

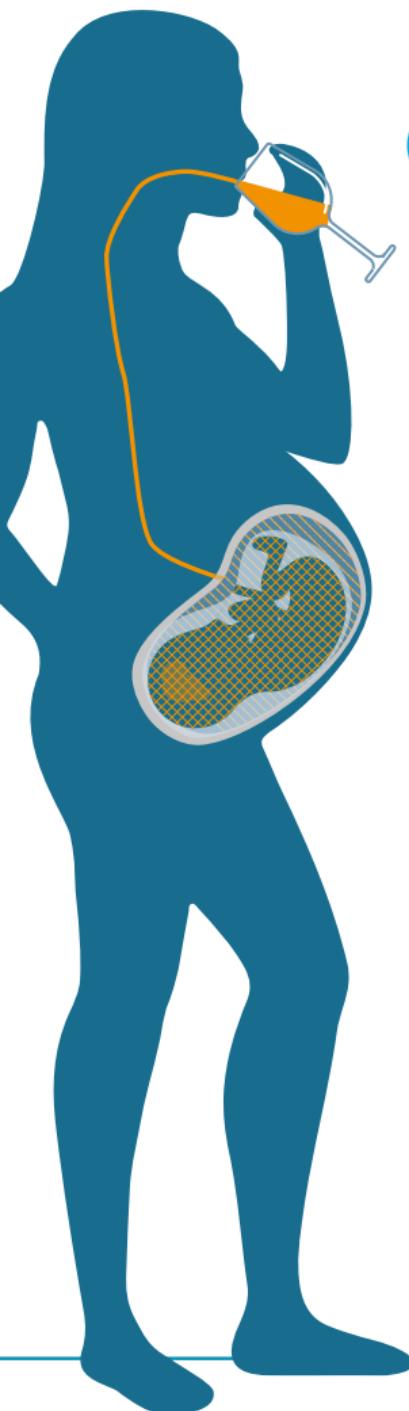


# **Alcohol and Pregnancy**

## **What you might not know**

# How can drinking harm your baby?

*When you're pregnant, every time you drink alcohol, your baby is drinking alcohol too. All alcohol is carried in your blood stream, through the placenta, to your baby. Your baby can't break down alcohol like you can.*



## If you drink alcohol while pregnant...

Your baby may not grow properly, especially their brain.

There's a risk that your baby may have a range of life-long problems, known as fetal alcohol spectrum disorder or FASD. Problems may be seen soon after birth. But most may not be noticed until the child is older, when they may have trouble learning or socialising or have behavioural problems.

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Your baby is more likely to be born prematurely.

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You are more likely to lose your baby through a miscarriage or stillbirth.



## **Is fetal alcohol spectrum disorder (FASD) preventable?**

Yes, by being alcohol-free while you're pregnant. Not all babies are affected the same way by alcohol, so there is no way of knowing whether it is safe to drink. Cutting out alcohol altogether avoids any possible harm.

## **Can you drink at all?**

No, there is no known safe amount of alcohol to drink during pregnancy. It's advised not to drink any alcohol when pregnant.

Alcohol can harm a baby's development at any stage of the pregnancy. This can be even before you know that you are pregnant. If you're trying to get pregnant, or there's a chance you could be pregnant, don't drink alcohol.

## **Are all types of alcoholic drinks harmful?**

Yes, all types of alcoholic drinks can harm your baby, including beer, wine, cider, spirits or ready-to-drink spirits (RTDs).

## **Is there a chance you could be pregnant or become pregnant?**

If you are trying to get pregnant, it's best not to drink alcohol. Alcohol can harm a baby from conception onwards.

If you think your contraception may have failed, don't drink alcohol until you know for sure that you're not pregnant.

If you're not trying to get pregnant, use an effective contraception method.

## **What if you drank alcohol before you found out you were pregnant?**

It's never too late to stop drinking. This will increase the chance of your baby being healthy. Talk to your midwife or GP if you're worried about it.

### **Breastfeeding and alcohol.**

While breastfeeding, it's best to be alcohol-free. Alcohol enters your breast milk and passes to your baby. This can affect your baby's growth and development.

Plan ahead, if you choose to drink when breastfeeding. Only breastfeed when there's no alcohol in your system. It takes about two hours for your body to break down one standard drink of alcohol. If you drink more than this, you will need to wait longer before breastfeeding.



## Finding it hard to stop drinking? Get help.

You can get help by talking to your midwife, doctor, nurse or other health professional. They can discuss ways you can stay healthy during your pregnancy, answer your questions, or put you in touch with others who can help you.

The Alcohol Drug Helpline is also here for you. Contact them on **0800 787 797**, [alcoholdrughelp.org.nz](http://alcoholdrughelp.org.nz) or free text **8681**, 24 hours, 7 days a week.

## A message for partners and whānau.

You have an important role to play in helping your pregnant partner or whānau member to be alcohol-free, and in looking after the health of the baby.

You can support by:

- joining her in being alcohol-free
- discouraging others from offering alcohol to her or other women who may be pregnant
- making sure there are non-alcoholic drinks at social gatherings, workplaces, parties and events.



## **Health Promotion Agency**

For help contact the Alcohol  
Drug Helpline on **0800 787 797**

To order resources visit **[alcohol.org.nz](http://alcohol.org.nz)**

This resource is available from [www.healthed.govt.nz](http://www.healthed.govt.nz) or the  
Authorised Provider at your local District Health Board (DHB).  
September 2018. **Code AL1108 (HPA); HE2523 (HealthEd)**



# Food safety: Avoiding listeria



# What is listeria?

Listeria is a common bacterium, which can cause a potentially serious illness called listeriosis.

## How do people get listeriosis?

Listeriosis is a food-borne infection that results from eating contaminated food. Chilled or prepared ready-to-eat products and foods, processed meats, soft cheese, and raw food are often linked to outbreaks of listeria.



## Who is at serious risk of listeriosis?

In healthy adults and children listeria usually causes few or no symptoms, but the following people are at more risk of serious disease:

- pregnant women and their unborn babies
- newborn babies
- people with weakened immune systems<sup>1</sup>
- frail older people<sup>2</sup>.

If you are not sure about your risk of being infected, talk to your doctor.

<sup>1</sup> Including cancer patients, diabetics, people taking immunosuppressive or cytotoxic treatment, people with alcoholism or liver or kidney disease.

<sup>2</sup> While this group is not strictly defined, a frail older person can be considered as a person over 65 who is in a vulnerable state of health that puts them at greater risk of further deterioration, ill-health or illness. Further information about frailty in older people is available from <http://www.health.govt.nz/publication/food-and-nutrition-guidelines-healthy-older-people-background-paper>

## What are the symptoms?

After being infected with listeria it takes between a few days and a few weeks for symptoms to develop. You may have no symptoms at all or you may become ill with:

- mild fever
- muscle aches
- nausea or vomiting
- diarrhoea
- headache.

In a small number of cases these symptoms can progress to more severe forms of the illness, such as meningitis and blood poisoning.

Listeriosis can be very serious for pregnant women. It can cause miscarriage, premature labour, or stillbirth and can cause severe infection in the newborn baby. If you think you might have listeriosis, see your doctor immediately.

## How can listeriosis be prevented?

The risk of serious illness from listeria infection can be reduced by safe food handling practices. Listeria will grow on food even if it's in the fridge and can withstand freezing.

