HEALTHY EATING WHEN YOU'RE PREGNANT

INFORMATION FOR VEGETARIANS AND VEGANS



Now that you're pregnant it's the ideal time to review your diet. What you eat during pregnancy affects your own health and wellbeing, your developing baby and your baby's health later in life.

When pregnant you only need to increase how much you eat by a small amount but you do need more of certain nutrients. A vegetarian diet can contain most nutrients you need if care is taken to eat regular meals and include foods from the five food groups each day (see below). However, a vegan diet needs careful planning and specific supplements to provide all the nutrients you and your baby will need while you are pregnant. Please see a dietitian for help planning your diet and advice on supplements.



Most women will need folic acid and iodine supplements as it is difficult to get enough of these from food alone. Vegans also need additional vitamin B12 as this is important for the baby's brain development (see 'Important nutrients during pregnancy' section below for more information).

Tips on how to include a variety of foods in your everyday meals

To help include the right variety and balance of foods each day choose a protein, carbohydrate and some vegetables, salad or fruit at each meal. Remember to include some dairy food or calcium-fortified plant milks such as soy or almond milk each day.

Below are examples of food to include in your daily meals, that is, a carbohydrate, a protein and fruit and vegetables. Choose foods from each column when preparing your breakfast, lunch and dinner.





Include nutritious snacks if you are hungry or are unable to eat enough at mealtimes.

If nausea is affecting your food choices eat what you can manage and get back on track when you feel better. See Nausea and vomiting in pregnancy (morning sickness) fact sheet for more information.

Important nutrients during pregnancy

Folic acid

Folic acid (also called folate) is a vitamin needed to build your baby's cells. In early pregnancy it can help reduce the risk of certain birth defects such as spina bifida.

As it's difficult to get enough folic acid from food alone you will need to take a supplement. Start when planning your pregnancy and continue it for at least the first 3 months after you are pregnant. Take either a daily folic acid supplement (400 micrograms per day) or take a pregnancy multivitamin. Some women with particular health conditions or who are overweight may be advised to take a higher dose of folic acid.

Folate is important throughout pregnancy so eat foods that are rich in folate such as green leafy vegetables, salad greens, fruit, wholegrain breads and cereals, fortified breakfast cereals, legumes and nuts.

Iodine

Iodine is important for the developing brain and nervous system of your baby. As more is needed during pregnancy and breastfeeding, and it's hard to get enough from food, a daily supplement of 150 microgram of iodine is recommended. Most pregnancy multivitamins contain this dose.

Supplements are also available that contain both iodine and folic acid. Do **not** take kelp (seaweed) tablets as they may contain too much iodine. If you have a preexisting thyroid condition, speak to your doctor before taking an iodine supplement.

Protein

Protein helps build all body tissues. Aim to include protein-containing foods in each meal. Eggs, dairy foods, nuts, legumes (dried beans and lentils) and food made from them, such as tofu are protein sources and will help your iron and calcium intake as well.

Iron

Iron is needed to form red blood cells for yourself and your baby. Lack of iron can cause tiredness and if severe can increase the risk of premature birth and low birthweight babies. A lot more iron is needed during pregnancy and it can be difficult to get enough from a vegetarian diet. You may need to take an iron supplement if blood tests show that your iron level is low.

Foods containing iron include legumes (lentils and dried beans), nuts, seeds, eggs, whole grains, green leafy vegetables and iron enriched breakfast cereals. You will absorb more iron from these foods if you eat vitamin Crich foods, such as citrus fruits, berries, tomatoes or capsicum at the same meal.

See the Iron in Pregnancy fact sheet for more information.

Calcium

Calcium helps form healthy bones. Dairy foods (milk, cheese, yoghurt) are a good source. If you drink soy or other plant milks, such as almond or rice milk, check the label and choose a brand with added calcium (at least 100mg per 100ml). Other calcium sources include bok choy, cabbage, broccoli, silverbeet, almonds, calciumfortified breakfast cereals and tofu, especially tofu set with calcium-based setting agent (check label). Spinach has calcium but it is not well absorbed by the body. If you seldom eat these foods, talk to you dietitian, midwife or doctor about whether you should take calcium supplements.

