Maternal and Child Nutrition
Best Practice Guidance
Revised

A multi-agency framework for all staff engaging with
women of childbearing age throughout pregnancy,
childbirth and the early years of parenting (0-5 year olds).

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• Adoption & Fostering Service
• Early Education Service

Voluntary organisations
• Breastfeeding Peer Supporters
• Women’s Aid
• Childcare Organisations
  - CALA
  - SPPA
• Family support organisations
  - Action for Children
  - Home Start
  - Family First

Other organisations
• Further Education Colleges
• University of Stirling

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Special thanks to Nanette Wallace, Graphics Officer, NHS Highland for her help and advice in production of the document.

Planning for Fairness

Planning for Fairness has been applied to this clinical guideline, which has taken into consideration the individual needs of all patients to ensure services are delivered equitably and fairly.
About the Guidance

What is it?
The Maternal and Child Nutrition Best Practice Guidance provides a co-ordinated, practical and evidence-based framework for delivery of nutritional care to women of childbearing age, throughout pregnancy, childbirth and the early years of parenting. It has been developed as a key strand in addressing health inequalities and health outcomes in Highland’s population, and forms part of NHS Highland’s multi-agency work to support the outcomes for maternal and infant nutrition as set out in the Scottish Government’s Maternal and Infant Nutrition Framework (January 2011).

Who’s it for?
Staff in all agencies engaging women and children, including: midwives, neonatal nursing staff, children’s nurses, community specialist public health nurses, oral health staff, dietitians, paediatricians, gps, early years health and social care staff, early years workers, family support workers, community development workers and voluntary sector workers.

How to use it?
The Guidance is presented in four sections, which correspond to the following stages:
- Pre-conception and Pregnancy
- Birth to six months
- Weaning (six - 13 months)
- Early Years (13 months - five years)

Why use it?
This second edition of the Guidance has been updated by a multi-professional working group and widely consulted on with staff in NHS, local authorities and partner agencies. The group has taken account of the latest evidence-base and feedback from the first edition, to support best practice in delivery of nutritional care to women, children and families. The working group invites feedback and comments from users of the Guidance at any time to facilitate an approach of continuous improvement in this work. Contact details for the members of the working group can be found in Appendix 14.

Where is it?
NHS Highland Intranet: http://intranet.nhsh.scot.nhs.uk/Pages/Default.aspx and For Highland’s Children website: www.forhighlandschildren.org
1. Introduction

The foundations for health and wellbeing begin at the earliest stages of life, and the nutrition a baby receives during pregnancy, as well as the diet of its mother pre conceptually, plays a major role in a child’s growth and development. Good nutrition provides strong foundations for the very young and older children also benefit from a well balanced and nutritious diet. As with the majority of issues that pose a threat to population health such as obesity, alcohol and drug misuse, smoking and mental ill-health, a co-ordinated, multi-agency approach is needed to improve maternal and infant nutrition. This refreshed guidance supports this approach, and recognises that NHS, local authorities, employers, the community and voluntary sector have the greatest opportunity to influence behaviour change and therefore have a key role in improving maternal and infant nutrition.

The central focus for this work is to address inequalities in health, and although it is crucial to improve maternal and infant nutrition across the whole population, activities need to be targeted to those in most need of support. Infant feeding patterns in Scotland are poor but are worse in mothers from the most deprived areas. Younger mothers, those living on a low income or in areas of deprivation and those with fewer educational qualifications are less likely to take the recommended nutritional supplements prior to pregnancy or have a good diet during pregnancy. They are less likely to breastfeed and more likely to introduce complementary foods earlier than recommended.

1.1 Background to development of the Guidance

The first edition of this Best Practice Guidance was produced and distributed in 2010 and this refreshed Guidance takes account of changes in evidence and evaluation/feedback from staff in all agencies on the first edition. Existing policies and strategies which impact on maternal and infant nutrition are cross referenced throughout the guidance.

The Guidance is presented in four sections, which correspond to the following stages:

- Pre-conception and Pregnancy
- Birth to six months
- Weaning (six - 13 months)
- Early Years (13 months - five years)

It brings together elements of nutrition from pre-conception to weaning and the early years, and recognises the important role that food plays in a child’s physical and cognitive development by viewing it as an important, social and pleasurable part of family life.
1.2 The Policy Context

Improving maternal and infant nutrition must be seen in the wider context of improving population health and wellbeing. There are a number of national policies and strategies in which promoting the health and wellbeing of infants and young children is embedded as a priority, including:

- Better Health, Better Care: Scotland’s Action Plan for Health
- National Performance Framework
- A Refreshed Framework for Maternity Care in Scotland 2011
- Equally Well: Implementation Plan
- Early Years Framework
- “Hall 4”
- Breastfeeding etc. (Scotland) Act 2005
- Healthy Eating, Active Living: An action plan to improve diet, increase physical activity and tackle obesity (2008-11)
- Preventing Overweight and Obesity in Scotland: A Route Map Towards Healthy Weight
- The Scottish Antenatal Parent Education Pack

Evidence from NICE Public Health Guidance 11: ‘Improving the Nutrition of pregnant and breastfeeding mothers, and children in low income households’, underpinned the Scottish Government’s action plan as detailed in CEL 36 (2008-2011) which prioritised the early years as a key area.

The ‘Scottish perspective’ on NICE PHG 11, focused on five key priority action points for Scotland:

- Healthy Start
- Training
- Vitamin D
- Breastfeeding and peer support
- Folic acid

These continue to be key action points supported by the refreshed Guidance, and will contribute to meeting outcomes associated with the national Maternal and Infant Nutrition Framework (2011).

The full documents can be viewed at:
www.nice.org.uk/ph11
www.scotland.gov.uk/publications
1.3 Key delivery partners

**NHS Operational Units**

The North and West and, South and Operational divisions of the North Highland CHP with Argyll & Bute CHP and Raigmore Hospital are the responsibility to influence maternal and child nutrition. Much of this is carried out through the day to day work of midwives, health visitors, public health nurses and dietitians in partnership with other agencies.

**NHS Highland Corporate Services**

The Health Improvement team within the Public Health Directorate works to develop NHS Highland-wide initiatives, such as public awareness campaigns; educational programmes; training; production or dissemination of quality controlled information materials, and development and evaluation of pilot projects. Public Health will also continue to access national and international information about policy planning, research and evidence-based action.

**Highland Lead Agency for Children and Young People**

There are a range of staff employed in the Highland Council Health and Social Care and voluntary partners across both universal health and education and additional needs services that have a pivotal role to play in supporting the nutrition of infants, children and young people: public health nurses (early years and school) Family Support Services, Childcare providers, Toddlers Groups and Pre School Education Centres, (School Nurseries and partner providers) or nurseries are all able to encourage and support breastfeeding and all aspects of good maternal and infant nutrition. Schools have a key role in providing information and life skills for day to day decision making and for the next generation of parents, particularly through the health and wellbeing aspects of Curriculum for Excellence.

**Local Authorities**

A broader range of Highland Council services and departments and services across Argyll & Bute Council also have a role to play in promoting healthy infant feeding. Local authority services to families, such as early years initiatives, Family Centres, or nurseries are all able to encourage and support breastfeeding and all aspects of good maternal and infant nutrition. As major employers, the local authorities can ensure that family friendly policies encourage and enable women employees to breastfeed their babies on return to work. As organisations with responsibility for huge numbers of venues and services, they can ensure that all local authority settings encourage breastfeeding and that all food provided for young children is healthy. They have an obligation to ensure compliance with the Breastfeeding etc (Scotland) Act 2005 in all settings for which they have responsibility. Through the ‘Curriculum for Excellence’, there are opportunities to educate children and inform parents about the benefits of healthy eating and being active.
| **High Life Highland** | High Life Highland is a charity, formed on the 1st October 2011 by The Highland Council to develop and promote opportunities in culture, learning, sport, leisure, health and wellbeing. High Life Highland delivers a broad range of cultural, sporting, leisure, learning and health & wellbeing initiatives and projects throughout the whole of the Highlands, for both residents and visitors.

Through High Life Highland there are opportunities for parents and children to be healthy at any and every weight. Resources include opportunities to participate in health and fitness programmes, healthy living campaigns, activities for children and families and a vast range of community facilities such as leisure centres and libraries.

www.highlifehighland.com |
| **Voluntary Organisations** | The main voluntary organisation which supports breastfeeding in NHS Highland area is the National Childbirth Trust. Other voluntary organisations include the La Leche League and the Breastfeeding Network, but these have no local representatives. All organisations have breastfeeding helplines, and all women who give birth in Highland and Argyll and Bute are given contact details.

A number of other voluntary organisations play a key role in increasing the awareness, availability and accessibility of healthy food locally within communities. |
1.4 Training and development

There are a number of training opportunities relevant to maternal and infant nutrition delivered through the Highland Public Health Network (HPHN), including:

- UNICEF Baby Friendly Initiative (BFI)
- Child Healthy Weight
- Negotiating Behaviour Change
- Motivational Interviewing and Raising the Issue
- Developing Effective Practice

A national training resource is currently being developed by NHS Health Scotland and NES, and will complement existing HPHN training courses.

For further details and to access the training offered through the HPHN please access the AT-L or contact the AT-L Administrator on 01463 704781 to book a place on any of the courses provided by HPHN.

1.5 Key outcomes to 2014

The three key national outcomes for the maternal and infant nutrition framework are:

- That our children have the best start in life and are ready to succeed
- That we live longer, healthier lives
- That we tackle the significant inequalities in society

There are a number of short, medium and long term outcomes and outcome measures for the national Maternal and Infant Nutrition Framework which build on the programme of work supported by the first edition of this Guidance and which relate directly to the Scottish Government’s HEAT targets H3, H7 (2008-2011) and CEL 36 (2008): Improving nutrition in women of childbearing age, pregnant women and children under five experiencing disadvantage.

A detailed logic model plan illustrating the Maternal and Infant Nutrition Framework outcomes can be found in Appendix 2.

A key short term outcome is the demonstration of skills in negotiating health behaviour change by all NHS and partner agency staff engaging with the target groups. The guiding principles of a health behaviour change approach underpin all interventions with the target groups and for further information and training options see:

- Section 1.4 – Training and development
- Section 3 – How can I support behaviour change?

These outcomes complement local authority single outcome agreements and children’s services plans.

1.6 Child Health Programme

The core schedule for contacts for children from birth, including reinstatement of the 24-30 month assessment, is set out in the Child Health Programme (‘Hall 4’). These contacts offer opportunities to discuss food and health topics and to assess any additional support that may be required.
2. ‘Healthy Start’ Scheme

‘Healthy Start’ replaced the Welfare Food Scheme in November 2006. The new scheme offers wider choice, seeks to address inequalities for breastfeeding mothers, and encourages earlier and closer contact between health professionals and disadvantaged families.

Women qualify for Healthy Start if they are at least 10 weeks pregnant or have a child under four years old and are in receipt of:

- Income Support, or
- Income-based Jobseeker’s Allowance, or
- Income-related Employment and Support Allowance, or
- Child Tax Credit (but not Working Tax Credit unless your family is receiving Working Tax Credit run-on only*) and has an annual family income of £16,190 or less (2012/13).
- Women also qualify if they are under 18 and pregnant, even if they are not in receipt of any of the above benefits or tax credits.

‘Healthy Start’ provides vouchers for eligible families which can be spent on unmodified liquid cows’ milk, plain fresh and frozen fruit and vegetables or infant formula milk. It also provides free vitamin supplements for eligible women and children. A Midwife or Health Visitor is responsible for signing the ‘Healthy Start’ application form, and this provides an opportunity to offer advice and support with breastfeeding, healthy eating and lifestyle changes.

Each Healthy Start voucher is worth £3.10 and can be exchanged for:

- Plain cows’ milk – whole, semi-skimmed or skimmed. It can be pasteurized, sterilized, long life or UHT
- plain fresh or frozen fruit and vegetables, whole or chopped, packaged or loose
- Infant formula milk that says it can be used from birth and is based on cow’s milk.

Entitlement to free vitamin supplements will be printed on a letter attached to the vouchers.

Eligible women and children aged over one and under four will receive one voucher per week, worth £3.10, for each child/pregnancy. All staff are encouraged to remind women already in receipt of ‘Healthy Start’ vouchers that they should contact the ‘Healthy Start’ office to register the birth of their baby in order to receive the correct number of vouchers. Children under one year old will receive two vouchers, worth a total of £6.20. Babies who are born before the expected date of delivery (EDD) will receive two vouchers until one year after their EDD. Babies who are born after the EDD will receive two vouchers for one full year from the date of delivery to their first birthday.

Eligible pregnant women or families should complete Part A and contact 0845 607 6823 if they need any help with it. A registered midwife, nurse or medical practitioner should complete, sign and date Part B – the health professional’s statement.

It is vital that all staff engaging with pregnant women, parents and families feel confident to promote the scheme with clients at every opportunity, with the ultimate aim of increasing the uptake of the ‘Healthy Start’ scheme across Highland.
The website also contains pages for the public and beneficiaries, including a ‘qualify wizard’ that women can use to see if they are eligible to get ‘Healthy Start’ vouchers, a downloadable application form, and a ‘Healthy Start’ shop locator with information about local retailers accepting ‘Healthy Start’ vouchers.

NB Healthy Start voucher value correct as at April 2012.

2.1 Distribution of Healthy Start vitamins and minerals to eligible women and children in Highland

Healthy Start vitamin drops and tablets are available free of charge to families eligible for the Healthy Start scheme. Vitamin supplements are available for pregnant women and for children from six months up until their fourth birthday.

The maternal vitamin tablets are packed in bottles of 56 tablets. The daily dose is one tablet which contains: 10 milligrams of vitamin C, 10 micrograms of vitamin D3, and 400 micrograms of folic acid.

The children’s vitamin drops are available for children from six months until their fourth birthday. Although eligible infants under six months old are not legally entitled to the supplements, if health care professionals consider that their natural vitamin stores are likely to be low and that the supplements would benefit them, then the supplements can be provided. They are packaged in 10ml bottles providing an eight week supply. The daily dose of five drops contains: 233 micrograms of vitamin A, 20 milligrams of vitamin C, and 7.5 micrograms of vitamin D3.

Health professionals can order Healthy Start vitamins through their local Healthy Start Vitamins administrator. You can find out who your local administrator is through the Lead Nurse’s office. Maternal tablets have a shelf life of two years; however the children’s drops only have a shelf life of 10 months, so care should be taken not to over order.

Eligible families receive a letter with their healthy start vouchers every month and every 2nd month there is a green flash on the letter demonstrating they are eligible for an eight week supply of vitamins. They should show this ‘green flash’ to their health professional before the vitamins are issued, although there is no requirement for health professionals to collect and return these.
The Role of the Midwife/Public Health Nurse

- Midwives and Public Health Nurses (PHNs) order Healthy Start vitamins as required (no more than once a month) from their local Administration Centre using the Healthy Start Vitamins Order Form 2.
- Midwives and PHNs should be aware of the short shelf life of the maternal vitamins (two years) and the infant vitamins (10 months) when ordering stock.
- The vitamin order will be delivered each month to agreed PHN and Midwifery bases.
- The Midwives and PHNs give out the vitamins to eligible families after viewing either their Healthy Start eligibility letter or their Healthy Start coupon featuring the 'green flash.' This verifies the family’s eligibility for Healthy Start vitamins. There is no requirement for professionals to collect and return the letter or coupons.
- It is best practice for the Midwives and PHNs to record vitamin distribution to eligible clients in their documentation.

It is understood that negotiations are underway at a national level to include the Healthy Start scheme in the national Community Pharmacy Contract Public Health Service. This would improve local access to Healthy Start vitamins for beneficiaries and opportunities to purchase a suitable low cost preparation for non-beneficiaries and fits in with the community pharmacy health promoting role. Pharmacists’ training and expertise about medicines and healthy lifestyles would also support opportunities for conversations around Healthy Start, and signposting to further sources of support where required.
3. How can I support behaviour change?

Changing behaviour is not easy. How many aspirations for change have we all had for ourselves, and how few do we carry through? That’s not surprising, when we consider all the factors which influence what we do, particularly in relation to eating, and how many of these are not within our control. Our environment, our peers, and our opportunities limit our choices, and although inequalities in health are not completely explained by differences in health related behaviour, there is no doubt that deprivation, discrimination, and the stress caused by these do affect our ability to choose to live ‘healthy’ lives.

The NICE PHG 6 (2007) on behaviour change stresses the need to intervene not just at the levels of individuals or families, but also at the level of communities and wider socioeconomic circumstances. Only by affecting change at all these levels will health related behaviours change at a population level. And when working with clients or families we must attempt to reduce inequalities in three ways:

• through reaching those who are most in need;
• through influencing life circumstances;
• and by being careful that we are not focussing all our attention on those whose need is least.

Even when we can make choices, making changes takes commitment, confidence and often support. Most people take time to make changes, we tend to react against being told what to do, and although we may know many of the reasons for change already, we may need information relevant to our own lives at times which suit us. In other words, we may need to be in control, and we need to feel that we can.

“People are generally better persuaded by the reasons which they themselves discovered, than by those which have come into the minds of others.”

Pascal (17thC French Mathematician/Philosopher)

Our eating behaviour and all behaviours are linked to a complex mix of beliefs, attitudes, and what we perceive as normal. Most of all they are very linked to emotions and any intervention which creates guilt or anxiety will inevitably undermine an individual’s ability to change. Understanding those feelings can help people to move on.

Making changes is a process which tends to take place over time, and a professional may play only a small, although significant, part in that process. Most people will make changes on their own.

The role of the practitioner therefore in negotiating change with clients or families is to:

• Act as a guide; helping them to find their own motivation and confidence to change;
• Helping to resolve the ambivalence they may have about changing, and when they are committed to making a change;
• Supporting them to identify solutions for themselves and create a realistic plan of action.
The Motivational Interviewing (MI) approach incorporates principles which should underpin all good practice in supporting people to make changes. Using these principles, and the skills and tactics of MI, or brief interventions based on MI, can make the whole experience less frustrating for both client and practitioner, and can lead to more sustained outcomes.

The goal is:

“To encourage clients to make the case for change and ways of achieving it, rather than having these presented to them by the Practitioner.”

The approach is based on the attitude of:

“...being willing to entertain the possibility that the person has the answers and the wisdom in themselves that makes change possible.”

William Miller 2007

This attitude is rare, and more commonly we slip into advice-giving and directive mode, or what is called The Righting Reflex in MI. It’s a normal human reaction to want to solve others’ problems; to try to make things better, yet the result is usually resistance, simply because control has been taken away from the person.

Practitioners who have undertaken Solihull Approach Training will also be aware of MI principles and their potential application to feeding and nutritional difficulties.

For further information about health behaviour change courses delivered through HPHN see the AT-L or contact the AT-L Administrator

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Part One

Pre-conception and Pregnancy
1. Healthy Weight in Pregnancy Pathway

**PRE PREGNANCY**

- Raise awareness of contraception and the importance of achieving a healthy weight and a good nutritional status prior to a subsequent pregnancy.
- Recommend all women commence folic acid supplements pre pregnancy 400 mcg daily = standard dose. Family history of NTD on maternal side 400mcg daily.
- Use a Health Behaviour Change Approach.
- Highlight importance of achieving a healthy weight and a good nutritional status before pregnancy.
- Offer to monitor:
  - Weight
  - BMI
  - Waist circumference
- Encourage all women of childbearing age and BMI ≥30 to adopt a healthy weight and a good nutritional status.

**PREGNANCY**

- Encourage a healthy diet 'Eatwell Plate' (see appendix 1) refer to ‘Ready Steady Baby!’
- Signpost to local support options to achieve a healthy weight.
- Encourage physical activity.
- If BMI ≥30 follow Pre-pregnancy antenatal and postnatal care pathway for women with obesity.
- All antenatal contacts offer an opportunity to discuss the important benefits which breastfeeding offers mum and baby. Highlight antenatal Peer Buddy Scheme.
- Complete antenatal checklist by 34 weeks gestation.

**POSTNATAL**

- Encourage participation in National Antenatal Education Programme.
- Give Healthy Start application form at booking. Highlight the importance of vitamin supplements in pregnancy and availability of Healthy Start vitamins.
- For midwifery/obstetric guidance refer to ‘Schedule of Care’ and ‘NHS Highland Pre-pregnancy antenatal and postnatal care pathway for women with obesity’.
- All antenatal contacts offer an opportunity to discuss the important benefits which breastfeeding offers mum and baby. Highlight antenatal Peer Buddy Scheme. Complete antenatal checklist by 34 weeks gestation.

Any additional intensive needs identified and addressed using Girfec, KCND
2. Healthy Weight in Pregnancy Schedule of Care

Pre-pregnancy
- Encourage all women to enter pregnancy with a healthy weight. If required, signpost to local support options to reduce weight and improve nutritional status.
- If BMI>30 offer “Managing your weight in pregnancy” leaflet to support discussion regarding healthy weight in pregnancy.
- Raise awareness of the risks and challenges of a raised BMI in pregnancy.
- Raise awareness of possible reduction in accuracy of scanning and monitoring of fetal wellbeing.
- Consider screening for diabetes if BMI≥30.
- Previous gestational diabetes - screen annually for type II diabetes and cardiometabolic risk factors
- Recommend a 400 microgram supplement of folic acid to women of childbearing age who are not using contraception.
- Recommend a 5 milligram supplement for women who are diabetic, taking anti-epileptic drugs, family history of NTD, coeliac or any other malabsorption state.
- Women with sickle cell disease should continue to take their normal dose of 5 milligrams daily throughout pregnancy.
- Raise awareness of healthy food choices and food safety issues.

