Good Nutrition in pregnancy

A healthy pregnancy is important for you and your baby

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WOMEN, YOUTH & CHILDREN COMMUNITY HEALTH PROGRAMS
Good Nutrition in pregnancy

A healthy pregnancy is important for you and your baby. Even though you are eating for two there is no need to eat twice as much. It is the quality of the food not the quantity that matters most.

Aim to fill up on healthy foods and keep physically active. Try to eat plenty of:

- fruit and vegetables
- nuts, seeds and legumes
- wholegrain breads and cereals
- reduced fat dairy or calcium fortified soy drinks
- lean meat or alternatives.
How much weight should I gain?

Weight gain during pregnancy varies from woman to woman. Enjoy your changing body shape and trust that you will return to your pre-pregnancy weight in good time.

The amount of weight you should gain depends on your pre-pregnancy weight.* Calculate your pre-pregnancy BMI** with your health worker and then use the table below to work out a healthy weight gain for you.

<table>
<thead>
<tr>
<th>Pre pregnancy BMI</th>
<th>Healthy weight gain</th>
<th>Weight gain in the 2(^{nd}) &amp; 3(^{rd}) trimester</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 18</td>
<td>12–18kg</td>
<td>450–650g per week (1.5–2.5kg per month)</td>
</tr>
<tr>
<td>19–24.9</td>
<td>11–16kg</td>
<td>400–600g per week (1.5–2kg per month)</td>
</tr>
<tr>
<td>25–29.9</td>
<td>7–11kg</td>
<td>300–400g per week (1–1.5kg per month)</td>
</tr>
<tr>
<td>Above 30</td>
<td>5–9kg</td>
<td>200–300g per week (0.8–1kg per month)</td>
</tr>
</tbody>
</table>

Women can expect to gain up to 1–2kg in the first trimester.

Weight loss during pregnancy is not recommended

Achieving a healthy weight before conception is desirable. If you are contemplating pregnancy, and have concerns about your body weight, talk to your Doctor, midwife or dietitian.

* Institute of Medicine Guidelines 2009

** BMI (Body Mass Index) = Weight (kg) ÷ Height (m)\(^2\)

* e.g. Weight 65kg, Height 165cm. BMI = 65 ÷ (1.65x1.65) = 23.9
Folate

It is important to have good folate stores prior to pregnancy and in the first twelve weeks of pregnancy.

Folate is needed for your baby’s development. It helps prevent birth defects such as spina bifida.

Good sources of folate include:

• Dark green leafy vegetables, e.g. broccoli, spinach and Brussels sprouts
• Other vegetables, e.g. asparagus, green beans, cauliflower, peas and parsley
• Fresh fruit, e.g. avocado, bananas, oranges, tomatoes, rockmelon and strawberries
• Legumes, e.g. chick peas, soy beans, baked beans and lentils
• Wholegrain breads, oats and fortified breakfast cereals (check the label)
• Yeast extract spreads, e.g. Vegemite™
• Nuts and peanut butter.

A daily folic acid supplement of at least 400 micrograms for at least one month before and the first three months of pregnancy is recommended. You may need additional folic acid if you have:

• diabetes
• BMI greater than 30
• a family history of neural tube defects.

Discuss this with your Doctor, midwife or dietitian.
Iron

Iron needs increase during pregnancy. Iron is necessary for making red blood cells that carry oxygen around the body.

The best sources of iron are:
- Red meats, e.g. beef, lamb, pork
- Chicken and fish.

These sources of iron are the most easily absorbed by your body.

Liver is an excellent source of iron, but should be limited to one serve per week during pregnancy as it is high in vitamin A. Too much vitamin A can be harmful to your baby.

Other sources of iron include:
- Nuts and nut butters
- Lentils, tofu, baked beans
- Eggs
- Wholegrain breads
- Fortified breakfast cereals
- Spinach & broccoli
- Prunes and dried apricots
- Milo™.

You will absorb more iron from these foods if they are eaten with a little meat or with a food rich in vitamin C, e.g. oranges, tomatoes, broccoli or fruit juice.

Iodine

Iodine is important for hormone production and your baby's brain development.

Good sources of iodine include:
- Bread with added iodine
- Seafood
- Eggs
- Dairy food
- Iodised salt

During pregnancy, it is difficult to get enough iodine from diet alone. The National Health and Medical Research Council recommends that all pregnant women take an iodine supplement of 150 micrograms each day (often included in pregnancy multivitamins). If you have a known thyroid condition, seek advice from your Doctor before supplementing.
Calcium

Calcium is needed to form strong bones and teeth in your developing baby.