However, some foods are more likely to become contaminated so people who are at risk of severe disease should not eat them. Some of the main ones are listed on the next page, but for a comprehensive list of foods check out: [www.mpi.govt.nz/food-safety/food-safety-for-consumers/food-and-pregnancy/](http://www.mpi.govt.nz/food-safety/food-safety-for-consumers/food-and-pregnancy/)



## Safety with food

You can keep food safe by:

- following good food hygiene practices, such as washing and drying hands thoroughly before and after handling and preparing food
- eating freshly-cooked or freshly-prepared foods
- washing raw fruit and vegetables very well before eating
- cooking food thoroughly to kill any listeria bacteria
- refrigerating leftovers immediately (cool hot foods for 30 minutes before refrigerating) and using them within two days. (Leftovers should be reheated to steaming hot – at least 75° C before eating.)

## Unsafe foods for people at risk:

- ✖ uncooked, smoked or ready-to-eat fish or seafood, including oysters, smoked ready-to-eat fish, sashimi or sushi\*
- ✖ paté, hummus-based dips and spreads
- ✖ ham and all other chilled pre-cooked meat products including chicken, and fermented or dried sausages such as salami\*
- ✖ pre-prepared or stored salads (including fruit salads) and coleslaws
- ✖ raw (unpasteurised) milk and any food that contains unpasteurised milk\*
- ✖ soft-serve ice creams
- ✖ soft, semi-soft, or surface-ripened soft cheese (such as brie, camembert, feta, ricotta, and roquefort)\*.

\* Note that these foods are safe to eat if heated thoroughly to steaming hot (at least 75° C).

For more detailed information on which foods are safe to eat see the following links.

- During pregnancy: [www.mpi.govt.nz/food-safety/food-safety-for-consumers/food-and-pregnancy/list-of-safe-food-in-pregnancy/](http://www.mpi.govt.nz/food-safety/food-safety-for-consumers/food-and-pregnancy/list-of-safe-food-in-pregnancy/)
- For people with low immunity: [www.mpi.govt.nz/food-safety/food-safety-for-consumers/people-with-low-immunity/](http://www.mpi.govt.nz/food-safety/food-safety-for-consumers/people-with-low-immunity/)

## Safer foods for people at risk:

- ✓ freshly-cooked foods
- ✓ pasteurised dairy foods, including:
  - milk, UHT milk, yoghurt
  - hard cheese (such as cheddar, colby, and edam)
  - processed cheese, cheese spread, cottage cheese and cream cheese (eat these cheeses within two days of opening the pack)
  - purchase all cheese in sealed packs, in small quantities, and use by the use-by date.
- ✓ freshly-washed vegetables and fruit
- ✓ freshly-prepared salads
- ✓ bread and baked foods without cream or custard
- ✓ dried food
- ✓ cereals
- ✓ beverages.



## More information

Your local public health service can give you more information on food preparation, storage, and safety. You can also talk to your doctor or nurse or contact the Ministry for Primary Industries – food safety group, [www.mpi.govt.nz/food-safety/food-safety-for-consumers/](http://www.mpi.govt.nz/food-safety/food-safety-for-consumers/) or Freephone **0800 008 333**.

This resource is available from [www.healthed.govt.nz](http://www.healthed.govt.nz) or the Authorised Provider at your local DHB.

Revised May 2017. 12/2018. Code **HE9007**



New Zealand Government

NGĀ KAI TOTIKA MĀ TE WAHINE HAPŪ

# Eating for Healthy Pregnant Women



***Eating well and doing moderate physical activity during pregnancy are important for you and your baby. Nutritional needs are higher when you are pregnant. Meeting these needs helps protect the long-term health of both you and your baby.***

***Seek antenatal (pre-birth) care as soon as you think that you are pregnant.***

Some pregnant women may need special advice from a dietitian about eating.

This includes women who:

- are 18 years old or younger
- have a medical condition affecting their eating, such as diabetes
- are having more than one baby (eg, twins or triplets)
- eat very little or have a history of eating problems
- are vegetarian or vegan
- are very overweight
- are underweight.

If you think you should see a dietitian, ask your lead maternity carer (LMC, eg, your midwife, doctor or obstetrician) to arrange this for you.



# Food for a Healthy Mother and Baby

***Eat a variety of healthy foods every day from each of the four main food groups below:***

1. vegetables and fruit
2. breads and cereals (wholegrain is best)
3. milk and milk products (reduced- or low-fat milk is best)
4. legumes, nuts, seeds, fish and other seafood, eggs, poultry (eg, chicken), or red meat with the fat removed.

- Limit your intake of foods and drinks that are high in fat (especially saturated fat), salt and/or sugar (see the section on page 9).
- If using salt, choose iodised salt.
- Take care when buying, preparing, cooking and storing food so that the food is as safe as possible to eat. Follow the food safety guidelines in the section Food Safety in Pregnancy on page 11.
- Drink plenty of fluids each day, especially water and reduced- or low-fat milk.
- Avoid alcohol during pregnancy.
- Aim for a healthy weight gain by eating well and being physically active each day (unless advised not to be physically active).

***Traditional Māori and Pacific foods can be healthy choices.***



## Eat a Variety of Foods

***You need a variety of healthy foods from the four food groups every day to provide for your growing baby as well as to maintain your own health.***

## 1. Vegetables and Fruit

Vegetables and fruit provide carbohydrates (sugar and starch), fibre, vitamins and minerals and are low in fat.

- Eat plenty of vegetables and fruit.
- Enjoy fresh, well-washed vegetables and fruit or frozen or canned varieties. Steaming or microwaving vegetables is best. Go easy on butter or margarine and salt.
- Include vegetables and fruit in a variety of colours.
- Limit juice and dried fruit intake because these foods have a high sugar content.



**Eat *at least seven* servings per day of vegetables and fruit – *at least five* servings of vegetables and *two* servings of fruit.**



## ***Serving size examples***

## **Vegetables**

- $\frac{1}{2}$  a medium potato or similar sized piece of kūmara, taewa (Maori potato), yam, taro, cassava, or green banana (75g)
- $\frac{1}{2}$  cup cooked vegetables, eg, pūhā, watercress, silverbeet, taro leaves, bok choy, Chinese cabbage, broccoli, cabbage, corn, carrot or peas (75 g)
- 1 cup salad or bean sprouts
- 1 medium tomato (75 g)

## *Fruit*

- 1 apple, pear, banana or orange (150 g)
- 2 small apricots or plums
- 1 cup diced or canned fruit (drained and with no added sugar), eg, pineapple (150 g)
- 1 cup frozen fruit, eg, mango, berries

## 2. Breads and Cereals

These provide carbohydrates (sugar and starch), fibre, and nutrients such as B vitamins and minerals.

- Eat plenty of breads and cereals, including rice, pasta, breakfast cereals and other grain products.
- Choose wholegrain varieties because they provide extra nutrients and fibre. They also help prevent constipation.
- Choose bread that has had folic acid added to it – this should be written on the ingredients list.

Choose **at least eight** servings of breads and cereals each day.

### Serving size examples

- $\frac{1}{2}$  medium roll (40 g)
- 1 medium slice rēwena bread (30 g)
- 1 slice bread (40 g)
- $\frac{2}{3}$  cup cereal flakes
- $\frac{1}{4}$  cup muesli (30 g)
- $\frac{1}{2}$  cup cooked cereal, eg, porridge (120 g)
- $\frac{1}{2}$  cup cooked pasta (150 g)
- $\frac{1}{2}$  cup cooked rice
- 3 crispbreads or crackers (35 g)



### 3. Milk and Milk Products

Pregnant women need milk and milk products as sources of protein, vitamins and minerals, especially calcium and iodine.