First point of contact
- Discuss the importance of continuing folic acid supplement until the 12th completed week of pregnancy.
- Measure height, weight and BMI and record in Scottish Woman Held Maternity Record (SWHMR).
- Record thromboprophylaxis risk score in SWHMR as per NHS Highland Thromboprophylaxis Protocol. Review thromboprophylaxis risk score throughout pregnancy.
- If BMI≥30 offer “Managing your weight in pregnancy” leaflet.
- Discuss how a healthy nutritious diet and active lifestyle will benefit mother and baby using ‘Ready Steady Baby!’ to support discussion.
- Give and discuss Healthy Start application form (see NHS Highland’s Information Trail). Sign form as appropriate.
- Raise awareness of the importance of vitamins in pregnancy and the availability of Healthy Start vitamins. Highlight the importance of vitamin D supplements during pregnancy and breastfeeding.
- Ensure BP is taken with appropriately sized cuff.
- If BMI≥30 Follow NHS Highland “Pre-pregnancy antenatal and postnatal care pathway for women with obesity”
- Anaesthetic Review in 3rd trimester if BMI≥40.
- Raise awareness of the importance of dental care during pregnancy.
- Raise awareness of local support options for obese women to minimise weight gain in pregnancy and improve nutritional status.
- Raise awareness of local options for exercise for pregnant women.
### Intrapartum

<table>
<thead>
<tr>
<th>Week</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-25</td>
<td>↓</td>
</tr>
<tr>
<td>28</td>
<td>• Opportunistic discussions re diet and lifestyle using a health behaviour change approach.</td>
</tr>
<tr>
<td></td>
<td>• Assess if eligible and in receipt of Healthy Start vouchers.</td>
</tr>
<tr>
<td></td>
<td>• Check gestational glucose. Offer Oral Glucose Tolerance Test (OGTT) if BMI $\geq 35$ or any other factors for gestational diabetes are present.</td>
</tr>
<tr>
<td></td>
<td>• Offer “Bump to Breastfeeding” DVD and information as per “Highland Information Trail”. Offer contact with Breastfeeding Peer Support Worker.</td>
</tr>
<tr>
<td>34</td>
<td>↓</td>
</tr>
<tr>
<td>36</td>
<td>• Ensure antenatal breastfeeding checklist is complete in SWHMR.</td>
</tr>
<tr>
<td>37 - Term</td>
<td>↓</td>
</tr>
<tr>
<td>Intrapartum</td>
<td>• Ensure women with BMI $&lt;18$ or $&gt;35$ have been reviewed by Obstetric Maternity Team.</td>
</tr>
<tr>
<td></td>
<td>• If BMI $&gt;40$ re-measure maternal weight and record in SWHMR.</td>
</tr>
<tr>
<td></td>
<td>• Ensure women with BMI $&gt;40$ have been reviewed by Anaesthetic Team and have had the opportunity to discuss their documented anaesthetic management plan for labour and delivery.</td>
</tr>
<tr>
<td></td>
<td>• If BMI $&gt;40$ carry out risk assessment for manual handling requirements.</td>
</tr>
</tbody>
</table>

### Postnatal

<table>
<thead>
<tr>
<th>Week</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-25</td>
<td>↓</td>
</tr>
<tr>
<td>28</td>
<td>• Assess thromboprophylaxis risk assessment score and give thromboprophylaxis as indicated.</td>
</tr>
<tr>
<td></td>
<td>• Encourage early mobility in women with BMI $\geq 30$.</td>
</tr>
<tr>
<td></td>
<td>• If receiving Healthy Start vouchers advise to phone Issuing Unit to inform of birth of baby (vouchers will double following baby's birth until one year of age).</td>
</tr>
<tr>
<td></td>
<td>• Discuss the availability of Healthy Start vitamins for eligible breastfeeding mothers until baby is one year old.</td>
</tr>
<tr>
<td></td>
<td>• Offer contact with Breastfeeding Peer Supporter and breastfeeding information as per “Highland Information Trail”.</td>
</tr>
<tr>
<td></td>
<td>• If history of gestational diabetes advise OGTT at 6 weeks postnatal and annual screening for type II diabetes and cardiometabolic risk factors by primary care team.</td>
</tr>
<tr>
<td></td>
<td>• Raise awareness of the availability of local support options to achieve a healthy weight and improve nutritional status.</td>
</tr>
<tr>
<td></td>
<td>• Raise awareness on local options for exercise and activity.</td>
</tr>
<tr>
<td></td>
<td>• Raise awareness of contraception choices and the importance of planning for a future pregnancy - encourage to achieve healthy weight and optimum nutritional status prior to conception.</td>
</tr>
</tbody>
</table>

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*Warning - Document uncontrolled when printed*

**Version:** 2  
**Date of Issue:** September 2012  
**Page 23**  
**Date of Review:** September 2014
3. Introduction to Healthy Weight in Pregnancy

Motherhood is a time of great physical, psychological and social change and it is also a time in a woman’s life when she is likely to try to address her lifestyle and make changes to improve her health. A pregnant woman of an unhealthy weight, with nutritional deficiencies and an inactive lifestyle will face significant health risks.

Maternal obesity is a risk factor which is associated with an increase in rates of stillbirth and neonatal death (CEMACH 2007). The fetus is at greater risk of being large for dates and suffering fetal distress and birth injury. The greater the maternal BMI, the higher the risk of congenital abnormality (CMACE/RCOG 2010). However, scanning images are more difficult to obtain resulting in reduced detection of malformations. The fetal heart rate is more difficult to monitor during pregnancy and labour.

Although the mechanisms which link maternal obesity and congenital anomaly are not fully understood, weight reduction and tight glycaemic control could help reduce risk. Following a Red Pathway, Keeping Childbirth Natural and Dynamic (KCND) and delivery in a Consultant-led unit could reduce the incidence of perinatal morbidity and mortality.

There is strong evidence that nutritional status at conception is an important determinant of fetal growth. The diet and lifestyle of a pregnant woman will continue to impact on her growing child’s health and wellbeing for years afterwards. A child born to an obese pregnant woman is at an increased risk of developing obesity and metabolic disorders in childhood. Inadequate or poor nutrition in pregnancy can lead to a child being predisposed to hypertension, diabetes and coronary heart disease in later life.

A woman is much more likely to have an inadequate intake of key nutrients if she is in the lowest social classes compared with a woman in the highest social classes. There may be obstacles facing a pregnant woman attempting to make changes to her diet. These issues may be particularly relevant for a disadvantaged woman:

- Lack of money
- Lack of cooking skills
- Lack of cooking equipment or facilities where she lives
- Lack of access to shops selling fresh, affordable and high quality food
- Dislike of particular foods or categories of foods

Practitioners must be aware of the challenges that can affect the lifestyle choices a woman makes. Giving a woman a list of foods to eat and avoid in pregnancy may not be sufficient to motivate her to eat a healthy diet.

Research demonstrates that women want practitioners to address the issues of obesity and weight management directly and support them in a non-judgemental way. When discussing nutrition and lifestyle issues, using a ‘Health Behaviour Change’ approach will encourage a woman to feel empowered and in control of her own health. Information and support should be personalised, relevant, realistic, practical and grounded in a relationship of trust and respect.
4. Pre-conception Care

A Healthy Weight Approach

All women should be encouraged to enter pregnancy and childbirth in the best possible health. Whilst obesity is correlated with health risks during pregnancy it is often too simplistic and unrealistic to advocate weight loss as a solution. Approaches which prioritise improvements in health over weight loss are more likely to result in sustainable, long term changes. Many women will have successfully lost weight in the past (with compliance and willpower), but find that weight loss maintenance is unsustainable, become demoralised and then revert to less healthy behaviours; this weight yo-yoing is common, is associated with health risks and undermines self esteem.

Women who are overweight or obese should be advised to maintain their current weight and identify lifestyle changes which are beneficial for their own sake, rather than for weight loss:

- Eating a varied, healthy balanced diet of food that they enjoy
- Learning to recognise signals of hunger and fullness as cues to eating, rather than external cues.
- Getting fit for pregnancy and childbirth through being active

This is not about ‘dieting’, deprivation and restraint; it is about improving maternal and infant health outcomes through positive changes in behaviour.

If a woman has a BMI $> 30$ care should be planned using NHS Highland's “Pre-pregnancy, antenatal and postnatal care pathway for women with obesity” see next page.

The ‘Eatwell Plate’ (Appendix 1), NHS Highland’s “Managing your weight in pregnancy” leaflet (Appendix 4) and ‘Ready Steady Baby!’ can be used to support discussions around health behaviour.
Pre-conception & Pregnancy

**Pre-pregnancy, antenatal and postnatal care pathway for women with obesity**

Additional Information

This pathway details the additional care management needs for all pregnant and pre-pregnant women with a Body Mass Index (BMI) over 30 kg/m².

**Body Mass Index (kg/m²)**

- Underweight: less than 18.5
- Healthy weight: 18.5 - 24.9
- Overweight: 25 - 29.9
- Obese: 30 - 39.9
- Morbidly Obese: 40 or more

It is essential that women with a high BMI are engaged in discussions and decisions about their care to promote their well-being and to ensure their babies get the best start in life. This follows the Getting it right for every child (GIRFEC) principles of early assessment and early intervention.

All women should be made aware of the advantages of a healthy diet and lifestyle during pregnancy. It is particularly important that women with a BMI >30 are informed of the risks of obesity in pregnancy. Further advice on nutrition can be found in NHS Highland’s “Maternal and Child Nutrition Best Practice Guidance”.

Health professionals can use ‘Ready Steady Baby!’ and NHS Highland’s ‘Managing your weight in pregnancy’ leaflets to support discussions with pregnant women around their diet and lifestyle.

**Folic Acid**

To reduce the risk of neural tube defects (NTD) all pregnant women should be advised to take a daily supplement of 400 micrograms (mcg) folic acid per day. This can be bought from some pharmacies, supermarkets and health supplement retailers and is also contained in most pregnancy multi-vitamins.

In 2010 the Scientific Advisory Committee on Nutrition (SACN) concluded that current evidence does not support a 5mg folic acid dose as a recommendation for women with a BMI >30. However, if a woman is taking anti-epileptic drugs, has a family history of neural tube defects (NTD), or has coeliac disease or another malabsorption state she should be advised to take a 5 milligrams (mg) supplement.

NB Folic Acid 5mg is only available on prescription and can be requested from your GP.

**Vitamin D**

All pregnant and breastfeeding women should be advised to take a supplement of Vitamin D 10mcg daily.

For women not eligible for Healthy Start, Vitamin D 10 micrograms (mcg) can be bought from some pharmacies, supermarkets and health supplement retailers and is also contained in most pregnancy multi-vitamins.

**Breastfeeding**

Obesity is associated with low breastfeeding initiation and maintenance rates. Women should be advised of the availability of additional support options (e.g., infant feeding clinics, local breastfeeding trainers, peer supporters).

Healthy Start scheme

Healthy Start replaced the Welfare Food Scheme in 2006 and is a Government initiative to improve the health of pregnant and breastfeeding women and their babies. Two vouchers a week will be issued for infants until their first birthday. Healthy Start vitamins are free to eligible pregnant women and children. The maternal vitamins contain folic acid 400mcg, Vitamin D 10mcg and Vitamin C 70 milligrams (mg). More information is available from www.healthystart.nhs.uk

Blood pressure monitoring

The Pre-eclampsia Community Guideline (PRECOG 2004) Recommendation 6 relates to practice to reduce errors in blood pressure measurement and includes advice regarding use of an appropriate size of cuff:

- Standard size (13x23cm) arm circumference up to 33cm
- Large size (18x29cm) arm circumference between 33 - 41cm
- Thigh cuff (18x36cm) arm circumference of 41cm or more

NB there is less error introduced by using too large a cuff than by using too small a cuff.

Moving and Handling

Individual risk assessment of women for manual handling requirements should be carried out throughout pregnancy, during labour, and also in the postnatal period. Appropriate equipment should be used where required. (NB Raigmore Theatres have table extensions and a trial ‘hover mat’ is currently available in Theatre 2.)
Maternal & Child Nutrition Best Practice Guidance - Revised 2012

Pre-conception & Pregnancy Care

For women with BMI > 30

- Strongly recommend active management of third stage of labour
- Suture subcutaneous tissue space at caesarean section if more than 2cm subcutaneous fat
- Offer weight management advice and support in primary care
- Offer information and advice about risks of obesity and pregnancy and offer ‘Managing your weight in pregnancy’ leaflet
- Commence 400mcg of folic acid daily prior to conception (5mg if additional risk factors)
- Measure weight and height, calculate and document BMI in SWHMR and summary sheet
- Use appropriate size BP cuff
- Continue daily folic acid supplement to 12 weeks
- Advise 10mcg Vitamin D daily throughout pregnancy
- Assess and document thromboembolism risk - thromboprophylaxis if indicated
- Offer information and about risks of obesity and pregnancy and how to minimise them. Offer ‘Managing your weight in pregnancy’.leaflet.
- Consider referral to local dietetic service.
- Assess and document thromboembolism risk - thromboprophylaxis if indicated
- Use appropriate size BP cuff

Additional care for women with BMI > 35

- As above plus:
  - Refer for specialist care (KCND Red Pathway)
  - Consider pre-eclampsia risk and consider aspirin 75 milligrams daily from 12 weeks until delivery. Consultant Obstetrician to document management plan in SWHMR if one or more additional risk factors present
  - Book for glucose tolerance test at 24-28 weeks

Additional care for women with BMI > 40

- As above plus:
  - Arrange antenatal Anaesthetic Review
  - Schedule antenatal care and monitoring of blood pressure as per individual needs based on KCND
  - Advise birth in consultant-led obstetric unit which has adult and neonatal intensive care facilities (Raigmore and RAH)
  - Alert theatre staff if weight > 120kg and requires operative intervention
  - Inform Anaesthetist on admission to labour suite
  - Establish early venous access
  - Consider early epidural in labour
  - Senior Obstetrician and Anaesthetist informed and available to attend operative vaginal or abdominal delivery as required

- First pregnancy, previous pre-eclampsia, > 10 years since last baby, > 40 years, first degree relative with family history of pre-eclampsia, booking diastolic BP > 80mmHg, booking systolic > 150mmHg, booking proteinuria, > 1+ on more than one occasion, multiple pregnancy, and certain underlying medical conditions such as antiphosplipid antibodies or pre-existing hypertension, renal disease or diabetes.

- As above plus:
  - Anaesthetic review - re-measure maternal weight and record in SWHMR - risk assessment for manual handling requirements
  - Review by Consultant Obstetrician by 36 weeks
  - Give advice and support regarding benefits, initiation and maintenance of breastfeeding (inform of local support options)
  - Individual assessment for presentation and fetal wellbeing - ultrasound scan as required
  - Encourage to mobilise as early as practicable
  - Assess thromboembolism risk - thromboprophylaxis if indicated
  - Give advice and support regarding benefits, initiation and maintenance of breastfeeding (inform of local support options)
  - Refer to primary care for ongoing weight management advice and support
  - If gestational diabetes - glucose tolerance test at 6 weeks postnatal - refer to GP for annual screening for type II diabetes and cardio-metabolic risk factors - offer lifestyle and weight management advice

Booking visit: Throughout pregnancy: Third trimester: Labour and delivery: Following childbirth:

Pre-conception: Consulted you or in primary care.


Lorna MacAskill, Midwife.
Version 1 - issued March 2012
5. Vitamins in Pregnancy

5.1 Folic acid

Folate (folic acid) is one of the B-group of vitamins and works with vitamin B12 to form healthy blood cells. It also helps reduce the risk of neural tube defects (NTD) such as spina bifida and anencephaly in unborn babies.

Adults require 0.2 milligrams of folic acid a day and most people should be able to get the amount they need by eating a varied and balanced diet. However, a woman who is pregnant or thinking of having a baby requires additional folic acid to help prevent NTDs and must be advised to take a 400 micrograms supplement at least one month prior to conception until the 12th completed week of pregnancy.

If a woman is diabetic, taking anti-epileptic drugs, has a family history of NTD or has had a previous pregnancy affected by a NTD, coeliac disease or other malabsorption state, she should take a 5 milligram supplement of folic acid. A woman who has sickle cell anaemia should continue to take her normal dose of 5 milligrams of folic acid throughout pregnancy.

In 2010 the Scientific Advisory Committee on Nutrition (SACN) concluded that current evidence does not support a 5mg dose of folic acid as a recommendation for women with a BMI $>30$. Therefore women with a BMI $>30$ should take a 400mcg supplement of folic acid unless they have an additional risk factor for Neural Tube Defects.

Folic acid supplements are the most effective way to reduce the risk of having a baby affected by a Neural Tube Defect. Each year up to 1200 pregnancies in the UK are affected by NTD - 85% are terminated and around 150 babies are born severely disabled with spina bifida. Taking folic acid, at the correct dose, could prevent over 75% of these affected pregnancies (ASBAH 2009).

The neural tube, from which the spinal cord and brain development, is formed within the first 25 days of pregnancy. Therefore, additional folic acid is essential in the first six weeks of a pregnancy. Folic acid supplementation is required pre-conceptually to ensure adequate levels are present in the earliest stages of pregnancy.

There is evidence that almost half of pregnancies are unplanned. Therefore, it is essential that a woman of childbearing age is informed of the importance of taking folic acid supplements when she is not using contraception.

Demographics show that it is the poorest and most educationally underprivileged women who are most at risk of having a pregnancy affected by NTD. A woman from a disadvantaged group is less likely to take folic acid or other supplements before, during or after pregnancy (Scottish Government 2011). Therefore, it is crucial that professionals take every opportunity to highlight the importance of folic acid supplementation to all women whenever contact with services is made.

A woman who is already pregnant must be advised to take a folic acid supplement as early in pregnancy as possible and to continue it until the 12th completed week of pregnancy. Supplements can be purchased from pharmacies or supermarkets, or can be prescribed by a GP/nurse prescriber.

A woman should also be encouraged to eat foods rich in folate as part of a healthy diet. Folic acid can be found in green, leafy vegetables, fortified cereals and breads, pulses, oranges, grapefruit and bananas. Further information can be obtained from www.eatwell.gov.uk and ‘Ready Steady Baby!’
5.2 Vitamin D

All pregnant and breastfeeding women should be advised to take a 10 microgram (400 units) supplement of vitamin D.

Vitamin D is essential to keep bones and teeth healthy and is particularly important in preventing new-born babies from developing rickets. Lack of vitamin D during pregnancy may adversely affect fetal bone mineralisation and accumulation of vitamin D stores for the early years of life.

Summer sunlight is the main source of vitamin D but many people in Britain may not get enough, especially during winter months. This is particularly relevant in the north of Scotland. Vitamin D is found in only a few foods eg. oily fish, margarine, and fortified breakfast cereals. There is no evidence that a supplement at the dose recommended, in addition to what is normally consumed in the diet, is harmful.

A woman of South Asian, African, Caribbean and Middle Eastern descent, and those who remain covered when outside, are at greatest risk of deficiency. Teenagers will require additional supplementation as they have greater nutritional demands. An obese woman has an increased risk of nutritional deficiencies and will particularly benefit from vitamin D supplementation during pregnancy and breastfeeding.

5.3 Vitamin C

Vitamin C helps the body absorb iron and maintain a healthy immune system. Eating a healthy, balanced diet containing plenty of fruit and vegetables will supply sufficient vitamin C for most people, but a supplement will help to ensure that a pregnant or breastfeeding woman is receiving enough (DOH 2009).

5.4 Vitamin A

A pregnant woman should be reminded to avoid supplements containing vitamin A as these may cause fetal abnormalities (DOH 2009).

5.5 ‘Healthy Start’ Vitamins

‘Healthy Start’ maternal vitamin and mineral supplements contain the recommended doses of folic acid, vitamin D and vitamin C required by pregnant and breastfeeding mothers.
5.6 Other considerations

**Peanuts**
There is no evidence that eating peanuts during pregnancy and breastfeeding will influence the chances of a child developing a peanut allergy (DOH 2009). The Government advises that peanuts and foods containing peanuts can be eaten during pregnancy and breastfeeding irrespective of whether there is a family history of allergens.

**Caffeine**
High levels of caffeine during pregnancy can increase the chance of miscarriage. It can also result in babies having a lower birth weight. A pregnant woman should limit her caffeine intake to less than 200 milligrams per day (DOH 2009).

Further information on foods to avoid in pregnancy and precautions to take when preparing food can be found on www.eatwell.gov.uk and in ‘Ready Steady Baby!’

**Dental care**
Pregnancy provides an opportunity to remind a woman to register with a dentist. Baby teeth calcification begins at five months in utero; adult teeth calcification begins just before or shortly after birth. If a woman experience any problems registering with a dentist then the NHS Dental Helpline number should be given 0845 644 2271.

A pregnant woman should be reminded of the importance of dental care at booking and again at 22 weeks gestation.
6. Physical Activity in Pregnancy

Regular exercise is an essential part of staying healthy. People who are active live longer and feel better. Exercise can help maintain a healthy weight and contributes to mental wellbeing. It can delay or prevent diabetes, cardiac problems and some cancers.

Gentle physical activity during pregnancy is safe and does not harm the growth and development of the fetus. Physical activity can reduce the likelihood of developing high blood pressure, diabetes, thromboses, pre-eclampsia and backache in pregnancy. It also has the added benefit of positively affecting mood, self-esteem and body image as well as helping promote restful sleep and relieving stress, depression and anxiety.

Swimming and brisk walking are particularly recommended in pregnancy but most women can continue their normal physical activity. If a woman exercises regularly prior to pregnancy she should be able to continue high intensity exercise activities, such as running and aerobics, with no adverse effects. A woman who has not previously exercised should be encouraged to participate in gentle activity throughout pregnancy, starting with 15 minutes aerobic activity three times a week, increasing to 30 minutes daily. There are many proven benefits to aquanatal exercise: Leisure Centres can provide details of local classes.

There are many local options for exercise available - with many having the added advantage of meeting other women who are pregnant.

Postnatally, it is important for a woman to exercise to return to her pre-pregnancy weight. A woman who is overweight or obese should be encouraged to exercise to assist weight loss and promote health and wellbeing. Many organised activities encourage women to meet other new mothers.

Regular exercise establishes good habits and encourages the whole family to become active.

The ‘High Life’ scheme allows affordable access to The Highland Council’s leisure facilities. Families on certain benefits can access facilities for 50p per activity (price correct as at April 2010).

Highland area: contact a local leisure centre or access information at: www.highland.gov.uk/leisureandtourism/sportsfacilities/highlife

Argyll & Bute area: contact a leisure centre or access information at: www.argyll-bute.gov.uk

Concessions are available for families and individuals on certain benefits.
7. Postnatal Issues

“Women who gain excessive amounts of weight are more likely to stay overweight or obese after the baby is born.”

(Goldberg 2005)

Obesity can have a negative impact on the mental health of a woman and can lead to feelings of isolation and stigmatisation. There may be a reluctance to access maternity care or to attend antenatal and postnatal groups and classes. An empathic, non-judgemental approach will encourage a woman to have a positive experience of maternity services and to access support when required.

An obese woman is less likely to breastfeed her baby. This can be due to positional issues, body image issues or the possibility of an impaired prolactin response to suckling (CMACE/RCOG 2010). All women should receive advice and support to initiate and maintain breastfeeding but an obese woman may require additional support and should be informed of local support options (Infant Feeding Clinic, local breastfeeding trainer, peer support). If women lose weight by eating healthily and participating in regular exercise, the quantity and quality of their breastmilk will not be affected.

The importance of embarking on a subsequent pregnancy at a healthy weight and with a good nutritional status must be emphasised.

After the birth it is important to emphasise the importance of planning for a future pregnancy. Contraception must be discussed and a woman should be supported to address diet and lifestyle issues during this time.

A woman should be encouraged to participate in physical activity, eat a healthy diet and should be signposted to local services which support this.

New mothers are encouraged to participate in exercise with their babies. Many leisure centres offer ‘mother and baby’ swimming sessions and other family based activities.

Discussing the principles to promote understanding of the ‘eatwell plate’ model of healthy eating will mean that a mother will be more likely to continue healthy eating practices. This will impact on the choices she makes when feeding her baby and her family.
Part Two

Infant Feeding
Birth - Six months
1.1 Breastfeeding Pathway Birth-Six months

Birth
Skin to skin offered to all mothers

Offer all mothers help to initiate breastfeeding at delivery

Weigh all babies at birth.

