

Eating for 1, Healthy and Active for 2

Experiences of facilitating compact training for community midwives

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Maternal BMI Statistics- North Wales

June 2014 - May 2015

28.6% women have a BMI 25-29.9

13.4% women have a BMI 30-34.9

6.6% women have a BMI 35-39.9

4.1% women have a BMI >40

24.7% have a BMI ≥ 30

52.7% are classified as overweight or obese

(approx 2% did not have a BMI recorded)

**Obese women 'twice as likely
to lose baby in first year'**

**Indulging while pregnant could
make your child obese**

**Mother's lifestyle maybe
to blame for worrying
number of birth
defects in Wales**

One in four pregnant women in North Wales is obese

**Obese pregnant women cost
the NHS up to 37% more**

**Babies of obese mothers
are at a higher risk of
premature birth**

**Mums to be with unhealthy
diets are 'more likely
to have badly
behaved children'**

**Obese mothers 'put babies'
hearts at risk'**

BCUHB Integrated Care Pathway

- Implemented across the health board in 2013
- All women with a calculated BMI ≥ 30 at the initial antenatal assessment
- Advice & support to optimise healthy weight management/minimise associated risks of a raised BMI
- Lifestyle tips & signposting on discharge (post pregnancy)



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INTEGRATED CARE PATHWAY (ICP) Pre-pregnancy, Antenatal, Labour and Postnatal care pathway for women with a raised BMI

ICP DEFINITION

This ICP is intended as a guide in providing care for the patient and their family. This multidisciplinary document will replace existing medical and nursing notes during this period of care. Professionals are encouraged to exercise their own professional judgement, however any alteration to the practice identified within this ICP must be recorded. If appropriate, patients can come off the pathway.

Overall Objectives of this care pathway

- To ensure all women of childbearing age have the opportunity, advice and support to optimise their weight pre, intra and post pregnancy (RCOG 2010)
- To reduce potential risks associated with obesity in pregnancy (RCOG 2010)
- To assist patients to achieve and maintain a healthy weight before, during and after pregnancy by eating healthily and being physically active and gradually losing weight after pregnancy (NICE 2010)
- To prevent patients from becoming overweight or obese (NICE 2010)
- To reduce the risk of thrombosis and embolism during pregnancy (RCOG 2009)
- To reduce the risk of hypertensive disorders in pregnancy (NICE 2010)

CRITERIA FOR USE

Inclusion criteria: BMI 30 kg/m² and above at booking visit.

INSTRUCTIONS FOR USE

Before writing in this ICP, please ensure you have signed the signature sheet (page 2). When using this document please ensure that you date, time and initial against each activity where indicated. It is important to remember that the aim of the ICP is to ensure the most appropriate care is given at the correct time.

If an activity outlined in the ICP has not, for whatever reason, been completed then this must be marked as unmet and detailed in the variance section. The pathway should be filed in the antenatal hand held notes (ANHHN) and used throughout pregnancy. At the onset of labour the pathway should be removed from the ANHHN and placed in the labour notes. Following birth the pathway should be removed from the labour notes and placed with the postnatal hand held notes.

It remains each professional's responsibility to ensure that practice is safe. This ICP is not a replacement for experienced clinical judgement and inter-disciplinary discussions. If you require further information please contact your Manager, Clinical Team Leader or ICP Co-ordinator.