- Choose reduced- or low-fat milk, yoghurt and hard cheese.
- Milk and milk products provide New Zealanders with most of their calcium. If you do not eat these foods or eat very little of them, ask your LMC about other calcium sources.
- Calcium is also found, in lower amounts, in foods such as wholegrain bread, broccoli, canned salmon, sardines, spinach, baked beans and tofu.
- If you are drinking non-dairy milks, eg, soy, oat or nut milk, choose one that is calcium-fortified (check the label).
- If you follow a vegan diet, you will need to check that your non-dairy milk has vitamin B12 in it.

Have **at least two** servings each day of milk or milk products, preferably reduced- or low-fat products.

#### Serving size examples

- 1 large glass milk (250 mL)
- $\frac{3}{4}$  cup or 1 potte yoghurt (200 g)
- 2 slices hard cheese (40 g)
- 1 large glass calcium-fortified soy milk (250 mL)



## 4. Legumes, Nuts, Seeds, Fish and other Seafood, Eggs, Poultry (eg, Chicken), or Red Meat with the Fat Removed

These foods give you protein, iron, zinc and other nutrients.

- Your body needs more iron and zinc during pregnancy.
- Iron is important for healthy blood and for the development of your baby. During pregnancy, it is important to have a good iron intake to help prevent iron deficiency.
- Iron in lean meats, chicken and seafood is absorbed well by the body. Eggs, cooked dried beans, peas and lentils, and nuts and seeds also contain iron, but the iron is not as easily absorbed.
- If choosing red meat, eat less than 500 g of cooked (700-750 g raw) red meat a week.
- Include foods rich in vitamin C with your meals to help absorb iron. Fresh vegetables and fruit, especially taro leaves (cooked), broccoli, tomatoes, oranges, kiwifruit, mangoes and pineapple, are rich sources of vitamin C. This is especially important for vegetarian and vegan women, who may find it hard to get enough iron.
- Liver is a good source of iron, but eat no more than a small piece (100 g) once a week.
- Make sure that vegetables, fruit, meat, chicken and seafood are fresh and that cooked food is cooked well, served hot and eaten immediately after cooking (see the Food Safety in Pregnancy section, page 11).
- Seafood and eggs are also useful sources of iodine (see the Iodine and Iodine Deficiency section on page 17).
- Fish is recommended because it is an important source of long-chain polyunsaturated fatty acids.





## Serving size examples

- 1 slice cooked meat (about 65 g), eg, beef, pork or lamb
- $\frac{1}{2}$  cup mince or casserole (65 g)
- $\frac{1}{2}$  medium steak (65 g)
- 1 drumstick or  $\frac{1}{2}$  chicken breast (80 g)
- 1 medium piece of cooked fish\* (100 g), eg, warehou or eel
- 1 medium, freshly cooked pāua (120 g)
- small can of canned fish, eg, skipjack or albacore tuna, sardines, salmon or mackerel (90 g)
- 8 medium, freshly cooked mussels (80 g)
- 2 large (2 x 60 g) eggs
- 1 cup canned or cooked dried beans, eg, bean salad or lentil dish (150 g)
- $\frac{1}{3}$  cup nuts or seeds
- $\frac{3}{4}$  cup tofu

\* See the mercury and fish information below.

Choose **at least three** servings from this group each day.

### Food safety when choosing fish and seafood

- High intakes of mercury are unsafe for your baby. Some fish have increased levels of mercury. However there is little concern with canned fish like tuna, salmon or sardines and other commonly eaten fish such as tarakihi, blue cod, hoki, john dory, monkfish, warehou, flounder and whitebait. The mercury levels in these fish are seen as low risk, and the nutrients they contain have many health benefits.
- Some longer-lived and larger fish (eg farmed salmon, snapper, uncanned albacore tuna and mackerel, as well as kahawai, red cod, orange roughy and ling) can contain more mercury, so these should not be eaten more than three to four times a week.
- A small number of fish (eg, school shark, southern bluefin tuna, marlin, and trout from geothermal regions and Lake Rotomahana) should be eaten only once a week or fortnight.
- Bluff and Pacific oysters and queen scallops can have high cadmium concentrations so should be eaten no more than once a month.
- Brown seaweed such as kelp or kombu can have very high iodine levels so eat no more than once a week.
- Mercury levels in fish are actively monitored by the Ministry for Primary Industries. For the most up to date, more detailed information check the MPI website [www.mpi.govt.nz](http://www.mpi.govt.nz) or freephone 0800 008 333 or contact your health practitioner for more information.

# Drink Plenty of Fluids Every Day

***Use your thirst as a guide. Aim for nine cups of fluid each day.***

Extra fluid may be needed during hot weather, after activity, or if you are vomiting or constipated.

Water or reduced- or low-fat milk are the best choices.

There is evidence that caffeine consumption may affect your baby's growth during pregnancy. Caffeine is naturally occurring in tea, coffee and chocolate and is present in many cola-type drinks. Limit your consumption of caffeinated drinks while pregnant. Have no more than four cups of tea or instant coffee or one 'double' espresso-type coffee each day.

Be cautious about drinking herbal teas. Check for a warning label saying 'not recommended for pregnant women' or discuss this with your LMC.

Avoid drinking tea with meals. The tannins in tea mean you will not absorb the iron in the meal as well as you could.

Limit soft drinks, flavoured waters, fruit drinks, cordials and diet drinks because these are low in nutrients and may be high in sugar. Energy drinks and energy shots are not recommended because they may contain high levels of caffeine and other ingredients not recommended for pregnant women.

## Choose and Prepare Foods Low in Fat, Salt and Sugar

***The best way to meet your extra needs is to choose foods from the four food groups. These are good sources of fibre, vitamins and minerals.***

When shopping, read labels and look for foods that are lower in fat (especially in saturated fat), salt and sugar. If using salt, choose iodised salt.

***To cut down on your intake of fat (especially saturated fat), salt and sugar:***

- choose polyunsaturated or monounsaturated margarine or lower fat table spreads (fortified with vitamin D) rather than butter or dripping, and spread margarine thinly
- choose foods rich in polyunsaturated fat and omega-3, including green leafy vegetables, nuts and seeds, oily fish (canned tuna, sardines, salmon, mackerel; fresh warehou, eel), and oils (soybean, canola, flaxseed and walnut oils)



- choose lean meats; trim off any fat, remove skin from chicken before or after cooking, skim fat off stews or off the top of boil-ups and eat more grilled, boiled or steamed fish
- reduce intake of sausages or processed meats, which can be high in fat and salt; if eating these foods, grill rather than fry them and always heat until piping hot
  - then serve them hot to reduce the risk of illness such as listeria (see the Food Safety in Pregnancy section on page 11)
- when cooking, choose to grill, steam, microwave, boil or bake foods, without adding fat
- eat meals without adding extra salt
- choose foods with no added sugar.

Many fast foods, takeaways and processed snacks are high in fat, salt and/or sugar. These include foods such as fish and chips, fried chicken, hamburgers, pies, chocolate bars, muesli bars, chippies, lollies, fruit leathers, cordials and soft/fizzy drinks. Limit intake of these foods and drinks. Only consider eating foods such as fried chicken, hamburgers and pies if they have just been made, are well cooked and are served piping hot (see the Food Safety in Pregnancy section, page 11).