Mother wishes to breastfeed - Ensure correct position and attachment and offer assistance with first feed.

If breastfeeding well, continue with baby-led feeding and continued support for positioning and attachment as part of routine postnatal care.

Initiate completion of postnatal checklists in maternity hand held records (SWHMR). (See guidelines for completing postnatal checklist and postnatal discharge leaflets in support of breastfeeding).

Breastfeeding support from CMW till day 10. Ongoing support from National and Local Breastfeeding support Groups and IFA. Information card on National and local breastfeeding support. Ensure awareness of Breastfeeding Welcome Sticker Scheme.

Mother wishes to formula feed her baby - (See Formula Flow Chart)

Refer to relevant flow chart for problem feeders. (See Hypoglycaemic Policy).

Continued HV support for breastfeeding as required Hall 4.

Rooming - in for all babies.

Offer feed again within 6 hours.

Weigh babies as near 72 hours as possible hospital or community. (See Weight Loss Guidelines)

HV Primary visit on day 11-15, weigh baby and complete breastfeeding checklist. (See Primary HV Postnatal Checklist and Guidelines) Refer to breastfeeding referral pathways for breastfeeding problems or weight loss issues.

Identify and address breastfeeding support options for families with additional needs.

Support exclusive breastfeeding for 6 months with the appropriate introduction of complementary foods.
1.2 Formula Feeding Pathway Birth-Six months

Birth - Skin to skin offered to all mothers

Offer all mothers help to initiate breastfeeding at delivery.

Weigh all babies at birth.

Rooming - in for all babies.

Offer whey based formula feed of mother’s choice. This is especially important for at risk babies. (See Hypoglycaemic Policy)

Offer formula feed again within 6 hours of first feed.

Refer to relevant flow chart for problem feeders. (See Hypoglycaemic Policy)

If formula feeding well, continue with baby-led feeding and continued support as part of routine postnatal care.

Provide 1:1 tuition on how to safely sterilise equipment and make up formula feeds

Initiate completion of postnatal checklist in SWHMR

Weigh babies on day three hospital or community. If feeding going well could be weighed on day 5 as per KCND Guidelines.

Support and advice from CMW till day 10. KCND

HV Primary visit on day 11-15 weigh baby.

Continued HV support and advice as required.

Identify and address formula feeding support options for families with additional needs. Girfec

Encourage 1st stage formula whey based milk for one year with the introduction of complementary foods at 6 months.

Refer to NHS Highland’s Information Trail for leaflets and resources

*Refer to specific guidelines for the preterm baby
1.3 Birth skin to skin offered to all mothers.

Step 4 | Point 4: NHS Highland Breastfeeding Policy

For every mother and baby to reap the benefits of skin to skin contact, it should be offered to all mothers as soon as possible following birth regardless of their feeding intention or mode of delivery. The experience should be relaxed, unhurried and uninterrupted and should continue for at least 1 hour or until first feed. Help with breastfeeding should be given as soon as the baby shows signs of willingness to feed. The mother’s feeding intention will be revealed at this point if they have not volunteered this information already.

“All mammals that are left for a sufficient length of time in a quiet uninterrupted environment will exhibit a set pattern of behaviour and eventually demonstrate pre feeding activities.”

(Righard L, Alade MO 2009)

Documents of date and time of offer of skin to skin and reason for discontinuing skin to skin should be recorded in the SWHMR, in the Labour Details Section.

Please note that skin to skin should not be interrupted eg: to weigh baby; perform a baby check; or suture a perineum. (See both: NHS Highland, Postnatal Guidelines for completing postnatal notes; and NHS Highland, Guide for Midwives in Theatre Fulfilling BFI recommendations updated 2012)

Benefits of skin to skin

<table>
<thead>
<tr>
<th>Generic benefits</th>
<th>Mother</th>
<th>Baby</th>
</tr>
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<tbody>
<tr>
<td>• Calms the mother and baby</td>
<td>• Stimulates the release of oxytocin - resulting in uterine contraction - reducing the risk of post partum haemorrhage (PPH)</td>
<td>• Regulates the baby’s temperature apex and respiratory rate</td>
</tr>
<tr>
<td>• Encourages mother/ baby bonding</td>
<td>• Primes the prolactin receptor sites ensuring breastmilk supply is not delayed. Also increases the potential for ongoing adequate milk supply.</td>
<td>• Stimulates the baby to exhibit pre-feeding behaviour</td>
</tr>
<tr>
<td>• Has been shown to increase the success and duration of breastfeeding</td>
<td>• Gives mothers confidence to handle their baby.</td>
<td>• Promotes longer and more restful sleep</td>
</tr>
<tr>
<td>• No short or long-term negative effects.</td>
<td></td>
<td>• Reduces the potential risk of hypoglycaemia probably due to early maintenance of neonatal temperature and probability of feeding during the immediate postnatal period.</td>
</tr>
<tr>
<td>• Helps with implementing the other steps and points in the UNICEF/ WHO Baby Friendly Initiative.</td>
<td></td>
<td>• Reduces crying in the baby.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The baby is colonised with the mother’s bacteria which will build up the baby’s immune system.</td>
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**Guideline for preterm infant birth-six months, skin to skin**

Skin to skin contact at birth is of great benefit for the preterm infant too, often referred to as kangaroo care. This however will depend on degree of prematurity and infant’s condition at delivery. The Paediatrician or Advanced Neonatal Nurse Practitioner (ANNP) will decide if the baby is stable enough to allow the baby to benefit from skin to skin contact at birth. As with a term baby, preterm infants should be dried thoroughly and covered with a warm dry towel, but with a premature infant a hat should be placed on their head to prevent further heat loss.

### KANGAROO CARE

The premature baby will benefit from all the advantages of skin to skin that a term baby does but it will also continue to reap the benefits of frequent episodes of skin to skin contact or kangaroo care once transferred to the neonatal unit. For example:

- Stimulates the production of breastmilk volume in mothers of preterm infants (Hurst et al 1997).
- Can also help in establishing and maintaining breastfeeding.
- Research has shown that Kangaroo care stabilises heart rate, increases oxygen levels and lowers stress levels.
- Helps with weight gain and sleeping patterns.
- Some of the protective factors of breastmilk operate via the entero-mammary immune system. Skin to skin contact may be particularly important to enable breastfeeding mothers of premature infants produce specific antibodies against the nosocomial pathogens in the neonatal environment (Hanson Korotkova 2002).

1.4 Initiating Breastfeeding

Offer all mothers help to initiate breastfeeding soon after birth.

Steps 4 & 5: NHS Highland Breastfeeding Policy

All mothers should be offered help with initiating a breastfeed as soon as baby demonstrates feeding cues. A mother cannot fully appreciate the emotions she will feel following childbirth. The hormones of lactation will stimulate mothering instincts and overwhelming feelings of love. At no other time will levels of hormones and natural mothering and nurturing instincts be so abundant. This window of opportunity can never be revisited. She may not have decided how she wishes to feed and cannot make a fully informed decision until she has experienced these emotions (Rosenblatt JS, 1992).

Evidence demonstrates that mothers are not offended by the offer of help to initiate breastfeeding and do not feel coerced into breastfeeding.

☑ Document the details of the first feed in the Labour Section of SWHMR notes.

If a mother states that she wishes to formula feed, then offer her a bottle of whey dominant formula of her choice and she can feed her baby soon after delivery. Feeding soon after delivery is especially important for the compromised baby. (See NHS Highland Hypoglycaemic Policy 2011.)

Guideline for preterm infant birth-six months, initiating breastfeeding

All mothers should be offered help with a breastfeed once the baby demonstrates feeding cues and shows interest at the breast. The premature baby, if its condition allows, is no exception. Early access to the breast will help to prime the prolactin receptor sites that surround the milk producing cells in the breast ensuring an ongoing adequate milk supply. Unprimed receptor sites can lead to insufficient milk supply. If baby is not stable enough to breastfeed at birth, it is important to express as soon as possible to prime these receptor sites. Even a few drops of colostrum will help stimulate milk production and can be given to the baby via syringe or Nasogastric (NG) tube regardless of gestation.

The Secretory Immunoglobulin A (SIgA) will coat and protect the permeable membrane of the preterm infants immature gut and help prevent pathogens passing through the porous membrane. Health professionals in the neonatal unit should have an individual discussion with the parents of babies likely to be admitted to the neonatal unit. The conversation should explain the critical importance of breastmilk to the preterm baby and reiterate evidence from the Breastfeeding Expert Group 2005 findings that breastmilk was the optimal form of nutrition for preterm and low birth weight infants. Evidence of this discussion should be entered in the baby’s records.

☑ Record method of feeding at birth in the Scottish Birth Record (SBR) by liaising with labour suite staff who will enter data in SBR.
Guideline for preterm infant birth-six months, initiating breastfeeding

The preterm baby will not just receive the generic benefits that breastfeeding provides but they can also receive the preterm benefits that breastfeeding offers for example;

Breastfeeding the pre-term or low birth weight neonate has been shown to –
• Increase bonding between mother and child – (Kron RE, et al 1997)
• Lower the stress levels of neonates
• Helps to maintain their temperature
• Stabilize blood glucose levels
• Helps to maintain their oxygen (O$_2$) and carbon dioxide (CO$_2$) levels
• Reduce the risk of apnoeas
• Regulate their heart rate – (Bier et al 1997)
• Increase neurological development due to breastmilk containing long-chained polyunsaturated fatty acids

Preterm infants are more susceptible to certain infections as immunity is prematurely developed. Neonatal Units carry a risk of infectious disease microbes which are often quite resistant to many antibiotics. Neonates are often involved in invasive procedures that occur during intensive care which render them more susceptible to pathogens.

Preterm infants are at specific risk of:
1. Necrotising Enterocolitis (NEC)
   • This condition damages the intestinal lining of the baby’s gut and can result in death of parts of the gut. Major cause of morbidity in preterm infants in fact are 20 times less likely to get NEC if breastfed.
   • Interleukin (IL)-8, a proinflammatory cytokine, plays an important role in the pathophysiology of NEC. Breastmilk is found to dramatically suppress the activation of (IL)-8 – (Minekawa R et al 2004).

2. Premature retinopathy
   • Preterm infants are especially susceptible to eye conditions which may cause blindness as they receive O$_2$ at greater levels than they would have experienced in-utero. Breastmilk contains docosahexaenoic acid which has been shown to promote development of the eye, especially the retina.

Preterm breastmilk contains more protein, more sodium, more calcium and less lactose than term breastmilk. The extra protein consists of the building blocks necessary for growth as well as immunoglobulins to protect the preterm baby from infection. Fortification of breastmilk will be required for babies less than 32 weeks or less than 1500g see page 47.
1.5 Good hospital/community practices

a) Positioning and attachment

<table>
<thead>
<tr>
<th>Steps 4 &amp; 5</th>
<th>Point 4: NHS Highland Breastfeeding Policy</th>
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When mothers decide to breastfeed, help should be offered to assist her when baby demonstrates signs of interest at the breast. Principles of good positioning and attachment should be followed by helping the mother into a comfortable position to ensure baby latches on effectively right from the start. Documentation of time of offer of help with first feed and comments on its success should be entered in the Labour Birth Record.

✔ Method of feeding at birth should be entered in the SBR.

(See Guide for Completing The NHS Highland Postnatal Checklist March 2010).

Mothers should be given the leaflet “Breastfeeding your baby: the problems with supplementary feeds and dummies” and also the “Feeding cues” card after they deliver. It is vital that all midwives and health professionals dealing with mothers and babies have the appropriate training in the UNICEF/WHO breastfeeding management education necessary for their requirements. This adheres to Step 2 and Point 2 of the NHS Highland Breastfeeding Policy.

An obese woman is less likely to breastfeed her baby successfully and may require additional support throughout the postnatal period, as per CEMACE/RCOG Joint Guideline The Management of Women with Obesity in Pregnancy March 2010 (see page 37).

Guideline for preterm infant birth-six months, positioning and attachment

Premature babies may not always be able to breastfeed effectively depending on their degree of prematurity. However all attempts should be made to encourage mothers to express frequently to ensure an adequate milk supply. The recommended intervals are at least 8 times in a 24 hour period which includes expressing at least once at night.

Hand expression should be taught in the early days allowing for collection of small amounts of colostrum, aiding hormonal stimulation and boosting mother’s confidence and autonomy. Evidence suggests that double pumping while using an electric pump was quicker, preferred by mothers, achieved greater amounts of expressed breastmilk and increased prolactin levels (BEG 2005). Ensuring adequate amounts of expressed breastmilk will reduce the need for supplementation with formula. Evidence suggests that mothers who are producing 750ml of expressed breastmilk (EBM) or more in a 24 hour period by the time their baby is 2 weeks old have an excellent chance of continuing to produce good volumes (UNICEF 2010) If the infant’s condition allows, frequent periods of skin to skin will help with the increase of hormones of lactation and stimulate the rooting reflex, baby may even attempt a few licks and nuzzles at the breast which will be emotionally invaluable for mothers. NG tube feeding of EBM whilst baby is nuzzling at the breast will help associate nuzzling at the breast with a full tummy. If a baby is able to suck, occasional attempts to assist with positioning and attachment should be encouraged as long as baby can tolerate these attempts. This will also give the mothers an opportunity to practice positioning and attachment skills. NG feeds or cup feeds of EBM are fundamental in ensuring the success of breastfeeding. The technique of breast compression while the baby is attempting to position and attach at the breast will reward the infant’s efforts.
### b) Offer feed again within six hours of delivery.

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<tr>
<th>Steps 5 &amp; 8</th>
<th>Point 4: NHS Highland Breastfeeding Policy</th>
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Most babies will breastfeed again within a few hours of the initial feed at delivery. However, after the initial feed it is very important for staff to encourage a second feed within six hours of having the first feed. This will ensure that the mother and baby have had the help that they require to successfully feed for a second time.

It is good practice to encourage mothers to look out for baby’s feeding cues, thus reducing the chance of missing out on a feed (NHS Highland ‘Feeding cues’ cards). However, if a baby is not interested and appears sleepy, suggest more skin to skin contact within the 6 hour postnatal period and encourage frequent offers of the breast. Hand expressing some colostrum may entice the baby to latch on. Hand expression will also stimulate milk production and ensure an ongoing milk supply. If baby feeds well within the 6 hour period continue with baby-led feeding. If baby is still reluctant to breastfeed follow NHS Highland ‘Hypoglycaemic Policy for the Reluctant Feeder’ 2011. This management is designed for a healthy term baby. Follow the NHS Highland ‘Hypoglycaemic Policy for the At Risk Baby’ 2011.

#### Guideline for formula feeding - offer feed again

Offer a formula feed again within 6 hours of first feed – This is really important in the early hours following delivery to ensure that the baby feeds frequently enough to maintain blood sugar levels.

This also encourages parents to watch for feeding cues and encourages bonding with their baby in the early postnatal period. (See NHS Highland ‘Feeding cues’ cards).

If the baby feeds well within this six hour period then proceed to baby-led feeding. If the baby is reluctant to feed then encourage frequent skin to skin contact and observation for feeding cues.

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*see next page for preterm*
**Guideline for preterm infant birth-six months, offer feed again**

Feeding regime will depend on degree of prematurity, weight and condition of the neonate. A baby under 35 weeks gestation is usually unable to coordinate the suck swallow, breathe sequence and will therefore require NG or orogastric tube feeding. A very low birthweight baby (VLBW) often needs to be given feeds intravenously.

Always remember to deduct volumes of express breastmilk yielded prior to topping up with formula, this not only adds to the benefits offered by breastmilk to the baby but encourages the mother’s attempts to establish breastfeeding.

i) Breastmilk fortifier – Fortifier is routinely added to the EBM of the following infants

- <32 weeks gestation
- Birth weight less than 1500g
- After the baby has been on enteral feeds of volume of 150ml/kg/day for a day then fortifier will be introduced
- If feeds are tolerated well: increase volumes to 170ml/kg/day – two days later
- Duration of fortification of breastmilk will continue until discharge unless the baby is fully breastfed. (NHS Highland Guidelines for Breastmilk Fortifier 2007)

ii) Feeding policy for formula fed infants in Special Care Baby Unit (SCBU)

- Formula fed babies < 2kg at birth or <34 weeks gestation will require, for example Nutriprem 1® until they reach 2 kg or are above 34 weeks corrected gestational age when they will be fed by formula of parent’s choice
- Formula fed infants < 1.5kg at birth will require Nutriprem 1®.
- These infants when reach 2kg of weight will be transferred to Nutriprem 2® and will continue to 6 months corrected gestational age.
- Formula fed infants who have poor weight gain and following a consultation with dietitians and paediatric staff, feeding can commence with eg. SMA High Energy® formula
  - (NHS Highland Feeding Policy for Babies in SCBU Feb 2007).

iii) Prescribing Policy for vitamins and iron

- Birth weight <2.2 kg and or < 34 weeks gestation
- Vitamins
  - Abidec® 0.6ml or Dalivit® 0.3 ml once a day commencing on Day seven
  - Babies fully fed on formula or fortified breastmilk continue vitamins until discharge from SCBU.
  - Babies fully or partially breastfed to continue on vitamins until six months corrected gestational age.
- Iron
  - Sytron® to commence on day 28 and to continue for 1 year
  - Birth weight <1.5 kg Sytron® 0.5 ml x1 daily, increase to 1 ml x1 daily once weight is 1.5 kg
  - Birth weight 1.5 – 2kg or gestational weight <34 weeks – Sytron® 1ml x1 daily

iv) Discharge policy for vitamins and iron

- Babies who are fully fed on Nutriprem 2®, high energy, standard formula or fortified breastmilk – Sytron® to continue to 1st birthday. Stop vitamins
- Babies who are fully or partially breastfed – Sytron® to continue to 1st birthday. Vitamins to continue until six months corrected gestational age and vitamins to be discontinued if baby changes to full formula or fully fortified breastmilk feeds. (NHS Highland Prescribing Policy for Vitamins and Iron, February 2007. Please note this Policy is current practice and is awaiting formal approval.)
c) Rooming-in for all babies

Step 7  Point 4: NHS Highland Breastfeeding Policy

All Baby Friendly Hospitals recommend rooming-in, which means babies stay with their mothers 24 hours a day. Babies should not be removed at night under the misconception that mothers need a good night’s sleep. Evidence shows that keeping mothers and babies together encourages bonding and baby-led feeding. It also helps to discourage supplementary feeds and therefore the risk of triggering allergies etc. The risk of cross infection is also greatly reduced. There is clear evidence for a correlation between rooming-in and longer breastfeeding duration (Lindenberg C. et al 1990).

It is important that mothers are made fully aware of NHS Highland’s rooming-in policy. There is no provision for nursery facilities within NHS Highland premises. Rooming-in is an ideal opportunity for mothers to become experts with their own babies and this will enable them to identify what is normal for their own child. This also provides them with the confidence they will need to manage their baby when discharged from 24 hour professional care.

All rooms should display the NHS Highland “Rooming-in” poster to demonstrate all the benefits that rooming-in offers. Mothers can be given help to settle babies. However all care should ideally be carried out at the mother’s bedside. Clear discussion surrounding bed sharing should take place using the ‘UNICEF Caring For Your Baby at Night’ leaflet. If a woman has made a fully informed decision to bed share, then all criteria should be met and it is recommended that staff take responsibility to check mother and baby on a regular basis. (See ‘Guideline for completing the NHS Highland Postnatal Checklist’).

Guideline for formula feeding - rooming-in

Please note all the points for rooming-in are relevant for formula fed babies but particular attention should be paid to the following:

Clear discussion surrounding bed sharing should take place using the ‘UNICEF Caring For Your Baby at Night’ leaflet. Evidence shows that formula fed infants are more prone to cot death (Alm Bel et al 2002). The UNICEF leaflet advocates that the safest place for formula fed babies are in a cot by the mother’s bed.
Guideline for preterm infant birth-six months - rooming-in

Unfortunately the majority of mothers with babies in the SCBU are unable to have their babies with them 24 hours a day. Mothers and babies who are trying to establish breastfeeding should be prioritised and facilities for rooming-in together should be sought wherever possible. This is especially important prior to discharge.

Sterile, well maintained equipment should be available for mothers to express their milk in close proximity to their babies, ideally within SCBU. Open visiting and a welcoming supportive reception for parents in the neonatal unit will help to ensure the success of breastfeeding.

Bed sharing should be discussed with parents who have an infant who was born preterm or low birth weight and they must be aware that the risk of Sudden Infant death Syndrome is increased in infants who were born below 37 weeks gestation, weighed less than 2.5 kg or are less than three months corrected gestational. UNICEF advocate the safest place is in a cot in the parents room for the first six months of life.
(www.babyfriendly.org.uk)

d) Baby-led feeding

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<th>Point 4: NHS Highland Breastfeeding Policy</th>
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Demand feeding or baby-led feeding is the recommendation from the UNICEF Baby Friendly Initiative. This simply means that babies feed as often as they wish for as long as they wish. No restrictions should be placed on the frequency or duration of feeds. Mothers should be encouraged to observe the feeding pattern to ensure a baby receives a complete feed and empties the breast completely before offering the next breast. This will ensure that the baby receives the lactose at the start of the feed and the richer higher fat content towards the end of the feed which contains all the essential fatty acids. Taking a baby off the breast before the full feed has been taken may lead to deprivation of important fats and calories.

Baby-led feeding is relevant to all mothers regardless of their method of feeding. This will ensure that a baby feeds when hungry and may well feed for different times at each feed. Regular stimulus of the breast will result in an adequate milk supply and mothers must be informed that the breast functions on a supply and demand basis.

If a mother’s milk supply is adequate, additional fluids are not required for a breastfed baby until they are at least six months old, even in hot climates. In hot weather babies may take shorter feeds. This is because the foremilk is watery and thirst quenching breastmilk is water-rich and has a low electrolyte concentration which ensures sufficient free water is available to the baby even in hot conditions. Giving a baby a supplement of water or other fluids may result in less breastmilk being taken and important nutrients being lost.

A mother needs to understand that her baby will very rarely have a routine. She must be informed of the importance of allowing her baby to lead the way with the feeding pattern.
(See ‘Guide For Completing The NHS Highland Postnatal Checklist March 2010’).

Refer to relevant flow chart for problem feeders.
Steps 5, 6, 9 Points 4 & 5: NHS Highland Breastfeeding Policy

Early and exclusive breastfeeding is all a healthy term baby requires to meet its nutritional needs for the first six months of life.

“Healthy, term, newborn, babies are not at risk of developing symptomatic hypoglycaemia as a result of simple underfeeding.”

