to adopt a policy of supporting mandatory fortification of flour with folic acid to prevent neural tube defects in line with the recommendations of the Food Standards Agency and the Scientific Advisory Committee on Nutrition;

ii) the UK nations to form legislation to make it a requirement for folic acid supplements to be in flour and flour based products.
2011
That this Meeting notes that the judgement in the “XYZ” case (High Court 11 May 2011) effectively abolishes the anonymity of expert witnesses in child protection proceedings, and calls on BMA Council and the Medico-Legal Committee to consider what subsequent actions need to be taken to protect both children and doctors.

That this Meeting views the primary medical care of children as an essential part of core general practice and would oppose any attempt to replace that function with specialist children’s GPs.

686 (a) Motion by the Conference of LMCs: That this Meeting views the paediatrics as an essential part of core general practice and would oppose any attempt to create a specialist ‘children’s GP’.

That this Meeting believes that only by addressing proper movement skills and nutritional adequacy can we tackle the growing issues of low basic fitness levels, postural and movement inefficiency and childhood obesity. This Meeting therefore:
   i) calls on the UK departments of education to ensure that all schools deliver an appropriate physical education curriculum that ensures our children have achieved basic movement skills on which to build regular exercise;
   ii) calls on the Westminster and devolved governments to have a commitment to promoting the health of our children by prioritising the importance of health, diet and nutrition in schools.

That this Meeting believes that the abolition of practice boundaries will lead to a deterioration of patient care and fundamentally compromise patient safety especially in areas of mental health care and the safeguarding of vulnerably children and adults and calls on the Department of Health to abandon this flawed policy.

2010
That this Meeting expresses grave concern about the ongoing high levels of alcohol related health and social damage in this country, and:
   (i) exhorts the BMA and government to consider further measures to educate the population and encourage sensible and appropriate drinking;
   (ii) supports a rise in the cost of alcohol as a method of reducing alcohol consumption in the home, in public places, and by children;
   (iii) supports a rise in the cost of alcohol as a method of supporting traditional pubs which can, at their best, be a vital part of our social fabric; (as a reference)
   (iv) insists that, as well as supporting a minimum price for a unit of alcohol, alcohol purchases should not be eligible for ‘customer loyalty points’;
   (v) demands a complete ban on alcohol advertising;
   (vi) calls for a properly enforced ban on drunkenness on public transport
That this Meeting recognises the positive health benefits of physical activity, and recommends that increasing walking and cycling in daily activity should be a public health priority for children and adults.

That this Meeting notes the recommendations of the Care Quality Commission report 2009, which highlights the need for NHS bodies to assure the training of their staff in child safeguarding, and calls on the UK Health Departments to confirm:
(i) that all commissioning bodies have responsibility for providing protected funding for child protection training;
(ii) that named and designated doctors’ job descriptions should include protected time for training staff within their organisation;
(iii) that competence levels and training needs are not always the same across different medical specialties.
(iv) that Local Safeguarding Children Boards (or equivalent) must make engagement with paediatricians, general practitioners and patients a high priority for 2010-2011.

2009
That this Meeting believes that in the interests of promoting optimal healthcare for all children:
(i) individual health visitors should be linked to GP surgeries
(ii) health visitors should have mandatory training in the prevention, recognition and management of childhood obesity.

That this Meeting believes that, in order to improve public health and fitness and tackle obesity in adults and children, there should be:
(i) no further reduction in the number of public swimming pools in the UK;
(ii) expansion of safe cycle paths and networks;
(iii) action at local level to ensure that recreational facilities are available to all regardless of their socioeconomic status and level of physical and psychological ability;
(iv) no discouragement for children who wish to play active games such as football and skipping etc in the playground;
(v) more extensive use of the media, including children’s programming, to promote healthy lifestyle messages.

That this Meeting notes with great concern the report by Lord Laming into the death of Baby P in Haringey, and calls on Council to:
(i) lobby Health Departments for improved funding for training for health professionals in safeguarding children;
(ii) press governments to introduce independent chairs for statutory safeguarding bodies at local level (such as Local Safeguarding Children Boards);
(iii) press governments to review their guidance such that statutory safeguarding bodies at local level have voting representation from paediatricians, child psychiatrists and general practitioners.
That this Meeting recognises the increased prevalence of obesity in children and the contribution that poor diet plays in this. We call upon the BMA Board of Science to research into easy to understand, child friendly food labelling and, in particular, to consider the recent research by the Food Standards Agency which confirms preference for a “traffic light” system.