## **Eat and Keep Active for a Steady Weight Gain**

***A healthy weight gain during pregnancy is best for you and your baby.***

It's normal to gain some weight during pregnancy due to the growth of the baby, placenta and amniotic fluid. However, gaining too much extra weight can increase your chances of:

- high blood pressure in pregnancy (pre-eclampsia)
- diabetes during pregnancy (gestational diabetes)
- needing a caesarean section
- having a large baby. This increases their risk of becoming obese in childhood and early adult life
- difficulty losing weight after your baby is born. This may increase your risk of developing diabetes, heart disease and some cancers later in life.

Not gaining enough weight during pregnancy can increase the chances of having a premature (preterm) birth, or a small for age baby.

Talk to your LMC about what a healthy weight gain during pregnancy is for you.

In the first 12 weeks of pregnancy, you don't need to eat any more food than you would usually eat when not pregnant, but it is important that you eat nutritious food. If you are of normal weight, the total amount of extra food you need each day after the twelfth week of your pregnancy is about the same energy value as a wholegrain cheese and tomato sandwich or a wholegrain peanut butter sandwich and a banana. If you were overweight before pregnancy, the extra energy you require is about one slice of wholegrain bread or two apples per day.

For information on weight gain during pregnancy see [www.health.govt.nz/your-health/healthy-living/food-and-physical-activity/healthy-eating/healthy-weight-gain-during-pregnancy](http://www.health.govt.nz/your-health/healthy-living/food-and-physical-activity/healthy-eating/healthy-weight-gain-during-pregnancy).

Dieting to lose weight during pregnancy is not recommended because it may result in a smaller and less healthy baby and it could also affect your health.

### ***Keeping active is important.***

Being physically active each day can help you avoid putting on excess weight, strengthen your heart and lungs and give you the extra energy and strength needed for the birth. Unless your LMC advises otherwise, aim for at least 30 minutes of moderate physical activity on most, if not all, days of the week.

Choose activities you enjoy that match your level of fitness. Suitable activities include brisk walking, swimming, aqua-jogging or any activity that is comfortable for you and leaves you with enough breath to hold a conversation.

Wear suitable clothes when being physically active, for example, a good support bra, loose clothing and supportive footwear. Take breaks for a drink, food or a rest if you need to.

Contact sports and vigorous physical activity are not recommended. Avoid physical activity in extremely hot weather. Don't start a new sport during pregnancy.

You may need more rest. Listen to your body. If you are tired, rest.

## **Food Safety in Pregnancy**

In pregnancy, your immunity is lower, so you and your unborn baby are more at risk than usual from the kinds of food-borne illnesses that affect everyone. Bacteria such as listeria, salmonella and campylobacter and pathogens such as toxoplasma can cause food-borne illness. When you are pregnant, this can cause infection in you and your baby and miscarriage and stillbirth in extreme cases.

Following some simple food safety steps, including avoiding some foods when you are pregnant, can prevent most food-borne illness and keep you and your baby healthy.

To keep food safe, all foods should be safely handled, stored and protected from cross-contamination. For example, bacteria from raw chicken can contaminate cooked chicken if the same chopping board is used for both.

### ***To keep food safe:***

- keep cooked and ready-to-eat foods separate from raw foods so that there is no cross-contamination
- wash your hands, utensils and chopping boards between preparing raw and ready-to-eat foods, to avoid cross-contamination
- cook food thoroughly, especially meat, which should be cooked till the juices run clear
- eat freshly cooked food as soon as possible after cooking or put it in the fridge as soon as it has stopped steaming



- eat canned food immediately after opening the can or transfer the food immediately to a covered, non-metal container and refrigerate
- use cooked, prepared and canned food stored in the fridge **within two days**
- reheat cooked food thoroughly so that it is piping hot, that is, above 70°C, and do not reheat more than once (take special care to heat food thoroughly and evenly when using a microwave oven by stirring frequently).
- wash and dry whole raw fruit, vegetables and herbs thoroughly
- don't eat food that is past its use-by date
- clean the fridge regularly and check that the temperature is between 2 and 4°C
- ideally, consume milk and milk products within two days of opening, particularly cream, ready-made custard and yoghurt. Don't drink or eat raw (unpasteurised) milk or cheese.
- you can eat cottage cheese and cream cheese if they are bought in sealed packs and consumed cold or cooked within two days of opening
- avoid prepared ready-to-eat foods such as those bought from a supermarket deli or restaurant buffet unless they are heated until piping hot
- don't eat prepared ready-to-eat foods such as shop-bought sandwiches when you aren't certain of product age, storage conditions or staff food handling.

There are a number of foods that are considered high risk with regard to listeria and other bacterial contamination.

### ***During pregnancy, do not eat any of the following foods:***

- processed meats\* such as pâté, salami, ham and luncheon
- cold pre-cooked meat\* such as chicken (plain or smoked) and corned beef
- raw (unpasteurised) milk and raw milk products
- soft pasteurised cheese\* (ie, brie, camembert, feta, blue, mozzarella and ricotta)
- pre-prepared or unrefrigerated salads, including rice or pasta salad, coleslaw, roasted vegetable and green salads
- hummus and other dips containing tahini
- raw, smoked\* or pre-cooked fish\* or seafood\*, including sushi, smoked salmon, marinated mussels or oysters
- foods containing raw egg, eg, smoothies, mayonnaise, hollandaise sauce or desserts such as mousse
- soft-serve ice cream
- cream or custard, especially in pre-made cakes or pastries (unless home-made or pre-packaged and eaten within two days of opening).

\* Note that these foods are safe to eat if heated thoroughly until piping hot, that is, above 70°C.

For more information and the most up-to-date list of high-risk foods to avoid, consult the MPI website ([www.mpi.govt.nz](http://www.mpi.govt.nz)) and search "food and pregnancy". Alternatively, contact MPI Food Safety freephone 0800 008 333 or your LMC for more information.

# Snack Ideas

- **Sandwiches:** Use a variety of fillings such as banana, yeast extract spread, hard cheese, baked beans, jam or peanut butter. Try different bases, for example, wholegrain bread rolls, rēwena bread, crackers, rice cakes, crumpets, pita bread, muffins and baked bread fingers.
- **Vegetable sticks:** Keep these in the fridge. Serve with plain unsweetened yoghurt or peanut butter.
- **Fruit:** Try fresh, canned (unsweetened) or frozen fruit, served whole, cut up with yoghurt or in an egg-free smoothie.
- **Cereals:** Choose cereals that are low in fat and sugar, for example, porridge, untoasted muesli, cornflakes, bran flakes and wheat biscuits.
- **Popcorn:** Pop using a little oil or margarine or use a microwave. Go easy on the salt.
- **Reduced- or low-fat milk products:** Try yoghurt, cubes of hard cheese, reduced or low-fat milk and milk puddings (eg, creamed rice). Remember to eat pre-packaged items within two days of opening.

# Lunch Ideas

## *Base your lunch on breads or cereals:*

- wholegrain bread/toast/roll
- wholegrain toasted sandwich
- pita, focaccia or Turkish bread
- pizza base
- rice or pasta
- rēwena bread
- crackers
- panini
- crumpets, muffins or fruit bread

... or try a microwaved baked potato.

## *Add a filling, topping or spread:*

- canned baked beans, corn or spaghetti
- hard cheese
- yeast extract spread, jam, honey or peanut butter
- hard-boiled egg
- banana
- canned fish, such as tuna, sardines, salmon or mackerel (freshly opened)

... or try a pre-prepared frozen meal or pizza served piping hot.