(WHO 1997)

However some babies may be reluctant to feed, appear unsettled or have risk factors that make them more vulnerable to the risks of hypoglycaemia. Policies and flow charts have been produced to assist with the management and prevention of hypoglycaemia in the newborn. This will ensure that problem feeders or at risk babies are recognised and managed appropriately; thus avoiding risks of hypoglycaemia, admissions to SCBU and unwarranted supplements of formula. (See ‘NHS Highland Hypoglycaemic Policy’ and associated flow charts - 2011).
Infant Feeding

Guideline for formula feeding - baby-led feeding

- If formula feeding well, continue with baby-led feeding and continued support as part of routine postnatal care

- It is really important that babies are fed as often as they wish. Baby-led or demand feeding has demonstrated that babies are capable of determining how often and for how long they feed.

- Routines change daily with new babies; hence demand feeding gives the baby and mum time to determine what is best for them. It also helps strengthen the bond between mother and baby. Mother may also be able to spot any potential health problems.

- Parents should be informed about how much formula a new born requires to reduce overfeeding. As a guide 150ml/kg/day is the requirement of a newborn, up to the age of 6 months.

- Mothers need to understand that a baby will very rarely have a routine and they must be informed that it is really important to allow their baby to lead the way.

- Mothers should be encouraged to look at their baby’s stools and urine output to determine if feeding is going well.

- The first stage formula is whey based which is easily digestible and therefore simpler for the gut to absorb. Evidence has shown that this is all that a baby needs until they are a year old with complementary weaning at six months. Babies can the progress to full fat cow’s milk at one year of age.

- There is no need to change babies under one year onto second-stage or follow on milks which are casein based as they have been shown to take longer for the baby to digest and can lead to constipation.

- Occasionally a baby may need to have a specialist formula prescribed on medical or dietetic advice.

- Never use soya infant formula for babies without advice from a Paediatric Dietitian.

- Goats’ milk infant formula is not suitable for babies as it is insufficient in some basic nutrients.

- Nutriprem® should not be used for infants who are on the at risk protocol. This is because it can lead to a sudden rise in blood sugar levels followed by a rapid decrease due to the over stimulation of insulin production. Nutriprem® is designed for the preterm baby.

- At risk babies who are formula fed are at risk of hypoglycaemia too and use of the NHS Highland ‘Hypoglycaemic Policy for the at Risk Baby’ is essential in prevention of hypoglycaemia.
Guideline for preterm infant birth-six months - baby-led feeding

Mothers of the premature baby should be informed of the importance of baby-led feeding. This will not be as relevant in the initial days of intensive care when feeds are obviously timed and measured but as the baby can progress towards more mother/baby centred feeds information should be given about feeding cues and feeding on demand.

Skin to Skin contact, kangaroo care and rooming-in all play an important role in helping initiate baby-led feeding and sustaining the duration and success of breastfeeding.

Non-nutritive Sucking – although we know that the introduction of teats and dummies to a term infant may prove to be disadvantageous – non-nutritive sucking may be beneficial for SCBU neonates in the following situations:

• Neonates that have prolonged periods of nil by mouth or NG feeding – ideally these babies should be attempted at the breast at each feed – thus associating the breast with food, comfort and a full tummy. Use of kangaroo care during feeds has also been shown to be beneficial and increase weight gain in preterm babies.

• Infants that are not given the opportunity to suck may develop a hypersensitivity of the oral cavity. Non-nutritive sucking has been shown to reduce oral hypersensitivity and also develop appropriate swallowing musculature.

• If a baby is on Continuous Positive Airway Pressure (CPAP), they are more stable if they are allowed to suck.

• Non-nutritive sucking is also beneficial when skin to skin contact or kangaroo care are not available and the baby is distressed.

• There is no evidence to show that CAREFUL use of a dummy in preterm infants either improves or interferes with establishment of breastfeeding, however dummy use has shown to limit feeding cues. Use should be limited.
e) Postnatal checklist

Initiate completion of the postnatal checklist for breastfeeding in the SWHMR.

<table>
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<th>Steps 4, 5, 6, 7, 8, 9, 10</th>
<th>Points 4, 5, 6, 7: NHS Highland Breastfeeding Policy</th>
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The hospital or community midwife will ensure that the Postnatal Checklist is discussed with mothers. A demonstration given of various skills and practices will provide mothers with the confidence and support required to enable them to feed their babies for as long as they wish. A number of topics are discussed in the postnatal checklist in the SWHMR. (See guidelines for completing the postnatal checklist)

This includes documenting details of mother’s experience and knowledge of:

- Positioning myself for breastfeeding
- Positioning my baby for breastfeeding
- Principles of good attachment
- How to recognise that my baby is feeding well
- My baby’s feeding and sleeping patterns for the first few days
- Baby-led feeding
- When my milk comes in
- Rooming-in at the maternity unit
- Sharing a bed with my baby - the risks discussed
- Winding my baby
- My baby’s needs (exclusive breastmilk for around the first six months of life)
- Why dummies or teats should not be used
- How to hand express my breastmilk
- Expressing breastmilk a) sterilising equipment b) safe storage
- Signs that my baby is feeding well and thriving
- Breastfeeding support in my community
- Other things I want to ask about.

Discussion around the importance of a good healthy diet and keeping well hydrated whilst breastfeeding is important. Mothers can now enjoy foods that were advised to be avoided whilst pregnant. Mothers may be eligible for vitamins whilst breastfeeding (page 16).

✔ Method of feeding on discharge from hospital should be entered in the SBR.
Guideline for formula feeding - postnatal checklist

- Initiate completion of the postnatal checklist in SWHMR.
- This checklist ensures that all aspects relating to care of a new baby has been discussed with the mother prior to discharge. This ensures that all relevant information has been given and documented.
- The checklist covers;
  - Using bottled milk/disposable teats in the maternity unit
  - The importance of good hand hygiene
  - Sterilising equipment
  - Making up formula feed correctly and safely (always following manufacturer’s instructions)
  - Giving a formula feed correctly and safely
  - Winding my baby
  - My baby’s feeding and sleeping patterns for the first few days
  - Baby led feeding
  - Rooming-in at the maternity unit
  - Sharing a bed with my baby - the risks discussed
  - Choosing the right type of milk for my new baby (whey based)
  - Signs that my baby is feeding well and thriving
  - Other things about feeding that I want to ask

(Please see ‘Guide for Completing The NHS Highland Postnatal Checklist For Bottle-Fed Infants Dec 2009).”

Guideline for preterm infant birth-six months - postnatal checklist

Most aspects of the term breast and formula feeding postnatal checklists will be relevant to the premature baby.

Sterilisation of equipment, storage of breastmilk and preparation of formula feeds are of significant importance with the preterm infant as the immaturity of their immune systems renders them more vulnerable to infection.
f) Safe preparation of formula feeds

Guideline for formula feeding - safe preparation of formula

Provide 1:1 tuition on how to safely sterilise equipment and make up formula feeds.

Sterilisation

It is really important to keep all feeding equipment clean to protect babies against infection.

1. Sterilisation should be done following manufacturer’s instructions
   – methods of sterilisation are:
     a. a chemical sterilising solution
     b. steaming in a steam steriliser
     c. a sterilising unit made for the microwave oven

2. Wash everything after use with hot, soapy water and use teat and bottle brushes to make sure all traces of milk are removed and rinse thoroughly before using the sterilising equipment of choice.

3. Always wash your hands before removing the equipment from the steriliser.

4. If you need to rinse the equipment before use then use boiled clean water.

5. Store any sterilisation solutions safely out of reach of children.

6. All equipment your baby uses to feed must be sterilised until your baby is six months old.

(Use of the UNICEF Sterilisation leaflet)

Making up a feed

- When using powdered formula, it is extremely important to follow the manufacturer’s instructions on the pack regarding the correct quantity of powder and water to be used.
- Never be tempted to use or add extra powder as this could make babies very ill.
- Never add less formula powder to water as this means that the baby will not get the nutrients and nourishment that they need.
- A fresh feed should be made prior to each feeding and any remainder must be thrown away.
- If baby needs fed when out and about, boil some water and take in a vacuum flask. Feeds can be prepared where and when needed.
- Formula feeds should be made using cooled boiled water that is still hotter than 70°C. In practice this means using water in the kettle which has been boiled and left for no more than half an hour.
- Use tap water rather than bottled water as the contents of some natural mineral waters are unsuitable for babies. For safety, content of mineral water needs to be checked for sodium level of below 0.2g per litre.
**Guideline for preterm infant birth-six months, safe preparation of formula**

Added care needs to be used with the preterm baby and all aspects of the guidelines for the safe preparation of formula for the term baby should be adhered to. Powdered milks run the risk of contamination via pollutants and chemicals in the formula, or the water used to make up the feeds. Mistakes can also be made in the preparation or storage of feeds and poor sterilisation techniques.

Preterm babies who are discharged home, feeding on Nutriprem 2® or SMA High Energy® will usually be around term and their gut should be mature enough to ensure powdered milk is appropriate to use. However there may be extenuating social circumstances which would compromise the safe reconstruction of the powdered milk and a request can be made for the prescription of formulas in Tetra Pak® design.

g) **Peer support**

Offer of peer support for breastfeeding mothers in the early postnatal period

**Step 10 | Point 10: NHS Highland Breastfeeding Policy**

Peer support to new mothers from mothers who have practical experience of breastfeeding themselves. This concept is not new but has recently been formally developed as a way of improving support for breastfeeding mothers. *(see NHS Highland Peer Support Pathways, 2009)*

A mapping exercise of initiatives conducted by (D’Souza L, Garcia J, 2003) intended to limit the impact of poverty and disadvantage on the health and wellbeing of low-income women and their babies, found that:

- peer support as a stand-alone intervention is very likely to increase breastfeeding initiation rates among low-income women who express the wish to breastfeed;
- support from a mother experienced in breastfeeding, complemented by professional services, is very likely to increase the duration of breastfeeding; and peer volunteers are particularly beneficial in mediating between low-income mothers and healthcare professionals.

NICE PHG 11 and the UNICEF BFI support the development of peer support for breastfeeding mothers. The importance of peer support is acknowledged in both the antenatal and postnatal periods. The guidelines also highlight the benefits of peer support to disadvantaged families.

The NHS Highland Breastfeeding Strategic Framework 2010-2013 will enable all women to have the right to be informed of the benefits of breastfeeding to enable them to make a fully informed choice.

The UNICEF Baby Friendly Initiative has been identified as the minimum standard required, ensuring that health professionals and partners have the appropriate knowledge and skills base to support, promote and encourage breastfeeding. It has been shown to be the most effective intervention in enhancing the duration of breastfeeding.

Trained breastfeeding peer supporters are also invaluable in ensuring that women who choose to breastfeed are given the support, encouragement and correct advice and information to breastfeeding for as long as they wish.
Peer support is one of the strategic aims of NHS Highland’s Breastfeeding Framework and health professionals and partners within Highland should be encouraged to embrace this initiative. Effective joint working between partners and volunteers should achieve better breastfeeding rates. Within NHS Highland, areas of low breastfeeding rates and higher levels of deprivation have been identified through the child health surveillance programme - preschool (CHSP-PS) system and will have targeted peer support initiatives in their areas.

**Guideline for preterm infant birth-six months - peer support**

Mothers of preterm babies will greatly benefit from peer support too. Peer models that have experienced the SCBU setting should be invited to engage with mothers in similar circumstances. They can offer support, advice and information about local support groups and local networks.

**h) Weigh babies**  As near 72 hours as possible.

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<tr>
<th>Step 6</th>
<th>Point 5: NHS Highland Breastfeeding Policy</th>
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<tr>
<td>• Breastfed babies should be weighed as near 72 hours as possible either in hospital or in the community.</td>
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<tr>
<td>• The baby should be weighed without a nappy and preferably before a feed. (This may not be possible in the community as the CMW can not always guarantee their visit will fit in with feeds.)</td>
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<tr>
<td>• Weight loss in the neonate in the first few days of life is a normal physiological process.</td>
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<td>- A weight loss of 10% was formerly seen as the cut off for acceptable weight loss. Recent studies are evidence based and demonstrate that normal weight loss in the majority of babies is more likely to be between 5% and 7% of the birth weight. (Dewey et al 2005)</td>
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‘NHS Highland’s Policy for Prevention of Excessive Weight Loss in the Breastfed Neonate 2011’ has been developed to identify breastfeeding problems allowing early intervention and appropriate management. This in turn will prevent unnecessary supplementation rates and help identify problems before they require more intensive intervention eg. admissions to hospital with excessive weight loss.

✔ Enter method of feeding on discharge from hospital in the SBR.

**Guideline for formula feeding - weigh babies**

Healthy term formula fed babies who are feeding well do not need to be weighed again until day five as per KCND guidelines. There is no need to weigh in hospital prior to this as a discharge weight is not essential.

✔ However please enter method of feeding on discharge from hospital in the SBR.
2. Community Support for Breastfeeding

2.1 Breastfeeding support from community midwife (CMW)

<table>
<thead>
<tr>
<th>Steps 5, 6, 8, 9, 10</th>
<th>Points 5, 6, 7: NHS Highland Breastfeeding Policy</th>
</tr>
</thead>
</table>

The CMW will offer support for the postnatal mother and baby up until day 10. However the care may continue beyond this time if the mother or baby requires ongoing support for postnatal problems.

The postnatal checklist can be completed by the CMW if not already completed in hospital. However, the CMW will complete the day 5 checklist also. Community health professionals will continue to offer help with breastfeeding and address any problems or difficulties mothers may encounter.

Baby will need to be weighed again if a significant weight loss was picked up on day three until an upward trend in weight is evident. (See NHS Highland ‘Policy for Prevention of Excessive Weight Loss in the Breastfed Neonate’ 2011).

The CMW should ensure that any problems are communicated to the HV or PHN who will take over the mother and baby care. They should also ensure that mothers are aware of how to contact local and national breastfeeding support groups or Infant Feeding Advisors. This will enable mothers to access help if they need advice or additional support. (NHS Highland ‘Congratulations’ postnatal support card for national and local contacts).

Breastfeeding mothers should also be made aware of the NHS Highland ‘Welcome to Breastfeed’ sticker scheme and the leaflet ‘Breastfeeding etc. (Scotland) Act 2005’ which will support and encourage breastfeeding in the community setting.

✔ Please record feeding method at day 10 on the SBR.

Guideline for formula feeding - breastfeeding support from CMW

The CMW will continue to give support until day 10 or beyond if postnatal problems occur. Information about safe preparation of formula and guidance on following manufacturer’s instructions should be reinforced. The CMW should ensure the postnatal checklist is completed and discuss any outstanding issues around formula feeding with the family. The CMW should ascertain if mothers are eligible for the Healthy Start scheme as this can provide extra financial help with the purchase of fresh fruit, vegetables, milk and infant formula. Any problems with formula feeding should be communicated to the HV.

✔ Please record feeding method at day 10 on the SBR.
Community support for breastfeeding mothers should continue through local and national networks. Most babies who are admitted to the neonatal unit will be discharged to the HV and will have continued support from the neonatal community liaison nursing team.

The Neonatal Community Liaison Service provide home visits, to a subset of sick and preterm babies who have been in SCBU. The role includes:

- offering support, advice and encouragement to breast and formula feeding mothers
- ensuring that the baby is gaining weight appropriately
- that mothers have access to specialist milks, dietetic advice and feeding specialist input where necessary and
- taking appropriate action where problems are identified.

### 2.2 Health visitor primary visit on day 11-15

**Step 10**  
**Points 4, 5, 6, 7: NHS Highland Breastfeeding Policy**

HVs or PHNs will continue the ongoing breastfeeding support when the CMW has handed over the care of the postnatal mother and baby. The HV or PHN should complete the primary visit postnatal checklist in the personal child health record. The content of this form is related to breastfeeding and should have been covered by the hospital or community midwife. This will highlight to the HV or PHN that all aspects of breastfeeding management have been discussed with the mother. Any areas that the mother is unsure about can then be identified and discussed. This helps to unify the common elements and principles of Girfec, HALL 4 and For Highlands Children 3. Ongoing support from the HV will continue as required. Baby should be weighed and plotted as a baseline from handover from CMW.

Healthy term babies should be expected to have returned to birthweight by two weeks of age. Any unresolved breastfeeding problems or excessive weight loss can be reported to local breastfeeding trainers or the Infant Feeding Advisors (IFAs) (see ‘Breastfeeding Problems Pathway of Referral to Infant Feeding Advisors’).

**Feeding method at six-eight weeks should be recorded on the Child Health Surveillance Programme - Pre-school (CHSP-PS).**

Please ensure all forms are returned to Tina Harrigan and her Team.

### Guideline for formula feeding - HV primary visit

The HV’s primary visit will be around day 11-15. The baby may be weighed and plotted as a base line from handover from CMW care. The HV will continue with support of safe formula feeding and encourage the use of whey based formula with the timely introduction of complementary solids. Any feeding problems can be referred to the IFAs. Ongoing support from HV as required. They should identify any additional needs and offer support as required Children’s Services Worker (CSW), ‘Healthy Start’, Sure Start grants etc.

**Please record feeding method at six-eight weeks on the CHSP-PS**
2.3 Ongoing support for vulnerable families

<table>
<thead>
<tr>
<th>Step 10</th>
<th>Points 4, 5, 6, 7: NHS Highland Breastfeeding Policy</th>
</tr>
</thead>
</table>

Ongoing support for breastfeeding from the HV or PHN will depend on individual’s needs. Further support may be needed for families with additional needs. For example; peer support, CSW, ‘Healthy Start’, (See NHS Highland ‘Breastfeeding Strategic Framework 2010 - 2013’ for local and national drivers and aims for NHS Highland).

**Guideline for formula feeding - ongoing support**

Support for formula feeding as above with the exception of peer support.

2.4 Support exclusive breastfeeding for six months with the appropriate introduction of complementary foods.

<table>
<thead>
<tr>
<th>Step 10</th>
<th>Points 4, 5, 6, 7: NHS Highland Breastfeeding Policy</th>
</tr>
</thead>
</table>

Breastmilk provides all the nourishment a baby will require for the first six months of life and beyond. Solids can gradually be introduced at around six months if the baby shows signs of readiness, eg:

- being able to sit up unsupported
- good hand to eye coordination
- putting objects in his mouth and gnawing
- taking an interest in other people’s food grabbing off a plate etc.
- able to put a cup to his mouth and co-ordinate swallowing.

A baby’s immune and digestive system is not fully developed before six months. Weaning too early can be detrimental to a baby’s health as it may increase the risk of asthma, eczema, digestive problems, allergies, obesity and diabetes in later life. Babies weaned at six months are able to chew more effectively and therefore be able to move on to lumpier foods and finger foods more quickly. Babies at this stage can also try a wider range of foods.

If a baby shows signs of being ready to wean before the recommended stage, and that more frequent feeding at the breast has not been enough to satisfy, the gradual introduction of first stage weaning foods would be preferable than introducing formula feeds it is important that the mother ensures:

- all feeding equipment is sterilized
- all food is pureed
- baby needs to be supported in a chair or on mother’s lap
- foods to be avoided in babies less than six months can be found in ‘Ready Steady Baby!’ page 175.
**Guideline for formula feeding - support exclusive breastfeeding**

Support of exclusive whey based formula for one year.

Whey based formula is all the nourishment a baby will require for the first six months of life. At around six months, solids can gradually be introduced if the baby shows signs of readiness, see above. By the time a baby is one year old there is no need to use follow-on milks as full fat cows’ milk is nutritionally adequate and less expensive.

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**Guideline for preterm infant birth-six months - support exclusive breastfeeding**

BLISS is a charity for preterm babies who are “for babies born too soon, too small, too sick”. BLISS recommends that preterm babies are weaned between 5 and 7 months old. This is from birth date and NOT gestationally corrected age. Very occasionally a preterm baby may benefit from weaning before five months but this must be discussed with the health care team. Preterm babies will demonstrate the same signs of readiness to wean as a term baby.

Contact details:

BLISS helpline: 0500 618 140
www.bliss.org.uk

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**Weaning**

Weaning should never take place before 17 weeks.
3. Provision for ‘Tongue-tie’ (ankyloglossia)

Tongue-tie or ankyloglossia is a congenital abnormality which is characterised by an abnormally short lingual frenulum. This can cause restriction to the movement of the tongue and can lead to problems with breastfeeding, formula feeding and weaning. The social implications of unresolved tongue-tie are listed below. Evidence suggests that there are no major safety concerns about division of tongue-tie and feeding is significantly improved in both breast and bottle feeding (H M Westcott, C Griffiths 2005).

NHS Highland’s ‘Policy (or Guidance) on Outpatient Tongue-tie Procedure’ supports the service of tongue-tie division where cases of tongue-tie are causing significant feeding problems. This service is supported by NICE IPG149 (2005).

<table>
<thead>
<tr>
<th>Problems for the breastfeeding</th>
<th>Problems for the breastfeeding baby</th>
<th>Problems with formula feeding</th>
<th>Problems in infancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Inability to latch or maintain the latch effectively resulting in sore nipples.</td>
<td>• Latching difficulties.</td>
<td>• Dribbling, resulting in excoriation of skin around the chin and neck.</td>
<td>• Difficulty with weaning onto solid foods.</td>
</tr>
<tr>
<td>• Poor milk transfer due to poor latch resulting in milk stasis and engorgement.</td>
<td>• Constant feeding.</td>
<td>• Slow to feed as unable to form an effective seal around the teat.</td>
<td>• Possible speech problems eg. lisp.</td>
</tr>
<tr>
<td>• This engorgement can lead to mastitis and possibly breast abscesses.</td>
<td>• Frustration.</td>
<td>• Frequent feeding.</td>
<td>• Increase in dental caries as tongue not able to articulate around the teeth to clean them.</td>
</tr>
<tr>
<td>• Poor milk supply</td>
<td>• Crying.</td>
<td>• Colic.</td>
<td>• Inability to stick out tongue and lick an ice cream or a yoghurt lid.</td>
</tr>
<tr>
<td>• Pain tiredness and frustration.</td>
<td>• Excessive weight loss or slow weight gain.</td>
<td>• Inadequate or slow weight gain.</td>
<td>• Social implications.</td>
</tr>
<tr>
<td>• Cessation of breastfeeding.</td>
<td>• Breastfeeding supplemented or stopped.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Referrals

Babies from birth to two months with tongue-tie causing significant feeding problems can be referred directly to the IFAs. Babies older than two months should be referred to an Ear, Nose and Throat Department.

Referrals can be made from medical practitioners midwives or HVs, See ‘Policy (or Guidance) on Outpatient Tongue-tie Procedure’.
Part Three

Weaning
Six - 13 Months
1. The Weaning Pathway six-13 months

- Mothers continue to breastfeed or offer whey protein dominant infant formula milk exclusively until the infant is six months.

  - Breastfeeding mothers aware of impact a reduction in breastfeeding has on food/nutritional requirements.

  - Mothers aware of eating patterns and behaviours on their own and their infants health and well-being.

  - Parents/carers can identify local opportunities for daily exercise and family activity.

  - Mothers can identify support network to help maintain/achieve a healthy weight.

  - Refer to adult Healthy Weight Pathway and signposted support.

  - Eligible mothers registered to receive healthy start vouchers and continue to take maternal vitamin supplement until infant is one year.

