

# a to z

## OF PREGNANCY & NUTRITION

### A guide for mums-to-be

A quick and practical guide to looking after you and your baby during preconception, pregnancy and breast-feeding.



the UK's number one pregnancy supplement





# Congratulations!

Trying for a baby and pregnancy is an exciting time, and a special journey to producing a new life. It is also a time when what you eat and drink becomes more important as you are preparing your body for providing nutrition for both you and your baby.

This practical guide is designed to help you understand your nutritional needs, how they change and the best foods to choose during preconception, pregnancy and breast-feeding. You don't need a special diet during pregnancy, but you do need to choose a diet that is healthy, balanced and full of the extra vitamins and minerals that you and your baby need.

As your baby grows, their nutritional requirements will change, so your diet should reflect this. Whilst you need a diet that is packed with nutrients, vitamins and minerals, it's important not to fall into the trap of 'eating for two' as your need for extra calories only really increases during the third trimester of pregnancy, and even then, not by a great deal.

In addition to eating well, it is also important to take care of yourself in other ways, such as ensuring adequate rest and relaxation time and keeping active. Pregnancy is demanding; both physically and emotionally so don't be afraid to ask those around you for extra help and support, whether at home or work.

Every woman's experience of pregnancy is different and it passes sooner than you think, so take the time to enjoy your changing body, to eat well and to pamper yourself – after all, nothing is more special than bringing a new life into the world.

Wishing you a healthy and happy pregnancy.

*From the Pregnacare Team*

# TRYING FOR A BABY - what to eat when you are planning to conceive

Making the decision to plan for a pregnancy is the ideal time for you and your partner to review your diet and lifestyle and make changes in order to achieve optimal health before conception. It is also a good time to ensure your intake of micronutrients are increased, particularly those known to be at greater demand during pregnancy including folic acid, vitamin D, calcium and iron.

What you eat and drink can make a difference to both female and male fertility and the basics are the same for both mums and dads-to-be:

- Consume a balanced and varied diet, rich in vitamins and minerals
- Eat plenty of fruit and vegetables (at least 5 portions each day) to boost vitamin and mineral intakes
- Choose iron rich protein foods such as lean meats, eggs, beans and lentils
- Try to include one portion of oily fish each week, e.g. salmon, trout, mackerel, sardines
- Avoid shark, swordfish and marlin, and limit tuna (fresh and canned) due to high mercury content
- Include low fat dairy foods every day for extra calcium, such as low fat milk and yoghurts
- Choose healthier snacks, such as fresh fruit, dried fruit and fortified breakfast cereals
- Avoid caffeine and alcohol
- Give up smoking
- Be active on most days
- Have your Rubella antibodies checked by your GP
- Drink lots of water
- Take time for both physical activities and mental wellbeing, focusing on reducing stress and building emotional resilience



## Additionally:

- Take a 400µg folic acid supplement and choose foods rich in folates from before conception until at least the twelfth week of pregnancy. Some women are advised by their GP to take more folic acid (see next page).
- Avoid too much vitamin A
- Take a daily supplement of 10µg vitamin D
- Take at least 2.5µg vitamin B12

In addition to eating a healthy diet, some women also choose to take a multivitamin and mineral that is specifically designed for preconception, such as Vitabiotics Pregnacare®. You should avoid taking regular multivitamins as these may contain vitamin A and insufficient folic acid and vitamin D.

Pregnancy specific supplements such as the Vitabiotics Pregnacare range contain the recommended level of 400µg folic acid and 10µg vitamin D, plus the vitamins and minerals vital for mother and baby, and are suitable for conception, for all of pregnancy and whilst breast-feeding. Pregnacare Plus includes additional Omega-3 capsules providing DHA. Maternal intake of DHA helps support normal fetal brain and eye development.<sup>1</sup>

Supporting Vitamin D levels is especially important during autumn and winter, for women with darker skin and those who wear a full body covering when outside, due to reduced exposure to sunlight.

The Healthy Start scheme helps low income families by providing vouchers for free plain fresh or frozen fruit and vegetables, milk, infant formula milk, basic vitamin supplements for women with vitamin C, D, folic acid. For more information visit [www.healthystart.nhs.uk](http://www.healthystart.nhs.uk) or ask your midwife.



Also take a look at the **Do's and Don'ts of Eating in Pregnancy** section on pages 8-9 for additional guidance on specific food choices.

<sup>1</sup> A beneficial effect is obtained with a daily intake of 200mg DHA in addition to the recommended daily intake of 250mg DHA/EPA for adults.

# Vital Vitamins & Minerals

During preconception and pregnancy, the vitamins and minerals you are most likely to be deficient in are:

REQUIREMENT PER DAY	ROLE IN PREGNANCY	CONCERNS	RICH SOURCES
<b>Folic Acid</b> <b>400µg supplement plus 300µg from food per day</b> 75% of women fail to eat enough in their diet and over half do not take a folic acid supplement prior to confirmation of pregnancy.	Contributes to maternal tissue growth during pregnancy. Supplemental folic acid intake increases maternal folate status. Low maternal folate status is a risk factor in the development of neural tube defects in the developing foetus.*	Women should take a 400µg folic acid supplement from the time contraception stops and until at least the twelfth week of pregnancy and also choose foods rich in folates. GPs may prescribe a higher dosage of folic acid to women with diabetes, a BMI over 30, taking epilepsy medication, with a coeliac disease or with a previous instance of neural tube defects.	Black eye beans, brussels sprouts, beef or yeast extract, kidney, kale, spinach, spring greens, granary bread, broccoli and green beans. Also added to some soft grain breads and breakfast cereals.
<b>Vitamin D</b> <b>10µg per day</b> Up to 100% of women fail to consume sufficient amounts from their diets.	Contributes to normal absorption/utilisation of calcium. Contributes to the maintenance of normal bones and teeth.	As outlined by the UK Department of Health, all pregnant and breast-feeding women should take a 10µg vitamin D supplement daily.	The main source is sunlight. Also found in oily fish, eggs and full fat dairy products. Also added to margarines, some yoghurts and breakfast cereals.
<b>Iron</b> <b>14.8mg per day</b> 8 out of 10 women eat too little. 2 in 5 women enter pregnancy with an iron deficiency.	Contributes to normal formation of red blood cells and haemoglobin. Haemoglobin transports oxygen in red blood cells.	Anaemia (not enough haemoglobin) is common during pregnancy, affecting both the mother's and baby's wellbeing.	All meat, especially red meat, fortified breakfast cereals and white bread, beans, chick peas, baked beans, eggs, dried fruit, nuts and seeds.
<b>Calcium</b> <b>700mg per day</b> 50% of women don't eat or drink enough.	Needed for the maintenance of normal bones and teeth.	Most of a baby's calcium is laid down in bones during the third trimester.	Milk, cheese, yoghurt, fortified soya milk and soya products, canned fish e.g. pilchards and sardines. Calcium is also added to white bread, beans and baked beans, almonds and hard tap water.
<b>Iodine</b> <b>200µg per day</b> Two thirds of women have a mild deficiency during pregnancy.	Contributes to normal production of thyroid hormones and normal thyroid function, as well as contributing to the normal growth of children.	During pregnancy, your iodine requirement increases from 150µg to 200µg per day. This is providing that thyroid status and iodine stores are adequate before pregnancy.	Fish, shellfish, eggs and dairy products such as cheese and milk.

\*A beneficial effect is obtained with a supplemental folic acid daily intake of 400µg for at least one month and up to three months after conception.

# Vital Vitamins & Minerals cont'd

For many women intakes of **magnesium, zinc, copper** and **potassium** are also below ideal levels. As a result, many women are at risk of not meeting the increased vitamin and mineral requirements during pregnancy. You may choose to take a pregnancy specific multivitamin and mineral supplement, such as Vitabiotics Pregnacare Original (tablets or liquid) or Pregnacare Plus to boost dietary intake and ensure that your baby is receiving everything that they need. You may be eligible for free vitamins – just ask your midwife.

## Healthy Eating during Pregnancy

Healthy eating during pregnancy is no different to healthy eating at any other time – it's just particularly important to ensure that you are eating enough of the essential nutrients, such as protein, carbohydrates, vitamins and minerals, for both you and your baby.

A balanced diet includes a wide range of foods from 5 different food groups:

- Starchy carbohydrates (bread, cereals, rice etc.)
- Protein (meat, poultry, fish, beans, nuts, soya etc.)
- Fruit and vegetables;
- Dairy foods (milk, cheese, yoghurts etc.)
- Foods containing fat and sugar



Source: Public Health England in association with the Welsh government, Food Standards Scotland and the Food Standards Agency in Northern Ireland

The diagram above gives you an indication of balance in terms of the quantities of each food group required. You need to be eating more fruit and vegetables and starchy carbohydrate foods, moderate amounts of dairy and protein foods and just a few fatty and sugary foods.

## DO'S AND DON'TS OF EATING DURING PREGNANCY

### Do's

In addition to eating a wide variety of foods, there are certain precautions you should take to safeguard your baby's wellbeing. Your immune system tends to be slightly less effective during pregnancy, leaving you more vulnerable to tummy bugs and upsets so extra care is needed.