## *Add an accompaniment:*

- soup, either home-made, canned or made from a mix
- yoghurt
- glass of reduced- or low-fat milk
- freshly made salad or stir-fried vegetables
- vege sticks (eg, baby carrots or tomato)

... or try an egg-free fruit smoothie.



## Finish with fruit:

- fresh
- canned
- frozen.

# Buying Your Lunch

**When buying your lunch, choose healthy and safe options, such as:**

- hot soup and toast
- hot savoury foods, for example, pizza, baked potatoes, rice and pasta dishes. These foods should be heated until they are piping hot (ie, 70°C).
- freshly made, hot toasted sandwiches
- a savoury muffin or scone
- yoghurt
- fruit
- egg-free fruit smoothie, freshly made.

### Remember ...

Avoid high-risk foods. Follow the food safety advice provided on pages 11–12.



# Eat Well to Cope with Pregnancy Symptoms

Nausea and vomiting are common during early pregnancy, and this is often the first sign of being pregnant. This is referred to as 'morning sickness', but it may occur at any time of the day or night, especially when you are tired or hungry.

Eat as well as you can. Your extra nutrition needs are small during early pregnancy, so nausea and vomiting rarely cause any nutritional problems. However, if your vomiting is severe and you are unable to keep any food or fluids down, seek advice from your LMC.

- Eat regularly, choosing smaller meals or snacks.
- Have fewer high-fat and spicy foods.
- Try a carbohydrate snack (such as a slice of dry toast, a cracker or fruit) before getting out of bed in the morning.

- Drink small sips of flat lemonade or ginger ale.
- Try ginger or foods flavoured with ginger.
- Give yourself extra time in the morning. Rushing can make you feel worse.
- Try to rest more.

## Indigestion and Heartburn

These are common towards the end of pregnancy.

- Eat regularly, choosing smaller meals or snacks.
- Have fewer high-fat and spicy foods.
- Avoid drinking fluids with meals.
- If a certain food upsets you, leave it for the time being.
- Avoid lying down straight after a meal.
- Going for a walk may help.
- Raise the head of the bed or use extra pillows.
- Check with your LMC before taking antacids.

## Alcohol

### ***Alcohol is not recommended.***

Your baby is sensitive to alcohol. The full effects of alcohol on your baby are unknown.

Alcohol, even in small amounts, will enter the baby's bloodstream, so whatever the mother drinks, the baby is having too. Alcohol could affect the development of your baby, especially of his/her brain.

## Smoking

### ***Being smokefree is recommended.***

Smoking reduces the oxygen and food supplies to the baby and can slow down the baby's growth and development.

Avoid smoky environments. Second-hand smoking (inhaling other people's smoke) has the same effect as smoking.



If you smoke during your pregnancy, your baby is more likely to be born prematurely or be underweight. A small baby does not mean an easier birth.

If you want to quit smoking, seek advice from your LMC.

## Medication

### ***Seek advice about taking medication***

Use medication only as advised by your LMC because they know which medications are safe for you and your baby.

Taking any other sort of drugs, for example, illicit drugs or party pills, is not recommended because these can affect the baby's growth and development.

## Folic Acid

Folic acid is a vitamin that is needed for the formation of blood cells and new tissue. During pregnancy, your need for folic acid is higher. Lack of folic acid has been linked with neural tube birth defects (NTDs) such as spina bifida. The risk of having a child with these birth defects is low and can be reduced by taking a folic acid tablet.

- ***Take a folic acid tablet*** (0.8 mg) daily for four weeks (one month) before you might become pregnant through to 12 weeks (three months) after actually becoming pregnant. If you find out that you are pregnant and you haven't been taking a folic acid tablet, start taking tablets straight away and continue until the 12th week of your pregnancy.
- A higher dose folic acid tablet is also available for women with a higher risk of NTD pregnancy. Talk to your LMC about which folic acid tablet is best for you.
- Choose foods naturally high in folate or fortified with folic acid, such as:
  - well-washed, fresh, raw or lightly cooked vegetables
  - raw fruit, well-washed or peeled (citrus is especially high in folate)
  - cooked dried beans and peas
  - yeast extracts
  - freshly cooked liver and/or kidney (no more than one serving a week)
  - folic acid-fortified wholegrain bread and breakfast cereals.

*Remember: eat **at least seven** servings of vegetables and fruit per day.*

# Iodine and Iodine Deficiency

Iodine is an essential nutrient required in small amounts to support normal growth and development, including brain development. It is important that unborn babies receive enough iodine. Requirements for iodine increase during pregnancy and breastfeeding. Even with a well-balanced diet, it is difficult to get enough iodine from food alone.

Choose foods that are important sources of iodine and take a daily iodine-only tablet throughout your pregnancy.



Important sources of iodine in foods include well-cooked seafoods, milk, eggs, some cereals and commercially made bread (excluding organic and unleavened bread as they are not required to be made with iodised salt).

If you use salt, choose iodised salt.

- Take one 0.150 milligram (mg)/150 microgram (mcg or  $\mu$ g) iodine-only tablet daily during your pregnancy.

For further information, contact a health practitioner such as your LMC, dietitian, practice nurse or pharmacist.

Supplements containing seaweed, kelp and iodine are not recommended for pregnant women because the iodine content and quality of the supplements is variable.

## Supplements

***The only supplements recommended for all pregnant women are folic acid-only tablets and iodine-only tablets, which can be purchased from pharmacies at a reduced cost with a prescription from your LMC.***

Choosing a variety of foods from the four food groups will meet your other requirements, and supplements will not be necessary.

Using vitamin and mineral supplements will not give you extra energy.

If you are taking any vitamin, mineral or herbal supplements, always let your LMC know. It is best to only take supplements when recommended by your LMC or a dietitian. Make sure they know that you are pregnant.



## Vitamin D

Vitamin D is needed for strong bones and joints. While it is found in some foods in the diet, the main source of vitamin D in New Zealand is sunlight. Vitamin D is made in the body through the action of sunlight on the skin. Examples of foods that contain vitamin D are fresh and canned oily fish (tuna, sardines, salmon, herring, mackerel, warehou, eel), eggs and vitamin D-fortified yoghurts, dairy desserts, milk and margarines.

Some sun exposure is recommended so that your body can make vitamin D.

Between September and April sun protection is recommended (shade, clothing coverage, and a hat that shades the face and neck, sunscreen, sunglasses), especially between 10.00 am and 4.00 pm. A daily walk or some other form of outdoor physical activity in the early morning or late afternoon is recommended.

Between May and August some sun exposure is important. A daily walk or another form of outdoor physical activity in the hours around noon, with face, arms, and hands exposed is recommended.

If you have darker skin, completely avoid sun exposure, have liver or kidney disease, or are on certain medications (eg, anticonvulsants), then you are at higher risk of vitamin D deficiency. If you live south of Nelson-Marlborough in winter, you're also more likely to have low vitamin D levels in late winter or early spring.

If you are concerned about not getting enough vitamin D, or are at higher risk of vitamin D deficiency, discuss this with a health practitioner, such as your doctor (GP), dietitian, LMC or Well Child nurse.

## Cravings and Aversions

Most women experience strong likes and dislikes (cravings and aversions) for certain foods at some time during pregnancy. If you eat a variety of foods from the four food groups every day, cravings and aversions are unlikely to affect your pregnancy.

If you are experiencing problems with cravings (for example, craving for unhealthy foods), have other eating problems or are unable to eat a variety of foods, ask your LMC to arrange for you to see a dietitian.