  - Breastfed infants of 6 months and over, and formula fed infants taking less than 600ml formula daily, receive healthy start daily vitamin drops.

  - Parents/carers offer infants suitable second stage (6-9 months) weaning foods/fluids.

  - Parents/carers offer infants suitable third stage (9-12 months) weaning foods/fluids.

  - Parents/carers offer infants suitable weaning fluids and drinking cups.

  - Parents/carers can access (local) information and support to choose, buy and cook healthy food.

  - Vouchers can be used locally to buy and cook healthy weaning and family foods.

  - Parents/carers offer ‘Ready Steady Toddler’ and play@home toddler books.

  - Parents/carers have infant eating family meals. Parents/carers following the ‘eatwell plate’ guide to healthy family eating.

  - Parents/carers start to offer infants suitable first stage weaning foods by six months (26 weeks), but mothers should be supported and encouraged to continue breastfeeding to two years and beyond (WHO).

  - Parents/carers participate in local oral health education activities.

Refer to NHS Highland’s Information Trail for leaflets and resources

<table>
<thead>
<tr>
<th>Version: 2</th>
<th>Date of Issue: September 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page 59</td>
<td>Date of Review: September 2014</td>
</tr>
</tbody>
</table>
2. Introduction to Weaning

“Weaning means the gradual introduction of solid foods along with the usual milk feeds (breast or formula) to an infant’s diet. The term weaning has the same meaning as complementary feeding and introduction of solids.”

(Scottish Executive, 2006)

When to begin weaning?

There are some key recommendations which inform this guidance:

The World Health Organisation’s global strategy for infant and young child feeding revised its guidance and recommended exclusive breastfeeding for the first six months of life (2001). The WHO recommendation applies to populations and it is acknowledged in the document that exclusive breastfeeding to six months could lead to iron deficiency in susceptible infants, and growth faltering and other micronutrient deficiencies in some infants.

In 2001, The UK Scientific Advisory Committee on Nutrition (SACN) reviewed the evidence from the 2001 World Health Organisation’s global strategy for infant and young child feeding and advised that:

“...there is sufficient scientific evidence that exclusive breastfeeding for six months is nutritionally adequate”.

However SACN noted that:

“...early introduction of complementary foods is normal practice in the UK and that mothers do this for many valid personal, social and economic reasons”.

therefore recommended that:

“...there should be some flexibility in the advice, but that any complementary feeding should not be introduced before the end of four months (17 weeks).”

The Department of Health issued a statement on breastfeeding (2003):

“Breastfeeding is the best form of nutrition for infants. Exclusive breastfeeding is recommended for the first six months (26 weeks) of an infant’s life as it provides all the nutrients a baby needs.”

Both the recommendations from the WHO and from the UK Department of Health (DoH) in 2003 were population recommendations. Both organisations recommended that each infant must be managed individually, so that insufficient growth and other adverse outcomes are not ignored and appropriate interventions are provided.
The European Society for Paediatric Gastroenterology, Hepatology and Nutrition and the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition reviewed the literature on complementary feeding for healthy term infants in 2008 and recommended that:

- Exclusive breastfeeding for around six months is a desirable goal.
- Weaning onto solid foods should begin by six months but not before four months.
- Breastfeeding continues throughout weaning particularly the early stages.
- Introducing gluten between four and seven months while breastfeeding may reduce the risk of coeliac disease, type 1 diabetes and wheat allergy.
- High allergen foods such as egg and fish do not need to be delayed until after six months as there is no evidence that this will reduce the likelihood of allergies.

**Introduction of solids**

Babies are able to take soft mashed foods from a spoon, form a bolus and swallow it at about five months but it is not until about six months that they can actively spoon-feed with the upper lip moving down to clean the spoon, chew and use the tongue to move the food in the mouth. They develop their hand to eye co-ordination, are curious about different tastes and textures and can grasp finger foods.

During weaning, babies learn new skills and will progress through the weaning stages as they are given the opportunities to learn. Feeding skills progress from immature sucking and swallowing, to biting and chewing along with oral muscle development, which is also important for speech development.

Babies should be eating family foods by the end of their first year, and the more variety they are offered at this age, the more likely they are to accept new tastes and textures later in childhood.

Babies will vary in their readiness for weaning, but the following are developmental signs of readiness:

- The ability to sit up which allows the infant to take an active part in eating solids.
- No longer automatically pushing solids out of the mouth (young babies have a tongue thrusting reflex which can make eating solids is difficult).
- Starting to show an interest in what others are eating and has the hand to eye co-ordination to reach out and grab objects.
Solids should be offered no later than six months for the following reasons:

- birth stores of iron, zinc, vitamins C and D may be too low
- too large a volume of milk would need to be consumed to supply nutritional needs
- the change in feeding behaviour from sucking to chewing must be encouraged
- problems with speech and language acquisition may occur
- the gut and kidney have developed sufficiently to cope with a more varied diet, physiology and development have matured along with neuromuscular co-ordination.

One or two teaspoons of semi-solid food should be offered at first. The use of small shallow plastic spoons and special feeding bowls is recommended. There is no need to sterilise feeding equipment after six months. New foods should be introduced gradually at three to four day intervals and one at a time. The texture and quantity offered should be gradually increased.

**Summary of the main points to consider when preparing food for babies:**

- Do not add salt or sugar to foods.
- Use naturally sweet fruits such as apples or bananas rather than adding sugar. Do not add artificial sweeteners to foods.
- Soft cooked meat, fish and pulses (such as peas, beans and lentils) are suitable foods to include in the diet from four-six months.
- Offer a variety of flavours and soft textures. Between six months and one year, give food which allows the baby to learn to chew and accept a wide variety of food textures.
- Finger foods are popular and are a preliminary to full self feeding. Some cubes of fruits, vegetables, potato, toast, cheese or soft meat should be included at each meal so that participation in self-feeding is encouraged.
- By the end of the third stage separately prepared foods are no longer needed and the full family diet can be offered.
2.1 Follow-on formula milks and other milks

a) Follow-on formula

These formula milks are marketed as having a slightly higher content of iron, but they have on average 0.5mg more iron per 100mls than standard formulas. They are also higher in energy, protein, calcium, sodium and other micronutrients than standard infant milks, and are therefore unsuitable to be used before six months.

For the majority of babies whose weaning diet is adequate, the use of follow-on milks should be discouraged as standard formulas provide adequate nutrients until one year of age.

Other Milks

b) Cows’ milk

Pasteurised whole cows’ milk should only be used as a main milk drink after the age of one year and the rationale is given in the table below:

<table>
<thead>
<tr>
<th>Renal solute load</th>
<th>Cows’ milk has a higher protein and sodium content than breastmilk and therefore a higher renal solute load. Kidney function and the ability to concentrate urine is immature in a young infant and a renal solute load in excess of capacity may increase water loss in the urine with the potential of dehydration.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergenicity</td>
<td>Cows’ milk protein is recognised to be allergenic. Risk of allergy is increased in babies because the gut is more permeable to food allergens, and children of atopic parents are at greatest risk, however from the age of six months, milk products such as yoghurts or milk puddings can be given as the milk protein in these foods has been denatured. Delayed introduction of cows’ milk, cows’ milk products and other common food allergens (eg. wheat, eggs) beyond six months is advisable for babies from strongly atopic families.</td>
</tr>
<tr>
<td>Iron</td>
<td>Cows’ milk contains little iron, which is of low availability. Iron requirements are increased late in infancy, and must be supplied by dietary intake once birth stores are depleted. Early use of cows’ milk as a main source of milk has been identified as a risk factor for iron deficiency (Harris 2002).</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Cows’ milk contains little vitamin D. Skin synthesis of vitamin D shows seasonal variability and babies fed cows’ milk as a main drinking milk may be at risk of vitamin D deficiency, unless government vitamin drops are given. Asian and Afro-Caribbean babies having cows’ milk as a drink, limited exposure to sunlight and delayed weaning, are at particular high risk of vitamin D deficiency.</td>
</tr>
</tbody>
</table>
Current recommendations propose that whole cows’ milk can be given to non-allergenic babies, as shown in the table below:

<table>
<thead>
<tr>
<th>Aged from:</th>
<th>Given as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six months</td>
<td>Milk-containing solids, eg: cheese, unsweetened yoghurts. To mix cereals, in cooking eg. cheese sauce, custard.</td>
</tr>
<tr>
<td>12 Months</td>
<td>As a main drinking milk.</td>
</tr>
</tbody>
</table>

For infants with diagnosed cows’ milk protein allergy see (see Guidelines for the management of CMPA).

**Reduced fat milks**

Whole milk is an important source of energy and other nutrients in a young child’s diet. Childhood energy requirements per unit of body weight are highest during the first year of life and, because stomach capacity is small, an infant’s diet must supply a lot of energy in a small volume of food. The energy density of whole milk is therefore appropriate for baby and toddler needs. Whole milk additionally supplies fat soluble vitamins A, D and E, not found in significant amounts in reduced fat milks.

The adoption of healthy eating habits is to be encouraged in a young child, but inappropriate restriction of dietary fat may lead to poor growth and therefore is not appropriate in the first two years of life.

- Semi-skimmed milk may be introduced from two years of age, if energy and nutrient intake is otherwise adequate and growth remains satisfactory.
- Skimmed milk should not be given to a child under five years of age.

**c) Goats’ and Ewes’ milk**

Goats’ and ewes’ milk should not be given to babies because:

- Goats’ and ewes’ milk are not nutritionally complete; levels of vitamins A, D and C and folic acid are low. Feeding with goats’ milk has been associated with infant megaloblastic anaemia.
- Goats’ and ewes’ milk are not subject to the same hygiene legislation as cows’ milk, and can be bought unpasteurised. Unpasteurised goats’ milk is a potential source of salmonella and brucellosis infection.
- Goats’ and ewes’ milk have a potentially high renal solute load.
- There is no evidence to suggest that goats’ and ewes’ milk reduce the risk of allergic disease.

If parents insist on feeding goats’ and ewes’ milk:

- Recommend use of a pasteurised product only, or at least boiling the milk for two minutes to reduce risk of microbiological contamination.
- Ensure a folic acid supplement is given, under medical supervision (average folic acid requirement is 40ug per day in infancy).
- Ensure government vitamin supplements in the recommended dose of five drops per day are given from one month of age.
- Monitor growth closely. If there is any doubt about nutritional adequacy, refer to a Dietitian for dietary assessment.
2.2 Food preparation and hygiene

Home prepared versus commercial infant foods

The majority of a baby’s food should come from suitable family meals. In general, home prepared weaning foods have many advantages over baby foods (see table below). Advice on the use of appropriate commercial foods should also be given eg. more use of savoury meals and fruit rather than puddings.

<table>
<thead>
<tr>
<th>Home Prepared Foods</th>
<th>Commercial Baby Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheap</td>
<td>Expensive</td>
</tr>
<tr>
<td>Total control over ingredients</td>
<td>Fixed control by manufacturers may not be desirable eg. gluten</td>
</tr>
<tr>
<td>Infant becomes accustomed to family foods</td>
<td>Family foods may be rejected</td>
</tr>
<tr>
<td>May be produced in bulk and frozen in small amounts</td>
<td>Large contents of tins and jars may be wasted in early weaning</td>
</tr>
<tr>
<td>Texture of food may be varied to suit various stages of weaning</td>
<td>Hard lumps of ‘junior’ or ‘stage 2’ foods may be rejected</td>
</tr>
<tr>
<td>Not always convenient eg. inadequate home cooking facilities, poor family diet</td>
<td>Convenient</td>
</tr>
<tr>
<td>Unknown nutritional content eg. food may be overcooked</td>
<td>Known nutritional content</td>
</tr>
</tbody>
</table>

Food Storage

Opened cans will rust due to the acidity of the contents; therefore food must be transferred to different containers before storage. Open, unused manufactured baby foods may be kept in a fridge for up to 48 hours.

Freezing

Do not freeze the following:

- Half eaten jars or tins of baby food.
- Food stored for some time unfrozen – it may be contaminated.
- Do not refreeze food unless it is cooked first.

Baby food manufacturers do not recommend freezing their foods.
Home-made foods and purees for babies can be frozen in ice cube trays for tiny quantities and yoghurt pots for small amounts. Once frozen, food can be tipped out of the container and stored in plastic bags. Food must be defrosted and reheated thoroughly until piping hot.

Babies and young children under two years are particularly susceptible to food poisoning because their immune system is immature. Many parents are unaware of the appropriate food safety standards which should be maintained in order to minimise risk of food borne disease. Discussion about food safety should therefore be part of advice given on feeding at all ages, from birth onwards. The information leaflet ‘Food Safety for Your Baby’ provides a good summary of food safety and hygiene tips:

<table>
<thead>
<tr>
<th>Foods</th>
<th>Action</th>
</tr>
</thead>
</table>
| For ready-made foods:        | • Check date marks  
• Check safety seals  
• Follow all instructions on labels |
| For foods prepared at home:  | • Defrost frozen ingredients thoroughly (in the fridge or microwave) unless the label states otherwise  
• Cook foods until piping hot and then allow to cool until comfortable to eat  
• Cook eggs until both white and yolk are solid or use pasteurised egg products |
| For all foods:               | • After heating foods in a microwave, stir thoroughly and allow to stand for a couple of minutes to avoid hot spots.  
• Store any extra food prepared (but not served) in a clean, covered container in the coldest part of the fridge and use within 48 hours.  
• For young babies, wash bottles in soapy water and then sterilise  
• When adding water to baby foods or milk always use cooled boiled water.  
• Wipe high chairs, bibs and eating arrears with detergent/disinfectant before and after every meal  
• Keep the kitchen extra clean, including the floor  
• Teach young children to wash their hands  
• Keep dirty nappies away from food  
• Throw away unfinished drinks and food scraps left on the plate  
• Change kitchen towel and cloths daily or more often |
2.3 Weaning fluids and use of feeder/trainer cups

Breastfeeding is the most natural and normal way to feed babies, but if a baby is formula fed it is best to introduce a cup around six months. The use of a bottle should be actively discouraged after the age of one year. As sipping and swallowing replace sucking, feeding from a free-flow feeder cup should begin.

There are two issues relevant to dental health: the length of time; and how often sugar is in the mouth. This is why it is important that parents and carers are discouraged from putting any sugar-sweetened drinks into a feeding bottle, especially if it’s to be left with the infant overnight or between meals. The drip feed effect means that teeth are continually under acid attack.

Pure unsweetened fruit juices are a good source of vitamin C, and are best given with breakfast or a main meal. Fruit juices should be diluted 50:50 juice to water or with a greater proportion of water to juice if a longer more thirst quenching drink is preferred. The juice should be restricted to mealtimes only. Whole milk or water only are recommended between meals.

Damage limitation

Diluting juices containing sugars and artificial sweeteners are not recommended for babies. If used, to minimise damage – dilute 1:10 juice to water and drink from a free-flow cup.

Most importantly, parents/carers should be advised never to give sugary, fizzy drinks and sugar-containing squashes outside mealtimes. These are particularly harmful if given in a feeding bottle. Some of the hidden sugars found on labels which cause tooth decay can be listed as: sucrose, fructose, glucose, maltose, dextrose, hydrolysed starch, corn or maize syrup, brown sugar, honey and treacle.
Drinking cups

There is an increasing variety of new designs for feeder/trainer cups appearing on the market, and the following principles can be applied when choosing one.

- The ideal feeder/trainer cup is one that spills when tipped – encouraging parents/carers to supervise children and reduce the frequent sipping of drinks. Free-flow feeder cups are much better than the new generation of no-spill cups with valves or those which require a strong sucking action (basically, these are the same as bottles with teats).
- Do not be misled by advertising. The word ‘cup’ can be interpreted in many ways. The container may be marked and labelled as a cup but in reality it may be a bottle in disguise.
- The use of any container that encourages free access to drinks should be discouraged. It is the frequency of drinking sweet or fruit drinks that encourages the risk of caries and erosion.
- Avoid any container that allows children to sip at drinks throughout the night.
- Encourage children to use containers which don’t allow them to be used as comforters, pacifiers or to sip drinks while they are “on the move”.
- For those wishing to purchase a ‘travel cup’, advise one which has a flip cover or twist action to prevent leakage.

To view or download a copy of ‘First Teeth, Healthy Teeth’ resource for HVs/PHNs view www.healthscotland.com/documents/3251.aspx

2.4 Special considerations

Weaning the pre-term infant

Each premature baby (born before 37 weeks gestation) should be considered individually and some time between five to eight months after their actual birth date is likely to be the best time to begin weaning (King & Aloysius 2009 and King 2009). Many of the organ systems develop precociously following preterm delivery and it is considered safe to wean preterm babies at this time even though their age may be less than four - six months after their estimated delivery date (EDD). The majority may benefit from delaying until after three months from their EDD, this will ensure development of adequate motor skills allowing the necessary head control for safe transition to solid foods (King & Aloysius 2009 and King 2009).

As growth and nutritional status can be issues in this group, careful attention is needed to supply a diet of sufficient nutrient density and variety. They often need vitamin, mineral, and sometimes protein and energy supplements - particularly those that are breastfed.

In addition it is important not to miss the opportune times when the introduction of textures and flavours are more easily accepted.

All young babies, especially those born prematurely, need back and head support when they are fed to minimise the risk of choking. More information is available on weaning the preterm infant from BLISS - the premature baby charity at: www.BLISS.org.uk

Feeding difficulties in children with special needs

Children with special needs, especially if complex, commonly have significant problems with feeding, often leading to poor growth, recurrent infections and distress for the child and the family. The earlier nutritional support is provided, the better the outcome.

These feeding difficulties can result from a wide range of causes, such as:

- Neurological impairment
- Chromosomal anomalies
- Structural abnormalities
- Progressive/degenerative conditions
- Communication disorder
- Behavioural difficulties

Some children with special needs may not develop feeding skills easily. If the problems are significant, this may result in negative associations at mealtimes for the child and their parents/carers. Food then becomes associated with unpleasant experiences, such as vomiting, retching and the child may become fearful of eating and drinking.

Referral to Speech and Language Therapy/Nutrition and Dietetic Services is recommended in addition to support for parents and carers.
Food intolerance and allergies

Babies are more likely to develop allergies if there is a family history of eczema, asthma or hay fever. For these families exclusive breastfeeding is particularly recommended for the first six months. Foods that commonly cause allergies (cows’ milk, eggs, wheat, nuts, seeds, fish and shellfish) (see Guideline for the management of CMPA in infants).

should be introduced one at a time so that any reaction can be noted. For babies with allergies it is particularly important not to introduce any of these foods before six months.

Peanut allergy

Previous advice for children with a family history of allergy was to avoid peanuts until three years of age. This advice has now changed because the latest research suggests that there is no clear evidence that this will help to reduce the risk of developing a peanut allergy.

For children where there is a history of allergy in their immediate family (the child’s parents, brothers or sisters have an allergy such as asthma, eczema, hay fever or other types of allergy), parents/carers should discuss this with the GP or HV before introducing peanuts to the child’s diet.

For children with no known allergies and no family history of allergy in their immediate family, peanuts can be introduced as part of a healthy, balance diet from six months in the same way as other foods which commonly cause allergies (that is, one at a time checking for any reaction). Children who have shown allergic reactions to foodstuffs should see a Paediatrician and Dietitian. Whole peanuts should be avoided until five years of age as there is a risk of choking (finely chopped peanuts are okay).

Coeliac disease is a condition in which malabsorption is caused by an allergic response of the gut mucosa to gluten, which is found in wheat, rye, barley and oats. Babies with this condition respond to a gluten-free diet, which must be supervised by a Dietitian.

2.5 Vegetarian and vegan weaning

Vegetarian or vegan diets may be adopted for a number of reasons, many of which are based on religious, moral or cultural beliefs. The term ‘vegetarian’ is often used to describe a range of diets that differ in their degree of restriction.

The process of weaning a baby on to a vegetarian or vegan diet is the same as for any other infant – the diet should be based on a wide variety of foods. To ensure that requirements for energy and nutrients are met, a range of foods from each of the four main food groups should be eaten daily. For children following vegan or other restricted diets, particular attention needs to be given to the balance and diversity of foods offered.

Children’s diets should be based loosely on the ‘eatwell plate’ guide and should generally at the end of the first year comprise of the same as the rest of the family.

• At least four servings daily from the bread, other cereals and potatoes group.
• At least four servings daily from the fruit and vegetables group.
• For lacto, and lacto-ovo-vegetarian children. At least two servings from the milk and dairy foods group should be encouraged each day. Vegetarian cheeses contain the same amount of energy and nutrients as non-vegetarian varieties (they are manufactured using rennet substitutes, which are not derived from animal products).
For children who follow vegan diets, alternatives should be recommended. Vegan mothers should be encouraged to breastfeed until at least six months, but if they are unable to breastfeed or choose not to do so, soy formula would be the appropriate choice. (BDA Paediatric Group Position Statement: use of infant formulas based on soy protein for infants allows this as an exception to the no soy protein under 6 months rule). From six months soya milk, oat milk, Kara or other suitable milk alternatives can be used in cooking but breast milk or soy formula is recommended until a minimum age of twelve months as a drink.

Soya cheeses, yoghurts and custards can be used from six months.

Rice milk should not be offered under the age of five.

Some of these products are fortified with vitamins and minerals eg. calcium, and such varieties are preferable. As alternatives to meat, fish and poultry and for their nutritional value, foods such as eggs (if eaten), peas, beans, lentils, nut and seed pastes and soya products such as tofu and textured vegetable protein (TVP) can be offered. At least two servings from this group of foods should be encouraged daily.

To ensure that vegetarian and vegan diets are nutritionally complete, intakes of energy, fibre and nutrients such as protein and iron need to be considered.

### Different types of vegetarian diets

<table>
<thead>
<tr>
<th>Type of Vegetarian</th>
<th>Description of Dietary Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Semi’ or ‘demi’ vegetarian</td>
<td>Red meat is excluded, but fish and other animal products are still consumed. Poultry may also be excluded by some people.</td>
</tr>
<tr>
<td>Lacto-ovo-vegetarian</td>
<td>All meat, fish and poultry are excluded. Milk, cheese, yoghurt and eggs are still consumed.</td>
</tr>
<tr>
<td>Lacto-vegetarian</td>
<td>All meat, fish and poultry and eggs are excluded. Milk and dairy products are still consumed.</td>
</tr>
<tr>
<td>Vegan</td>
<td>All foods of animal origin are excluded. Diets are based on vegetables, vegetable oils, pulses, cereals, nuts, fruit and seeds.</td>
</tr>
<tr>
<td>Fruitarian</td>
<td>Foods of animal origin as well as pulses and cereals are excluded. Diets are based on raw and dried fruit, nuts, honey and olive oil.</td>
</tr>
<tr>
<td>Macrobiotic (sometimes referred to as Zen Macrobiotic diet)</td>
<td>This diet is based on the ‘Yin and Yang’ theory, with the two concepts representing the positive and negative aspects of life. The diet progresses through ‘levels’, becoming increasingly restrictive and gradually eliminating foods of animal origin, fruit and vegetables. At the final level, only cereal (brown rice) is eaten. Fluids are also restricted.</td>
</tr>
</tbody>
</table>
2.6 Vitamins and minerals during weaning

Including a wide variety of foods in the diet from an early age will help to ensure that all essential minerals, trace elements and vitamins are provided. Of particular relevance to weaning are Iron, vitamin C and vitamin D.