Best sources:
- Milk
- Cheese
- Yoghurt
- Soy drinks
- Soy yoghurt
- Firm tofu

Other sources:
- Salmon (with bones)
- Sardines
- Soy cheese
- Tahini
- Bok choy
- Broccoli
- Almonds

If you are unable to consume 2–3 serves of dairy foods or fortified soy products each day, you may need a calcium supplement.

Vitamin D

Vitamin D is needed for strong and healthy bones, teeth and muscles.

Good food sources of vitamin D include:
- Oily fish (e.g. sardines, herring, mackerel, tuna in oil)
- Margarine and milk enriched with vitamin D
- Eggs.

The sun is the best natural source of vitamin D but also the major cause of skin cancer. For women with dark skin or little exposure to sunlight, a vitamin D supplement and a diet high in vitamin D rich foods will help protect your bones and those of your baby. If you think you could be at risk of vitamin D deficiency, speak to your Doctor.
**Omega 3 Fats**

Omega 3 fats are important for your baby’s brain and eye development.

Good sources of omega 3 fats include:

- Fish such as mackerel, herrings, sardines, atlantic salmon, canned salmon and canned tuna (especially tuna in oil). These fish are lower in mercury than other types and can be eaten 2–3 times per week.

Other sources:

- Lean beef, nuts, canola oil, soy products and omega 3 enriched foods.

There is no conclusive evidence on the benefits of omega 3 or fish oil supplements during pregnancy. If your intake of seafood and other foods containing omega 3 fatty acids is low, you may benefit from a pregnancy multivitamin that includes omega 3. Discuss your needs with your doctor, midwife, pharmacist or dietitian.

**Multivitamins**

Pregnancy places extra nutritional demands on the body. If you are finding it hard to eat a varied diet with foods from the 5 food groups, you may benefit from a multivitamin. Choose a specially formulated pregnancy multivitamin. If you follow a vegetarian or vegan diet, you may need extra supplementation. Discuss your needs with your Doctor, midwife or dietitian.
Choose a variety of foods from the following food groups every day to meet your nutritional needs during pregnancy.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Serves</th>
<th>Serving Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breads and cereals</strong></td>
<td>6–8½ serves*</td>
<td>1 slice of bread, ½ medium roll, 1 small English muffin or scone, ½ cup pasta or rice, (\frac{2}{3}) cup breakfast cereal, (\frac{1}{4}) cup muesli, 3 crispbreads or 1 crumpet</td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td>5 serves</td>
<td>½ cup cooked vegetables, 1 cup of salad, 1 medium tomato, ½ medium potato, ½ cup cooked or canned beans, peas or lentils</td>
</tr>
<tr>
<td><strong>Fruit</strong></td>
<td>2 serves</td>
<td>1 medium piece fruit, 2 small pieces fruit, 1 cup diced or canned fruit, 1(\frac{1}{2}) tablespoons sultanas, 4 dried apricots, ½ cup juice</td>
</tr>
<tr>
<td><strong>Milk, yoghurt and cheese</strong></td>
<td>2(\frac{1}{2}) serves</td>
<td>250mls milk, 200g yoghurt, 2 slices (40g) cheese, 250mls soy drink (calcium enriched)</td>
</tr>
<tr>
<td><strong>Meat and alternatives</strong></td>
<td>3(\frac{1}{2}) serves</td>
<td>65g cooked meat, 80g cooked poultry, 100g fish, 2 eggs, 1 cup cooked or canned beans, peas or lentils, 30g nuts or nut butters, 170g tofu</td>
</tr>
<tr>
<td><strong>Fats and oils</strong></td>
<td>2 serves</td>
<td>2 teaspoons (10g) margarine, 1 teaspoon of oil, 10g nuts or nut butters</td>
</tr>
</tbody>
</table>

*The amount of food you need depends on your individual body size & activity level. Try to eat according to appetite.*
Healthy Snacks

Snacks are sometimes easier for pregnant women to eat than large meals. Choose from the following small meal ideas to meet your increased nutrition needs.

- Sandwiches with lean meat, chicken, baked beans or peanut butter
- Salad with hardboiled egg, tuna or salmon
- Boiled or microwaved potato with savoury topping, e.g. baked beans, cheese, creamed corn
- Mini pizzas made on muffins or Lebanese bread
- Fruit loaf, toasted muffins or crumpets
- Fruit or savoury muffins with added bran
- Cracker biscuits with cheese, fresh hommus, avocado or Vegemite™
- Tinned, fresh or dried fruit
- Nuts, popcorn or ready to eat wholegrain cereals
- Yoghurt or Fruche™
- Reduced fat milkshakes made with fruit, yoghurt, ice cream or topping
- Raw vegetable sticks with fresh dip or yoghurt
- Vegetable juice.
Drinks

Most pregnant women need around 9–11 cups of fluid per day to stay well hydrated.

Water
Water is the best drink. Try to drink plenty of tap water every day.