	Reduces risk of
<ul style="list-style-type: none"> <li>• <b>Cook all meat and poultry thoroughly</b> so that there is no trace of pink or blood, and wash all surfaces and utensils after preparing raw meat. Store raw meats at the bottom of the fridge and use a separate chopping board.</li> </ul>	T S
<ul style="list-style-type: none"> <li>• <b>Wash fruit, vegetables and salads thoroughly</b>, even pre-packaged types that are washed and ready to eat.</li> </ul>	T
<ul style="list-style-type: none"> <li>• <b>Make sure eggs are thoroughly cooked</b> to reduce the risk of salmonella only eat British Lion eggs (eggs with a lion stamp on them). These can be eaten fully cooked, partially cooked and raw (e.g. fresh mayonnaise and mousse).</li> </ul>	S
<ul style="list-style-type: none"> <li>• <b>Only drink pasteurised or UHT milk</b> or if only raw or unpasteurised milk is available, boil it first. Don't drink unpasteurised goat's or sheep's milk or eat their milk products.</li> </ul>	L
<ul style="list-style-type: none"> <li>• <b>Reheat ready-to-eat poultry and cooked chilled meals thoroughly</b> and ensure they are piping hot before they are eaten.</li> </ul>	S
<ul style="list-style-type: none"> <li>• <b>Make sure that raw foods are stored separately from ready-to-eat foods</b> to reduce the risk of food poisoning.</li> </ul>	S
<ul style="list-style-type: none"> <li>• <b>Wash your hands thoroughly</b> before and after handling any food, after going to the toilet and before eating.</li> </ul>	S
<ul style="list-style-type: none"> <li>• <b>Wear gloves when gardening or changing the cat's litter tray.</b></li> </ul>	T
<ul style="list-style-type: none"> <li>• <b>Limit caffeine to no more than 200mg a day.</b> Don't forget that cola, hot chocolate, chocolate bars and energy drinks also contain caffeine. See p16 for more information.</li> </ul>	

**S** **Salmonella:** a common cause of food poisoning which can cause severe symptoms during pregnancy and can lead to miscarriage and stillbirth.

**L** **Listeria:** a bacteria which causes mild tummy upsets or flu like symptoms. Can also lead to miscarriage and stillbirth.

**T** **Toxoplasmosis:** an infection caused by a tiny parasite that is found in soil, cat faeces and infected meat (raw, undercooked and cured). In rare cases this can cause brain damage, blindness, epilepsy, miscarriage and stillbirth.

### Don'ts

Some foods pose a particular risk during pregnancy, either because of the way they are produced, or high levels of certain nutrients or substances they contain. The foods below are best avoided during pregnancy.

	Risk of
<ul style="list-style-type: none"> <li>• <b>Don't eat any type of pâté, including vegetable pâté, and mould-ripened soft cheeses</b>, such as Brie, Camembert, and blue varieties, such as Danish blue.</li> </ul>	L
<ul style="list-style-type: none"> <li>• <b>Don't eat raw, undercooked, or cured meats</b> (like salami or Parma ham).</li> </ul>	T
<ul style="list-style-type: none"> <li>• <b>Don't eat liver or liver products</b> such as liver pâté or liver sausage, as they may contain large amounts of vitamin A, which could harm your baby. Avoid supplements containing vitamin A – check the label. Betacarotene is safe.</li> </ul>	Vitamin A toxicity
<ul style="list-style-type: none"> <li>• <b>Don't eat shark, marlin and swordfish and limit tuna intake</b> to no more than 2 servings if fresh, or 4 small cans a week, because the mercury levels in these fish are high and can damage your baby's developing nervous system. This also applies before conception and during breast-feeding.</li> </ul>	High levels of mercury
<ul style="list-style-type: none"> <li>• <b>Don't have more than two portions of oily fish a week</b>, such as salmon, mackerel, sardines and trout. Do however include one portion every week for important Omega-3.</li> </ul>	High levels of contaminants
<ul style="list-style-type: none"> <li>• <b>Don't eat raw shellfish</b>, as it may contain harmful bacteria and viruses that cause food poisoning. However shellfish that is part of a hot meal and has been thoroughly cooked is fine.</li> </ul>	Food poisoning
<ul style="list-style-type: none"> <li>• <b>Don't drink alcohol.</b> The Chief Medical Officers for the UK recommend that if you're pregnant or planning to become pregnant, the safest approach is not to drink alcohol at all to keep risks to your baby to a minimum. Drinking in pregnancy can lead to long-term harm to the baby, with the more you drink, the greater the risk.</li> </ul>	Alcohol affects a baby's growth and development
<ul style="list-style-type: none"> <li>• <b>Don't smoke.</b> If you smoke it's important to give up as soon as possible as this can be very harmful to your baby. This includes partners too, as passive smoking can be just as dangerous to your unborn baby. Speak to your GP or midwife for help and support in smoking cessation for both parents.</li> </ul>	Poor growth and low birth weight

# COMMON DIETARY Myths

## Now that I'm eating for two, can I eat twice as much as before?

In short, no. Falling for the myth of eating for two is likely to result in excessive weight gain, which is not good for you or your baby. Your body becomes more energy efficient during pregnancy in order to meet the increased energy needs, so you only need to eat slightly more e.g. the odd extra slice of bread or one or two healthy snacks each day.

## I've been having strong food cravings – does this mean I am deficient in something?

Cravings or aversions to food vary between women and even between pregnancies for the same woman. We don't really know why food cravings or aversions occur, but they are likely to be caused by hormonal changes to taste and smell rather than any specific deficiencies for vitamins or minerals.

For many women food cravings or aversions are unlikely to be harmful but if the craving is for unusual foods or excessive quantities, then it is important to discuss this with your midwife or GP.

## Eating spicy food will bring on labour. Is this true?

No. Eating spicy food close to a due date may cause tummy upsets but that is as close to bringing on labour as you might get. So if you enjoy spicy foods you are safe to carry on eating these throughout the whole pregnancy.

## I've been feeling sick all day - why is it called morning sickness?

The cause of morning sickness is thought to be due to the rise in hormone levels during pregnancy. For many women nausea and sickness are at their worst in the mornings hence the name morning sickness, but it can indeed be 'any time of day sickness.' Most cases are resolved by the end of the first trimester, but may continue after this time. Women who are severely affected should speak to their midwife for advice on how to cope with this troublesome problem.



# TEN BASICS OF HEALTHY EATING DURING PREGNANCY

- 1 Base every meal on starchy foods like bread, potatoes, rice, pasta, chapatis, yams and cereals.** These provide energy for you and for your baby to grow. They can also be a good source of fibre, help you feel full and combat fatigue.
- 2 Eat lots of fruit and vegetables.** Aim for a wide variety and at least 5 servings every day. Fresh, frozen, canned and dried all count.
- 3 Choose foods rich in protein** such as lean meat, chicken, fish, eggs, soya, beans and nuts. These foods are also great sources of iron.
- 4 Eat more fibre rich foods** such as wholegrain breads and pasta, brown rice, wholegrain or high fibre breakfast cereals, pulses, fruit and vegetables to help prevent constipation and piles.
- 5 Eat plenty of dairy foods** such as milk, cheese and yoghurts. Dairy foods are a major source of calcium, important for your and your baby's teeth and bones. Choose low fat varieties when you can. If you prefer dairy alternatives, such as soya drinks and yoghurts, go for unsweetened, calcium-fortified versions.
- 6 Make snacks nutritious.** Snacking is common during pregnancy. However too many indulgent snacks can result in excessive weight gain. Healthier snack choices include: low-fat yoghurts, ready-to-eat apricots, figs or prunes, a small bowl of unsweetened breakfast cereal, or porridge with milk, crisp bread or vegetable sticks, hummus, vegetable and bean soups.
- 7 Aim for two portions of fish each week,** one of which should be oily. Oily fish includes salmon, trout, sardines and pilchards, which are important for supplying the baby with long-chain fatty acids (AA, EPA and DHA). Maternal intake of DHA contributes to the normal development of the eyes and brain of the foetus.<sup>2</sup> If you never eat oily fish speak to your midwife about taking a pregnancy supplement which contains Omega-3, such as Vitabiotics Pregnacare Plus.
- 8 Get active and try to maintain a healthy weight.** The average pregnancy weight gain is 10-12kgs or 22-28lbs if your pre-pregnancy weight is in the normal range. Gaining too much weight can affect your health and blood pressure. Equally, it's important to avoid dieting when pregnant as this can limit your baby's access to nutrition. Being active not only helps to moderate weight gain, but also prepares the body for birth.
- 9 Drink plenty of water and other fluids.** Pregnant women dehydrate more quickly than normal so drinking plenty of water and other fluids is important, especially when exercising or if the weather is hot.
- 10 Don't skip breakfast.** Breakfast provides a vital boost to energy and nutrient levels, so make sure you get every day off to a great start for you and your baby.



<sup>2</sup> A beneficial effect is obtained with a daily intake of 200mg DHA in addition to the recommended daily intake of 250mg DHA/EPA for adults.