By four months of age, neonatal iron stores are reduced by half, and decrease further by six months. Between four and 12 months, dietary sources of iron are required to maintain haemoglobin levels; the RNI increases from 1.7mg/day at 0-three months, to 7.8 mg/day at seven -12 months (DOH 1994). Foods rich in haem iron (meat) should be encouraged. Adding a good source of vitamin C to non-haem iron sorces eg. cereals and pulses will enhance absorption of iron in the gut.

There is a risk of vitamin D deficiency in the first year of life, due not only to the rapid rate of bone growth, but also to low provision, which can result from a lack of skin exposure to sunlight and consequent minimal cutaneous synthesis. Babies at particular risk of vitamin D deficiency are those:

- born to mothers with a low vitamin D status because the infant will have low vitamin D status and their mother’s breastmilk will have low vitamin D
- of African, Asian and Middle Eastern Origin
- whose mother’s cover most of their skin when outside, particularly in summer
- on a restricted diet e.g. Vegetarians and Vegans.

Whether breast or formula fed babies should have adequate vitamin status if they are fed on demand (estimated intake of breast/formula milk over 500mls/1 pint per day). Where breastmilk is the main drink after six months of age, a daily supplement of vitamin A and D should be given. (Both these vitamins are added to formula milks). ‘Healthy Start’ infant vitamin drops contain vitamins A, C and D, and are recommended for:

- Breastfed babies from six months – five years, or from one month if there is any doubt about the mother’s general nutritional status or Vitamin D status during pregnancy.
- Formula fed babies over from six months – five years when they are taking less than 500ml (1 pint) formula milk daily.

NHS Highland currently distributes Healthy Start children’s drops to beneficiaries of the scheme. Non-beneficiaries are encouraged to purchase an ‘age appropriate’ supplement which includes A, C and D which they could obtain from supermarket, chemist or health shop.
2.7 Influences of culture, religion and ethnicity

Eating patterns and food intakes are influenced by culture, and many ethnic groups advocate specific dietary habits and periods of fasting for religious reasons.

Parental eating habits and food beliefs obviously influence the foods eaten by children, and this should be considered when advising parents about weaning and feeding young children. In Britain, some ethnic groups continue to retain dietary habits on the basis of religious beliefs, whereas others choose to relax some or all of the habits and fasting patterns of different religions and adopt a more ‘Westernised’ diet.

The following table gives examples of some dietary habits.

<table>
<thead>
<tr>
<th>Examples of Religious Group</th>
<th>Food Differences and Fasting Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muslims</td>
<td>Pork is avoided. All other meat, poultry and fish must be halal i.e. the meat must be killed according to Muslim law. Alcohol is also avoided. Muslims are required to fast from dawn to sunset during the month of Ramadan. Although children under 12 years and pregnant and lactating women are exempt from fasting, children’s diets may be affected if their parents are fasting.</td>
</tr>
<tr>
<td>Hindus</td>
<td>Some Hindus follow strict lacto-vegetarian diets. Beef is avoided and pork is rarely eaten. Some will also avoid lamb, poultry, fish, shellfish and eggs. Alcohol is forbidden. Some devout Hindus will fast for one or two days each week.</td>
</tr>
<tr>
<td>Sikhs</td>
<td>Some Sikhs follow lacto-vegetarian diets. Beef is avoided, pork is not usually eaten, and alcohol is forbidden. Some devout Sikhs fast once or twice each week.</td>
</tr>
<tr>
<td>Buddhists</td>
<td>Most Buddhists follow lacto-ovo-vegetarian diets, although fish and eggs are sometimes eaten.</td>
</tr>
<tr>
<td>Jews</td>
<td>Pork, shellfish and fish without fins are avoided. All other meat and fish must be slaughtered in accordance with the Jewish faith to render it kosher (permitted). Meat and milk or milk products must not be cooked together or served at the same meal.</td>
</tr>
<tr>
<td>Rastafarians</td>
<td>Pork, shellfish, alcohol, coffee and tea are avoided. Other meats and fish may also be avoided. Some Rastafarians may follow strict vegan diets.</td>
</tr>
<tr>
<td>Seventh Day Adventists</td>
<td>Pork, shellfish, alcohol, coffee, tea and cocoa are avoided. Many follow lacto-ovo-vegetarian diets, although milk and milk products may also be avoided by some.</td>
</tr>
</tbody>
</table>
### 3. Healthy Weaning Summary Chart

<table>
<thead>
<tr>
<th>Six months</th>
<th>New skills</th>
<th>New Food textures to introduce</th>
<th>Milk and dairy products</th>
<th>Bread and starchy foods</th>
</tr>
</thead>
</table>
| 6 months   | • Taking food from front of mouth | • Mashed food | • Breast or minimum 600 ml of infant formula daily | • Mix smooth cereal with milk (use low fibre cereals eg. rice based) 
• Mix starchy vegetables. |
|           | • Moving food from front to back of mouth | • Managing mashed foods | • Demand feed for breastfed babies – it is difficult to know quantities baby will be taking. Values given are a rough guide taken from formula fed babies | • Start to introduce some wholemeal bread and cereals. 
• Foods can be a more solid “lumper” texture. Begin to give finger foods Eg. toast). |
|           | • Swallowing food with a spoon | • Chewing minced and chopped foods | • Breastmilk or 500-600 ml of infant milk daily | • Hard cheese eg. Cheddar can be cubed or grated and used as “finger food”. 
• Most baby and ordinary breakfast cereals are fortified with iron and B vitamins. 
• Cereals and bread derived from wholemeal are a richer source of nutrients and fibre than refined cereals. |
| 2nd Stage  | • New skills | • Mashed food | • Check Breastmilk or 500–600 ml of infant milk daily | • Start to introduce some wholemeal bread and cereals. 
• Foods can be a more solid “lumper” texture. Begin to give finger foods Eg. toast). |
|           | • Moving soft lumps around mouth | • Chewing soft lumps with self-feeding using hands and fingers | • Also use any milk to mix solids. | • Encourage wholemeal products with added sugar (biscuits, cakes etc). 
• Starchy foods can be of normal adult texture. |
|           | • Soft lumps in a lidded beaker or cup | • Liquids in a lidded beaker or cup | • Hard cheese eg. Cheddar can be cubed or grated and used as “finger food”. | • Discourage high fat foods (crisps, savoury snacks and pastry). |
| 3rd Stage  | • New skills | • Hard finger foods | • Minimum 250 ml milk up to a maximum of 600 ml daily | • Discourage high fat foods (crisps, savoury snacks and pastry). |
|           | • Moving soft lumps around mouth | • Minced food | • Also use any milk to mix solids. | • Minimum of 4 servings daily |
| After one year | • Chewing minced and chopped foods | • Mincing and chopped foods | • Minimum of 4 servings daily | • Discourage feeding other foods from a bottle after one year. |

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**Date of Review:** September 2014
## Healthy Weaning Guidance continued...

<table>
<thead>
<tr>
<th>Stage</th>
<th>Dietary Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six months</td>
<td><strong>Fruit and vegetables</strong>&lt;br&gt;Mash soft-cooked vegetables and fruit.</td>
</tr>
<tr>
<td>2nd Stage</td>
<td>2 Servings Daily&lt;br&gt;Raw soft fruit and vegetables. Banana, melon and tomato may be used as “finger foods.” Cooked vegetables and fruit can be a coarse, mashed texture.</td>
</tr>
<tr>
<td>3rd Stage</td>
<td>Minimum 3-4 servings daily&lt;br&gt;Encourage lightly-cooked or raw foods. Chopped or “finger food” texture is suitable. Unsweetened orange juice with meals especially if diet is meat free.</td>
</tr>
<tr>
<td>After one year</td>
<td>Minimum 1 serving daily or 2 from vegetable sources&lt;br&gt;Encourage low-fat meat and oily fish (sardine, herring, and mackerel). Liver pate can be used after one year.</td>
</tr>
</tbody>
</table>

### Extra Information
- Vegetables may be preferred raw or cooked.
- Chopped or grated tomato, carrot, or other vegetables are preferred as thick soup, puree, or crushed to make them suitable for infant’s mouth.
- To enhance the absorption of iron, offer fruit and vegetables (rich in vitamin c) with every meal.
- Trim fat from meat.
- Use little or no added fat when cooking foods which already contain fat such as meat.
- Encourage unsweetened fruit if vegetables are rejected.
- Encourage lightly-cooked or raw foods. Chopped or “finger food” texture is suitable.
4. Baby-led Weaning

Baby-led weaning is an approach to weaning that has proved to be popular and effective with some groups. The use of baby purees and weaning spoons are discouraged, and babies are encouraged to feed themselves. The approach is based on the principle that most babies have strong necks and can sit up if supported. Their hand to eye co-ordination has developed to the extent that they can reach out and start to grasp food and grip it in their palms.

It has been suggested that babies who are allowed to feed themselves by being offered a selection of nutritious finger foods can more easily join in with family meals from the start, and are less likely to refuse foods or become fussy eaters as they grow older. This may help to prevent a child’s unwillingness or inability to accept foods which require chewing, a problem that may become apparent when babies move from purees to second stage foods containing lumps.

Suitable foods are those shaped like a chip, or have a ‘handle’ such as cooked broccoli spears, as these do not require a developed a ‘pincer grip’ and can be clasped in a fist. With this approach, a selection of nutritious finger foods can be offered and the baby encouraged to join in at family mealtimes.

It is suggested that as long as the infant can sit upright, handle their own food and move it to the back of their mouths, the risk of choking or gagging is minimal.

Note: For a small number of children a strict Baby-led weaning approach may not be appropriate as their level of development may not allow them to achieve adequate nutritional intake by self-feeding.

Children’s dental hygiene scheme

This is an action plan for improving oral health and modernising NHS Dental services in Scotland. The Scottish Executive (2005), outlined measures to address poor oral health, including funding and provision of preventative care.

There are two ways to limit and reduce the incidence of tooth decay:

- Brush at least twice daily with a toothpaste containing at least 1000 ppm fluoride.
- Limit the frequency of intake of sugars in drinks and foods – if sugars are eaten, it should be as part of a meal, rather than between meals.

Multi-disciplinary working has a key role to play in improving oral health. The foundations for good oral health are established at an early age. Contact with various health professionals provides opportunities to offer advice, support and ensure access to oral hygiene resources.

‘Childsmile’

‘Childsmile’ is a national programme designed to improve the oral health of young children currently in an interim demonstration phase (2009-2011).

Within the programme from birth, HVs will assess newborn children so that all those considered to have increased risk of dental decay can be enrolled into the programme from the earliest age. Following referral, the family will be visited by a community based Oral Health Support Worker (OHSW) who will explain the benefits of joining ‘Childsmile’ and link the child into a local ‘Childsmile’ dental practice. The Dental Health Support Worker is available to support families to attend the dental practice at the recommended visits and also to link the family into other activities available in the local community that support good oral health.

Through ‘Childsmile’, children will receive an enhanced package of infant dental care at their chosen ‘Childsmile’ dental practice. The oral health promotion sessions will be run by ‘Childsmile’ trained dental care professionals with parents/carers on a one to one or small group basis in accordance with the care pathway. The care pathway recommends visits to the dental practice when the child reaches three months, six months and at least six monthly intervals thereafter.

Part Four

Early Years
13 months - five years
1. Early Years Pathway 13 months – five years

Infant eating family meals according to the ‘eatwell plate’ guide.

- Eligible parents receive and use **HEALTHY START** vouchers.
- Parents use **HEALTHY START** vouchers locally to buy and eat/cook healthy food.
- Family support organisations include food, active play and oral health awareness in activities and promote **HEALTHY START**.
- Birth - three years: Additional needs are identified by Public Health Nurse or others and addressed.
- Three-five years - Link Health Visitors liaise with pre-schools where additional needs are identified.
- Parents can access further support from Public Health Nurse.
- If required, specialist dietary advice requested and referral to specialist paediatric services.

All families with birth - five years

- Parents can access community based food/cooking activities.
- Parents can identify local opportunities for physical activity.
- One-three years: Childminders, toddler and playgroups promote awareness of healthy eating through food provided and raising awareness of **play@home** toddler book.
- Three-five years - Pre-school: Curriculum for Excellence ‘Health and Wellbeing’ outcomes include healthy eating and physical activity.
- Pre-schools follow a healthy eating policy in line with national guidance and offer a range of foods at snack time.
- Pre-schools issue **play@home** book and promote healthy eating, physical activity and to parents.
- Link Health Visitors/Public Health Nursing Team offer health promotion advice to staff/children/parents at pre-schools.
- Registered Early Education and childcare Providers meet National Care Standard 3.

Oral Health

- ‘Childsmile’ programme to improve the oral health and general health of children in Scotland and reduce health inequalities and improve access to dental services.
- Core programme: every child receives a free dental pack (fluoride toothpaste, toothbrush and leaflet) on at least six occasions by age five.
- Core programme: all children in pre-schools are offered daily supervised toothbrushing.
- Childsmile nursery: fluoride varnish will be applied every 6 months to 20% of pre-school children in disadvantaged communities.
- Childsmile practice: • every child to have access to primary care dental services and to receive a tailored programme of care. • additional support directed to children and families most in need by a network of oral health support workers linked to public health nursing teams.

All children eat healthy family meals.

Five years

Any additional intensive needs identified and addressed using *Girfec*, Hall 4

Registered Early Education and childcare Providers meet National Care Standard 3.
1.1 Principles

The nutritional principles for meeting the needs of infants over one year are exactly the same for all young children. Their diet should be healthy and based on the five food groups which is illustrated in the ‘eatwell plate’ (see Appendix 1):

<table>
<thead>
<tr>
<th>Group</th>
<th>Type of food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Bread, cereal foods and potatoes</td>
</tr>
<tr>
<td>Group 2</td>
<td>Fruit and vegetables</td>
</tr>
<tr>
<td>Group 3</td>
<td>Milk and diary products</td>
</tr>
<tr>
<td>Group 4</td>
<td>Meat, fish and alternatives (pulses, eggs, nuts and seeds)</td>
</tr>
<tr>
<td>Group 5</td>
<td>Fat and sugar rich foods</td>
</tr>
</tbody>
</table>

Young children need a healthy diet but for them the guidance given in this model usually varies on two aspects, fat restriction and adherence to a high fibre intake, which is not really suitable for young children. However with the growing trend of obesity seen in young children lower fat products can be recommended in those children with a Body Mass Index over the 91st centile.

For all children, the principle of ‘variety’ is still the basis for ensuring that a child will get a good range of nutrients and exposure to new tastes, textures and experiences.

It is critical that independence is fostered and self help and fine manipulative skills are developed. Parents/carers should be encouraged to offer a wide range of foods with different colours, textures and flavours and that exposure to foods high in salt, sugar and additives is limited.

Foods that can be gradually introduced into the diet after the child is one year old include:

- Cows’ milk to drink (or a suitable substitute for those who don’t take cows’ milk for medical or cultural reasons)
- A wider range of pulses
- More citrus fruit
- A greater variety of all foods, tastes and textures
- Some spices
- Honey
1.2 Infant nutrition: key aspects

UNICEF, WHO and other infant-feeding specialists confirm that breastmilk gives a baby ideal nourishment during the critical first months of life, as well as vital immunity against killer diseases like pneumonia. Babies should be exclusively breastfed from birth to six months, and then breastfed alongside age-appropriate, complementary feeding for two years and beyond (Innocenti Declaration, 2005).

Full fat cows’ milk can be used in cooking, but should not be introduced as a drink until one year. Once solids are introduced and if breastfeeding has ceased, infants should be drinking about one pint per day.

All children need to consume adequate energy for growth and development – this can be challenging in children under two years of age as they eat relatively small volumes of food. Therefore, full fat versions of dairy products should be offered.

From two years a gradual introduction of low fat dairy products should be considered for children who are growing well and eating a varied diet. Semi-skimmed milk or water should be offered to drink in pre-school education settings.

By the age of five most children should be eating in accordance with the ‘eatwell plate’ model of healthy eating.

1.3 Helping children maintain a healthy weight

Obesity in the early years is on the increase, mainly due to environmental and behavioural changes related to diet and inactivity. A survey of a sample of children in NHS Highland area in 2008/09 indicated that up to 13% of P1 and 22% of P7 were overweight/obese.

While many of the factors causing overweight need to be addressed at a government level, parents, childcare providers and family support practitioners have a key role to play in enabling children to maintain a healthy weight.

Current Scottish guidance on the management of obesity recommends the following actions to encourage children and young people to eat well and to be physically active:

Encourage parents and carers to:

- ensure their children have regular meals, including breakfast, in a sociable atmosphere without distractions (such as watching television)
- whenever possible, eat meals with their children
- comfort their children with attention, listening and hugs instead of food
- separate eating from other activities such as watching television or using the computer
- encourage their children to listen to internal hunger clues and to eat to appetite
- avoid classifying foods as good or bad
- keep foods out of the house that their child should be avoiding.
Physical Activity

UK government guidelines published in 2011 recommend:

- **Infants who are not yet walking**
  Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments

- **Children who are capable of walking unaided**
  Should be physically active daily for at least 180 minutes (3 hours) spread throughout the day.

- **For all children under 5 years**
  (Adults) should minimise the amount of time children spend being sedentary (restrained or sitting) for extended periods (except time spent sleeping).

- More information and practical suggestions to achieve these targets are available in leaflets produced by the British Heart Foundation to accompany the guidelines, available to download from: http://www.bhfactive.org.uk/homepage-resources-and-publications-item/280/index.html

SIGN Guidance 115 Management of Obesity (NHS Quality Improvement Scotland, 2010) highlights:

- Children and young people should be encouraged to increase their physical activity to help manage their weight and because of the other known health benefits, such as reduced risk of type 2 diabetes and cardiovascular disease

- Parents should be aware that more than two hours of sedentary behaviour, particularly of screen time (TV watching, computer use and playing video games), for children per day should be discouraged.

- Children should be given the opportunity and support to be more active in their daily lives (such as walking, cycling, using the stairs and active play such as skipping) and supported to do more regular, structured physical activity (such as football, swimming or dancing).

- The choice of activity should be made with the child, and be appropriate to their age, ability and confidence.

- Encourage people to be more active as a family – for example, walking and cycling to school and shops, going to the park or swimming.

- Providing information on local opportunities to be active will make it easier for individuals to access them and enable them to make a longer term commitment to being active

The Active Scotland website by NHS Health Scotland helps to find local opportunities to be physically active www.activescotland.org.uk

The play@home books (see page 84) offer easy activities for 0-5 year olds.
1.4 Obesity in children

Diagnosis and screening

BMI centiles of the UK 1990 reference chart should be used to diagnose overweight and obesity in children:

- > 91st centile = overweight
- > 98th centile = obese

Treatment

An NHS Highland pathway for treatment of children under five years old is to be developed. Practitioners who are working with families should follow the SIGN recommendations above and:

- incorporate behaviour change components, similar to the X Programme and 1-1 Programme which are family focussed, interactive lifestyle behaviour change programmes for children aged 2-15. For further information about the X Programme and 1-1 Programme please contact the Public Health Department, NHS Highland
- encourage families to use existing resources like play@home activities and the ‘eatwell plate’.

Following the SIGN 115 recommendations:

In most obese children (BMI >98th centile) weight maintenance is an acceptable treatment goal.

The following groups should be referred to hospital or specialist paediatric services before treatment is considered:

- Children who may have serious obesity-related morbidity that requires weight loss (eg. benign intracranial hypertension, sleep apnoea, obesity hypoventilation syndrome, orthopaedic problems and psychological morbidity).

- Children with a suspected underlying medical (eg. endocrine) cause of obesity including all children under 24 months of age who are severely obese (BMI > 99.6th centile).
1.5 Resources

‘Ready Steady Toddler!’ is the national booklet for parents covering 13 months – three years, produced by NHS Health Scotland which includes healthy eating advice. All parents should be able to access the booklet through their HV/PHN. Copies are available through NHS Highland’s Health Information and Resources Service (HIRS) 01463 704647 or www.nhshighland.scot.nhs.uk/HIRS

Early Years Services have the national ‘Nutritional Guidance for Early Years: food choices for children aged one-five years in early education and childcare settings’ (Scottish Executive, 2006), which provides detailed advice on food and nutrition. All registered childcare providers were sent a copy in 2006. NHS Highland has added a supplementary sheet on sweeteners (see Appendix 10).

NHS Health Scotland produced ‘Adventures in Foodland’, a comprehensive national resource for those working with 0-five year olds. It complements the national Nutritional Guidance and is a practical guide for carers and includes information and activities on:

- Healthy Eating
- Oral Hygiene
- Promoting physical activity
- Developing a policy for your group.

The ‘Childsmile’ website has tips on snacks and drinks (www.child-smile.org)

‘play@home’ is a series of booklets for parents of 0-five year olds, promoting healthy development. The toddler (one-three years) and pre-school (three-five years) books give ideas for a wide range of activities, including songs, rhymes and messy play involving food. The books are offered to all parents in the NHS Highland area. A short quiz for practitioners to stimulate discussion can be found at Appendix 13.

When children attend an out of school club in school premises, the food offered will meet the requirements of the Schools (Health Promotion and Nutrition) (Scotland) Act 2007. The Care and Learning Alliance has produced a quick reference to implementing the Acts Standards (see Appendix 12). Supporting guidance developed by NHS Highland and The Highland Council is available, covering:

- Healthier home baking
- School Snacks
- Celebrations, special events, schools trips and rewards

Copies are available from Childcare and Early Education Service, 01463 711176 or can be downloaded from www.forhighlandschildren.org select ‘Your Choice to Healthy Living’.

For parents and carers, the Scottish Government website ‘Take Life On’ has ideas on healthy eating and being active: www.takelifeon.co.uk

‘Ready Steady Toddler’ www.readysteadytoddler.org.uk/
2. Childcare and Early Education Settings

2.1 Food and health

Food is much more than nutrition. Meals, snacks and drinks form part of our culture, social times, pleasure, satiety and as such form an important part of children’s experiences and education. Providing children with good nutrition can improve their ability to play, learn and socialise well, helps to ensure good growth and development and can protect against the development of heart disease, certain cancers and being overweight.

Many people are involved in the production and preparation of food. Decisions like supporting local businesses, making fair-trade choices, selecting organic/non organic foods, can support the health of others through providing a secure income, ensuring a safe working environment and reducing food miles.

Food has always been an important element of pre-school work and is embedded in the early years curriculum. Talking about, preparing/growing and eating food offers a wealth of opportunities to develop children’s enjoyment and understanding of healthy eating as well as their wider understanding of the world and their social skills.