Vitamin D

Vitamin D helps the body absorb and use calcium. It works together with calcium to build your baby's bones. Only a small amount of vitamin D comes from food (it's contained in egg yolks, margarine, milk and oily fish). Sunlight helps your body make its own vitamin D. If you are indoors a lot, have darker skin or cover most of your body in clothing, your vitamin D levels may be low. Very low levels can cause bone weakness and muscle pain in women and skeletal abnormalities (called rickets) in their babies. If you are at risk you will be advised to take a vitamin D supplement.

Vitamin B12

Vitamin B12 is needed for blood cell, nerve and brain development of your baby. Vitamin B12 is present naturally only in foods of animal origin. Vegans and vegetarians who eat few dairy foods or eggs are at risk of deficiency, especially as pregnancy and breastfeeding rapidly use body stores of B12. Breastfed babies of vegan mothers are particularly at risk of B12 deficiency. Vitamin B12 is added to certain brands of soy milk and meat substitutes but the amount in these foods may not be enough if few other sources of B12 are eaten. Algae, yeast and fermented foods such as tempeh and miso are not reliable sources of B12.

It is important for women at risk to have their level checked and may need a B12 supplement.

If you are concerned please talk to your dietitian or doctor.

Omega-3 fats

Omega-3 fatty acids are needed for healthy brain, nerve and eye development in the baby and may have other health benefits. Vegetarian sources include walnuts, chia seeds and linseeds (also called flaxseeds) and soybeans.

Multivitamin supplements

Ideally the best way to meet the increased nutrient requirements of pregnancy is with a balanced diet but if you are unable to eat well, a pregnancy multivitamin supplement may help. A multivitamin supplement can also be a convenient way of getting enough folic acid and iodine if you are not already taking these supplements.

Check that any supplements you take are suitable for pregnancy. Multivitamin supplements that are not designed for pregnancy may contain too much of a form of vitamin A called retinol. Another form of vitamin A called beta carotene is safe for pregnancy. Ask your pharmacist, doctor or dietitian for advice if you are unsure.

Foods to avoid or limit

Food-borne infections

Pregnant women are at greater risk of some types of food poisoning and infections that can be passed on to the baby. To reduce your risk:

- Use good food handling practices such as using separate chopping boards for raw and cooked foods.
- Don't leave leftover food on the bench for too long. Place it in the fridge once it has stopped steaming.
- Avoid foods that may contain the listeria bacteria such as soft cheeses (brie, camembert, ricotta, feta and blue cheese), soft serve ice-cream, pre-prepared salads. Listeria is killed by cooking food to boiling point, so, when cooking or reheating foods, make sure they are steaming hot. If you are not sure that food has been prepared or stored hygienically do not eat it.
- Avoid undercooked eggs to limit risk of salmonella food poisoning, which in rare cases can affect the baby. Cook eggs until the yolk and white are firm.
- Sesame seeds are also a salmonella risk so avoid eating sesame seeds and ready to eat products such as tahini, halva and hummus. Sesame seeds that have been heat treated are safe to eat.
- Toxoplasmosis can be found in cats' poo (and raw meat). To reduce the risk of infection wear rubber gloves if handling cat litter and wash hands after gardening or handling pets.

Alcohol

Not drinking alcohol is the safest option.

Caffeine

Tea and coffee contain caffeine. These are safe to drink in moderation, for example, one to two coffees or up to five cups of tea per day. Energy drinks can contain large amounts of caffeine or guarana (a source of caffeine) so should be limited.

See the Food Safety during Pregnancy fact sheet for more information.

How much weight should I gain?

Your recommended weight gain depends on your prepregnancy body mass index (BMI).