That this Meeting:
(i) reaffirms the Association’s 1999 condemnation of the advertising of tobacco at the point of sale;
(ii) calls on the BMA to lobby for legislative change to make illegal all tobacco advertising throughout the UK;
(iii) calls for restrictions on vending machines, where children can currently purchase cigarettes out of sight of adult supervision.

That this Meeting overwhelmingly supports Lord Laming’s Inquiry into the death of Baby P and welcomes the resulting drive to increase the number of health visitors in primary care.

That this Meeting would strongly support moves by the BMJ Publishing Group to introduce a standard patient consent for publication form which would be acceptable to the majority of journals, therefore avoiding the need for repeated consent forms, if an article is submitted to and refused by consecutive journals.

2008
That this Meeting:
(i) recognises that the welfare of vulnerable children is served by doctors prepared to work in child protection including expert witness work;
(ii) expresses support for any doctor who fulfils their duty in safeguarding children;
(iii) believes that the recent handling by the GMC of doctors undertaking their duty in safeguarding children will deter health professionals from engagement in child protection work (Carried as Reference);
(iv) believes that the GMC must reconsider how it handles cases involving safeguarding children (Carried as Reference);
(v) reiterates the 2006 ARM call for an enquiry into miscarriages of justice regarding cot death;
(vi) regrets that the government has not done enough to protect the interests of children and of doctors involved in safeguarding children.
2007
That this Meeting believes that the United Kingdom is suffering from an obesity epidemic and that voluntary measures by food industry and media are unlikely to address the problem and:

(i) calls for legislation to ban advertising of unhealthy food to children and a reduction of salt, sugar and hydrogenated fats added to pre-prepared food;
(ii) calls for a halt to the sale of assets such as school playgrounds and sports fields;
(iii) AS REFERENCE) calls on government to mandate schools to provide exercise facilities;
(iv) deplores the promotion by sections of the Food and Drinks Industry of GDA (Guideline Daily Amounts) labelling to the exclusion of the “traffic light” system;

That the BMA calls on government to ban the sale of tobacco products in vending machines as an essential measure to prevent the sale of tobacco to children.

That this Meeting is deeply concerned at conditions in which surgical instruments (of a high quality) are manufactured in Pakistan, which involves the employment of children, deficient health and safety measures and low wages. The NHS is a major purchaser of these instruments, at prices very much higher than the producers earn. We call upon the government to institute a fair trade policy for the purchase of these instruments which would be to the health and socio-economic benefit of the workers and their families.

That this Meeting calls on Parliament to debate the merits of more extensive use of 20 mph speed limits on roads, to cover all “walk to school” routes, as a measure that will reduce risk of injury, promote physical activity in school aged children and help shift the balance between motorist and pedestrian.

That this Meeting acknowledges the call by the World Health Organisations to provide hepatitis B vaccines to all children and calls upon the Department of Health to introduce the hepatitis B vaccine into the childhood schedule without further delay.

2006
That this Meeting should call for bans on the advertising of unhealthy food and drink to children.

2005
That this Meeting supports the compulsory wearing of cycle helmets when cycling:

(i) for children;
(ii) for adults.
2003
That this Meeting requests the Board of Science and Education report on the known causes of obesity in school-aged children, the health impact of the increased prevalence of obesity in this group and the measures that need to be taken to halt this trend.

2003
That this Meeting:
(i) believes that the “family friendly” NHS is a myth;
(ii) believes that all doctors have a right to family friendly working hours;
(iii) deplores the lack of readily available childcare in the NHS, and
(iv) believes that if the Department of Health is serious about the family friendly NHS, they should make provision to support doctors taking time off when their children are sick.

2001
That this Meeting strongly believes that all children in the United Kingdom should be protected from tuberculosis by immunisation.

That “looked after children’s” medicals require an increase in remuneration and recognition.