1. Management of Women with Obesity in Pregnancy, CMACE/RCOG Joint Guideline (2010)
2. Weight management before, during and after pregnancy NICE Guideline (2010) – PH27
3. Thrombosis and Embolism during Pregnancy and the Puerperium, Reducing the Risk, Green-top 37 (2009)
4. Hypertension in Pregnancy, NICE Guideline (2010) – CG107

Responding to Training Needs



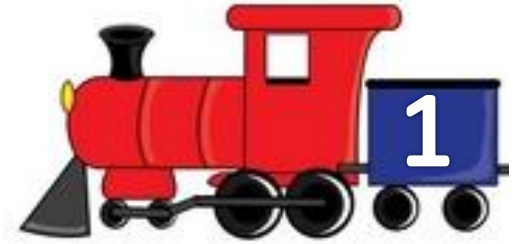
- 89% of our midwives wanted access to **local** nutrition/weight management training

(North Wales Public Health Conference, May 2012)

- Specific training needs:
 - how to approach the topic of weight*
 - to be able to offer positive advice*
 - suitable supplements*
 - update on general nutrition*

The Training Journey

Development



- Consulted with Senior & Community Midwives, a Health Psychologist & Exercise Physiologist
- Observed booking/ antenatal clinics
- Spoke to other services across the UK to explore existing training models
- Reviewed clinical/ public health guidance and related qualitative literature from the perspective of midwives and women
- Formulated learning outcomes to fit around the allocation of a half day 'compact' training model
- Applied for RCM CPD accreditation

The Training Journey

Results ...



- Published in BMC Pregnancy & Childbirth (Basu et al, 2014)
- Achieved statistically significant improvements in self reported knowledge and confidence e.g.
 - 97% indicated knowledge of pregnancy food & nutrition messages was ‘much’ or ‘somewhat better’, with 60% of this figure stating it was ‘much better’
 - 83% indicated confidence to explain the risks of a raised BMI in pregnancy was ‘much better’ or ‘somewhat better’
- Emerging themes....
Good Quality/ Valued Resources/ Relevant to
Midwives/ Much to fit in

The Training Journey

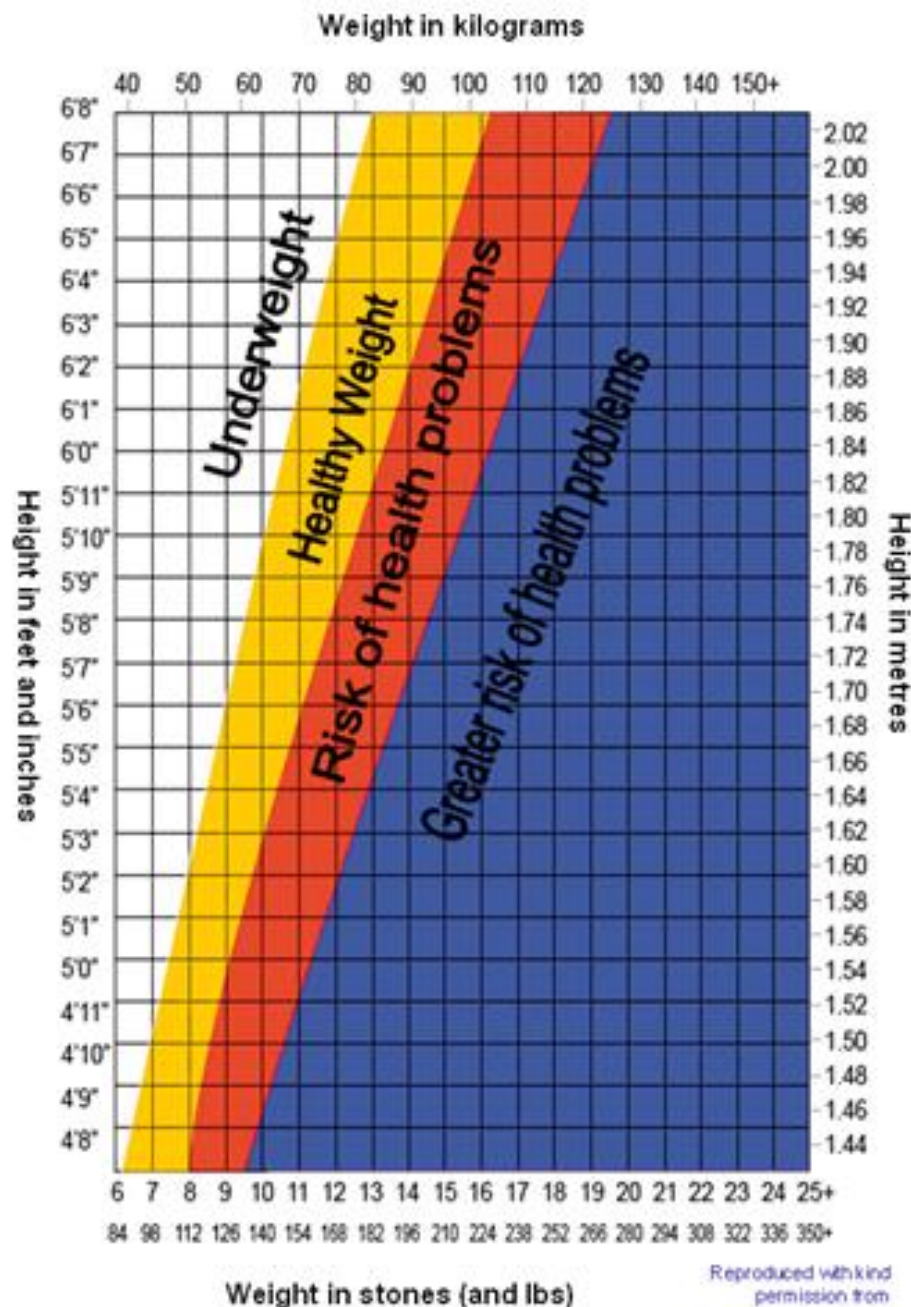
Next Steps...