Alcohol
If you are pregnant or planning a pregnancy, not drinking alcohol is the safest option (NHMRC 2009).

Caffeine
Limit to 300mg of caffeine per day – 3 cups of coffee or 6 cups of tea (unless decaffeinated). Avoid guarana and energy drinks.

Herbal Tea
Herbal and fruit teas can provide a good alternative to drinking tea or coffee. There is little information on the safety of herbal and botanical supplements during pregnancy. If you are unsure if a herbal tea is safe consult with your health professional.
Sample Meal Plan

**Breakfast**
- Wholegrain breakfast cereal with milk
- Toast (preferably wholemeal or wholegrain) with nut butter
  OR

**Morning Tea**
- Fresh fruit and yoghurt

**Lunch**
- Pita bread filled with salmon & salad
- Piece of fruit
- Water or vegetable juice

**Afternoon Tea**
- Scone / fruit bread / crumpet
- Vegetable sticks & hommus
- Tea / coffee

**Dinner**
- Beef and vegetable stir fry
- Noodles or rice

**Supper**
- Cheese and biscuits or
- Glass of milk or hot milky chocolate
What about?

**Constipation:** To prevent and treat constipation, try to include high fibre foods such as wholegrain breads and cereals, legumes, fruit, vegetables, nuts and seeds. Drink plenty of water and try to exercise most days.

**Morning sickness:** Morning sickness is often a problem in the first few months of pregnancy. It can occur at any time of the day. Try to:
- eat small, frequent meals
- have dry foods before getting out of bed, e.g. savoury cracker biscuits, toast
- eat cold or plain foods
- avoid fatty, highly spiced foods
- avoid drinking with meals
- have someone else prepare your meals.

**Exercise:** Exercise is important during pregnancy. It will help you to cope with the birth of your baby and regain your shape after your child is born. Swimming and walking are two activities you can enjoy throughout your pregnancy. Be careful not to overdo it, and stop if you experience pain.

**Fish and mercury:** Fish is an excellent source of protein, minerals and omega 3 fatty acids. Choose carefully as some fish contains mercury that can harm your child’s brain development and nervous system. Use the following as a guide:
- 1 serve (150 grams) of Orange Roughy (Deep Sea Perch) or Catfish a week and no other fish that week OR
- 1 serve per fortnight of Shark fish (Flake) or Billfish (Swordfish/Broadbill, Marlin) and no other fish that fortnight OR
- If the above types of fish are not eaten, 2–3 serves of other fish or seafood (including tinned tuna and salmon) can be safely eaten each week.

**Salmonella:** In rare cases salmonella can cause miscarriage. Avoid foods that contain raw egg, such as mayonnaise or chocolate mousse. Cook chicken and eggs well.

**Toxoplasmosis:** Toxoplasmosis is an infection resulting from eating raw or undercooked meats, or from contact with cat faeces. Toxoplasmosis in pregnant women can affect the unborn child. Pregnant women should avoid eating raw or undercooked meats. Careful attention should also be given to good food hygiene practices.
What about?

**Listeria infection**: This can result from eating food contaminated with the bacteria *listeria monocytogenes*. It can harm an unborn baby and may cause still birth. Pregnant women should not eat foods which carry a high risk of listeria growth.

High risk foods include processed foods that are:
- not adequately heat treated;
- stored for long periods; or
- subject to poor food hygiene practices.

It is best to avoid:
- unpasteurised dairy products
- pre-prepared paté
- soft cheeses, e.g. brie, ricotta, feta
- soft serve ice cream and soft serve yoghurt
- cold meat and chicken used in takeaway sandwiches
- processed meats, e.g. devon, ham
- cold, smoked and raw seafood, e.g. oysters
- pre-prepared or stored salads, e.g. coleslaw
- foods close to or past the ‘use by’ date.

Pregnant women should also avoid foods that have been prepared and then stored in the refrigerator for more than 24 hours. Leftovers should be thoroughly reheated until piping hot. Freshly cooked foods may be frozen promptly then thawed in the refrigerator and used within 24 hours. Never thaw food at room temperature.

**What foods are safe?**

Listeria is destroyed by cooking. Foods which are safe include:
- freshly cooked foods, used within 24 hours of preparation
- fresh pasteurised milk and milk products, and UHT milk
- yoghurt
- hard cheese (e.g. cheddar, parmesan) and processed cheese (e.g. plain cream cheese, cottage cheese)
- fresh washed vegetables and fruit
- canned foods.

For more information on food safety go to [www.foodauthority.nsw.gov.au](http://www.foodauthority.nsw.gov.au)
Where can I find out more information?

HERE ARE 3 WAYS:

1. Talk to your Doctor

2. Make an appointment with an ACT Health Community Dietitian by phoning 6207 9977

3. Check out more resources at www.health.act.gov.au