2000
That this Meeting, believing that UN sanctions on Iraq are damaging the health of innocent civilians, particularly women and children:
(i) deplores the harmful effects of sanctions on the health care provision for innocent populations in various countries;
(ii) believes that licensed medicines for Iraq should be exempt from scrutiny by bureaucratic sanctions committees;
(iii) asks the BMA to consider asking the World Medical Association to send an official delegation to Iraq to assess the full effect of sanctions on the Iraqi people and make appropriate recommendations to the WHO.

1999
That this Meeting calls for tough action to protect children from the dangers of alcohol.

That this Meeting believes that the target payment system for MMR vaccine is an unfair system. GPs are being forced to bear the consequence of society’s reluctance to protect its children. This Meeting recommends a system that excludes the MMR from the target system, and maintains that if the Government truly believes in the benefits of this vaccination, more far reaching measures should be employed to ensure that those at risk are vaccinated as opposed to merely penalising GPs who have no control over the situation.
1997
That this Meeting requests the Government to:
(i) give the Minister for Public Health responsibility and power to ensure that all
Government departments co-operate and collaborate on health issues;
(ii) introduce a new Public Health Act;
(iii) formulate policy to address the undeniable relationship between social inequality
and health;
(iv) ensure that the health impact of policies and plans initiated by any government
department are assessed;
(v) establish an independent Food Standards Agency to separate the interests of food
producers from those of consumers;
(vi) maintain the centrally funded public health laboratory service;
(vii) ensure that the public and especially school children and young people receive
education in food hygiene.

1995
That this Meeting calls for a ban on the manufacture, distribution and use of land mines
and that a concerted international effort be made to remove outstanding mines as land
mines are now one of the biggest killers of children in third world countries.

1994
That the British Medical Association upholds the principle of the sanctity of the life of
every human creature, and abhors and condemns the use of the organs of murdered
street children in transplantation.

That this Meeting:
(i) believes that the Department of Education’s guidelines on sex education in schools
will not promote the health of school children and run counter to the Health of the
Nation goals;
(ii) does not believe the Government’s stated intention to reduce teenage pregnancy
rates when the HEA’s excellent work is censored by a Minister for Health and the
guidelines on sex education policy for schools show scant respect for young
peoples’ rights and confidentiality and resource allocations for sexual health are
inadequate;
(iii) calls for a public debate on contemporary sex education to take account of the
majority of parents’ views and appropriate research findings.

1993
That this Meeting welcomes the report of the Joint Working Party on Medical Services
for Children, and urges the BMA to press the Department of Health, and NHS
Management Executive to require purchasing authorities to commission and fund
combined child health services, along the lines recommended in the report, and to provide extra funding to pay for the training and regrading of the doctors concerned.

1991
That this Meeting:
a) urges all health authorities to consider carefully the medical staff implications implicit in the Children Act 1989;
b) believes that the benefits of this legislation will not be fully achieved without the employment of sufficient numbers of suitably trained CMOs, and careful attention to the workload of general practitioners, child psychiatrists and paediatricians;
c) calls upon Government to make available the resources which will permit purchasers adequately to address these issues when contracting for children's services.

1988
That the BMA should ask the DES to include in the national education curriculum at least one hour per year compulsory education in accident and prevention, resuscitation and first aid for all children in full-time education.

That to make more specially trained doctors available for the examination of children suspected of sexual abuse, the police organisation should consider employing doctors trained for this aspect of a police surgeon's work, who would not necessarily undertake all the duties of a police surgeon.

That this Meeting:
(a) welcomes the opportunity provided by the Report of the “Inquiry into Child Abuse in Cleveland 1987” to strengthen services for children and their families in each health district, and
(b) calls on the Government to consult fully with the medical and other professions involved before issuing definitive guidance to inter-agency work in the field of child abuse.

1986
That this Association believes that the correct interpretation of the House of Lords judgement in the case of Gillick v. Wisbech Health Authority is as follows:
(1) That children of under 16 must be entitled to expect that both the existence and the content of a consultation in connection with pregnancy or contraception will normally remain secret.
(2) That in the case of any departure from this rule doctors should be liable to justify their action.
**Appendix 3: UK dietary recommendations for pregnancy**

### Before pregnancy

A healthy diet is important at any time but particularly when planning a pregnancy. The eatwell plate\(^a\) makes healthy eating easier. Try to eat:

- plenty of fruit and vegetables – aim for at least five portions a day
- plenty of starchy foods
- some milk and dairy foods
- some meat, fish, eggs and other non-dairy sources of protein
- just a small amount of foods and drinks high in fat and/or sugar.