The experiences offered to children - trying new textures, tastes and colours and understanding where food comes from and the link between food and health - are vital. These experiences can reinforce healthy eating habits and encourage those who have had less exposure to good food. This is relevant for both children and their parents.

Many children aged 0-five years will spend time in a setting registered with the Scottish commission for the Regulation of Care (the ‘Care Inspectorate’). Services which require to be registered are: childminders, day nurseries, out of school clubs and pre-school education centres. Standards are set which services should meet and which form the basis of inspection.

National Care Standard 3 sets out the expectations regarding ‘Health and Wellbeing’ in early education and childcare services up to the age of 16 including:

- Children and young people have opportunities to learn about healthy lifestyles and relationships, hygiene, diet and personal safety.
- Children and young people have access to a well-balanced and healthy diet (where food is provided) which takes account of ethnic, cultural and dietary requirements, including food allergies. Staff make sure that help with feeding is given in a way that best meets the needs of the child or young person.
- Children and young people have opportunity to sleep or rest and have regular access to fresh air and energetic physical play.

The ‘Curriculum for Excellence’ includes healthy eating and physical activity topics within the ‘Health and Wellbeing Outcomes’ for the early stage (three-six year olds).
2.2 A healthy eating policy

Childcare providers have many decisions to make on food, including:
- which food and drinks to serve
- how to involve parents and carers
- what to advise parents
- the use of food as rewards and treats
- birthdays and celebrations
- eating out
- whether to support promotions of certain foods

The best way to make sure that children get access to healthy foods on a consistent basis is for providers to have a Food and Health Policy. The ‘Nutritional Guidance for Early Years’ and ‘Adventures in Foodland’ include policy ideas which can be adapted. See Appendix 11 for a sample Policy from The Highland Council and Appendix 12 for food safety information for registered childcare and early education providers.

2.3 Promoting healthy eating

In addition to the main role of providing children with good nutrition, early years services also have a valuable role to play in promoting healthy eating to parents/carers and the wider community. Fun activities such as sharing recipes, community meals, growing plants, visiting producers and retailers can be an effective way of involving families and local businesses. If children bring a packed lunch, the ‘Rising Stars’ system developed in Highland is an easy and positive way to encourage parents and children to make healthier food and drink choices. It is aimed at school age children but has proved effective with pre-schools too. Copies are available from The Highland Council, Childcare and Early Education Service 01463 711176.

Free milk

Registered childcare and pre-school providers can claim free milk for children under five years old. If you are a local authority pre-school, please contact your council for details of how to claim. Other providers should contact their own organisation.

‘Healthy Start’ (see page 15/16)

We know that not all eligible families currently receive their entitlement of ‘Healthy Start’ vouchers for milk, fresh fruit and vegetables. Pre-school education centres are in a good position to remind parents about the ‘Healthy Start’ scheme, for example:
- put up a poster available from www.healthystart.nhs.uk
- display a list of local shops that accept vouchers
- explore what can be bought with the vouchers and recipe options, as part of working with families on healthy eating topics.
2.4 Becoming a breastfeeding friendly nursery

Early years providers can play a vital role in encouraging a positive attitude towards breastfeeding and supporting breastfeeding mothers.

- Welcome breastfeeding mothers and make a suitable space available for them if they would like it.
- Join the NHS Highland Baby Friendly welcome sticker scheme and put up ‘Breastfeeding Welcome’ signs (contact 01463 704842 for information).
- Positively support breastfeeding mothers, including safely storing and using breastmilk if available.
- Never give breastfed babies supplementary feeds of formula milk or water unless the parent made a fully informed choice to do this.
- Never use bottles or dummies with breastfed babies as this can affect their ability to suckle from the breast and can also mask feeding cues. If you have been instructed to, give supplementary feeds use feeding cups or spoons unless the parents have given consent to use a bottle and teat.
- WHO states that breastfed babies do not need any food other than breastmilk for up to six months.
- Bring the idea of breastfeeding into play, so that children are encouraged to see breastfeeding as normal and natural.
- Display posters on the wall which give a positive image of breastfeeding. For materials contact HIRS see below.
- Do not use toy baby feeding bottles, but replace with toy feeding cups. Remove all books or other materials which reinforce formula feeding as the normal way to feed a baby. Images can be found in unexpected places!

Checklist to evaluate resources:

- Does the resource demonstrate individuals using bottles as if this is the normal way to feed babies?
- Are bottles, teats and dummies used as symbols for babies?
- Do dolls come with bottles?
- Do the toys promote formula-feeding as the cultural norm?

Do not use any materials or leaflets which promote any formula milk company. This would contravene the WHO UNICEF International Code of Marketing of Breastmilk Substitutes. Appropriate materials can be supplied on request from:

Health Information & Resources Service,
Assynt House, Beechwood Park,
Inverness, IV2 3BW
01463 704647
www.healthyhighlanders.org.uk
2.5 Encouraging ‘fussy eaters’

It is possible for other children, nursery staff or parents to help a child accept a wider range of foods. To do this effectively requires a good deal of patience, persistence and judgement. A few tips are given below:

<table>
<thead>
<tr>
<th>Avoid making changes when a child is anxious</th>
</tr>
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<tbody>
<tr>
<td>➢ Anxiety will just make a child more likely to reject change.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Try to avoid negotiating, pleading and too much explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ This often just increases anxiety levels.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Limit the length of the meal</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Mealtimes should not be rushed. At the same time, most children do not need more than 15 to 30 minutes to eat a meal. It is sometimes helpful to create a rule where any food that is not eaten is thrown away after 30 minutes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Be realistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ One child can manage a plateful of new food, another will cope with a few mouthfuls. For some children, success is simply putting in the mouth and then removing it. The next time it is offered it will be more familiar and acceptable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Make the foods you want your child to eat seem more valuable</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ You can do this by appearing to restrict it... For example, we often say “Oh alright then, you can have a biscuit - but only one”. This often backfires, with the child wanting lots because you said they could only have one, so its value was increased. Why not try restricting something more nutritious like meat, fish, fruit or vegetables. This can make these foods seem more valuable too.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Take the pressure off</th>
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</thead>
<tbody>
<tr>
<td>➢ Put food that is unfamiliar on child’s plate. Do not ask the child to eat it. If they refuse, sometimes it is best just to say, “That’s fine, you eat what you want to. Leave that bit if you don’t like it”. Appearing not to care too much will help reduce any anxiety. Alternatively, put the foods you want the child to try on serving dishes so that they can help themselves. They are most likely to do this when you are not looking!</td>
</tr>
</tbody>
</table>

continued overleaf
**Encouraging ‘fussy eaters’ continued...**

<table>
<thead>
<tr>
<th><strong>Involve children in choosing which foods to buy, prepare or cook</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>➤ This helps to show children that they have some control and can make choices. For example, when shopping, tell the child to choose three new foods. To start with, these choices may not be that nutritious. This is not important. The child is just learning that trying new food is something that they have control over and that can be enjoyable. It may even be best not to ask the child to eat the food they have chosen when you get home. Leave it out so the new food can be seen. When the child sees the food that they have chosen, there is a chance that they will ask if they can have it. Similarly, if a child helps with preparing and cooking food, there may be no need to ask a child to try some. If they want some, they will either eat it or ask if they can have it.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Praising children</strong></th>
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</thead>
<tbody>
<tr>
<td>➤ You can praise children for trying something new. However, do not overdo it. Praise them in a ‘matter of fact’ way that is not too emotional. Too much expression may just remind the child what a big deal it is and make them anxious.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Dessert</strong></th>
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<tbody>
<tr>
<td>➤ Children often enjoy dessert more than the main course. This means that parents often only allow dessert if the main course has been eaten. This is not always a good idea. It can create the idea that the main course is an unpleasant thing that has to be endured before they get what they really want.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Influence of other children</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>➤ Avoid giving too many snacks immediately before a meal. Children eat better when they are hungry, but not too hungry. Try to leave at least an hour between a snack and a meal.</td>
</tr>
</tbody>
</table>
### 2.6 Further information

See Appendix 15 for websites of national organisations.

<table>
<thead>
<tr>
<th>Resources</th>
<th>Description</th>
<th>Further Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Promoting Health and Wellbeing in 0-five years settings</strong></td>
<td>A folder offered to all registered providers. It provides guidance on key health topics, including food and health, food safety and physical activity and signposts further information and sources of support.</td>
<td><a href="http://www.forhighlandschildren.org">www.forhighlandschildren.org</a> &gt; Your Choice to Healthy Living &gt; publications.</td>
</tr>
<tr>
<td><strong>Fun with Fruit &amp; Veg</strong></td>
<td>A resource for Highland pre-school groups, with a sum provided annually by NHS Highland for buying in fresh food, complemented by resources provided by the Early Education team and NHS colleagues. Centres are encouraged to buy food from local producers where possible.</td>
<td>The Highland Council Childcare &amp; Early Education Service ☎ 01463 711176.</td>
</tr>
<tr>
<td><strong>Highland One World Group</strong></td>
<td>Loans resources on food topics that incorporate learning about other cultures.</td>
<td><a href="http://www.highlandoneworld.org.uk">www.highlandoneworld.org.uk</a> (starts August 2012)</td>
</tr>
<tr>
<td><strong>Nutrition Guidance Training</strong></td>
<td><strong>Argyll &amp; Bute</strong>: a three hour course looking at implementation of the Nutritional guidance for Early Years document</td>
<td>Oban Education Office ☎ 01631 564908</td>
</tr>
<tr>
<td></td>
<td><strong>Highland</strong>: a similar short course may be available in some areas, dependent on trainer availability.</td>
<td>The Highland Council Childcare &amp; Early Education Service ☎ 01463 711176.</td>
</tr>
<tr>
<td><strong>Games, posters, DVDs</strong></td>
<td><strong>Highland</strong>: contact HIRS. Games include: Belly Busters, Chiphead and Lettucehead, Eat 5! Game, Set and Match</td>
<td><a href="http://www.nhshighland.scot.nhs.uk/HIRS">www.nhshighland.scot.nhs.uk/HIRS</a> ☎ 01463 704647</td>
</tr>
<tr>
<td></td>
<td><strong>Argyll &amp; Bute</strong>: NHS Greater Glasgow &amp; Clyde is able to provide resources and materials.</td>
<td>Public Education Resource Library, Dykebar Hospital, Paisley ☎ 0141 314 4261 or <a href="mailto:PERL@renver-pct.scot.nhs.uk">PERL@renver-pct.scot.nhs.uk</a></td>
</tr>
<tr>
<td></td>
<td>A resource comprising a large food groups mat and plastic foods is available from the Education Office.</td>
<td>Oban Education Office ☎ 01631 564908</td>
</tr>
</tbody>
</table>
3. Local Oral Health Education

Children’s dental hygiene scheme

This is an action plan for improving oral health and modernising NHS Dental services in Scotland. The Scottish Executive (2005), outlined measures to address poor oral health, including funding and provision of preventative care.

There are two ways to limit and reduce the incidence of tooth decay:

• Brush at least twice daily with a toothpaste containing at least 1000 ppm fluoride.
• Limit the frequency of intake of sugars in drinks and foods – if sugars are eaten, it should be as part of a meal, rather than between meals.

Multi-disciplinary working has a key role to play in improving oral health. The foundations for good oral health are established at an early age. Contact with various health professionals provides opportunities to offer advice, support and ensure access to oral hygiene resources.

‘Childsmile’

‘Childsmile’ is a national programme designed to improve the oral health of young children currently in an interim demonstration phase (2009-2011).

Within the programme from birth, HVs will assess newborn children so that all those considered to have increased risk of dental decay can be enrolled into the programme from the earliest age. Following referral, the family will be visited by a community based OHSW who will explain the benefits of joining ‘Childsmile’ and link the child into a local ‘Childsmile’ dental practice. The Dental Health Support Worker is available to support families to attend the dental practice at the recommended visits and also to link the family into other activities available in the local community that support good oral health.

Through ‘Childsmile’, children will receive an enhanced package of infant dental care at their chosen ‘Childsmile’ dental practice. The oral health promotion sessions will be run by ‘Childsmile’ trained dental care professionals with parents/carers on a one to one or small group basis in accordance with the care pathway. The care pathway recommends visits to the dental practice when the child reaches three months, six months and at least six monthly intervals thereafter.

APPENDICES
Appendix 1

The eatwell plate

Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.
Appendix 2

The national Logic Model

Warning - Document uncontrolled when printed

Version: 2  Date of Issue: September 2012
Page 94  Date of Review: September 2014
Appendix 3

Getting It Right for Every Child (*Girfec*)

The main aim of Getting It Right for Every Child (*Girfec*) is to ensure that all children in Scotland are at the centre of care provision. *Girfec* supports and builds on good practice delivered by universal services to ensure that children and families get the help they need, when they need it with less bureaucracy. This requires all agencies working together to ensure Scotland’s children get the best start in life.

The social and cultural influences that are experienced before, during and after pregnancy and childbirth have a significant and far reaching impact on child and maternal health and wellbeing. Ensuring that women and their families are engaged and informed to make positive health choices and ensure their own and their baby’s future health is paramount.

Early assessment during pregnancy means that service providers are well placed to identify those mothers and babies that may require additional support to enable them to meet their optimal health and social needs. Providing early support and intervention may offset the development of more complex needs and is the one of the principles of *Girfec*.

The promotion of breastfeeding is crucial to this journey into motherhood and the benefits that it offers mothers and babies can not be overstated. Providing mothers with accurate, evidence based knowledge about the benefits of breastfeeding can enable women to enter motherhood with confidence in their own abilities to nurture their babies.

*Girfec* offers practitioners across all agencies the same practice models and tools to enable robust assessment and planning of care within a health and social context. The wellbeing indicators – safe, healthy, achieving, nurtured, active, respected and responsible, and included are used as an aid to identifying any areas where support may be required. The ‘My World Triangle’ ecological model then assists practitioners to undertake a fuller assessment, identifying the strengths and pressures for a family and providing an analysis of their needs.

These models can help to identify the additional needs that may be required in the context of a holistic approach to infant feeding and ensure that all families are engaged in discussions and decisions to ensure that babies are healthy and nurtured and get best start in life.

www.forhighlandschildren.org/htm/girfec/girfec.php
Appendix 4

Managing your weight

In pregnancy

Your Body Mass Index (BMI) is calculated using your height and weight (weight (kg)/height (m)^2).

An information leaflet for women who are pregnant, or planning a pregnancy, and have a BMI over 30.

Managing your weight in pregnancy

Here are some ideas that have worked for other women. You decide what is right for you.

What specific changes are right for you?

What support can you get?

And remember - a healthy weight is for life, not just pregnancy.

I will cut back on pieces of fruit a day.

I will eat 2 extra I will not eat fried food.

I will only have sugar free drinks.

I will have smaller portions.

I will eat breakfast every day.

I will only have an occasional takeaway meal.

I will go for a walk every day.

I will eat 3 meals a day.

I will find out about local activity classes.

I will eat a more varied meal.

I will eat a healthy breakfast.

I will cut back on biscuits and cakes.

I will only have an occasional sweet.

I will not eat fried food.

I will eat smaller portions.

I will eat breakfast every day.

I will eat a healthy diet.

I will eat a more varied meal.

I will eat a healthy breakfast.

I will find out about local activity classes.

I will eat a more varied meal.

I will eat breakfast every day.

I will eat a healthy diet.

I will eat a more varied meal.

I will eat breakfast every day.

Something else?

Options for change

Maternal & Child Nutrition Best Practice Guidance - Revised 2012

Appendix 4

Leaflet devised by Lorna MacAskill, Midwife, and Fiona Clarke, Dietitian, NHS Highland. Tel 01463 717123
Having a healthy diet and being active will increase your chances of becoming pregnant and having a healthy pregnancy. Everything you eat or drink reaches your baby in some way and influences your baby’s health. Gaining too much weight in pregnancy is not healthy for you or your baby.

Getting fit before and during pregnancy means you will have a more comfortable and enjoyable pregnancy and birth.

Key messages:
- A healthy diet helps you with your pregnancy.
- A healthy diet helps your baby with their growth.
- Exercise will reduce your risk of developing complications.
- Most of these tips can be managed. Eating a healthy diet and keeping active. Having a healthy diet and being active will increase your chances of becoming pregnant and having a healthy pregnancy.

### Getting fit

#### Key messages:
- Get fit for pregnancy and childbirth.
- Do not try to lose weight.
- Do not eat for two (only 200 extra calories per day required in the last few weeks of pregnancy).
- Keep active e.g. walking, swimming, cycling and many activity classes are suitable.
- Take a supplement of folic acid when planning a pregnancy and until you are 12 weeks pregnant.
- Take a supplement of 10 micrograms (mcg) Vitamin D during pregnancy and breastfeeding.
- Eat regular, balanced meals.
- Limit the amount of high fat and high sugar foods you eat.
- Aim to eat 5 portions of fruit and vegetables every day.
- Drink plenty of non-sugary fluids and limit your caffeine intake.
- Aim to have a healthy diet and be active before planning another pregnancy. Gaining too much weight during pregnancy may put you and your baby at risk.

### Risks for you

- Miscarriage
- Diabetes
- High blood pressure
- Pre-eclampsia
- Caesarean section
- Wound infections
- Blood clots
- Big babies
- Birth defects (such as spina bifida)
- Obesity in childhood and later life
- Stillbirth

Most of these risks can be managed. Eating a healthy diet and keeping active will reduce your risk of developing complications.
Appendix 5

Keeping Childbirth Natural and Dynamic (KCND)

All NHS Boards in Scotland have now embraced the policy direction outlined in the ‘Framework for Maternity Services’ (2001) and ‘Expert Group on Maternity Services’ – EGAMS (2003). Both these reports endorse the promotion of pregnancy and childbirth as normal life events, advocating women centred care with services and care providers tailored to need. Community focus is recommended and midwife-led care for healthy women experiencing uncomplicated pregnancy. Women with more complex needs will be cared for by multidisciplinary maternity care teams led by an Obstetrician. The Midwife will be lead professional for the majority of low risk women and this increases the likelihood of a normal birth pathway for healthy women regardless of birth setting. Women with more complex needs should also have the opportunity of following as normal a birth pathway as possible despite risk factors.

The principles and philosophies of KCND Quality Improvement Scotland (QIS) support professionals working in maternity care. This ensures that women are appropriately risk assessed and follow a pathway appropriate to their needs.

Assessing weight in pregnancy is a vital component to the decision making process regarding which pathway a woman follows. If she has a BMI of <18 or >35 this puts her on a Red Pathway indicating significant associated risk factors during pregnancy, labour and birth. Assessment of weight, good dietary and nutritional support at the earliest opportunity is essential in order to ensure that risk factors can be minimised. This enables women to maximise opportunities to keep their pregnancy journey as normal as possible.
Appendix 6

High Life Highland Information

High Life membership is an affordable, flexible way for you and your family to enjoy leisure and cultural activities throughout the Highlands. There are 2 types of membership available.

<table>
<thead>
<tr>
<th>ALL INCLUSIVE</th>
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<tbody>
<tr>
<td>Family</td>
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<tr>
<td>£25.00 per month or £300 per year</td>
</tr>
<tr>
<td>Individual</td>
</tr>
<tr>
<td>£17.50 per month or £210 per year</td>
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</tbody>
</table>

All-inclusive membership offers unlimited access to most centre facilities and activities. You pay a monthly amount by Direct Debit or the equivalent annual lump sum by cash, cheque or debit/credit card.

<table>
<thead>
<tr>
<th>BUDGET</th>
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<tbody>
<tr>
<td>If you are entitled to certain benefits then the Budget option may be the best deal for you. You pay just 50p per person per activity. There’s no monthly payment and no contract. To be eligible for Budget Membership, you should be in receipt of one of the following benefits:</td>
</tr>
</tbody>
</table>

- Pension Guarantee Credit
- Job Seekers Allowance
- Income Support
- Employment Support Allowance
- Disability Living Allowance
- Attendance Allowance

For further details contact your local High Life Highland leisure centre or visit our website www.highlifehighland.com/membership
The following Leisure Centres are not operated by High Life Highland but you can still use your card there. Please be aware there may be further restrictions or charges applicable. Please contact the individual centre for full details.

<table>
<thead>
<tr>
<th>Centre Name</th>
<th>Address</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assynt Leisure Centre</td>
<td>Culag Harbour, Lochinver, IV27 4LQ</td>
<td>01571 844123</td>
</tr>
<tr>
<td>Averon Leisure Centre</td>
<td>High Street, Ainess, IV17 0GB</td>
<td>01349 882287</td>
</tr>
<tr>
<td>Culloden Academy Complex</td>
<td>Keppoch Road, Culloden, IV1 2JZ</td>
<td>01463 792794</td>
</tr>
<tr>
<td>Inverness Leisure</td>
<td>Bught Park, Inverness, IV3 5SS</td>
<td>01463 667500</td>
</tr>
<tr>
<td>Lochalsh Leisure Centre</td>
<td>Douglas Park, Kyle of Lochalsh, IV40 8AB</td>
<td>01599 534848</td>
</tr>
<tr>
<td>MacDonald Aviemore Highland Resort</td>
<td>Aviemore, PH22 1PN</td>
<td>0844 879 9152</td>
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</tbody>
</table>

### Argyll & Bute Leisure Facilities

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Address</th>
<th>Phone Number</th>
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<tbody>
<tr>
<td>Aqualibrium Swim and Health, Campbeltown</td>
<td></td>
<td>01586 551212</td>
</tr>
<tr>
<td>Atlantis Leisure, Oban</td>
<td></td>
<td>01631 566800</td>
</tr>
<tr>
<td>Helensburgh Swimming Pool</td>
<td></td>
<td>01436 672224</td>
</tr>
<tr>
<td>Mid Argyll Sports Centre</td>
<td></td>
<td>01546 603228</td>
</tr>
<tr>
<td>Riverside swim and Healthcentre, Dunoon</td>
<td></td>
<td>01369 701170</td>
</tr>
<tr>
<td>Rothesay Leisure Pool</td>
<td></td>
<td>01700 504300</td>
</tr>
<tr>
<td>Mid Argyll Swimming Pool, Lochgilphead</td>
<td></td>
<td>01546 606676</td>
</tr>
</tbody>
</table>
UNICEF 10 Steps to Successful Breastfeeding

Every facility providing maternity services and care for newborn infants should:
1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff.
2. Train all healthcare staff in skills necessary to implement the breastfeeding policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within half an hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants.
6. Give newborn infants no food or drink other than breastmilk, unless medically indicated.
7. Practice rooming-in, allowing mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

UNICEF 7 Point Plan for the protection, promotion and support of breastfeeding in community healthcare settings

All providers of community healthcare should:
1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff.
2. Train all staff involved in the care of mothers and babies in the skills necessary to implement the policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Support mothers to initiate and maintain breastfeeding.
5. Encourage exclusive and continued breastfeeding, with appropriately timed introduction of complementary foods.
6. Provide a welcoming atmosphere for breastfeeding families.
7. Promote co-operation between healthcare staff, breastfeeding support groups and the local community.
Appendix 8

Supplementary Memo on Artificial Sweeteners and the Nutritional Guidance for Early Years

The Guidance warns against the use of drinks and some foods high in added sugar. Such drinks and foods, if consumed frequently, can lead to tooth decay. Please be aware however, that many soft drinks (fizzy and still) are free from added sugar, but instead contain artificial sweeteners. We believe it may be unwise to provide these drinks either. The reasons for this are outlined below.