## Constipation

Constipation can result from the pressure of the growing baby and from hormonal changes that cause your gut muscles to relax.

Choose wholegrain breads and cereals and vegetables and fruit (eg, bran muffins, kiwifruit, figs, corn and peas).

Drink plenty of fluids every day.

Go for a daily walk or be physically active in some other way.

## Allergy Prevention

During pregnancy, it is recommended that you eat well from the variety of foods in the four food groups. Avoiding common food allergens during pregnancy is not recommended.

However, if you do choose to avoid common food allergens during pregnancy or breastfeeding, talk to your LMC, doctor or Well Child nurse. They can refer you to a registered dietitian who will make sure that your nutritional needs are being met and help you identify all hidden sources of the food allergen in the diet.

# For more information

You are entitled to free care from an LMC during your pregnancy.

The booklet **Your Pregnancy** (code HE1420) gives you information on choosing an LMC. Once your baby is born, you and your infant are entitled to receive free Well Child care in accordance with the Well Child Tamariki Ora National Programme. This includes advice about and support with your own and your baby's nutrition requirements. This programme is delivered by your LMC from conception until 2–6 weeks after the birth of your baby. From 2–6 weeks onwards, your Well Child provider (Plunket, public health service, Māori or Pacific provider) will provide this care.

Talk to your LMC or Well Child provider about other information you want to know.

## ***Other organisations for information:***

Healthline 0800 611 116

New Zealand College of Midwives

La Leche League (for breastfeeding support and information)

Maternity Services Consumer Council

NZ Multiple Birth Association, PO Box 1258, Wellington

Parents Centre New Zealand

Dietitian at local public health unit

Ministry of Primary Industries (for food safety and label reading advice)

## ***For website information***

Ministry of Health <http://www.health.govt.nz/your-health/pregnancy-and-kids/pregnancy>

Health Education resources [www.healthed.govt.nz](http://www.healthed.govt.nz)

Ministry of Primary Industries [www.mpi.govt.nz/food-safety](http://www.mpi.govt.nz/food-safety)

Raising Children in NZ [www.raisingchildren.org.nz](http://www.raisingchildren.org.nz)

ISBN 978-0-478-41171-3 (print)  
ISBN 978-0-478-41172-0 (online)



New Zealand Government

This resource is available from [www.healthed.govt.nz](http://www.healthed.govt.nz) or the Authorised Provider at your local DHB.

Revised November 2020. 12/2020. Code **HE1805**

## Folic Acid and Neural Tube Defects (including Spina Bifida)

### Take one folic acid tablet daily

**Spina bifida is a serious, lifelong condition that affects babies from birth, causing walking, bladder and bowel problems.**

Spina bifida is the most common type of Neural Tube Defect (NTD). More than half of the babies born with NTDs are either stillborn or die shortly after birth. Women can reduce, though not entirely prevent, the risk of NTDs by taking

the vitamin folic acid as a daily tablet.

- Take one 0.8 milligram (mg)/800 microgram (mcg or  $\mu$ g)\* folic acid tablet daily.

- If planning a pregnancy, take the tablet daily for at least 4 weeks before you might become pregnant.

- Continue taking the tablet daily until the end of week 12 of your pregnancy.

- If you find you are pregnant during the first 12 weeks of pregnancy, you should take the tablet from that point until the end of week 12.

- The recommended registered tablet can be purchased at pharmacies (or at a lower cost, when prescribed by your doctor or midwife).



It is also important to eat a healthy, varied diet. See *Eating for Healthy Pregnant Women* code HE1805 for further information.

Important sources of folate and/or folic acid in foods include: well-washed, fresh, raw or lightly cooked leafy green vegetables such as broccoli and spinach, fruits and juices such as orange juice, some fortified breads and cereals, and dried beans and peas.

For further information, contact a health professional such as your doctor, midwife, dietitian, nurse or pharmacist.

\* A 5mg tablet is also available for those women at high-risk of a NTD-affected pregnancy.



Turn over for information on iodine supplementation when pregnant and breastfeeding.

# When Pregnant and Breastfeeding

## Iodine and Iodine Deficiency

### Take one iodine-only tablet daily

Iodine is an essential nutrient required in small amounts to support normal growth and development. **Iodine is essential for normal brain development.** It is important that unborn babies and infants receive enough iodine.

Requirements for iodine increase during pregnancy and breastfeeding. Even with a well-balanced diet, it is difficult to get enough iodine from food alone. Women are advised to choose foods that are important sources of iodine and to supplement their diet throughout pregnancy and breastfeeding with an iodine-only tablet.

Important sources of iodine in foods are: well cooked seafoods\*, milk\*, eggs\*, some cereals and fortified bread. If salt is used, choose iodised.



- Take one 0.150 milligram (mg)/150 microgram (mcg or  $\mu$ g) iodine-only tablet daily when pregnant and breastfeeding.
- The recommended registered tablet can be purchased at pharmacies (or at a lower cost, when prescribed by your doctor or midwife).

For further information, contact a health professional such as your doctor, midwife, dietitian, nurse or pharmacist.



\*See latest advice on food safety on the Ministry of Primary Industries' website at [www.mpi.govt.nz/food-safety/food-safety-for-consumers/food-and-pregnancy/](http://www.mpi.govt.nz/food-safety/food-safety-for-consumers/food-and-pregnancy/)

Vitamin, mineral and health supplements other than folic acid and iodine should only be taken in consultation with your lead maternity carer.



**Antenatal Screening**  
free health checks during pregnancy

# HIV testing in pregnancy

part of antenatal blood tests



HIV (human immunodeficiency virus) is a virus that affects the body's ability to fight infection. It can lead to AIDS (acquired immunodeficiency syndrome) if left undetected and untreated.

The number of people with HIV in New Zealand is low. However that number is increasing and so all pregnant women are being offered an HIV test as part of their antenatal care. A woman with HIV can pass the virus on to others including her baby during pregnancy, birth or through breastmilk.

The HIV test will be done at the same time as other routine antenatal blood tests (blood group and Rhesus factor, full blood count, hepatitis B, rubella and syphilis). One sample of blood can be used for all the tests.

All of these tests are free to most women.



## Informed consent

As with your other antenatal tests it is important that you have enough information to help you decide about having the test.

If you have concerns or want to know more about the HIV test, talk with your GP, midwife or specialist. You may also want to discuss it with your partner, family or whānau.

You have the right to choose not to have any of the tests.



## Why have an HIV test?

Most pregnant women with HIV do not know they have the infection. The test is the only way to tell.

A woman who finds she has HIV is able to get early treatment and support for herself, her partner, family or whānau and help reduce the risk of passing the virus to her baby.

The majority of pregnant women will be found not to have HIV.



## How accurate is the test?

The test is very accurate. However, a small number of women may have an unclear result and may need to have a second blood test. In most cases the second test will give a negative result.



## How will I get my results?

The health professional who organised your blood tests will give you your results.

If a woman's HIV test is positive, professional advice, help and support will be given to help look after her health, her baby's health and that of her partner, family or whānau. Pregnant women with HIV will be referred for specialist consultant care and treatment.



## How effective is the treatment?

Treatment to prevent HIV being passed on to the baby is very effective. Without treatment there is about a 25% chance the baby will be born with HIV. With treatment, the chance of the baby being born with HIV is less than 1%.

Early treatment and support is important for women who have HIV as it helps them remain well.



