

Healthy eating for vegetarian or vegan pregnant and breastfeeding mothers

Healthy eating in pregnancy and breastfeeding

Healthy eating is important at all stages of life, especially during pregnancy and breastfeeding. What you eat and drink at this time can affect your health and the health of your baby for many years to come.

There is only a *small* increase in the *amount of food* you need to eat while you are pregnant or breast feeding. However, you do need more of certain nutrients, so it is very important that you make good choices for a *nutritious diet*. *This is important* so you and your baby get all you need for healthy growth and a healthy pregnancy.

Your daily food group requirements during pregnancy are outlined in the table over leaf. Use the numbers in the middle column to guide how many serves to eat from each food group per day.

One serve is equal to each of the foods in the column on the right. For example, one serve of fruit is equal to 2 small plums, one serve of grain (cereal) foods is equal to ½ cup of cooked pasta.

Weight Gain in Pregnancy

The weight you should aim to gain depends on what your weight (and body mass index - BMI) was *before* you became pregnant. BMI is the number used to work out the recommended amount for you. If you were given a hand held record from antenatal clinic you may find your BMI in here. If not, you can work it out using the following:

$$\text{BMI} = \text{weight}/(\text{height} \times \text{height}) = \text{___} \text{kg/m}^2$$

Use this table as a general guide to what weight you should gain during pregnancy.

If your <i>pre-pregnancy BMI</i> was...	You should gain...
Less than 18.5 kg/m ²	12½ to 18kg
18.5 to 24.9 kg/m ²	11½ to 16kg
25 to 29.9 kg/m ²	7 to 11½ kg
Above 30 kg/m ²	5 to 9kg

What's in this handout?

- Healthy eating for pregnancy –essential nutrients I need and how I get them?
- A sample meal plan to show you how this all fits together

Food Group	Number of serves per day 19-50 years		1 serve
	Pregnant	Breast Feeding	
Vegetables and legumes/ beans	5	7½	½ cup cooked green or orange vegetables (eg broccoli, carrot, spinach) ½ cup cooked, dried or canned beans, chickpeas or lentils (no added salt) ½ cup corn 1 cup raw leafy green vegetables ½ medium potato, or other starchy vegetable (sweet potato, taro, cassava) 75 g other vegetables e.g. 1 small-medium tomato
Fruit	2	2	1 piece medium sized fruit (e.g. apple, banana, orange, pear) 2 pieces smaller fruit (e.g. apricot, kiwi fruit, plums) 1 cup diced, cooked or canned fruit ½ cup 100% juice 30 g dried fruit (e.g. 1½ tablespoons sultanas, 4 dried apricot halves)
Grain (cereal) foods	8½	9	1 slice of bread ½ medium bread roll or flat bread ½ cup cooked rice, pasta, noodles, polenta, quinoa, barley, porridge, buckwheat, semolina, cornmeal ⅔ cup breakfast cereal flakes ¼ cup muesli 3 crisp breads 1 crumpet or 1 small English muffin or scone
Eggs, nuts, seeds and legumes	3½	2½	2 large eggs (120g) 1 cup (150 g) cooked dried beans, lentils, chickpeas, split peas, canned beans 170 g tofu ⅓ cup (30 g) unsalted nuts or seeds 2 tablespoons nut paste, no added salt
Dairy or alternatives	2½	2½	1 cup (250 ml) milk (with at least 100mg added calcium per 100ml) 200 g (¾ cup) dairy or calcium fortified soy yoghurt 40g (2 slices) dairy or soy cheese
Unsaturated oils/spreads	2		10g dairy free spread, butter or margarine 7g poly/monounsaturated oil (eg. olive, canola, sunflower)
Additional serves for taller or more active women	0–2½		3–4 sweet biscuits 30 g potato crisps 2 scoops dairy/soy ice-cream

Iron

Iron is needed to form the red blood cells for you and your baby. It helps carry oxygen in your blood and is needed for your baby to grow. During pregnancy you need a lot more iron than usual. This means that an iron supplement is highly recommended for women who follow a vegetarian or vegan diet.

Good sources of additional dietary iron are legumes, (e.g. beans, peas, lentils), dark green vegetables, dried fruits, nuts, breakfast cereals and wholemeal breads. Talk to your healthcare provider to make sure you are getting enough iron from your diet.

Iron Content of Foods

Daily target 27 mg

Food	Serve size	Iron /serve (mg)
Tofu	100g	3 - 5
Canned beans or cooked dried beans	1 cup	3 - 4
Iron fortified breakfast cereal	1 bowl	3
Eggs	2	2
Cooked spinach	½ cup	2
Cooked silver beet	½ cup	1.5
Dried Apricots	4 halves	1
Oats	½ cup	1
Wholemeal bread	1 slice	0.5 - 1

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You can help your body get iron from the food you eat or drink by:

- Including vitamin C with meals (e.g. citrus foods, tomato, capsicum)
- Using antacids sparingly
- Avoid taking foods or supplements with calcium at the same time as an iron supplement.

Some foods and drinks may stop your body using iron from your diet. To reduce this, avoid:

- Drinking tea or coffee with meals
- Eating more than 2 tablespoons of unprocessed bran.

Protein

Pregnant or breastfeeding women should aim to include protein sources *at each meal* such as legumes, nuts and soy products (or eggs/dairy if vegetarian).

Rice, oat & almond milk are low in protein.