- Included within BM (Hons) Midwifery course Bangor Uni
- Incorporated into Obs & Gynae mandatory training programme across the health board for a full 12/12
- Produce a bi annual e-bulletin with topical updates
- Facilitated a 1 day 'train the trainer' session for other Specialist Dietitians across Wales
- Developed a similar training model for Health Visitors to maximise opportunities for cascading messages to support families and future pregnancies

Activities & Resources





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In this range you are underweight:

- You may not be eating enough food to supply your own body and your growing baby with the nutrients you both need
- Being underweight and trying to stay within this range can be unhealthy
- It is important to eat a healthy balanced diet and to try to gain weight

The healthiest range:

- You are at least risk of developing weight-related medical problems and having complications during your pregnancy and birth
- For a healthy pregnancy it is important to follow a healthy, balanced diet and include some daily physical activity

In this range you may be at risk of developing weight related health problems:

- Making small changes to your diet and becoming more active will help to reduce this risk and could also improve any existing health problems
- Making healthy lifestyle changes now will help you avoid gaining excess weight during pregnancy, making it easier to achieve a healthy weight after giving birth

In this range your health is at greatest risk:

- You are at increased risk of a number of weight-related complications during pregnancy
- Making changes to the foods you eat and becoming more active will help to reduce the health risk and will benefit both you and your baby
- Making healthy lifestyle changes now will help you avoid gaining excess weight during pregnancy, making it easier to move towards a healthy weight after giving birth

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Bump, Baby & Beyond

Naw Mis a Mwy

Practical tips for helping you engage pregnant women in discussions on weight and weight gain in pregnancy...

Do explain why you want to take her weight and height and check her understanding of BMI.

Do sensitively explain how weight (a raised BMI) can pose some risks during pregnancy (for mum & baby).

Do focus on the positives e.g. when discussing weight related risk factors reassure her about how the risks will be managed; the benefits of additional monitoring/screening.

Do listen to her concerns e.g. how she feels about her weight now she's pregnant.

Do explain that weight loss isn't recommended in pregnancy (regardless of her weight at the start). Instead, focus on the benefits of eating well and being active.

Do give any guidance or advice neutrally e.g. Some women find it helpful to try this.... or scientific evidence tells us....

Don't avoid the topic of weight, women can value the opportunity to talk about it when pregnant, particularly if they feel listened to and understood.