A 400ug folic acid supplement should be taken daily from the time contraception is stopped until the twelfth week of pregnancy. Women who have previously had a baby with neural tube defects, or who are taking medication for diabetes, epilepsy or coeliac disease should take a 5mg supplement.

Department of Health guidelines on the consumption of alcohol state that women trying to conceive should avoid drinking alcohol, but if they do choose to drink, to minimise the risk to the baby, they should not drink more than one to two units of alcohol once or twice a week and should not get drunk.

### During pregnancy

A healthy diet is important in pregnancy. There is no need to eat for two – it’s the quality not the quantity of the diet that’s important. Try to eat a variety of foods including:

- plenty of fruit and vegetables – aim for at least five portions a day
- plenty of starchy foods
- plenty of iron-rich foods such as pulses, bread, green vegetables, and foods rich in vitamin C that will help the iron to be absorbed
- milk and dairy foods – these contain calcium and other nutrients that your baby needs
- foods rich in protein such as lean meat*, chicken and fish (aim for at least two portions of fish each week including one of oily fish), eggs and pulses
- fibre-rich foods such as wholegrain bread and cereals.

Cut down on foods and drinks high in fat and/or sugar such as cakes and biscuits.

---

\(^a\) The eatwell plate is a policy tool that defines the Government’s recommendations on healthy diets. It makes healthy eating easier to understand by giving a visual representation of the types and proportions of foods needed for a healthy and well balanced diet. For further information visit the Department of Health website.
A 400 g folic acid supplement should be taken daily until the twelfth week of pregnancy. Women who have previously had a baby with neural tube defects, or who are taking medication for diabetes, epilepsy or coeliac disease should take a 5mg supplement.

A 10 g vitamin D supplement should be taken throughout pregnancy.

Do not take dietary supplements that contain vitamin A such as fish liver oils, and avoid liver and liver-containing products.

Caffeine-containing drinks should be consumed in moderation to limit caffeine intake to less than 200mg a day (equivalent to approximately two mugs of instant coffee).

Avoid paté, liver, certain cheeses and raw or partially cooked eggs, shellfish and meats, and unpasteurised milk.

Department of Health guidelines on the consumption of alcohol state that pregnant women should avoid drinking alcohol, but if they do choose to drink, to minimise the risk to the baby, they should not drink more than one to two units of alcohol once or twice a week and should not get drunk.

The BMA believe that the only sensible message for women who are pregnant must be complete abstinence from alcohol.

*Vegetarianism and veganism
It is possible for vegetarians and vegans (people who eat no animal products at all, including dairy products) to be adequately nourished for successful pregnancy and lactation, but they need to be knowledgeable about nutrition and plan their diet carefully. For vegans, there is a high risk of deficient intakes of micronutrients vitamin B12, iodine, calcium, vitamin D and omega-3 fatty acids. There are reports of neurological deficits in children born to vitamin B12 deficient vegan mothers, and the mother should take vitamin B12 supplements, as this micronutrient is found only in foods of animal origin. The high levels of vitamin B12 found in some algae and seaweeds (eg spirulina) are not bioactive. For the other micronutrients listed above, supplements must be taken, or fortified foods (eg many soya milks are fortified with calcium) or specific foods sources included in the diet (eg kelp seaweed for iodine, or flaxseed for omega-3 fatty acids). Good advice can be found on the websites of the Vegetarian Society and Vegan Society.
## Appendix 4: Infant feeding guidelines

<table>
<thead>
<tr>
<th><strong>World Health Organization</strong></th>
<th><strong>Department of Health</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breastfeeding</strong>: Practice exclusive breastfeeding from birth to six months, and introduce complementary foods at six months while continuing to breastfeed on-demand until two years of age or beyond.</td>
<td><strong>Breastfeeding</strong>: Breastfeeding is best and provides all the nutrients a baby needs for the first six months. Continue exclusive breastfeeding for six months. The longer breastfeeding continues, the greater the benefits.</td>
</tr>
</tbody>
</table>