Drinks containing artificial sweeteners (or added sugar) may help children develop a taste for very sweet foods, meaning that the more subtle natural sweetness of fruit and vegetables taste bland by comparison. There has been some research and anecdotal reports suggesting that some artificial sweeteners may be harmful to the health of some vulnerable children.

Some artificial sweeteners are not permitted in foods marketed for children under two years of age. Some parents are concerned about the use of these sweeteners and other food additives, and would prefer these not to be given to their children.

Applying the precautionary principle, we advise therefore that foods or drinks containing artificial sweeteners are not provided for pre-school children in child care settings, and that parents and carers should not be encouraged to purchase them.

Instead, we suggest that three types of drink are provided. Namely milk or water anytime, pure fruit juice or ‘Smoothies’ in a cup, not a bottle, at mealtimes only. Look out for artificial sweeteners in low fat yoghurts too. These are best avoided. Wholemilk yogurt, plain or fruit flavoured is better.
Appendix 9

Healthy Eating Policy - samples

Name of Nursery

Snack time is an integral part in the social life of the nursery. It is also a time to reinforce children's understanding of the importance of healthy eating.

We hope to achieve this by ensuring that:

- All meals and snacks provided are nutritious and varied, avoiding large quantities of fat, sugar, salt, additives, preservatives and colourings.
- As a general rule, snack food will be provided by the nursery.
- Children's medical and personal dietary requirements are respected.
- Parents of children who are on special diets will be asked to provide as much written information as possible about suitable foods.
- Menus are planned in advance and food offered is fresh, wholesome and balanced.
- A multi-cultural diet is offered to ensure that children from all backgrounds encounter familiar tastes and that all children have the opportunity to try unfamiliar foods.
- The dietary rules of religious groups and also of vegetarians/vegans are known and met in appropriate ways.
- If a main meal is offered, the following elements are included:
  - protein for growth
  - carbohydrate for energy
  - essential minerals and vitamins in vegetables, salads and fruits
  - water, semi-skimmed milk or fruit juice to drink.
- Dairy foods: whole milk yoghurts, plain natural yoghurt, plain fromage frais and hard cheese can all be offered. Lower fat cheeses are also useful eg. cottage cheese.
- Semi-skimmed milk or water will be served with morning and afternoon snacks.
- Water will be available if children are thirsty.
Healthy Eating Policy

- The Healthy Eating Policy and snack menus are shared with parents. Nursery recipes can be available on request.
- Parents or guardians will be advised if their child is not eating well.
- Children will be encouraged to develop good eating skills and table manners and will be given plenty of time to eat.
- Withholding food will not be used as a form of punishment.
- Carers will sit with children while they eat and will provide a good role model for healthy eating and if rolling snack is in place, an adult will be monitoring the area.
- Food will be prepared and served in accordance with food hygiene guidelines.

Signature                        Role

Signature                        Role

Date

Further information:
Childcare and Early Education Service,
The Highland Council, ② 01463 711176
Healthy Eating in Clubs/Centres

Schools (Health Promotion and Nutrition) (Scotland) Act 2007
CALA GUIDE TO IMPLEMENTING NUTRITIONAL REQUIREMENTS

Healthy Eating in Clubs/Centres

Guidance on implementing Sections 4 & 6 of the Act

The Standards for Food Outwith Lunch and Drinks have been set to complement the work already undertaken by school catering providers and signal a clear and consistent message to pupils about what sort of foods and drinks they should eat throughout the school day.

Pupils have access to foods and drinks in a range of settings in school, and these standards are required to be implemented within these settings if they are operated by the local authority, managers of a grant aided school or by another person or organisation on their behalf. These settings are principally:

Breakfast clubs, tuck shops, mid-morning and afternoon snack, after school clubs providing snacks and meals.

Food Standards that apply to food that is provided to food outlets outwith the school lunch.

1. Fruit and vegetables
   - A variety of fruit and/or vegetables must be available in all school food outlets.
   - Only pre-packaged savoury snacks with:
     - Pack size of no more than 25g
     - No more than 22g of fat per 100g
     - No more than 2g of saturates per 100g

2. Savoury snacks
   - No more than 0.6g of sodium per 100g
   - No more than 3g of total sugar per 100g are permitted.

3. Table salt and Condiments
   - Additional salt must not be provided in schools.
   - Condiments (if available) must be dispensed in no more than 10 ml portions

4. Confectionery
   - No confectionery can be provided.

5. Fried foods
   - Fried foods cannot be provided.

Reference should also be made to: Nutritional guidance for early years: food choices for children aged 1-5 years in early education and childcare settings, Scottish Government. Prepared by Angela Dickson, Care and Learning Alliance.
## Schools (Health Promotion and Nutrition) (Scotland) Act 2007

**CALA GUIDE TO IMPLEMENTING NUTRITIONAL REQUIREMENTS**

<table>
<thead>
<tr>
<th>YES</th>
<th>SELECT WITH CARE</th>
<th>NO</th>
</tr>
</thead>
</table>
| A variety of **fruit** and/or **vegetables** must be available in all school food outlets.  
These could include for example:  
• Whole or pieces of fresh fruit  
• Canned fruit in natural juice  
• Raw vegetables  
• Salads  
There is a wide range of other foods that are not covered by the Standards that can still be provided in school food outlets. |
| Dried fruit with no added sugar or salt.  
If **condiments** are available, they must only be dispensed in no more than 10 ml portions.  
e.g. tomato ketchup, brown sauce, salad cream, mayonnaise, pickles and relishes.  
**Only savoury snacks** that have reduced amounts of fat, saturated fat, sodium and sugar and in a pack of no more than 25g are allowed e.g.  
• crisps,  
• crisp like products,  
• pretzels,  
• salted or sweetened popcorn,  
• rice crackers,  
• cream crackers,  
• oatcakes and  
• bread sticks |
| **X No confectionery**  
No chocolate and chocolate products, (e.g. bars of milk, plain or white chocolate, chocolate flakes, buttons or chocolate filled eggs and chocolate spread).  
Chocolate coated products, e.g. partially or fully coated biscuits, chocolate coated fruits or nuts, chocolates and chocolate coated ice cream and cereals with chocolate.  
No sweets, including sugar-free sweets  
e.g. boiled, gum/gelatine, liquorice, mint and other sweets, lollipops, fudge, tablet, toffee, sherbet, marshmallows and chewing gum.  
No chocolate, yoghurt or sugar coated dried fruit and nuts  
Cereal bars, processed fruit sweets and bars.  
**X No fried foods**, including products deep-fried in the manufacturing process,  
e.g. chips, pakora, spring rolls, potato waffles, potato wedges fried bacon, fried sausage, fried burgers and pre-prepared coated, battered and breaded products, e.g. chicken nuggets, fish fingers, potato shapes, battered onion rings and doughnuts.  
**No savoury snacks** – as per specifications on previous page.  
No additional salt should be provided. |

Reference should also be made to: Nutritional guidance for early years: food choices for children aged 1-5 years in early education and childcare settings, Scottish Government.  
Prepared by Angela Dickson, Care and Learning Alliance.
Appendix 10

Food Safety in Childcare Settings

All childcare services regulated by the Care Inspectorate who prepare food and/or drinks will require to be registered with their local Environmental Health Officer (EHO). If you are not already registered, please contact your nearest EHO, through your local authority. From April 2010 this will also apply registered childminders in domestic settings who provide a food service to those in their care.

Under the Food Hygiene Regulations there is a statutory obligation for anyone in a centre who handles food to notify the person in charge immediately if they are suffering from diarrhoea, salmonella or other germs likely to cause food poisoning, skin infections, nose or throat infections, ear or eye discharge.

The regulations set out a number of structural requirements such as the standards for lighting, walls, floors etc. One structural item which can cause issues is the provision of a sink designated only for hand washing. This wash hand basin should not be used for food preparation/dishwashing. It is preferable that separate facilities are provided for food preparation and equipment washing. It is however accepted that in smaller operations one sink may be used for both equipment and food washing, provided that both activities can be done effectively and without prejudice to food safety. The feasibility of this will vary depending on the type of food preparation being carried out. If you have any concerns on this matter or other structural issues please contact your local EHO. Often local solutions can be found.

Childcare providers need to look at the way food is prepared and to put controls in place to ensure that their practices do not prejudice food safety (risk assessment). Centres considering refurbishment or planning action as a result of a Care Inspectorate inspection should discuss this with their local EHO.

Certificated Training

All childcare providers must be fully aware of the key rules for food hygiene (see below). In centres, these must be explained to all new members of staff as part of their induction training before they become involved with any food preparation.

If centres are involved in the preparation of high risk foods such as sandwiches then at least one member of staff in a centre should hold the Elementary Certificate in Food Hygiene awarded by the Royal Environmental Health Institute for Scotland or an equivalent qualification. It is currently recommended that the course is retaken every four years. For more information see www.rehis.org.uk

Childminders are not required to attend a formal course or to acquire a food hygiene qualification, however they must have sufficient knowledge to prepare and supply food that is safe to eat.
Key Rules of Hygiene

1. Keep the storage and preparation of raw and cooked food strictly separate.

2. Avoid unnecessary handling of food.


4. Do not prepare food too far in advance.

5. When reheating food ensure it gets piping hot.

6. Clean as you go. Keep all equipment and surfaces clean.

7. Keep yourself clean and wear clean clothing.

8. Always wash your hands: - before handling food
   - after using the toilet
   - after handling raw foods or waste
   - before starting work
   - after each break
   - after blowing your nose

9. Do not smoke, eat, or drink when preparing food, and never cough or sneeze over food.

10. Ensure cuts and sores are covered with a waterproof, high visibility dressing.

11. Tell your supervisor, before commencing work of any skin, nose, throat, stomach or bowel trouble or infected wound.

12. Follow any food safety instructions either on food packaging or from your supervisor.

13. If you see something wrong - tell your supervisor.

Your local Environmental Health Officer should also be able to offer you advice.

The Food Standards Agency website also has useful information, including sections on cleaning and food safety: www.food.gov.uk
# Appendix 11

## Healthy Eating Quiz for Early Years Practitioners

<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What roughly is ‘a portion’ of food?</strong></td>
<td>Approximately one-third to two-thirds of an adult portion, or more generally, ‘a handful’ of whoever is doing the eating.</td>
</tr>
<tr>
<td><strong>Should you always use very low fat products for children to maintain a healthy weight?</strong></td>
<td>No. Low fat spreads of less than 40% fat are not recommended because they have a high level of poor quality hydrogenated fat. Butter or mono or poly unsaturated fat and oils eg. olive oil or rapeseed oil are recommended. Whole or semi-skimmed milk should be used.</td>
</tr>
<tr>
<td><strong>Is it OK to use diluted pure fruit juice in pre-schools?</strong></td>
<td>Only milk or water should be offered outside meal times. Unsweetened diluted pure fruit juice in a cup could be offered with a meal.</td>
</tr>
</tbody>
</table>
| **Can the children eat any veg and fruit that you grow with them?**       | Yes. The Care Inspectorate does not object to such activities. They expect that all usual health safety precautions are adhered to regarding the handling of food:  
  • Ensure the growing medium and the growing environments are safe  
  • Be aware of any possible contamination from animals eg. cats  
  • Wear Gloves if necessary  
  • Wash hands after gardening and before preparing food  
  • Scrub and or rinse food before cooking/eating |
| **Why might playing outside help children’s nutrition?**                  | Most of our vitamin D comes from the action of sunlight on our skin so toddlers and pre-school children should get a moderate amount of sunlight, especially during the summer months so that they build up a store of vitamin D. Foods rich in vitamin D help the body absorb calcium to build strong bones. Low light levels in northern Scotland means that young children and those with darker skin pigmentation may be deficient in vitamin D. A dietary supplement of vitamin D is important during Autumn, Winter and Spring. Good food sources are tinned oily fish, margarine, eggs, meats, fortified cereals. Some children may benefit from drops with vitamins A, C and D (free to families on benefits, via ‘Healthy Start’ scheme). |
## Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANNP</td>
<td>Advanced Neonatal Nurse Practitioner</td>
</tr>
<tr>
<td>BEG</td>
<td>Breastfeeding Expert Group</td>
</tr>
<tr>
<td>BFI</td>
<td>Baby Friendly Initiative</td>
</tr>
<tr>
<td>BLISS</td>
<td>For babies born too soon, too small, too sick</td>
</tr>
<tr>
<td>BMI</td>
<td>Body Mass Index</td>
</tr>
<tr>
<td>CEMACH</td>
<td>Confidential Enquiry into Maternal and Child Health</td>
</tr>
<tr>
<td>CHSP-PS</td>
<td>Child Health Surveillance Programme - Pre-School</td>
</tr>
<tr>
<td>CMW</td>
<td>Community Midwife</td>
</tr>
<tr>
<td>CPAP</td>
<td>Continuous Positive Airway Pressure</td>
</tr>
<tr>
<td>EDD</td>
<td>Estimated delivery date</td>
</tr>
<tr>
<td>EBM</td>
<td>Expressed Breastmilk</td>
</tr>
<tr>
<td>Girfec</td>
<td>Getting it Right for Every Child</td>
</tr>
<tr>
<td>HBC</td>
<td>Health Behaviour Change</td>
</tr>
<tr>
<td>HV</td>
<td>Health Visitor</td>
</tr>
<tr>
<td>KCND</td>
<td>Keeping Childbirth Natural and Dynamic</td>
</tr>
<tr>
<td>NEC</td>
<td>Necrotising Interocolitis</td>
</tr>
<tr>
<td>NG</td>
<td>Naso-Gastric</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health Service</td>
</tr>
<tr>
<td>NICE</td>
<td>National Institute for Health and Clinical Excellence</td>
</tr>
<tr>
<td>NTD</td>
<td>Neural Tube Defect</td>
</tr>
<tr>
<td>OGTT</td>
<td>Oral Glucose Tolerance Test</td>
</tr>
<tr>
<td>OHSW</td>
<td>Oral Health Support Worker</td>
</tr>
<tr>
<td>PHN</td>
<td>Public Health Nurse</td>
</tr>
<tr>
<td>RNI</td>
<td>Reference Nutrient Intake</td>
</tr>
<tr>
<td>SCBU</td>
<td>Special Care Baby Unit</td>
</tr>
<tr>
<td>SlgA</td>
<td>Secretory Immunoglobulin A</td>
</tr>
<tr>
<td>SWHMR</td>
<td>Scottish Woman Held Maternity Record</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations International Children’s Emergency Fund</td>
</tr>
<tr>
<td>VLBW</td>
<td>Very Low Birth Weight</td>
</tr>
<tr>
<td>Weaning</td>
<td>The gradual introduction of solid foods along with the usual milk feeds (breast or formula) to an infant's diet</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
</tbody>
</table>
## Appendix 13

### Useful Websites

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Contacts details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association for spina bifida hydrocephalus</td>
<td><a href="http://www.asbah.org">www.asbah.org</a></td>
</tr>
<tr>
<td>BLISS - The premature baby charity</td>
<td><a href="http://www.BLISS.org.uk">www.BLISS.org.uk</a></td>
</tr>
<tr>
<td>Breastfeeding Network</td>
<td><a href="http://www.breastfeedingnetwork.org.uk">www.breastfeedingnetwork.org.uk</a></td>
</tr>
<tr>
<td>Childsmile</td>
<td><a href="http://www.child-smile.org">www.child-smile.org</a></td>
</tr>
<tr>
<td>Community Food &amp; Health Scotland</td>
<td><a href="http://www.communityfoodandhealth.org.uk">www.communityfoodandhealth.org.uk</a></td>
</tr>
<tr>
<td>Getting it right for every child</td>
<td><a href="http://www.forhighlandschildren.org/htm/girfec/girfec.php">www.forhighlandschildren.org/htm/girfec/girfec.php</a></td>
</tr>
<tr>
<td>Food Standards Agency</td>
<td><a href="http://www.eatwell.gov.uk">www.eatwell.gov.uk</a></td>
</tr>
<tr>
<td>Food Standards Agency, Scotland</td>
<td><a href="http://www.food.gov.uk/scotland">www.food.gov.uk/scotland</a></td>
</tr>
<tr>
<td>‘Healthy Start’ Scheme</td>
<td><a href="http://www.healthystart.nhs.uk">www.healthystart.nhs.uk</a></td>
</tr>
<tr>
<td>KCND</td>
<td><a href="http://www.scotland.gov.uk">www.scotland.gov.uk</a></td>
</tr>
<tr>
<td>Maternal and Early Years Network</td>
<td><a href="http://www.maternal-and-early-years.org.uk">www.maternal-and-early-years.org.uk</a></td>
</tr>
<tr>
<td>National Childbirth Trust</td>
<td><a href="http://www.nctpregnancyandbabycare.com">www.nctpregnancyandbabycare.com</a></td>
</tr>
<tr>
<td>NHS Health Scotland</td>
<td><a href="http://www.healthscotland.com">www.healthscotland.com</a></td>
</tr>
<tr>
<td>NHS Highland Health Information and Resources Service (HIRS)</td>
<td>Catalogue and booking at <a href="http://www.nhshighland.scot.nhs.uk/HIRS">www.nhshighland.scot.nhs.uk/HIRS</a></td>
</tr>
<tr>
<td>Net Mums</td>
<td><a href="http://www.netmums.com">www.netmums.com</a></td>
</tr>
<tr>
<td>play@home</td>
<td>See Issue 15 at: <a href="http://www.ltscotland.org.uk/earlyyears">www.ltscotland.org.uk/earlyyears</a> mattered/</td>
</tr>
<tr>
<td>Ready Steady Baby</td>
<td><a href="http://www.readysteadybaby.org">www.readysteadybaby.org</a></td>
</tr>
<tr>
<td>Ready Steady Toddler</td>
<td><a href="http://www.readysteadytoddler.org">www.readysteadytoddler.org</a></td>
</tr>
<tr>
<td>Scientific Advisory Committee on Nutrition</td>
<td><a href="http://www.sacn.gov.uk">www.sacn.gov.uk</a></td>
</tr>
<tr>
<td>SWHMR</td>
<td><a href="http://www.nhsqis.org">www.nhsqis.org</a></td>
</tr>
<tr>
<td>Take Life On</td>
<td><a href="http://www.takelifeon.co.uk">www.takelifeon.co.uk</a></td>
</tr>
<tr>
<td>UNICEF UK Baby Friendly Initiative</td>
<td><a href="http://www.babyfriendly.org">www.babyfriendly.org</a></td>
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</table>
## Appendix 14

### Working Group

<table>
<thead>
<tr>
<th>Name and email</th>
<th>Job Title</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Val MacDonald</td>
<td>Health Improvement Specialist</td>
<td>NHS Highland</td>
</tr>
<tr>
<td><a href="mailto:valerie.macdonald1@nhs.net">valerie.macdonald1@nhs.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lorna Macaskill</td>
<td>Community Midwife</td>
<td>NHS Highland</td>
</tr>
<tr>
<td><a href="mailto:lorna.macaskill@nhs.net">lorna.macaskill@nhs.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karen Mackay</td>
<td>Infant Feeding Advisor</td>
<td>NHS Highland</td>
</tr>
<tr>
<td><a href="mailto:karen.mackay3@nhs.net">karen.mackay3@nhs.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Julia Nelson</td>
<td>Health Development Officer – Early Years</td>
<td>The Highland Council</td>
</tr>
<tr>
<td><a href="mailto:julia.nelson@highland.gsx.gov.uk">julia.nelson@highland.gsx.gov.uk</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nikki Strachan</td>
<td>Specialist Paediatric Dietitian</td>
<td>NHS Highland</td>
</tr>
<tr>
<td><a href="mailto:nikki.strachan@nhs.net">nikki.strachan@nhs.net</a></td>
<td></td>
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</tr>
</tbody>
</table>
Appendix 15

References


Alm Bel et al (2002), Breastfeeding and the sudden infant death syndrome in Scandinavia, 1992-95


Better Health, Better Care: Scotland’s Action Plan for Health
www.scotland.gov.uk/Publications/2007/12/11103453/0


‘Childsmile’ national programme designed to improve general and oral health and reduce health inequalities: www.child-smile.org


Equally Well: Implementation Plan www.scotland.gov.uk/Publications/2008/12/10094101/0


Griesbach, D (2009) ‘Knowledge and attitudes towards vitamin D and folic acid supplementation among health professionals and the public.’ NHS Health Scotland


Hogan M Wescott, C Griffiths DM 2005 Randomised, controlled trial of division of tongue-tie in infants with feeding problems journal of paediatrics and childbirth 41 (5-6), 246-250


Hurst NM, Valentine, Renfro L et al. Skin to skin holding in the neonatal intensive care unit influences maternal milk volume. J Perinatol 1997;17:213-217


http://bapm.org/nutrition/guidelines.php


www.tommys.org


National Care Standards Early Education and Childcare up to the age of 16

www.scotland.gov.uk/Publications/2009/01/13095148/0


National Institute for Health and Clinical Excellence IPG149 Decision on ankyloglossia (tongue-tie) for breastfeeding (2005)

National Institute for Health and Clinical Excellence PHG11 Support for Peer Support (2009)


National Institute of Clinical Excellence (2010) Venous thromboembolism-reducing the risk


NHS Health Scotland, 2007, Ready Steady Toddler! Downloadable at: www.readysteadytoddler.org.uk/ (Polish, Russian and Lithuanian versions available)

NHS Highland Prescribing Policy for Vitamins and Iron, February 2007

NHS Highland Feeding Policy for babies in SCBU Feb 2007

NHS Highland Breastfeeding Strategic Framework 2010 -2013

NHS Highland 2009, Highland’s Information Trail.

NHS Highland and The Highland Council Rising Stars leaflet Feb 2008


Richens, Y ‘Bring back the scales’ (2008) British Journal of Midwifery 16(8) 534-535


www.scot.gov.uk/Topics/Health/NHS-Scotland17273
Scottish Government Early Years Framework www.scotland.gov.uk/Publications/2009/01/13095148/0
Stewart, Ramsay, Greer ‘Review Obesity: impact on obstetric practice and outcome’ The Obstetrician and Gynaecologist 2009;11:25-31
Scottish Government (2010) Preventing overweight and Obesity in Scotland: A Route Map Towards Healthy Weight
The ‘Curriculum for Excellence’ (3-18 year olds) Health and Wellbeing Outcomes www.ltscotland.org.uk/
UNICEF UK Baby Friendly Initiative Workbook for the three day Course in Breastfeeding Management 2004
WHO Technical review of Optimal Feeding of low birth weight infants, 2006
World Health Organisation review of literature 1997

References