# a to Z

OF PREGNANCY  
& NUTRITION

Now that you are pregnant, you are sure to have lots of questions about the journey to motherhood.

This A to Z of pregnancy and nutrition provides many of the important answers for mums-to-be.

It covers everything from flatulence and weight gain to cravings and vitamin supplements.\*

If you have any further questions, don't be shy to ask your midwife or GP.

## a is for...

### alcohol

Women who are pregnant or planning to become pregnant should not drink alcohol at all. Drinking alcohol in pregnancy can lead to long-term harm to the baby, with the more you drink, the greater the risk.

### amniocentesis

Amniocentesis is one of several diagnostic tests that may be offered during pregnancy. It is used to detect chromosome abnormalities in the unborn child that may cause Down's syndrome or other congenital problems. In amniocentesis, a sample of the amniotic fluid that surrounds the foetus is removed and analysed. This test is performed from week 15 of pregnancy onwards.

### anaemia

Anaemia is characterised by a low level of a substance called haemoglobin which contains iron and is responsible for transporting oxygen in red blood cells. During pregnancy, anaemia is quite common because the demands for iron change, so routine blood tests are carried out during pregnancy to check if you will need iron supplements. It is important that pregnant women **eat an iron-rich diet** to ensure the production of extra red blood cells so that the foetus and placenta receive enough oxygen. Iron rich foods include red meats, fortified breakfast cereals, dried fruits, pulses and bread.

### antacid

Antacids counteract stomach acidity and are often used as a treatment for heartburn. Heartburn occurs as a result of increased abdominal pressure, relaxation of the gastro-oesophageal sphincter due to pregnancy hormones and altered gastrointestinal function.<sup>3</sup> Symptoms are often aggravated by lying down, or by eating certain foods, particularly those that are spicy, fatty, fizzy or acidic. Symptoms will often be less severe with small frequent meals and snacks rather than larger meals. Avoid spicy, rich or fatty foods, eating just before bedtime and try to limit the use of antacids to manufacturers' directions. If you're taking iron supplements as well as antacids, don't take them simultaneously. Antacids can stop iron from being absorbed by your body.

### antenatal care

Antenatal care means 'care before birth.' It aims to monitor and promote the wellbeing of a mother and her developing baby. Midwives and doctors provide information, advice and reassurance as well as monitoring, screening and treating where necessary. Antenatal care is a vital medical service and it is important to attend all appointments to ensure all is well with you and your baby through the pregnancy and pick up any problems early.

### aspirin

It's safe to take aspirin as a painkiller in the first 6 months of pregnancy (up to 30 weeks).

Do not take aspirin for pain relief after 30 weeks of pregnancy. It can cause complications - including breathing and blood clotting problems - in the newborn baby. For most women, paracetamol is the best painkiller to take in late pregnancy.

If you've taken aspirin after week 30 of pregnancy, especially if you've taken it for a long time, tell your doctor or midwife straight away so they can check the health of your baby.

\* While every attempt has been made to ensure that the information contained in this guide is accurate and reliable, this is intended as a guide only and not a substitute for advice from a health professional. Please note: Vitabiotics cannot guarantee the reliability of facts obtained from other third party information sources. Information correct at time of going to print (May 2020).

<sup>3</sup> Dowswell T, Neilson JP (2008) Interventions for Heartburn in pregnancy Cochrane Database Syst Rev 2008 Oct 8;(4): CD007065

# b is for...

## back pain

Back pain experienced by pregnant women is caused by the ligaments between the pelvic bones softening and joints loosening in preparation for the baby's passage through the pelvis.

This movement can cause considerable discomfort on either side of the lower back, often with walking, and especially when going up and down stairs. During the second trimester, the uterus becomes heavier and changes the woman's centre of gravity. Gradually - and perhaps without being aware of it - women begin to adjust their posture and the way in which they move.

These compensations can result in back pain, strain or other injury. The separation of the muscles along the front of the abdomen during pregnancy may also contribute to back pain during pregnancy. These two parallel sheets of muscles run from the rib cage to the pubic bone. As the uterus expands, they sometimes separate along the centre seam, which can make back pain worse. Careful lifting and carrying during pregnancy is important to prevent injury.



## birth weight

The average birth weight in the UK is 3.5kgs (7.6lbs), but this can be reduced if you are expecting your first child, or if your baby is a twin or triplet.

Your midwife will check the size of your baby by measuring your bump at intervals throughout your pregnancy. They may need to arrange an ultrasound scan to check the health of your baby if they measure smaller than expected.

## bloating

The sensation of bloating occurs during pregnancy because of hormones that slow your digestion and the pressure of your growing uterus on your stomach and intestines. Eating plenty of fibre and drinking adequate amounts of fluid may help to alleviate this.

## body mass index

There are no UK guidelines for weight gain in pregnancy but some studies have provided the information in the table below. You should not try to lose weight during your pregnancy but it is also important not to put on excess weight either.

Body mass index is a measure of weight in relation to height. It is calculated using the following equation.

$$\text{BMI} = \text{weight kg} \div (\text{height m})^2$$

Pre-pregnancy Body Mass Index	Recommended Weight Gain
Less than 18.5 (underweight)	12.5-18kgs (28-40lbs)
18.5-24.9 (normal weight)	11.5-16kgs (25-35lbs)
25-29.9 (overweight)	7-11.5kgs (15-25lbs)
30 or more (Obese)	5-9kgs (11-20lbs)

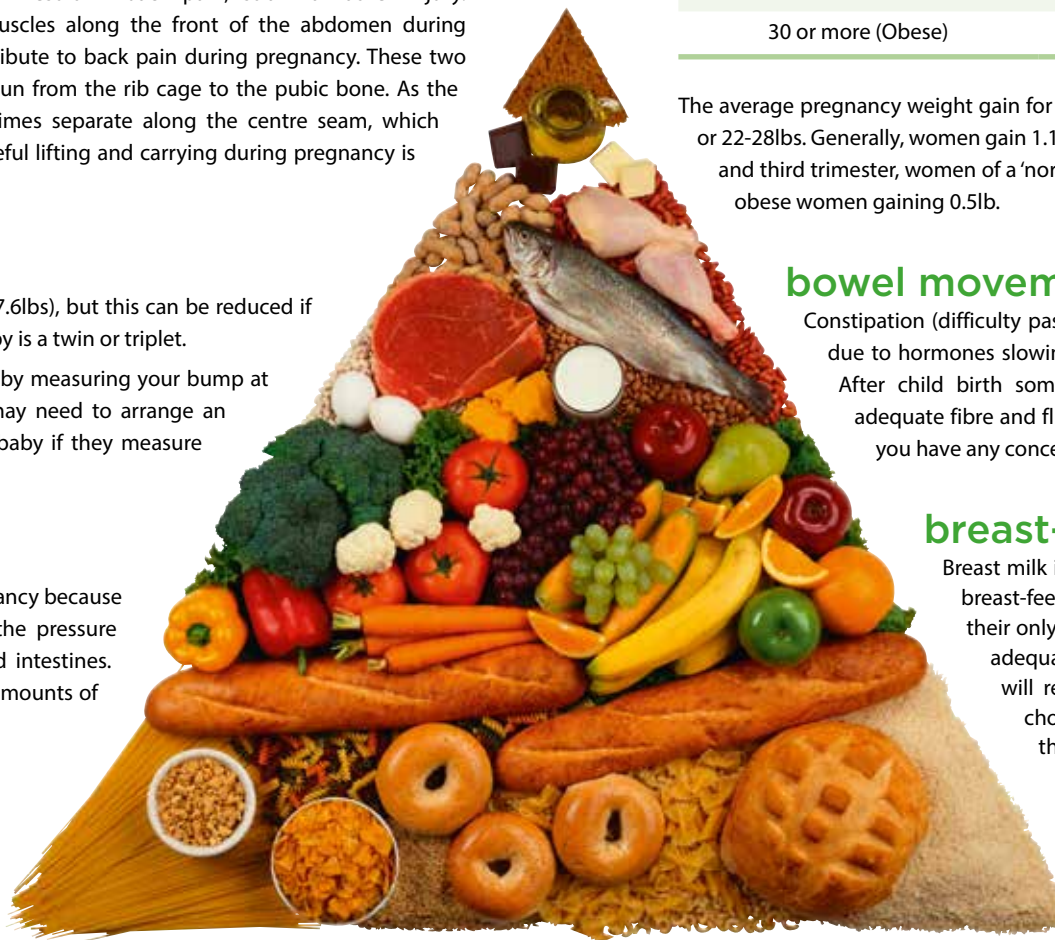
The average pregnancy weight gain for women in the normal weight category is 10-12kgs or 22-28lbs. Generally, women gain 1.1-4.4lbs during the first trimester. During the second and third trimester, women of a 'normal weight' will gain an estimated 1lb a week, with obese women gaining 0.5lb.

## bowel movements

Constipation (difficulty passing bowel movements) is common in pregnancy due to hormones slowing the gut and the physical pressures of the baby. After child birth some women may experience bowel problems. An adequate fibre and fluid intake should help with this, but see your GP if you have any concerns.