**Formula feeds**: Not recommended – all babies should be breastfed. The WHO has developed guidelines for the non-breastfed baby (partly for use by HIV-positive women).a

**Formula feeds**: Infant formula is the only alternative to breastfeeding until one year. Cows’ milk-based formula is best. Follow-on formula can be used from six months but is not essential. Other types of formula should be used only on medical advice: Hydrolysed protein formula may be useful in cow’s milk allergy. Soya formula is an alternative but may also be allergenic. Goats’ milk formula is not suitable for babies.

**Other drinks**: Avoid giving drinks with low nutrient value, such as tea, coffee and sugary drinks such as soda. Limit the amount of juice offered so as to avoid displacing more nutrient-rich foods. Increase fluid intake during illness.

**Other drinks**: Water is the best alternative drink to milk. Breastfed babies don’t need any until they start solids. Under six months use tap water, boiled and cooled. Some bottled water has a mineral content too high for babies. Others are OK (labelled accordingly). Bottled water should be boiled too. Fruit juices are a source of vitamin C but reduce the baby’s

---

Growing up in the UK – Ensuring a healthy future for our children

appetite for milk and can cause tooth decay; avoid before six months. After that use diluted (one in 10 with boiled water) in a feeding cup, at mealtimes only. Squashes, fizzy drinks, flavoured milk, juice drinks, tea and coffee are not suitable for infants.

Starting complementary feeds: Start at six months with small amounts of food and increase as the child gets older while maintaining frequent breastfeeding.

Starting complementary feeds: Solids can be started from six months and gradually increased in amount and variety so that by twelve months, solid foods are the main part of the diet, with breast or formula milk making up the balance.

Progress with complementary feeds: Start with a teaspoon of smooth vegetable purée (carrot, parsnip, potato, yam) or fruit purée (banana, cooked apple, pear or mango) or cereal (not wheat-based) such as baby rice, sago, maize, corn meal or millet, given with the baby’s usual milk (breast or formula) at one feed in the day.

Progress with complementary feeds: Gradually increase the amount within one feed, and then progress to two and three feeds per day. React to the baby’s appetite, giving more if wanted. Solids can include full-fat cows’ milk products (yoghurt, fromage frais, cheese sauce). Give cereals once a day. Use home-cooked foods mashed, sieved, or puréed. Introduce puréed red meat, poultry, fish or eggs, or puréed beans or pulses (lentils, hummus) at least once a day. Serve starchy foods (potatoes, yams, rice or bread) two to three times/day, and fruit and vegetables as finger foods at two or more meals/day.

Increase the number of times the child is fed complementary foods as he/she gets older. For the average infant complementary foods should be provided two to three times/day at six to eight months and three to four times/day at nine to 24 months. Additional nutritious snacks (pieces of fruit or bread or chapatti with nut paste) may be offered one to two times/day. If the energy density or amount of food per meal is low, or the child is no longer breastfed, more frequent meals may be required.
Feed a variety of foods to ensure that nutrient needs are met. Meat, poultry, fish, eggs and vitamin A-rich foods should be eaten daily or as often as possible. Provide diets with adequate fat content.

After illness, encourage the child to eat more than usual.

Vegetarian diets cannot meet nutrient needs at this age unless nutrient supplements or fortified products are used.

As the baby continues to develop, use foods with a thicker and lumpier texture to encourage chewing, even before teeth emerge. Give finger foods (toast, bread, breadsticks, pitta bread or chapatti, peeled apple, banana, carrot sticks, or cubes of cheese). Avoid sweet biscuits and rusks. Later, start minced or chopped meals and fruit between meals. When the baby is mobile (crawling and walking) increase the amount of food. Use full-fat dairy products; low fat is sensible for adults but not babies.

If the family is vegetarian, use pulses (such as red lentils, beans or chickpeas) or tofu as protein sources. Vitamin C in fruit and vegetables helps iron absorption, so include these at mealtimes.