Don't use the word 'obese'. It is a clinically accurate term but women often find this offensive. Instead use alternative phrases such as 'a raised BMI' or 'weight above the recommended range'.

Don't be judgemental about her weight, be mindful of your own opinions and put any prejudices you may have to one side.

Don't rush in with your own ideas about what she should do to manage her weight in pregnancy.

Don't reinforce statements such as 'I'll worry about my weight after I've had the baby'. Reassure her that weight gain is a normal and healthy part of pregnancy, however excessive weight gain can for many women lead to longer term weight retention after pregnancy.

Food Group	Key Messages
Foods and drinks high in fat and/or sugar	<ul style="list-style-type: none"> Limiting these can help you achieve the best quality of your diet Including a mix of foods to achieve the best quality of your diet Limiting the frequency of eating these foods Managing your weight It's only in the last 10 years that we've realised that eating too much of these foods can lead to health problems
Fluids	<ul style="list-style-type: none"> Drinking plenty of water (and other fluids) is important for pregnancy Adult females should drink at least 6-8 glasses a day

AB, BCUHB, MW Training Notes, Updated Dec 2014

Food Group	Key Messages
Meat, fish, eggs, beans and other non dairy sources of protein	<ul style="list-style-type: none"> These foods are an important source of protein for maintenance and repair of cells in your body Aim to have 2 portions of foods from this group each day 75-100g (3-4oz) lean meat, poultry or fish 125g (5oz) white fish 2 eggs 4 tablespoons pulses, lentils, chickpeas 2 tablespoons of plain nuts 2 tablespoons of plain seeds Meat is also one of the main sources of iron Red meat is a rich source of iron Oily fish has an important role in brain development. The Department of Health recommends eating 2 portions of oily fish per week e.g. salmon, mackerel, sardines Some fish need to be cooked thoroughly Beans, lentils, and chickpeas contain fibre, protein and iron but have no fat

AB, BCUHB, MW Training Notes, Updated Dec 2014

Food Group	Key Messages
Milk and Dairy	<ul style="list-style-type: none"> These are a great source of calcium and your baby These foods (alongside fish) are important for brain development. Eating red meat can affect child cognitive development Aim to have 3 portions of these foods each day a third pint of milk (200ml) 30g (1oz) cheese 1 pot of yoghurt (125g) 1 medium to large portion of soft cheese (50g (2-3oz) soft cheese) half a tin of rice pudding Lower fat milks e.g. skimmed milk These foods are also a good source of protein If you are eligible for free school meals, you can get milk and yoghurt for free Some yogurts are fortified with vitamin D Vitamin D helps our bodies absorb calcium If you prefer alternative milks, choose ones that are fortified with calcium and vitamin D

AB, BCUHB, MW Training Notes, Updated Dec 2014

Food Group	Key Messages
Bread, rice, potatoes, pasta and other starchy foods	<ul style="list-style-type: none"> These are an important source of energy around these foods The number of portions you eat from this group each day depends on your age and sex Most women (as well as most men) should eat 4-6 portions each day 1 slice medium wholemeal bread 2-3 tablespoons of rice 2 heaped tablespoons of pasta 2-3 heaped tablespoons of potatoes 2 egg sized potatoes 1/4 of a medium wholemeal loaf There are lots of different types of starchy foods Choose wholemeal bread and wholemeal pasta Fortified and fortified cereals Don't just eat white bread