## breast-feeding

Breast milk is the best possible nutrition for your baby. During breast-feeding, your baby is entirely dependant on you as their only source of nutrition. By ensuring your diet contains adequate levels of specific vitamins and minerals, your baby will receive all the nutrients they need. Some women choose to take a multivitamin and mineral supplement that is specifically designed for pregnancy and breast-feeding, for extra peace of mind and to safeguard their own nutritional requirements, such as Vitabiotics Pregnacare.





# C is for...

## caffeine

Whilst pregnant, caffeine intake should be limited to no more than 200mg a day because high levels of caffeine can result in low birth weight, or even miscarriage. Caffeine occurs naturally in tea, coffee and chocolate and is also added to some soft drinks and 'energy' drinks. Try decaffeinated tea or coffee as an alternative.

The amount of caffeine found in some foods and drinks is as follows:

- One mug of instant coffee: 100mg
- One mug of filter coffee: 140mg
- One mug of tea: 75mg
- One can of cola: 40mg
- One can of energy drink: up to 80mg
- One 50g bar of plain chocolate: up to 50mg
- One 50g bar of milk chocolate: up to 25mg

## calcium

Calcium intake during breast-feeding is particularly important, as calcium is needed for the maintenance of normal bones. Breast-feeding is estimated to use 200-400mg/day.<sup>4</sup> Recommended intake of calcium during lactation is 1250mg/day, considerably higher than the 700mg/day required during pregnancy.<sup>5</sup> For younger women and adolescents who are still developing their own bone mass, calcium requirements may be higher.

## calorie intake

Energy needs only rise slightly during pregnancy because the body undergoes adaptations allowing increased energy needs to be met from only a very small increase in calorie intake. The recommended increase in energy intake for pregnant women in the UK is just 191kcal per day during the third trimester.<sup>5</sup>

## citrus fruit

In order to help your body absorb and effectively use iron and other nutrients from your food, you should eat plenty of vitamin C rich foods such as oranges, tangerines, grapefruit, lemons and tomatoes.



## coffee

Coffee contains caffeine - see opposite for caffeine guidelines.

## common cold

Some women may find themselves more vulnerable to colds while pregnant as the immune system is working hard and may be less effective than usual. Coughs and colds are usually caused by viruses, which do not benefit from antibiotics, so must run their course. Cold remedies can relieve symptoms so that you feel better, but they won't make you get better any faster. The majority of over-the-counter cold remedies are not recommended during pregnancy. Except for treating fever, it is fine to simply ride out your cough or cold if you don't want to take any medications. Always check with the pharmacist before taking any cold remedy (including tablets, capsules, powders or cough mixtures) during pregnancy as most are not recommended. The flu vaccine is advised during pregnancy and whooping cough vaccine also advised from 16 weeks up to 32 weeks of pregnancy.

## constipation

Constipation is a common problem during pregnancy and is caused by a combination of hormone changes e.g. higher levels of progesterone slowing the activity of the digestive tract, the physical impact of pregnancy, dietary changes and reduced levels of physical activity. Alleviation of constipation often requires a combination of approaches, mostly focused on dietary changes to increase fibre and fluid intake, increased moderate physical activity (which aids digestion and movement of food and residues along the digestive tract), and where necessary the use of faecal bulking agents. If you are struggling with constipation speak to your midwife or GP.

## crackers

To alleviate nausea, try eating crackers before getting out of bed in the morning.

## cravings

Food cravings are common during pregnancy and are defined as 'a compulsive urge for a food for which there was no previous excessive desire.' There is no harm in indulging a craving as long as it is eaten in moderation and alongside a healthy and balanced diet.



<sup>4</sup> Prentice A, 2003. Pregnancy and lactation. In: Pediatric Bone: Biology and Diseases. Eds Pettifor J, Juppner H and Glorieux F. Academic Press, London, UK, 249-269.

<sup>5</sup> Scientific Advisory Committee on Nutrition (2011) Dietary Reference Values for Energy. The Stationary Office.

# d is for...



## dairy products

Pregnant and breast-feeding women are encouraged to eat moderate amounts of dairy foods such as milk and cheese which contain calcium, protein, vitamin D and zinc. Also see L, for Listeria.

Remember to continue drinking plenty of fluids throughout your pregnancy and while breast-feeding.

## dehydration

The increased metabolism during pregnancy leaves women more vulnerable to dehydration so an adequate fluid intake is important, especially when it is hot or when exercising. Never limit fluid intake to avoid frequent trips to the toilet - dehydration can lead to premature contractions and can contribute to fatigue and dizziness.

Severe morning sickness can also lead to dehydration so monitor fluid intake if this occurs.

## dental care

Pregnancy can aggravate dental problems. Gingivitis (an inflammation of the gums) is a common problem, which may be the result of increased blood flow to the gums caused by pregnancy hormones and may require treatment. It can lead to bleeding gums and has been associated with complications of pregnancy, such as premature birth. Brush your teeth with a soft-bristled toothbrush after meals or at least twice a day to help prevent cavities and gingivitis. Flossing regularly and avoiding sugary drinks and food will also help to protect your gums. NHS dental care is free during pregnancy and until 1 year after your due date, so see your dentist regularly and make sure they know you are pregnant.

## diabetes

The combination of diabetes and pregnancy increases the risk of complications for both the mother and baby.<sup>6</sup> For women with diabetes, the risk of complications can be considerably reduced with optimal control of diabetes from the time of conception – this includes healthy eating and nutrition. Gestational diabetes occurs in around 3-5% of pregnancies so all women are routinely monitored during pregnancy for increasing glucose levels. Specialist advice and monitoring is offered to women who show signs of gestational diabetes. If you are deemed a risk of developing gestational diabetes or you show signs, you may be offered a test for it during your pregnancy.

## diarrhoea

Most often, diarrhoea in pregnancy is a result of changing hormone levels - predominantly increased levels of progesterone. However if accompanied by a fever or vomiting, and if it persists for more than 24 hours, you may wish to speak to your midwife or GP to eliminate other potential causes such as food poisoning.

# e is for...

## eating during labour

Hospital policies on eating during labour vary. It may be a good idea to try to eat a meal during early labour to help keep up your energy. Let your body tell you whether to eat, but don't forget to drink regularly to avoid dehydration.

If you do feel hungry during labour, stick to slow releasing carbohydrates that are lighter on the digestive system and will provide you with energy throughout your contractions. Take snacks with you such as biscuits, fruit, dried fruit etc.

## eating for two

Falling for the myth of needing to eat for two is likely to result in excessive amounts of weight gain, as energy needs during pregnancy only rise slightly. This is because the body undergoes adaptations allowing increased energy needs to be met from only a very small increase in calorie intake. The recommended increase in energy intake for pregnant women in the UK is just 191kcal per day during the third trimester.

## energy - (lack of!)

Energy requirements during pregnancy will vary from woman to woman according to pre-pregnancy body weight, work and leisure activity levels. Extra energy is needed for fetal growth and development and for extra maternal tissues such as the placenta, amniotic fluids and additional body fat. In addition, an increase in energy expenditure is required to maintain these tissues and carry out physical activities at a higher body weight.

Energy demands are not equally distributed throughout pregnancy, with energy needs being far higher during the second and third trimesters because the bulk of new tissues are laid down as protein or fat in these periods. However, the actual increase in energy needed from the diet is quite low as the body adapts to the increased energy needs of pregnancy. See **eating for two** above.

## eggs

To reduce the risk of salmonella only eat raw (e.g. fresh mayonnaise and mousse), partially cooked and fully cooked British Lion eggs (eggs with a lion stamp on them).

<sup>6</sup> www.NHS.uk

# f

is for...

## feeling faint

Feeling faint when you stand for too long or get up quickly is caused by low blood pressure (BP). The pregnancy hormone progesterone relaxes the walls of your blood vessels causing low blood pressure, however, low BP tends to return to normal during the last few weeks of pregnancy. Avoid lying on your back as pregnancy progresses; as the growing uterus becomes increasingly heavy it can press on a very large blood vessel if you do. This reduces blood to the brain and makes you feel faint. If this does happen, turn onto your side and the faint feeling will quickly pass.



## fish

Fish is a great source of protein and oily types provide Omega-3 fatty acids. However whilst pregnant avoid eating shark, marlin and swordfish and limit the amount of tuna you eat to no more than two tuna steaks a week (weighing about 140g cooked or 170g raw) or four medium-size cans of tuna a week (with a drained weight of about 140g per can). This is because of the levels of mercury in these fish. At high levels, mercury can harm your baby's developing nervous system. This also applies during breast-feeding.

Try to have one, but don't have more than two portions of oily fish a week. Oily fish includes salmon, trout, mackerel or herring. Remember that eating fish is good for your health and the development of your baby, so you should still aim to eat at least two portions of fish a week, including one portion of oily fish.

Avoid raw shellfish because it may contain harmful bacteria and viruses that cause poisoning. However, shellfish that is part of a hot meal that has been thoroughly cooked is fine.

Whilst pregnant you are able to eat smoked fish such as smoked salmon and trout. Also raw or lightly cooked fish in sushi, if the fish has been frozen first.