To calculate your BMI divide weight (in kilos) by height (in metres) squared. Check the table below for the recommended weight gain for your BMI range.

If you find you have gained a lot of weight early in pregnancy, aim to slow your weight gain down to the recommended monthly gain.

Dieting is not recommended, instead limit intake of high fat and high sugar foods and do some daily exercise such as walking. Speak to your doctor, midwife or physiotherapist if you are unsure what type of exercise is appropriate for you.

See Weight and pregnancy fact sheet for more information and tips on what to eat if you are worried you are gaining too much or too little weight.

Pre-pregnancy	BMI European	BMI Asian	Recommended weight gain during pregnancy	Weight gain per month in 2nd & 3rd trimesters*
Underweight	Less than 18.5		12.5 to 18kg	2 to 2.5kg
Normal weight	18.5–24	18.5 to 22.9	11.5 to 16.0kg	1.5 to 2.2kg
Overweight	25–29	23 to 27.5	7 to 11.5kg	1 to 1.4kg
Obese	30 and above	Above 27.5	5 to 9kg	0.7 to 1.2kg

Recommended weight gain

*The average weight gain in the first three months is 0.5 to 2kg.

Where to get more information

If you have questions about what to eat or weight gain during pregnancy ask for a referral to a dietitian.

The Women's website

for more information on nutrition and pregnancy www.thewomens.org.au/hi-healthy-pregnancy

The following fact sheets are also available for download:

- Healthy eating when you're pregnant with twins
- Coping with common discomforts of pregnancy
- Food safety during pregnancy
- Iron & pregnancy
- Nausea and vomiting in pregnancy (morning sickness)
- Weight gain during pregnancy

Food Standards Australia New Zealand

This website has useful information for consumers. Search for 'Fish and mercury', 'Listeria and food' and 'Food poisoning'

www.foodstandards.gov.au/consumer/

Eat for Health

Visit the Australian Dietary Guidelines website for advice and resources about healthy eating. www.eatforhealth.gov.au

Eat for Health: Healthy foods guide

Use the following table as a guide to foods you should include in your daily diet.

Food group	Daily serves	Each item is an example of a serve	
	5	1/2 cup vegetables	
Vegetables & Legumes		1 cup salad	
		1/2 cup legumes (cooked)	
	2	1 medium or 2 small pieces fruit	
Fruit		1 cup tinned fruit or fruit salad	
		1 tablespoon dried fruit	
	3 ½	65g cooked meat	
		80g cooked chicken	
Meat and		100g cooked fish fillet of 1 small can of fish	
meat alternatives		2 eggs	
meat alternatives		1 cup legumes canned or cooked legumes/beans - lentils, chickpeas	
		170g tofu	
		1 tablespoon (30g) nuts	
	soy or 2 ½	1 cup milk	
Dairy or alternatives such as soy or almond milk		Small tub (¾ cup) yoghurt	
		2 slices (40g) cheese	
) 8 ½	1 slice bread, ½ bread roll, 1 chapatti,	
Crain foods (broads & corocle)		1/2 Lebanese bread, 3 crisp breads	
Grain foods (breads & cereals)		1 cup cereal, ½ cup porridge (cooked)	
		1/2 cup rice, pasta, noodles (cooked)	
Unsaturated oils and spreads Optional		1 to 2 tablespoons per day	

Limit foods that are high in added fats and sugars, such as cakes, biscuits, pastries, high fat takeaway foods and sugar-sweetened soft drinks and juices. While these are fine in small amounts, in large amounts they can cause excess weight gain or take the place of more nutritious foods.

DISCLAIMER This fact sheet provides general information only. For specific advice about your baby or your healthcare needs, you should seek advice from your health professional. The Royal Women's Hospital does not accept any responsibility for loss or damage arising from your reliance on this fact sheet instead of seeing a health professional. If you or your baby require urgent medical attention, please contact your nearest emergency department. © The Royal Women's Hospital 2019–2021