AB, BCUHB, MW Training Notes, Updated Dec 2014

Food Group	Key Messages
Fruit and vegetables	<ul style="list-style-type: none"> These are super foods packed with essential vitamins, minerals and fibre Aim to eat at least 5 portions from this group each day. Examples of a portion would include any one of the following: <ul style="list-style-type: none"> 1 medium apple, pear or banana 2 small fruits e.g. satsumas or plums small bowl of vegetables handful of salad 1 heaped tablespoon of dried fruit 100mls pure unsweetened fruit juice (only counts as 1 portion per day) When looking to increase the number of portions you eat, build up gradually Try and include a variety of colours so you and your baby benefit from the full range of vitamins and minerals they offer e.g. red, orange and yellow varieties give a rich source of Vitamin C and iron Leafy green vegetables and salads are a good source of folic acid (vitamin B9) and iron Folic acid is an important mineral that helps your baby to develop normally. In addition to what you eat, the Department of Health recommends that women planning to become pregnant take a supplement of 400 micrograms a day (5 milligrams a day for women with a raised BMI) at least 1 month before conceiving, and up until the 12th week of pregnancy* Have you heard about Healthy Start? Some pregnant women are eligible to receive vouchers for £3.10/week and can be exchanged for fresh or frozen fruit and vegetables (and milk - see later) Remember to wash all your fruit, vegetables and salad before eating

AB, BCUHB, MW Training Notes, Updated Dec 2014

The Eatwell Plate- key messages for Pregnancy

Tips to help health professionals communicate healthy eating messages to women during pregnancy

Key Messages for Pregnancy

These are super foods packed with essential vitamins, minerals and fibre

Aim to eat at least 5 portions from this group each day. Examples of a portion would include any one of the following:

- 1 medium apple, pear or banana
- 2 small fruits e.g. satsumas or plums
- small bowl of vegetables
- handful of salad
- 1 heaped tablespoon of dried fruit
- 100mls pure unsweetened fruit juice (only counts as 1 portion per day)

When looking to increase the number of portions you eat, build up gradually

Try and include a variety of colours so you and your baby benefit from the full range of vitamins and minerals they offer e.g. red, orange and yellow varieties give a rich source of Vitamin C and iron

Leafy green vegetables and salads are a good source of folic acid (vitamin B9) and iron

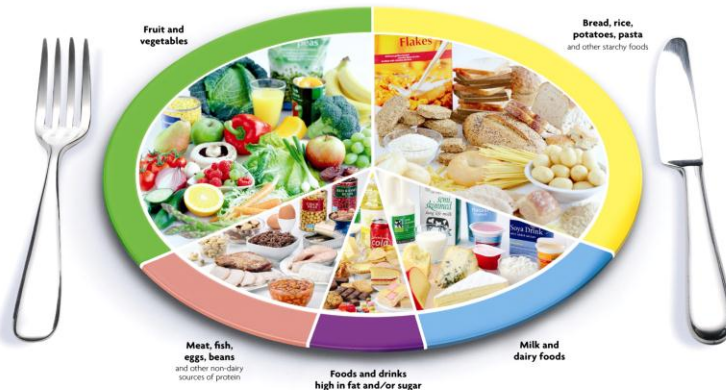
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Have you heard about Healthy Start? Some pregnant women are eligible to receive vouchers for £3.10/week and can be exchanged for fresh or frozen fruit and vegetables (and milk - see later)

Remember to wash all your fruit, vegetables and salad before eating

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.

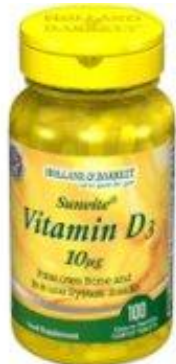
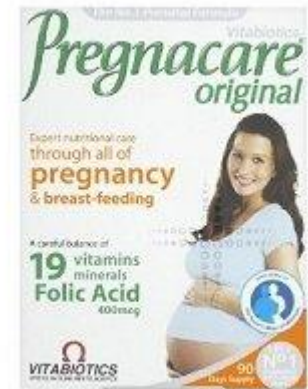
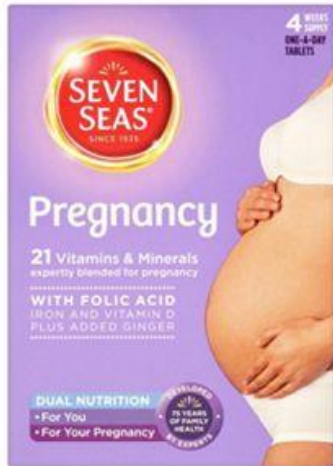


Department of Health in association with the Welsh Government, the Scottish Government and the Food Standards Agency in Northern Ireland

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Pregnancy Supplements- what to advise?