## flatulence

The average person passes wind 5-15 times a day and this can increase during pregnancy because increased levels of hormones, such as progesterone which can cause the smooth muscles in your body, including your gastrointestinal tract, to become relaxed. This relaxation process slows down your digestive processes, which causes burping and flatulence, especially after a big meal.

The foods most likely to cause wind include beans, broccoli, sprouts and asparagus, as well as fizzy drinks. However, it is important that you eat a balanced diet so simply cut back on the foods that cause you the most discomfort.

## TIPS FOR AVOIDING WIND DURING PREGNANCY

- Don't eat big meals. Instead, eat several small meals throughout the day.
- **Don't talk while you're eating. Take your time and chew food thoroughly.**
- Limit your fluid intake during meals (but don't forget to make up for it between meals).
- **Limit fizzy drinks.**
- Drink from a glass, not a bottle or a straw, and don't gulp your drinks.
- Exercise. Even a brisk walk can help your sluggish digestive tract.
- **Don't smoke (this is a habit you should break before getting pregnant).**
- Consider practicing yoga for relaxation and good breathing techniques. (Some people tend to swallow more air when they're excited or anxious if they're prone to hyperventilating).<sup>7</sup>
- Try drinking a cup of peppermint tea, as it can ease wind and bloating.

## fetal growth

Your baby soon grows from a group of cells to a fully developed baby. Track their growth using the table below:

Time Period	Size of foetus
20 days	A pinhead
4 weeks	A grain of rice
8 weeks	A tomato
12 weeks	A pear
16 weeks	A grapefruit
20 weeks	20cm long and looks like a tiny newborn
25 weeks	Baby now weighs 450g (1lb)
30-31 weeks	Baby is around 24cm long and weighs around 1.6kgs (3lbs 5oz)
40 weeks	The average newborn weighs 3.5kgs (7.6lbs)

## folic acid

Women are currently advised to take a 400µg folic acid supplement prior to conception and for at least the first twelve weeks of pregnancy, but the benefits of folic acid supplementation extend throughout the whole of pregnancy. Women with multiple pregnancies or a previous history of neural tube defects should take more. Pregnacare Original, Pregnacare Liquid and Pregnacare Plus contain 400µg folic acid as well as other important vitamins and minerals vital for mother and baby. Please see page 6 for information on **folic acid** dosages.

<sup>7</sup> www.babycentre.co.uk



## food aversions

Food aversions are 'a definite revulsion against food and drink not previously disliked.' The most common aversions appear to be to tea, coffee, alcohol, fried foods, eggs, and on occasion sweet foods in later pregnancy.

## foods to avoid

Some foods pose a particular risk during pregnancy, either because of the way they are produced, or because of the high levels of certain nutrients or substances they contain. The following foods are best avoided during pregnancy (see **Do's and Don'ts of Eating during Pregnancy**, p8):

- All types of pâté, including vegetable pâtés, and mould-ripened soft cheese because of the risk of listeria infection. Although listeria is a very rare disease, it is important to take special precautions during pregnancy because even mild forms of the illness can lead to miscarriage, stillbirth or severe illness in the newborn.
- Do not eat liver or liver products such as liver pâté or liver sausage, as they contain high levels of vitamin A. Too much vitamin A can harm your baby. Avoid cod liver oil supplements or any supplements containing vitamin A. Pregnacare does not include vitamin A for this reason.
- Avoid shark, marlin and swordfish and limit the amount of tuna you eat to no more than two tuna steaks a week (weighing about 140g cooked or 170g raw) or four medium-size cans of tuna a week (with a drained weight of about 140g per can). This is because of the mercury contained in these fish. **At high levels, mercury can harm a baby's developing nervous system.** This also applies during breast-feeding.
- Don't have more than two portions of oily fish a week. Oily fish includes salmon, trout, mackerel or herring. But remember that eating fish is good for your health and the development of your baby, so you should still aim to eat at least two portions of fish a week, including one portion of oily fish.
- Avoid raw shellfish because it may contain harmful bacteria and viruses that cause poisoning. However shellfish that is part of a hot meal that has been thoroughly cooked is fine.

## fruit & vegetables

Current advice is to aim for at least 5 servings of a variety of fruit and vegetables every day. Fresh, frozen, canned, dried and juiced all count (although juice can only be counted as one serving each day no matter how much is drunk). Always wash fresh fruit and vegetables carefully.

# g is for...

## gastroenteritis

The immune system works hard during pregnancy leaving you more vulnerable to tummy bugs and gastrointestinal infections such as listeria and salmonella. Most gastrointestinal infections in pregnancy only require rehydration and fetal monitoring.

If you have a tummy upset it is important to remain well hydrated by constantly sipping diluted squash or water. If symptoms are severe or last longer than 24 hours speak to your GP or midwife.

## gestational diabetes

Gestational diabetes is high blood sugar (glucose) that develops during pregnancy and usually disappears after giving birth. It happens when your body cannot produce enough insulin - a hormone that helps control blood sugar levels - to meet your extra needs in pregnancy. Dietary advice is to consume regular meals and eat starchy foods that release sugar slowly, plenty of fruit and vegetables, avoid sugary foods and drinks and eat lean sources of protein. Careful monitoring of food intake, regular weighing and blood glucose testing are required if you are considered at risk of developing it.

## ginger

Ginger is an alternative remedy for the relief of morning sickness, which has been shown to work in a number of studies.

## glucose screening

It is important that pregnant women with diabetes have their blood glucose monitored regularly to ensure optimal care for both themselves and the growing baby. Each time you visit your GP or midwife they will check your urine for sugar and may take a blood test as well.



# h is for...



## hand washing

To prevent illnesses wash your hands regularly and thoroughly, especially:

- Before and after handling any food, especially raw meat and fish and before eating
- After gardening, even if you have worn gloves
- After going to the toilet
- After coming in from outside/work/public transport
- After touching dogs, cats, kittens or their litter

## headache

Headaches are a common discomfort and may occur at anytime during pregnancy but tend to be most common during the first and third trimesters. An increase in headaches during the first trimester is believed to be caused by the surge of hormones along with an increase in the volume of blood circulating throughout your body. These headaches may be aggravated due to stress, poor posture or changes in your vision. Other causes of headaches during pregnancy may involve one or more of the following:

- Lack of sleep
- Dehydration
- Stress (too many changes)
- Low blood sugar
- Caffeine withdrawal

A severe persistent headache during pregnancy may indicate raised blood pressure so always speak to your midwife or GP if this occurs.

## healthy eating

During pregnancy, your diet should be focused on bread, other cereals, potatoes and fruit and vegetables with smaller amounts of meat, fish and dairy products. Foods that are high in fat and sugar should be eaten less often and be considered treats. See **Healthy Eating during Pregnancy** on p7-9 for more information.

## healthy eating voucher

You may be entitled to free plain fresh or frozen fruit and vegetables, milk, infant formula milk, basic vitamin supplements for women with vitamin C, D, folic acid and children with vitamin A, C and D under the Healthy Start scheme.

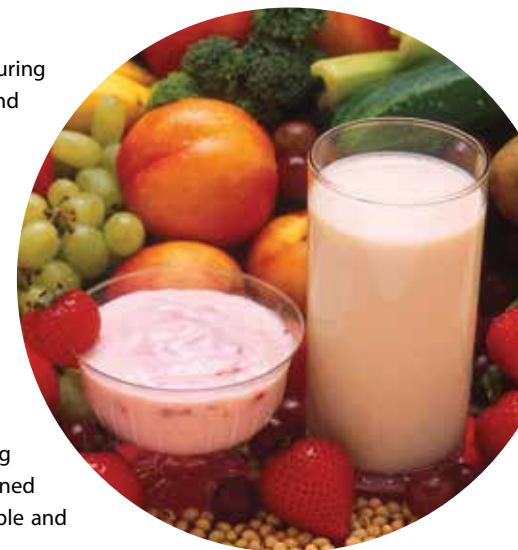
You qualify if you're at least 10 weeks pregnant<sup>8</sup> or have a child under four years old and you or your family receives any of the following:

- Child Tax Credit (with a family income of £16,190 or less per year)
- Income-related Employment and Support Allowance
- Universal Credit (with a family take home income of £408 or less per month)
- Income-based Jobseeker's Allowance
- Income Support
- Pension Credit

You also qualify if you are under 18 and pregnant, even if you don't get any of the above benefits.

## healthy snacks

Women often feel the need to eat more frequently during pregnancy hoping to combat morning sickness, and to meet the energy demands of the growing baby due to altered blood sugar control. However eating too many indulgent snacks, such as cakes and biscuits, may result in too much weight being gained. Keep these as treats and try to make healthier snack choices such as: sandwiches or pitta bread with low fat fillings, low-fat yoghurts, hummus and bread or vegetable sticks, a small bowl of unsweetened breakfast cereal, or porridge with milk, milky drinks, fruit, including fresh, ready-to-eat apricots, figs or prunes, tinned in juice or dried such as raisins or apricots, vegetable and bean soups.



## heartburn

Gastro-oesophageal reflux, the basis of heartburn during pregnancy, is very common, affecting up to three-quarters of pregnancies. It can start as early as the first trimester, but is generally worst in the third trimester.