Daily protein targets:

- 1st trimester: 46g
- 2nd & 3rd trimesters: 60g
- Breastfeeding: 67g

Food	Serve size	Protein /serve (g)
Eggs	2 large	15
Canned beans or cooked dried beans	1 cup	13 -15
Tofu	100g	10 -15
Cow's milk	1 cup	9
Soy milk	1 cup	8
Nuts	1/3 cup	5

Folate or Folic acid

Folate (or folic acid) is needed for your baby to grow and develop. It is especially important in the month before you fall pregnant and the first trimester (three months) of pregnancy. A good intake of folate reduces the risks of your baby being born with conditions such as spina bifida (a disorder where the baby's spinal cord does not form properly).

All women planning a pregnancy and in the early stages of pregnancy (the first three months) should take a folic acid supplement of at least 400mcg (micrograms) per day. Women who have diabetes or are overweight (with a BMI > 30 kg/m²) should take a higher dose of folic acid of 5mg (milligrams) per day.

You should also eat a variety of folate-containing foods. Foods high in folate include green leafy vegetables such as broccoli, spinach, bok choy, and salad greens, some fruits, and cereals and breads with added folic acid.

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Calcium

Foods and drinks with added calcium are important to meet calcium requirements for vegans whilst pregnant. Include tofu, almonds, sesame seeds, tahini, as well as plant milks with added calcium (choose one with at least 100mg calcium per 100mls if you are vegan). Vegetarians will usually obtain sufficient calcium from dairy products.

Daily calcium target 1000 mg

Food	Serve size	Calcium/serve (mg)
Cow's milk	1 cup	300
Yoghurt	200g	400
Hard Cheese	40g	300
Tofu	100g	320
Soy milk	1 cup	310
Soy Beans	1 cup	105
Sesame Seeds	1 tablespoon	90
Almonds	1/3 cup	80
Dried Figs	3 figs	80
Tahini	1 tablespoon	65

Vitamin B12

Animal products (eggs/dairy) are an important source of B12, so your B12 intake will be limited if vegan. A good amount can be consumed by having at least two serves of soy milk with added B12 daily. Food fermented by micro-organisms (soy sauce, miso, tempeh), manure-grown mushrooms, spirulina and yeast may contain small amounts of vitamin B12, but this is not sufficient to meet your requirements for vitamin B12 so a supplement may be required. Discuss your vitamin B12 levels and requirements with your Doctor, Pharmacist or Dietitian.

Vitamin B12 Content of Foods

Daily target 2.6 mcg

Food	Serve size	Vitamin B12 /serve (mcg)
Soy Burger#	75g	2
Egg	2 large	1.5
Cow's milk	1 cup	1
Soy Milk#	1 cup	1

check for added B12

Zinc

Good sources for vegetarians/vegans include beans and lentils, yeast, nuts, seeds and wholegrain cereals.

Zinc Content of Foods

Daily target 11mg

Food	Serve size	Zinc /serve (mg)
Pumpkin seeds	1/3 cup	6.5
Soybeans & Lentils	1 cup	2 - 3
Cashews	30g	2
Cheese	40g	1.5 -2
Tofu, firm	100g	1.5
Zinc fortified breakfast cereal	2/3 cup	1.5
Green peas	½ cup	1.5
Cow's milk	1 cup	1
Brown rice, cooked	½ cup	0.5

Iodine

Adequate iodine in pregnancy is needed for your baby's growth and brain development. Your body needs more iodine during pregnancy. All pregnant and breastfeeding women should take a supplement of 150mcg (micrograms) of iodine.

You still need to consume a nutritious diet in addition to this supplement. All shop bought bread (except organic) contains added iodine so is a good source. Do not take kelp (seaweed) supplements or kelp

based products due to varying amounts of iodine and risk of heavy metals such as mercury.

Multivitamin supplements

A multivitamin during pregnancy is not necessary unless you do not have a balanced diet – compare what you are eating with the table on the second page. If you do choose to take a vitamin or mineral supplement during pregnancy, choose one that is specifically designed for pregnancy. Always check with your doctor before taking any supplements as

an excessive intake can be harmful and reduce the absorption of other nutrients.

Herbal supplements and preparations

Many herbal preparations have a drug-like effect. These should be used with the same caution as with other drugs. Please call the NPS (National Prescribing Service) Medicines line for any information regarding alternative treatments in pregnancy, phone 1300 633 424

Sample Meal Plan

Breakfast

Muesli with dairy/soy milk and chopped fresh fruit
Toast with nut butter
Fresh fruit juice

Morning Tea

Smoothie made with dairy/soy milk, dairy/soy yoghurt and fruit

Lunch

Lentil soup
Wholegrain bread with avocado (or egg) and salad

Afternoon Tea

Wholegrain crackers with nut butter, cheese or hummus

Dinner

Tofu and nut, vegetables stir fry or curry
Brown rice

Supper

Fresh Fruit/ almonds/ dried figs

Things I can do to improve my diet for a healthy pregnancy and/or while breastfeeding:

1.

2.

3.

4.

For further information contact your Dietitian or Nutritionist: _____

Content in this handout was informed by:

Eat for Health Australian Dietary Guidelines. Commonwealth of Australia (2013)

National Health and Medical Research Council (2010), Public Statement, *Iodine Supplementation for pregnant and breastfeeding women*

National Health and Medical Research Council (2006). Nutrient Reference Values for Australia and New Zealand Executive Summary. Dept Health and Ageing. Canberra, Commonwealth of Australia.

Position of the Academy of Nutrition and Dietetics: Vegetarian Diets (2016)