British Dietetic Association Fact Sheets

BDA The Association of UK Dietitians

Food Fact Sheet

Pregnancy

This Food Fact Sheet will help you to eat well before and during pregnancy to give your baby a good start in life.

Healthy eating for pregnancy is no different from at any other time of your life. There is no need to eat for two, eating a varied diet made up from the four main food groups below is ideal. Try to eat regularly - three meals per day are ideal to ensure you and your baby get all the nutrients needed.

Bread, rice, potatoes, pasta and other starchy foods including jam, chapatti - these foods give you energy and should make up the main part of each meal. Choose wholegrain options.

Fruit and vegetables - these give you calcium, minerals and fibre. Aim to eat five or more portions per day. Fresh, frozen, tinned, dried and juiced all count.

Meat, fish, eggs, beans and other non-dairy sources of protein such as nuts, pulses and iron. Include foods from this group twice a day. Try to eat one portion of oily fish per week.

Milk and dairy foods - these give you calcium. Aim to have three portions of these foods per day. One portion is provided by one of the following: One glass (one glass) of milk, 150g yoghurt and 30g cheese. Choose low fat dairy products unless you are underweight. If you eat soya products unless they have calcium added. Other non-dairy foods containing calcium include tinned, green leafy vegetables, broccoli, tofu, whitebait, beans, dhal, sardines, almonds, dried fruit.

Foods high in fat and/or sugar - keep foods from this food group such as cakes, biscuits, chocolate to a minimum to avoid too much weight.

Common questions

Is there financial help? Yes. If you are on certain benefits for Healthy Start from 10 weeks pregnant you will receive a weekly voucher for fruit and vegetables.

Should I take folic acid? Yes. To help prevent neural tube defects you should take a 400mcg folic acid supplement before (when stopping contraception) and during the first 12 weeks of pregnancy. If you have a family history of neural tube defects or are taking certain medicines you should take a 5mg folic acid supplement from your GP.

Should I take other vitamins? Yes. 10mcg/day of Vitamin D. This is to prevent rickets. Some NHS dietitians will prescribe Vitamin D. If you are taking other supplements, check they contain Vitamin D.

Foods to choose

Spinach, kale, broccoli, beans and eggs, yeast and bread, oranges and lemons, wheat bran, poultry, fortified cereals.

Good sources of folic acid

Spinach, kale, broccoli, beans and eggs, yeast and bread, oranges and lemons, wheat bran, poultry, fortified cereals.

What does folic acid do?

Folic acid, together with vitamin B12, is necessary to form red blood cells. Deficiency of folic acid can cause a type of anaemia (reduced oxygen-carrying ability of the blood) called 'macrocytic' (large cell) anaemia. Both vitamins together also help nerves to function properly. Folic acid is also essential for the formation of DNA (genetic material) within every body cell, allowing each cell to replicate perfectly.

Sources of folic acid

Folate is found naturally in a wide variety of foods and is also present in foods fortified with folic acid. As folic acid is a water-soluble vitamin (dissolves easily in water) it is lost from vegetables during cooking. This can be reduced by avoiding over-cooking, and steaming or microwaving vegetables instead of boiling.

How much do I need?

Men, children and women who are not likely to become pregnant should be able to obtain sufficient amounts of folic acid in their diet by eating a healthy diet containing a wide variety of foods.

What does folic acid do in my body?

Vitamin D helps your body absorb calcium for healthy bones and teeth. Even if you have a calcium-rich diet (for example from eating plenty of low fat dairy foods and green leafy vegetables), without enough vitamin D you cannot absorb the calcium into your bones and cells where it is needed. Vitamin D may have other important roles in the body, but there isn't enough evidence at the moment to make any recommendations.