Heartburn occurs as a result of increased abdominal pressure and the relaxation of the gastro-oesophageal sphincter due to pregnancy hormones, allowing stomach acid to rise into the lower oesophagus sometimes resulting in a severe burning sensation.<sup>9</sup> Some women may find milk and yoghurt soothing, but the most common remedy is **antacids** (see p13).

## high blood pressure

High blood pressure can indicate a potentially serious condition called pre-eclampsia and is routinely tested during pregnancy. If you have pre-existing high blood pressure, ('essential hypertension'), your GP can prescribe tablets to keep it under control during pregnancy which won't affect your baby in any way.

<sup>8</sup> www.healthystart.nhs.uk

<sup>9</sup> Dowswell T, Neilson JP (2008) Interventions for Heartburn in pregnancy Cochrane Database Syst Rev 2008 Oct 8;(4): CD007065

# i is for...

## indigestion

The hormones involved in pregnancy relax the sphincter between the stomach and the oesophagus, which may cause indigestion. The problem might also be gastric reflux. Keeping something in your stomach is the best way to prevent it. Eat frequent small meals throughout the day instead of fewer large ones. Some women find certain foods make indigestion worse such as spicy, rich, fatty or acidic foods and fizzy drinks.

Sleeping with your head elevated may also help. You might want to try peppermint tea, which can help calm the gastrointestinal tract. **Antacids** (p13) can also help some people. Try to eat slowly and allow time to digest food before rushing around. Not eating just before bedtime and avoiding stress, when possible, may also prevent discomfort.

## insomnia

Many women suffer from insomnia and other sleep problems during pregnancy and most often it is caused by not being able to get comfortable, frequent trips to the bathroom, leg cramps, excitement and anxiousness about the baby's arrival. Try to avoid tea, coffee or cola drinks in the evening, as the caffeine can make it harder to go to sleep.

Worrying about your lack of sleep will only compound the problem so try the following methods to get a good night's sleep:

1. Start winding down before climbing into bed by taking a warm bath or get your partner to give you a massage. You can also try a pre-bed relaxation technique such as progressive muscle relaxation or guided imagery.
2. Make sure your room is a comfortable temperature for sleeping. Is it dark and quiet enough? Heavy or dark-coloured curtains can help keep out unwanted light, and sound machines can help mask the drone of traffic with white noise.
3. If you aren't asleep within 20 to 30 minutes after getting into bed, get up and go into another room. Read a magazine or listen to music until drowsy, then get back into bed.

## iron

The demand for iron during pregnancy is high and pregnant women can become iron deficient, so make sure you eat plenty of iron-rich foods. Try to have some food or drink containing vitamin C, such as fruit or vegetables or a glass of fruit juice, with iron-rich meals to help your body absorb the iron.

If the iron level in your blood becomes low (see **anaemia**, p12), your GP or midwife will advise you to take iron supplements. Good sources of iron include: lean meat, green leafy vegetables, dried fruit, nuts and fortified breakfast cereals.



# j is for...

## jaundice

Some pregnant women experience severe itching often during pregnancy. This symptom can be due to a condition called intrahepatic cholestasis of pregnancy (ICP). The main symptom of ICP is itching, usually without a rash. For many women this is more noticeable on hands and feet but can be all over the body and worse at night. Mild jaundice (yellow colouration of skin and eyes), dark urine and pale poo can also occur in this condition. Both the itching and the jaundice occur because the liver becomes up to 30 times less efficient at getting rid of bile (a greenish-yellow fluid that is partly a waste product, and partly used to digest fat) during pregnancy. Always speak to your midwife or GP if concerned about itching as this should be investigated to eliminate ICP.<sup>10</sup>

## juice

Drinking juice is another way to make sure you get the recommended intake of eight glasses of water per day. Vitamin C requirements increase in pregnancy so a glass of fresh juice also helps to top this up. Be aware that fruit juice has a high sugar content and should be consumed in moderation.



# l is for...

## listeria

During pregnancy, Listeria can cause miscarriage, stillbirth or severe illness in the newborn. It is a very rare disease, occurring in about 1 in 30,000 births in the UK. However it is important to reduce the risk by avoiding some uncooked soft cheese made with mould or a rind (including brie and camembert), unpasteurised milk or dairy products and any type of pâté. Also remember to wash fruit and vegetables thoroughly and re-heat ready meals or pre-cooked foods until they are piping hot. If you're pregnant, you should also avoid close contact with farm animals that are giving birth or have recently given birth.

## liver

Do not eat liver or liver products, such as liver pâté or liver sausage, as they contain high levels of vitamin A. Too much vitamin A can harm your baby.

# m is for...



## meat

Meat provides protein and iron but make sure you cook all meat thoroughly (be especially careful with poultry, pork, sausages and burgers) so that there is no trace of pink or blood. Always wash hands thoroughly and clean all surfaces and utensils after touching raw meat. This will help to avoid infection with Toxoplasma, which may cause toxoplasmosis, which can harm your baby.

Make sure that raw foods are stored separately from ready-to-eat foods, otherwise there is a risk of contamination which may cause other types of food poisoning from meat including Salmonella, Campylobacter and E.coli 0157. Also make sure you use a separate chopping board for raw meats.

## menstrual cycle

Breast-feeding delays your periods returning or restarting. If you have a baby who sleeps through the night from an early age, your periods are likely to return sooner — typically in three to eight months. In other words, the more often your baby nurses, the longer it will be before you get your period again. However breast-feeding is not a reliable form of contraception so don't rely on this if you want to avoid unexpected surprises!

## migraine

If you are prone to getting migraines you may experience stronger headaches or find that they diminish whilst pregnant. Some women also experience a migraine for the first time when they are pregnant. Some studies have found a slight correlation between migraines and hormones.

Common triggers may include but are not limited to:

- Stress
- Coffee
- Chocolate
- Weather
- Cheese
- Hormones

Common home remedies for migraine headaches include:

- Applying a cold towel to your head
- You may need to consult your GP about the best form of pain relief medication for your migraines.
- Taking a cold shower
- Taking a nap
- Exercise
- Biofeedback (ask your doctor)
- Relaxation such as meditation or yoga



## milk

There's no need to switch from skimmed or semi-skimmed milk to whole milk as the only nutrient whole milk contains that skimmed milk doesn't, is fat. And while fat is important during pregnancy, you're probably getting enough unless you're consciously eating a low-fat diet. You should avoid any unpasteurised cow's milk, goats' milk or sheep's milk and any foods made from these products such as soft goat's cheese.

To get adequate amounts of calcium and vitamin D during pregnancy, drink four 8fl. oz (236ml) glasses (32fl. oz or 946ml) of pasturised skimmed milk each day, or eat a variety of other calcium rich foods such as 1 cup (245g) plain pasturised skimmed milk yoghurt, 1 cup (225g) non-fat pasturised cottage cheese, and 1 cup (250ml) calcium-fortified orange juice.

## minerals

Minerals help your body use the energy provided by food for both yourself and your baby. They also help repair and maintain cells and tissues. You can get most of the vitamins and minerals you need from a healthy diet, however many women find it difficult to get enough iron, folic acid and calcium from food and choose to take a pregnancy specific vitamin every day such as Pregnacare.

## mood swings

It is quite common to have fluctuating moods and emotions during pregnancy. Although progesterone and oestrogen are thought to be partly responsible, feelings of moodiness are often simply due to the fact that pregnancy is a time of tremendous change.

It's common for women to experience mental ill health for the first time in pregnancy. Women may feel more vulnerable and anxious. Pregnancy and birth can trigger depression in some women. If you are worried, talk to your midwife or GP.

## morning sickness

It is estimated that approximately 80% of pregnant women experience discomfort from the nausea and vomiting associated with pregnancy, which can actually occur at any time of the day or night. Most cases spontaneously resolve by the end of weeks 16 to 20 of your pregnancy, however one in five women experience nausea and vomiting for a much longer period of time. A small number may develop hyperemesis gravidarum (severe nausea, vomiting and dehydration) which requires specialist care. If you are at all concerned about morning sickness speak to your GP or midwife.

There are a great deal of theories on why women suffer from morning sickness during pregnancy, the most popular being:

- A combination of the changes in the body - rapidly increasing oestrogen levels, an enhanced sense of smell, excess stomach acids and fatigue.
- Increased stress and emotion levels.
- The build-up of hCG (human chorionic gonadotropin) in your system. hCG is a hormone produced after implantation takes place. It continues to increase until about the 12th week of your pregnancy, at which point the levels of hCG start to decrease. This is usually when morning sickness ceases.

Morning sickness will not affect your baby as long as you eat a well balanced diet and avoid dehydration by drinking lots of fluids (see **dehydration**, p18). The best approach to morning sickness is to eat plain carbohydrate foods frequently. Eating crackers or ginger biscuits before getting out of bed in the morning also helps some women.

# n is for...

## neural tube defects

The neural tube forms the baby's brain and spinal cord in the first 28 days of pregnancy. Insufficient folic acid can cause the neural tube not to develop properly, and may cause neural tube defects such as spina bifida.