**Do not force:** Feed slowly and patiently; encourage but do not force. If children refuse foods, experiment with different foods, tastes, textures and methods of encouragement. Minimize distractions during meals. Feeding times are periods of learning and love – talk to children during feeding, with eye to eye contact.

**Do not force:** Go at the baby’s pace. Allow plenty of time for feeding and to allow the baby to learn to swallow solids. Don’t rush or ‘force feed’. Most babies know when they’ve had enough to eat. Offer a wide variety of foods to avoid choosiness later on.

**Food safety:** Practice good hygiene. Wash hands before food preparation. Store foods safely. Serving immediately after preparation, using clean utensils and serving dishes. Avoid using feeding bottles, which are difficult to keep clean.

**Food safety:** Heat only what the baby will want. Don’t reheat previously warmed food. Heat food thoroughly and allow it to cool. Don’t refreeze food that’s been warmed or previously frozen. Everything for feeding the baby needs to be really clean.
**To be avoided:** No specific guidelines

**To be avoided:** Added salt: Babies <6 months need <1g/day, and <1 year a maximum of 1g/day. Breastfed and formula-fed babies get enough salt. Don’t add salt to cooked foods. Limit high-salt foods (cheese, bacon, sausages, processed foods, pasta sauces, breakfast cereal). Avoid sugar and honey: Sweeten stewed sour fruit like rhubarb with mashed banana, breast or formula milk. Don’t use honey until after one year as it may contain harmful bacteria. Some foods can cause allergic reactions in some babies. Avoid the following before six months: Eggs, fish and shellfish. Wheat-based and gluten-containing foods (bread, wheat flour, breakfast cereals, rusks). If there is a family history of coeliac disease, consult a doctor before using wheat, rye or barley-based foods. Nuts and seeds – including peanuts, peanut butter and other nut spreads. Don’t give whole peanuts to children under five years old because they can cause choking.

---

**Vitamin-mineral supplements:**
Use fortified complementary foods or vitamin-mineral supplements as needed.

**Vitamin-mineral supplements:**
No specific guidelines.

---

**Starting ordinary cow’s milk:**
No specific guidelines.

**Starting ordinary cow’s milk:**
Full-fat cow’s milk not suitable as a drink until one year. Semi-skimmed milk not suitable as a drink until two years. Skimmed milk not suitable until five years.
Appendix 5: Key nutritional concerns and recommendations