When is vitamin D made in skin?

The amount of vitamin D you make depends on how strong the sunlight is. You will make more in the middle of the day, when the sun is strongest. You will also make more when you are in direct sunlight than in the shade or on a cloudy day.

What happens if I do not have enough iodine?

A low intake of iodine over a long period of time may cause your thyroid to work harder to keep the right amount of thyroid hormones in your blood. In order to trap iodine, this swelling - or 'goitre' - may be visible in your neck. However, visible goitre due to low iodine intake is rare in the UK. It is more likely that having too little iodine in your diet will lead to low levels of thyroid hormones. If you have a deficiency of iodine when you are pregnant, your baby's brain may not develop as well as it could and this could affect your child's ability to learn.

Where is iodine found in the diet?

Iodine is found in a range of foods, the richest sources being fish and dairy products. Seaweed is a concentrated source of iodine, but it can provide excessive amounts (particularly so in the case of brown seaweed such as kelp) and therefore eating seaweed more than once a week is not recommended, especially during pregnancy.

Milk and dairy products are the main sources of iodine for most people. Research has shown that

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Food Fact Sheet

Folic Acid

Folic acid is a B vitamin which is vital for the formation of red blood cells. The form of folic acid occurring naturally in food is called 'folate'. This Fact Sheet will tell you all about folic acid - which foods are good sources, how much you need, and who should take supplements.

What does folic acid do?

Folic acid, together with vitamin B12, is necessary to form red blood cells. Deficiency of folic acid can cause a type of anaemia (reduced oxygen-carrying ability of the blood) called 'macrocytic' (large cell) anaemia. Both vitamins together also help nerves to function properly. Folic acid is also essential for the formation of DNA (genetic material) within every body cell, allowing each cell to replicate perfectly.

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Milk and dairy products are the main sources of iodine for most people. Research has shown that

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Food Fact Sheet

Vitamin D

Sunshine, not food, is where most of your vitamin D comes from. So even a healthy, well balanced diet, that provides all the other vitamins and goodness you need, is unlikely to provide enough vitamin D. Read on to find out the best ways to get enough vitamin D.

What is vitamin D?

You make vitamin D under your skin when you are outside in daylight, which is the reason vitamin D is sometimes called the 'sunshine vitamin'. A vitamin D is something that helps our body function - a 'nutrient' - that we cannot make in our body. Vitamin D is different because even though we call it a vitamin, it is actually a hormone and we can make it in our body.

What does vitamin D do in my body?

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Food Fact Sheet

Iodine

This Food Fact Sheet will tell you more about iodine, its food sources and how much you need.

What is iodine?

Iodine is a mineral that is important for health. It is needed to make hormones in the thyroid. These hormones are needed for many body processes including growth, regulating metabolism and for the development of a baby's brain during pregnancy.

Do we get enough iodine in the UK?

For many years iodine intake in the UK was thought to be more than adequate but recent research has shown mild iodine deficiency in schoolgirls and pregnant women. There is now concern that many adult women may not be getting enough iodine, particularly in pregnancy.

How much iodine do I need?

Life stage	Iodine required per day (mcg)
Adults	150
Pregnant women	250
Breastfeeding women	250