The UK Department of Health recommends all pregnant women and women trying for a baby take 400µg folic acid every day. Not having enough folic acid in your body before and during pregnancy can cause neural tube defects. You should also try to eat foods that contain folate (the natural form of folic acid), such as broccoli, spinach and chickpeas.

See p21 for further benefits of **folic acid**.

# p is for...

## pâté

Avoid all types of pâté, including vegetable, because it may contain Listeria. Pâté made from any type of liver should also be avoided due to its high vitamin A content.

## piles

Piles (haemorrhoids) are a common problem for pregnant women and are caused by the weight of the uterus pressing on major blood vessels. This leads to a pooling of blood and ultimately causes the veins to enlarge and swell. In addition, the hormone progesterone relaxes the veins and allows the swelling to increase. Piles are best prevented by eating a high fibre diet accompanied by plenty of fluid. If you have problems with piles, speak to your GP or midwife.

## placenta

The placenta is the organ that nourishes the foetus by transporting nutrients from your blood and removing waste products.

## poultry

Poultry is a food that unless handled properly can carry an increased risk of salmonella. Always store uncooked and cooked meats separately and check that all meats are cooked thoroughly (with no signs of pink or blood) before eating. Handle pre-cooked poultry with care. Only buy from a reputable source and ensure that it is kept thoroughly chilled and never eat if beyond its use before date.

## prolactin

Prolactin is the hormone that tells your breasts to produce milk for your baby. It is stimulated by suckling, so frequent feeding on demand will help to get milk supply established in the early weeks.



# S is for...

## salmonella

Salmonella is the most common cause of food poisoning in the UK, and in severe cases may cause miscarriage or premature labour. The foods most likely to carry salmonella are raw eggs or partially cooked eggs that are not British Lion or undercooked poultry. Therefore pregnant women are advised to only eat raw (e.g. fresh mayonnaise and mousse), partially cooked and fully cooked British Lion eggs (eggs with a lion stamp on them). Food hygiene should be tightened especially with raw and cooked meats. Wash hands thoroughly with antibacterial soap after handling raw meat and use a separate chopping board for raw and cooked meat products.

## salt intake

Most of us consume too much salt, which in the long-term can have negative effects on blood pressure. More than two thirds of the salt in our diets comes from pre-packaged and processed foods. Limited evidence from one systematic review found no significant difference in the risk of pre-eclampsia with a low salt diet compared with a normal diet.<sup>11</sup>

## sex

Because your body doesn't change that much in the first trimester, sex can pretty much continue as it has in the past. If you're having a normal pregnancy, sex is considered safe during all stages of pregnancy. Many expectant mothers find that their desire for sex fluctuates during certain stages in the pregnancy, with some finding that sex becomes uncomfortable as their bodies get larger.

Your baby is fully protected by the amniotic sac (a thin-walled bag that holds the foetus and surrounding fluid) and the strong muscles of the uterus. There's also a thick mucus plug that seals the cervix and helps guard against infection. The penis does not come into contact with the foetus during sex, so it is safe to continue having sex throughout the whole of pregnancy. If you experience bleeding at any stage during pregnancy you should contact your midwife as soon as possible.

### After your baby is born

Generally, you should wait at least six weeks after birth before having sex. The uterus and cervix undergo significant changes during the process of delivering a baby and they need time to heal. During this healing phase the lining of the uterus, especially the site where the placenta was attached, is susceptible to infection. Sex, douching, tampons and anything placed in the vagina may introduce bacteria, and cause an infection.



<sup>11</sup> Duley L, Henderson-Smart DJ, Meher S (2005) Altered Dietary salt for preventing pre-eclampsia and its complications Cochrane Database of Systematic Reviews 2005, Issue 4. Art. No.: CD005548. DOI: 10.1002/14651858.CD005548.



## skin

The most common skin changes in pregnancy are:

- Chloasma: brown, clearly defined patches on the face, typically on the cheekbones and forehead.
- Darkening of the nipples and external genitals (pubic area).
- Darkening of existing moles.
- Linea nigra: a dark line that appears on the abdomen, running straight down from the umbilicus (belly button).
- Striae gravidarum (stretch marks of pregnancy): red lines or bands that can appear on the abdomen during pregnancy, or the breasts after breast-feeding, which later become white, smooth, shiny and flattened.
- Veins near the skin can become more obvious.
- Varicose (swollen) veins can appear on the legs.
- An increase in the number of skin tags (small, harmless skin outgrowths that occur especially on the neck, but can be found on any part of body).
- Acne can worsen.

## sleeping

According to one study, 97% of pregnant women have difficulties getting to sleep or staying asleep. It can happen at any time, say the US researchers in the Journal of Obstetric, Gynecologic and Neonatal Nursing. Problems in the study group of 127 women ranged from restlessness, wakefulness and tiredness in the day. Sleep problems are very common during pregnancy for all sorts of reasons. In early and late pregnancy in particular, you may need to get up in the night to use the bathroom. As you get bigger, finding a comfortable position to sleep can be difficult. Your body's 'thermostat' can seem permanently set to 'over-heat.' You may find it too hot for bedcovers, but then wake up feeling cold. Backache can also keep you awake. Putting a pillow under your bump can help in late pregnancy. You may also experience 'restless leg syndrome' which isn't uncommon and is exactly what it sounds like: jerking or twitching of the legs, particularly when lying down. Leg cramps are also a common complaint. Sleeping on your side after first trimester has a significant effect on reducing stillbirth.

## smoked meat

Some countries advise pregnant women not to eat cold meats because of the risk of **Listeria** (see p27). In the UK, women are not advised to avoid these products because the risk is very low. Pregnant women should take care when eating cold cured meats such as salami, pepperoni, chorizo and Parma ham because these meats are not cooked but cured and fermented so they may contain toxoplasmosis-causing parasites. For ready-to-eat meats, you can reduce the risk from parasites by freezing cured meats for four days at home before you eat them. Freezing kills most parasites and so makes the meat safer to eat.

## soft cheese

Mould-ripened soft cheeses, such as Brie and Camembert, may contain **Listeria** (see p27), which is a type of bacteria that can lead to pre-term birth, miscarriage, and/or flu-like symptoms. These should therefore be avoided during pregnancy. However it is fine to eat other soft cheeses such as cream cheese, ricotta or cottage cheese, as long as they're made from pasteurised milk. If you are unsure – stick to a hard cheese such as Cheddar and parmesan.

## spicy food

It's fine to eat spicy or hot food whilst pregnant or nursing, as long as you feel fine while you're eating it. Although a tiny fraction of what you ingest is transferred into your milk supply, it's unlikely that eating spicy food will affect your baby.

Eating garlic may even be beneficial to breast-feeding. Two studies have shown that the infants of mothers who eat garlic tend to feed for a longer time, and many babies seem to prefer a variety of flavour in breast milk.

Go by trial and error. If you suffer from heartburn after you've eaten a fiery curry, or your baby seems upset or irritable, then opt for a milder diet until they are slightly older.

Women from parts of the world where spicy dishes are the cultural norm don't make big changes to their diet when they become pregnant or are nursing, the key is to stick to a healthy, varied diet, and avoid foods that make you feel uncomfortable.

## starchy food

Starchy foods including bread, rice, pasta and potatoes are carbohydrates and are satisfying, making you feel fuller for longer and providing you with energy. As they are bulky, you are less likely to overeat and gain weight on starchy foods, so include one at every meal and choose a starchy food over fatty and sugary snacks wherever possible. Wholegrain versions are especially nutritious and the fibre helps to prevent **constipation** (see p17).



is for...

## teeth & gums

The combined effect of increased blood supply and pregnancy hormones can make your gums very soft and spongy. They may bleed when you brush your teeth or eat something hard like an apple. Make sure you brush your teeth with a soft brush and floss gently at least twice a day (after every meal if you can), paying particular attention to the area where your teeth meet your gums and avoiding sugary drinks and food will also help. NHS dental care is free during pregnancy and until 1 year after your due date, so see your dentist regularly and make sure they know you are pregnant, since it is best to avoid x-rays, if possible.

Gum problems can occur throughout pregnancy, but your gums should get back to normal soon after your baby's birth.

## tiredness

A variety of factors can cause tiredness during early pregnancy, including insomnia, anxiety and poor diet. Anaemia may also develop in pregnancy if there is an insufficient intake of **iron** (see p26). Combat symptoms by eating a well balanced diet and resting as and when you can.



# U is for...



## underweight

Women who are severely underweight during pregnancy and who are not eating enough are at an increased risk of miscarriage, premature birth, gastroschisis (when the baby's stomach doesn't develop properly), the baby having a low birth weight, which can have serious long term effects on their health.

## unpasteurised milk

Campylobacter is another common cause of food poisoning in the UK, which is commonly found in poultry and unpasteurised milk. Infections during pregnancy have been associated with premature birth, spontaneous abortion and stillbirths. Always ensure that any milk and cheeses consumed during pregnancy have been pasteurised.

# V is for...



## vegetables

Eat plenty of fruit and vegetables (at least 5 portions each day) to boost vitamin and mineral intakes whilst pregnant. Wash or peel fruit and vegetables before eating (see [healthy eating during pregnancy](#), p7-8).