## What is the treatment?

Pregnant women with HIV will usually be offered a combination of treatment and interventions including:

- medicines during pregnancy and birth to help women stay healthy for longer, and to prevent them from passing the virus on to the baby
- advice about safe delivery methods
- medicines for the baby which will be offered for a few weeks after birth. Current international evidence suggests that the drug treatment before and after birth causes no harm in babies
- advice about the safest feeding methods for the baby.

## What about confidentiality?

All of your antenatal blood test results including HIV will be sent in confidence to your GP or Lead Maternity Carer and to your local District Health Board (DHB).

Even when you choose not to have an HIV test you will be asked if the DHB can be informed of your choice. This information is used to monitor the safety and effectiveness of the programme, regardless of the choice that you make.

*Your personal details are carefully protected.*

The Ministry of Health collects information for monitoring and evaluation of the screening programme.

*The Antenatal HIV Screening Programme is overseen by the National Screening Unit of the Ministry of Health. The Programme aims to detect HIV in pregnant women to reduce the number of babies born with HIV.*

## For more information:

- visit the National Screening Unit's website: [www.nsu.govt.nz](http://www.nsu.govt.nz)
- talk to your GP, midwife or specialist
- visit the New Zealand AIDS Foundation website: [www.nzaf.org.nz](http://www.nzaf.org.nz)
- visit Positive Women Inc website: [www.positivewomen.org.nz](http://www.positivewomen.org.nz)



New Zealand Government

This resource is available from [www.healthed.govt.nz](http://www.healthed.govt.nz) or the Authorised Provider at your local DHB.

I'm giving my pepi (baby) the best possible start in life • I smell great! • I ❤ my baby, so I'm staying smokefree • Kid kaha, stay strong, you can do it! • I've got more cash in my pocket



Place your scan/photo of baby here

te hironga hauora hpa

Quitline ME MUTU

0800 778 778

New Zealand Government

smokefree ROTERUA 2025

A MESSAGE FOR PARTNERS/FAMILY/WHĀNAU...

You have an important role to play in helping your pregnant partner/family member to quit and looking after the health of baby.

- The more support she has, the easier it becomes for her to quit.
- Never smoke around her and baby
- The first six weeks after baby is born can be a tough time, when she'll need your help to stay smokefree.
- If you smoke, why not make this your time to quit too?

**MAKE YOUR HOME AND CAR SMOKEFREE**

Second-hand smoke also harms babies and children. Babies exposed to secondhand smoke are more likely to develop asthma, pneumonia, croup and glue ear. Every year, 1,500 young children in New Zealand have ear operations because their ears are damaged by second-hand smoke.

From 28 Nov 2021 it will be illegal to smoke in a vehicle carrying anyone under 18yrs old – whether the car is moving or stationary.

**You'll be setting a great example for your kids/mokopuna by quitting smoking. Children whose parents or caregivers smoke are 7x more likely to become smokers themselves.**

**Make your home and car smokefree. If people want to smoke in your home, ask them to go outside. Don't let anyone smoke around your children.**



**HOW DOES SMOKING HARM MY BABY?**

IF YOU SMOKE WHEN PREGNANT..

Baby is **30% more likely to be born prematurely** and have a low birth weight. Premature babies and babies with low birth weights are at greater risk of lots of health problems like infection, brain hemorrhage, heart problems and even blindness. If your baby has a low birth weight it doesn't mean your labour will be easier.

When baby is born he/she may have withdrawal-like symptoms from tobacco. This **may make baby jittery and hard to soothe**.

You are more likely to have a **miscarriage**.

Baby is **30% more likely to die** of Sudden Unexplained Death in Infancy (SUDI) or cot death.

# WHAT ARE THE BENEFITS OF QUITTING?



In **24 HOURS** all the carbon monoxide is out of your system and your lungs work better.



You'll save **HEAPS** of money. If you smoke a pack a day it costs nearly \$240 every week or over \$12,400 per year. Think of all the things you could do with that cash!



You'll have clearer skin with **LESS wrinkles**, plus you'll smell better.



You'll be giving your baby a much healthier start. You're likely to live a **LONGER, healthier life** as a Mum. Smoking kills around half of all people who continue to smoke.



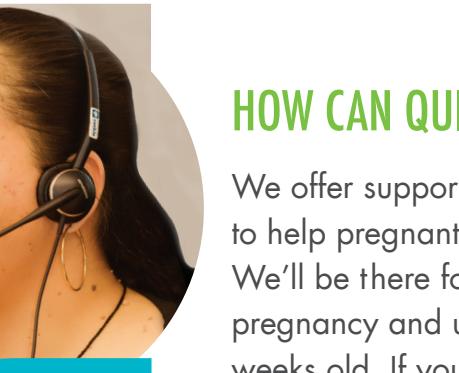
After a year your risk of having a heart attack is **HALVED**

## IT'S NEVER TOO LATE TO QUIT FOR YOUR BABY

Even if you have smoked for some of your pregnancy, quitting now will make baby healthier.

Quitting smoking is one of the **BEST** decisions you will ever make, for you and your baby.

## WHEN YOU QUIT SMOKING...



We know that quitting smoking can be hard. We're here to support you - not judge you.



If you are craving cigarettes, nicotine patches, gum or lozenges can really help. They are much safer than smoking.

## LOCAL CONTACT DETAILS



## HOW CAN QUITLINE HELP?

We offer support specially designed to help pregnant women quit smoking. We'll be there for you throughout your pregnancy and until baby is at least six weeks old. If you like, we will also talk to your partner/family about helping you to quit and making your home smokefree. Call us **0800 778 778** or text **4006**.



If you feel tempted to smoke, reach out for support. You can call Quitline as often as you need to.

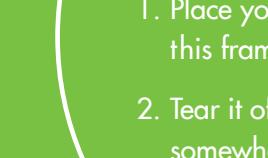


## WHEN BABY IS BORN...

When baby is born it's still important to stay smokefree. The first six weeks is a time many women find challenging. Remember how well you've done in quitting smoking. Even if you don't smoke around baby, poisons from cigarettes will stay in your clothes and hair. Baby will be exposed to these.

## YOUR PHOTO FRAME

1. Place your can/photo of baby in this frame
2. Tear it off and put it on the fridge or somewhere you can see it



# Immunise during **Pregnancy**

Protecting baby and you from  
whooping cough and influenza



**immunise**

their best protection

**This leaflet is for pregnant women and their families. It explains the immunisations recommended to protect mum and baby against serious diseases such as whooping cough and influenza.**

**Free**  
immunisations  
against  
whooping cough  
and influenza

## **What is whooping cough?**

Whooping cough (pertussis) is a serious disease that is easily spread by coughing and sneezing.

Whooping cough immunisation is recommended in each pregnancy as protection can wear off over time



# How serious is it?

Whooping cough can be very upsetting for you and your baby. It can cause severe coughing attacks and may lead to serious complications, like pneumonia and brain damage.



It starts just like a common cold – runny nose, sneezing, slight fever and a mild irritating cough. The coughing attacks get worse and can be followed by a gasping breath or a 'whoop', and sometimes vomiting. The cough can last for up to 3 months.

800+

75%  
+ 

3 died

**Fact:** Over 800 babies caught whooping cough in the 2010–2013 outbreak in New Zealand. Of these, 75% needed hospital treatment. Two babies and one 3-year-old died.

## Who is most at risk?

Whooping cough is worse for babies under 1 year old. They are often unable to feed or breathe properly so become very ill and may need hospital treatment. In some cases, babies can die.

Babies who are not yet immunised are at greatest risk.