<table>
<thead>
<tr>
<th>Providing personal support for breastfeeding</th>
<th>What has been done?</th>
<th>What needs to be done?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICE Public Health Guidance 11(2008) ‘Improving the nutrition of pregnant and breastfeeding mothers and children in low-income households’. Recommendation seven (as one of five key priorities) requires ‘commissioners and managers of maternity and children’s services to adopt a multifaceted approach or coordinated programme of interventions across different settings to increase breastfeeding rates’. All pregnant women now receive a DVD ‘From bump to breastfeeding’ which offers practical information and guidance through the medium of women’s personal stories and experiences. This project is undertaken by the charity ‘Best Beginnings’ with Department of Health funding and endorsed by five Royal Colleges.</td>
<td>• Audit and strengthening of implementation through PCTs. • Midwifery care in the postnatal period needs strengthening. • Shortages in the workforce should be addressed through improving collaboration between professional and paid breastfeeding peer supporters. • Further evaluation of the effectiveness of the multifaceted approach. • This project has been extended* to support families of sick and premature babies. It aims to ensure that they are at the centre of their baby’s care in ways that are known to improve health outcomes.</td>
<td></td>
</tr>
<tr>
<td>What has been done?</td>
<td>What needs to be done?</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Targeted intervention to focus on the low socioeconomic groups</strong></td>
<td>NICE PH Guidance 11 (2008) Recommendation 11 (as one of five key priorities) requires commissioners and managers of maternity and children’s services to target ‘Pregnant women and new mothers, particularly those who are less likely to breastfeed.’</td>
<td></td>
</tr>
<tr>
<td>• Audit and strengthening of implementation through PCTs.</td>
<td>• Health visiting needs to be strengthened, particularly in disadvantaged areas.</td>
<td></td>
</tr>
<tr>
<td><strong>Better understanding of the need for continuing support from significant health professionals and family members</strong></td>
<td>NICE PH Guidance 11 (2008) Recommendation 10 requires health professionals (especially midwives, health visitors, and support workers) to ‘provide continuing and proactive breastfeeding support at home, recording all advice in the mother’s hand-held records’.</td>
<td></td>
</tr>
<tr>
<td>• Audit and strengthening of implementation through PCTs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Local policy guidelines on support of breastfeeding should be published and monitored</strong></td>
<td>NICE PH Guidance 11 (2008) Recommendation seven also requires maternity and children’s services to implement a structured programme subject to external evaluation that encourages breastfeeding; ‘The UNICEF Baby Friendly Initiative should be considered a minimum standard’.</td>
<td></td>
</tr>
<tr>
<td>• Audit and strengthening of implementation through PCTs.</td>
<td>• Continued funding for educational support and external audit provided through Unicef Baby Friendly Accreditation pathways.</td>
<td></td>
</tr>
<tr>
<td>What has been done?</td>
<td>What needs to be done?</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Help on return to work</td>
<td>• Audit and strengthening of implementation through PCTs.</td>
<td></td>
</tr>
<tr>
<td>Greater emphasis should be placed on updating health professionals in order to increase their awareness of breastfeeding issues, promotion and management</td>
<td>• Strengthen implementation of educational initiatives (for example, The University of York and Humberside NHS Region, have collaborated to develop a distance learning course providing modules at Master’s level open to all health professionals.) • Endorsement of learning initiatives by Royal Colleges and review of Specialist Training</td>
<td></td>
</tr>
<tr>
<td>NICE PH Guidance 11 (2008) Recommendation one requires professional bodies and skills councils to ensure that health professionals have appropriate knowledge and skills to advise on a range of early nutrition topics including breastfeeding. Growth charts used in UK since 2009 are based on the growth of breastfed infants and young children, reminding health</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
professionals that breastfeeding should represent a societal norm and reducing the risk that a healthy breastfed infant will be inappropriately perceived as showing faltering weight gain. Extensive multidisciplinary educational support on use of the new charts is provided through Royal College of Paediatrics and Child Health website (www.rcpch.ac.uk).

<table>
<thead>
<tr>
<th>What has been done?</th>
<th>What needs to be done?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricula. This should be led by the Inter-Collegiate Group on Nutrition (<a href="http://www.icgnutrition.org.uk">www.icgnutrition.org.uk</a>) through the Academy of Medical Royal Colleges.</td>
<td></td>
</tr>
<tr>
<td>• Launch new four to growth chart. Realignment of obesity thresholds to overcome confusion about the difference between clinical and public health definitions (eighty-fifth to ninety-first vs ninety-first and ninety-fifth centiles)</td>
<td></td>
</tr>
</tbody>
</table>

**Initiatives by lay groups eg National Childbirth Trust and La Leche League should be properly subsidised**

NICE PH Guidance 11 (2008) requires commissioners and managers of maternity and children’s services to: ‘provide easily accessible breastfeeding peer support programmes [to include training] and ensure peer supporters are part of a multidisciplinary team.

• Audit and strengthening of implementation through PCTs.
### What has been done?

<table>
<thead>
<tr>
<th>Combine nutritional education with practical advice accompanied by quasi cash incentives to purchase healthier foods</th>
<th>‘Healthy Start’ was introduced in 2006 following a review of the WFS by COMA.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NICE PH Guidance 11 (2008) Recommendation four promoted uptake of Healthy Start and use as an opportunity to offer eligible parents ‘practical, tailored information, support and advice on a range of topics including increased purchase and consumption of fruit and vegetables, breastfeeding and introduction of complementary foods after six-months’.</td>
</tr>
<tr>
<td></td>
<td>• Audit of uptake and implementation is in progress (Department of Health Research &amp; Development Directorate sponsored projects)</td>
</tr>
<tr>
<td></td>
<td>• Audit and strengthening of implementation through PCTs.</td>
</tr>
</tbody>
</table>
Appendix 6: Child disability: useful websites

www.edcm.org.uk

www.councilfordisabledchildren.org.uk

www.education.gov.uk

www.dh.gov.uk

www.guardian.co.uk/society/disability

maxdavie.posterous.com (author’s blog)