## vegetarian & vegan diet

Vegetarian and vegan pregnant women can still enjoy a carefully planned vegetarian/vegan diet. There are many health benefits to vegetarian and vegan diets, but pregnant women need to take extra care to get enough of the nutrients more easily supplied in non-vegan/vegetarian diets, especially protein, iron, zinc, vitamin D, calcium and vitamin B12.

## vitamin K

Vitamin K is offered to the baby after birth either orally (3 doses) or injection (1 dose) to help prevent a rare bleeding disorder called haemorrhagic disease of the newborn. Your midwife should discuss the injection with you while you are pregnant.

This is because newborns are born with low levels of vitamin K which contributes to normal blood clotting. This leads to a decrease in vitamin K-dependent blood coagulation factors, making some newborns more susceptible to haemorrhage in the first several days of life until vitamin K is manufactured in their bodies.<sup>12</sup> Babies will produce their own vitamin K as they start digesting milk, therefore, early and regular (or unrestricted) feeding is important.

## vitamins & minerals

Possible deficiencies during pregnancy include:

<b>Folic Acid</b> which contributes to maternal tissue growth during pregnancy.	<b>400µg</b> supplement plus <b>300µg</b> from food/day
<b>Vitamin D</b> which contributes to normal absorption/utilisation of calcium.	<b>10µg/day</b>
<b>Iron</b> contributes to normal formation of red blood cells and haemoglobin.	<b>14.8mg/day</b>
<b>Calcium</b> which is needed for the maintenance of normal bones and teeth.	<b>700mg/day</b> during pregnancy and <b>1250mg/day</b> while breast-feeding <sup>13</sup>
<b>Iodine</b> which is needed for the normal production of thyroid hormones and normal thyroid function, crucial in early pregnancy.	<b>150µg/day</b>

## vitamin supplements

The Healthy Start scheme helps low income families by providing vouchers for free plain fresh or frozen fruit and vegetables, milk, infant formula milk, basic vitamin supplements for women with vitamin C, D, folic acid and children with vitamin A, C and D. Ask your midwife for an application form, or visit [www.healthystart.nhs.uk](http://www.healthystart.nhs.uk)

Many women choose to take a comprehensive pregnancy specific multivitamin and mineral supplement, such as Vitabiotics Pregnacare Original, Pregnacare Liquid or Pregnacare Plus in order to safeguard dietary intake.

# W is for...



## water intake

Drink plenty of water and other fluids, as pregnant women dehydrate more quickly than normal. Drinking plenty of fluids is important, especially when exercising or if the weather is hot.

## weight loss after pregnancy

Just as it's best to put on weight slowly and steadily during your pregnancy, you need to be slow and steady in losing weight after your pregnancy. If you are breast-feeding you should not follow a weight reducing diet. A general rule for weight loss is to aim for around 1lb per week. It might not sound much, but it quickly adds up and gives your body chance to recover and skin time to gradually shrink back. Breast-feeding can help you lose weight naturally with a well balanced diet.

<sup>12</sup> (Cunningham et al. 1989:611).

<sup>13</sup> British Nutrition Foundation *Nutrition Bulletin*, 30, 253.

## DIET AFTER BIRTH & breast-feeding

Breast milk is the best choice for your new baby. It provides all of the nutrients your baby will need as well as extra immunity against infection. It also helps your body return to normal after the birth and utilise the extra body fat stored during pregnancy. In the first year your baby grows an impressive amount, so not surprisingly the nutritional requirements of breast-feeding are quite high. Looking after a new baby can be exhausting in terms of disturbed nights and loss of sleep, so try to make sure you get all of the help and support you need in order to get adequate rest during the day, especially during the first few weeks.

The basics of healthy eating after birth remain exactly the same as during your pregnancy, however your energy needs will be higher so you may need to include regular snacks in addition to meals if breast-feeding. Not only are you providing your baby with vitamins and minerals, but you will also be replacing those lost from your body during pregnancy so it is important to continue eating a diet that is rich in vitamins and minerals.

Many women choose to continue taking a one-a-day multivitamin and mineral supplement that is suitable for breast-feeding in order to boost their diet and for peace of mind that they are safeguarding their diet with all the nutrients they need.

It is particularly important to eat plenty of calcium rich foods whilst breast-feeding as your requirements increase by an extra 500mg per day<sup>14</sup> (equivalent to needing an extra pint of milk every day). Also try to continue eating oily fish once each week (such as salmon, trout, sardines or avocados and nuts), and choose foods that have added Omega-3 such as some types of milk or eggs.

The UK Department of Health also recommend that all pregnant and breast-feeding women should take a daily supplement containing 10µg of vitamin D to ensure the mother's requirements are met and to build adequate fetal stores for early infancy.

**Don't forget that you need to drink extra fluids to avoid dehydration as well as tiredness and headaches. Try to remember to drink an extra glass of water, milk or fruit juice every time you feed your baby.**

Alcohol and caffeine both pass into breast milk so continue to limit your intake of these. What you eat and drink will pass all sorts of flavours in your milk to your baby, helping to prepare them for weaning. However some babies may be sensitive to highly spiced or strong tasting foods so if you notice that certain foods upset the baby then it's best to avoid them.



## GETTING BACK INTO SHAPE after the baby is born

Most women are keen to get back into shape after pregnancy and wear their normal clothes. However labour and the following sleep disturbed nights will take their toll on even the most energetic of women. Therefore, it's essential to balance maintaining energy levels and the stamina to keep going with any attempts to lose weight. If you are breast-feeding, now is not the time to diet. It is as important to eat a healthy balanced diet and to keep well hydrated as it was during the pregnancy.

The best way to approach getting back into shape is to **take it slowly**, starting with some gentle exercise, such as a short daily walk combined with a healthy balanced diet that is low in fat with a mix of protein, carbohydrates, fruit and vegetables. Opt for low-fat, high-fibre foods and healthy snacks such as fresh fruit to stave off hunger. Don't forget the importance of pelvic floor exercises to regain the strength of these muscles following pregnancy. If you are unsure ask your midwife or health visitor about these.

If you have had a caesarean section you should follow advice from your midwife and avoid abdominal exercise for the first six weeks.

At your six week check, your GP will tell you if it is okay to resume normal activities such as swimming, aerobics etc.

All of the high-risk foods that were off limits during pregnancy can now make a welcome return to your diet, such as soft and blue cheeses, liver, etc. as the baby is no longer at risk and your immune system will be returning to normal. **You can choose to eat peanuts or foods containing peanuts (such as peanut butter) when breast-feeding as part of a healthy balanced diet, unless you are allergic to peanuts or your health professional advises not to.**<sup>15</sup> If you are breast-feeding, alcohol and caffeine still needs to be limited, and if you are not breast-feeding, don't forget that after 9 months of abstinence you will probably be very susceptible to the effects of alcohol and caffeine.

The guidelines for eating fish remain the same during breast-feeding (see [fish](#) p20).

If you are tired and lacking sleep, eating little and often will help to keep energy levels up. And if friends offer to help, it is a great idea to ask them to bring round a freshly cooked meal that you can simply re-heat, or pop into the freezer for another day.



<sup>14</sup> British Nutrition Foundation *Nutrition Bulletin*, 30, 253

<sup>15</sup> www.NHS.uk



# Expert nutritional care for every stage of pregnancy

Worldwide studies have shown that even with a good diet, extra nutrients may be necessary before and during pregnancy. Vitabiotics Pregnacare Original, Pregnacare Liquid and Pregnacare Plus have been carefully developed to support women who are trying for a baby, right through pregnancy to breast-feeding and the postnatal period.

**Pregnacare Original** and **Pregnacare Liquid** provide the recommended level of 400µg folic acid and 10µg vitamin D, plus essential vitamins and minerals including iron and vitamin B12. They are both suitable before conception, for all of pregnancy and whilst breast-feeding. Pregnacare Liquid is ideal for those who prefer not to swallow tablets.

**Pregnacare Plus** combines the Pregnacare Original tablets with Omega-3 capsules for even greater care. The comprehensive multivitamin tablet delivers essential nutrients for pregnancy, including the recommended level of 400µg folic acid plus iron and vitamin D. The additional Omega-3 capsules provide a rich source of the important fatty acids, including Docosahexaenoic Acid (DHA). Maternal intake of DHA contributes to normal brain and eye development of the foetus.\*



Comprehensive  
vitamins & minerals

19 vitamins &  
minerals, plus  
Omega-3 DHA

## For further information

contact Vitabiotics Ltd, 1 Apsley Way,  
London NW2 7HF

telephone 020 8955 2600

email [pregnacare@vitabiotics.com](mailto:pregnacare@vitabiotics.com)

visit [www.pregnacare.com](http://www.pregnacare.com)

This guide has been  
developed by



\*A daily intake of 200mg DHA is required in addition to the recommended daily intake of 250mg DHA/EPA for adults. While every attempt has been made to ensure that the information contained in this guide is accurate and reliable, this is intended as a guide only and not a substitute for advice from a health professional. **Please note:** Vitabiotics cannot guarantee the reliability of facts obtained from other third party information sources. Information correct at time of going to print (July 2020).