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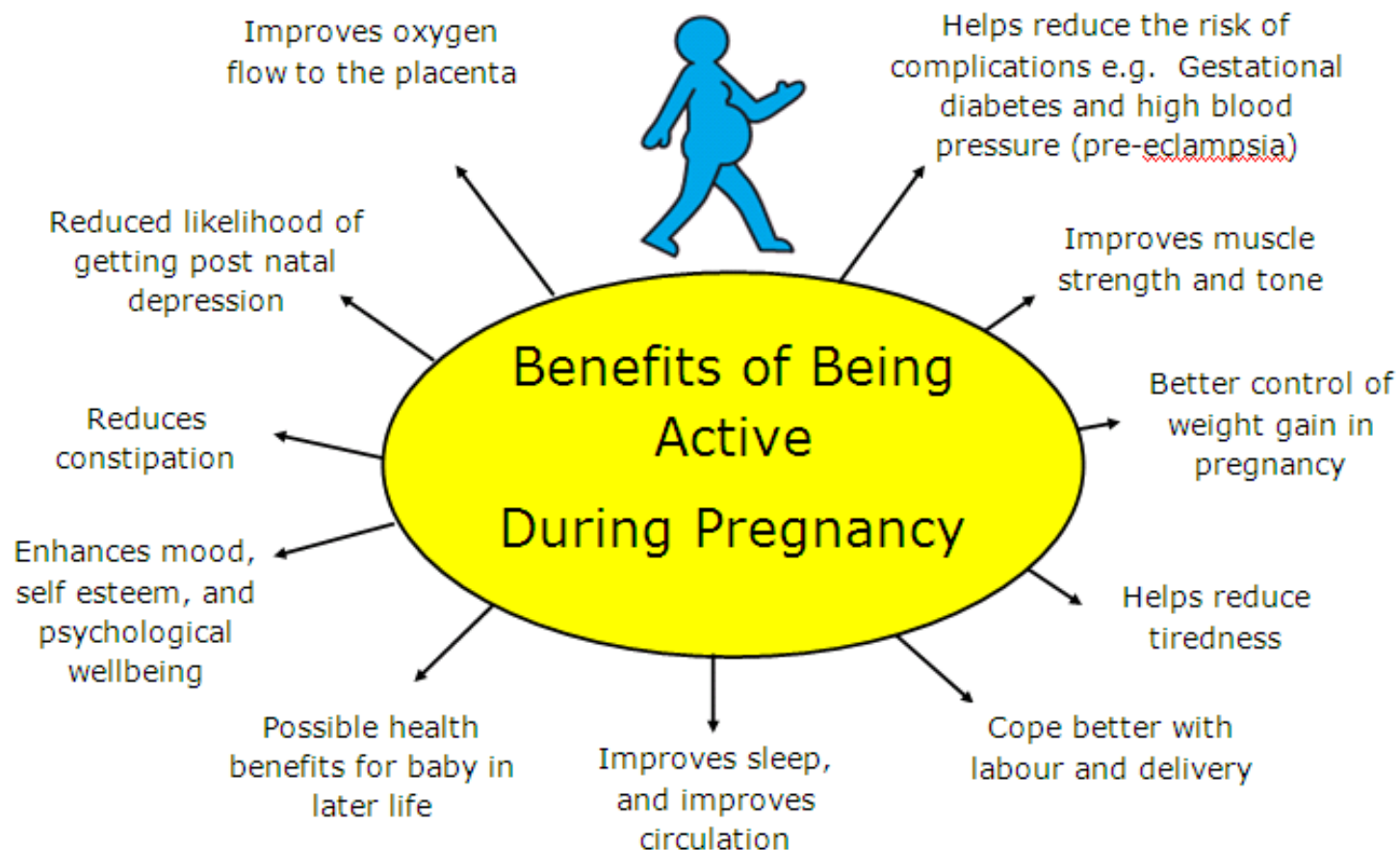
www.bda.uk.com

Resources: First Steps Nutrition

Practical guides illustrating the range & amounts of food that can meet the nutritional needs of women in pregnancy and help give baby the best possible start.

Free to download from:
www.firststepsnutrition.org





Acknowledgements

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- BCUHB Charitable funding

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Helpful Links & Resources

- NHS choices (Live Well pages)
www.nhs.uk
- Start for Life
www.nhs.uk/start4life
- First Steps Nutrition
www.firststepsnutrition.org
- The British Dietetic Association
www.bda.uk.com
- Tommy's
www.tommys.org.uk