Remember baby's first immunisations at **6 weeks**

# What is influenza?

**Influenza or 'the flu' is not a cold.** Symptoms are usually much more severe, and include a cough, headache, fever or chills, body aches and pains, fatigue and generally feeling miserable.

Influenza can pose a serious risk to your life and that of your unborn baby.

## How serious is it?



Pregnant women and their unborn babies are most at risk of serious complications from influenza. It can lead to early birth, miscarriage, stillbirth, and lower birth weights.



**Fact:** Every year around 500 New Zealanders die from influenza.

Changes in the immune system, heart and lungs during pregnancy make pregnant women more at risk of serious influenza complications.

Pregnant women are nearly 5 times more likely to be hospitalised with influenza than women who are not pregnant.



**Fact:** New Zealand pregnant women are five times more likely to be admitted to hospital for influenza-related complications than women who are not pregnant.

# How can I protect my baby and myself from these diseases?

**Immunisation is the best way to protect your baby and yourself against whooping cough and influenza.**

**Immunising against whooping cough** is recommended during pregnancy so you can pass on your immunity to your baby before they are born. This helps to protect baby until they have their first immunisations at 6 weeks.

**Immunising against influenza** is recommended during pregnancy to protect you from serious illness that could affect your baby. The best time to get vaccinated is in autumn, before the winter peak of influenza.

The vaccines are safe for use in pregnancy. The vaccine itself doesn't get passed on to your baby, but the antibodies you produce in response to the vaccine do.



# How effective are the vaccines?

**Immunising against whooping cough** during pregnancy is very effective at protecting babies before they can be immunised themselves.



**Fact: About 90% of babies whose mothers are immunised against whooping cough during pregnancy will be protected during their first few weeks of life.**

Protection wears off over time. People can get whooping cough some years later, even if they've been immunised or have had it before. This is why **immunising against whooping cough is recommended during each pregnancy**.

**Immunisation against influenza** is effective in preventing most influenza A and B strains in healthy adults when there is a good match between vaccine and circulating influenza strains.



# After baby is born

After your baby is born, get them immunised at the recommended times to protect against whooping cough and several other serious diseases.



Delaying immunisation puts your baby at greater risk of catching preventable diseases when they're most vulnerable to severe illness.

While not routinely recommended for all babies, influenza immunisation is available for purchase for babies from age 6 months onwards. It's free for babies and children with a history of significant respiratory illness and some other serious health conditions.

Talk to your doctor if you think this might apply to your child. Ask your doctor about any other available immunisations that can help protect your child.

## Other ways to protect your baby

- Adults in close contact with babies are recommended to be immunised against whooping cough.
- Keep babies away from anyone with a cough, even if they and baby are fully immunised.
- Enrol your baby at a general practice as soon as they're born to make sure they get the care they need on time.

# Protect your baby

- 1. Enrol with a midwife and general practice** – as soon as you know you're pregnant
- 2. Get immunised during pregnancy** – against whooping cough and influenza
- 3. Immunise baby on time** – at 6 weeks, 3 months and 5 months
- 4. Free immunisations for pregnant women and babies** – see the National Immunisation Schedule

## Where can I get more information?

- Talk to your midwife, nurse or doctor
- Call **Healthline 24/7** on **0800 611 116** or call **0800 IMMUNE** (466 863) 9:00am to 4:30pm, Mon-Fri.
- Visit: **health.govt.nz/immunisation**

This resource is available from [healthed.govt.nz](http://healthed.govt.nz) or the Authorised Provider at your DHB. Revised March 2020. 04/2020. **HE2503**

# Protect your unborn child –

## Check if you're immune to rubella (German measles)

Rubella can cause serious harm to your unborn child. If you are immune (protected) against rubella you can stop your unborn child from being infected.

All women of childbearing age need to know if they are immune (protected) against rubella. You are likely to be immune if you have:

- ▶ already had rubella
- ▶ been immunised against rubella.

**Get your  
rubella  
immunity  
checked  
now**

A simple blood test can let you know if you're protected (immune). Talk to your doctor, nurse, midwife, or community health worker.



### What you need to do

- ▶ If you're **trying to get pregnant**, check with your doctor or midwife now to see if you are protected (immune). If you are not immune you will need to be immunised. Checking if you are immune and getting the vaccine are both free.
- ▶ When you **get immunised**, avoid getting pregnant for at least one month.
- ▶ If you think you **might be pregnant** and your immunity was not tested, talk to your midwife or doctor as soon as you can about what to do. You can't get vaccinated if you're already pregnant.

# What is rubella (German measles)?

Rubella is usually a mild viral illness, which is spread by breathing, coughing, and sneezing. But if a pregnant woman gets rubella, especially in the first three months of pregnancy, it can lead to birth defects in her unborn baby.

## Symptoms of rubella in adults:

- ▶ rash on the face, scalp and body
- ▶ swollen neck glands
- ▶ sore joints
- ▶ feeling unwell.

## For your unborn child, rubella can cause:

- ▶ blindness
- ▶ deafness
- ▶ heart defects
- ▶ brain damage.

## The worst time to get rubella is during the first three months of pregnancy

- ▶ If you are trying to get pregnant or in the early stages of your pregnancy, keep away from children with a rash and adults who have flu-like symptoms, unless you know you are immune from rubella.
- ▶ If you are pregnant and in contact with people who have rubella and you are not sure of your immunity, tell your doctor or midwife immediately, so you can be tested.

**Make sure  
your children are  
immunised too.  
The MMR (measles  
mumps, rubella) vaccine  
is available free for all  
children at 15 months  
of age, with the  
second dose at  
four years.**

This resource is available from [www.healthed.govt.nz](http://www.healthed.govt.nz) or the Authorised Provider at your local DHB.

Revised May 2017. 04/2019.  
Code HE4172



New Zealand Government



# Yes, you can!

'Experts everywhere agree that it is safer to use nicotine replacement therapy (NRT) in pregnancy than for a parent to keep on smoking.'

Lesley McCowan, Obstetrician, Auckland DHB

[www.changeforourchildren.co.nz](http://www.changeforourchildren.co.nz)



## What is NRT?

NRT is a smoking cessation aid. Like crutches, it can be something to lean on as you take your first steps as a smokefree person. Low-cost options are: **gum** that you chew, **lozenges** that you suck or **patches** that you put on your skin. There are various flavours and doses.

## How does NRT work?

NRT stops cravings. You still get some nicotine, but in a safer way and more slowly. It helps to weaken the addiction. Gum or lozenges are best in pregnancy.

## Is NRT safe for my unborn baby?

It is **essential** that both mother and baby are protected from tobacco smoke during pregnancy. No nicotine is good for your baby, but NRT is a lot safer than smoking.

## What if I do keep on smoking?

When you smoke so does your baby. Harmful toxins cross the placenta. Your baby gets a **higher dose** than you do and is **trapped** with the toxins. The placenta is damaged and pregnancy may end early. Your baby is permanently **weakened** by the harm, and may die.

## How do we get NRT?

Ask your midwife, nurse or doctor, or, call your DHB for details of local smokefree services, or, call Quitline (0800 778 778). While NRT helps reduce cravings, support from people who care makes a difference, too.

## Information for your midwife, nurse or doctor

“In summary, an analysis of the risks and benefits of smoking versus using NRT in pregnancy overwhelmingly supports the use of NRT.”

**Reference:** Ministry of Health. 2007. New Zealand Smoking Cessation Guidelines. Wellington: Ministry of Health.



# SLEEP ON SIDE WHEN BABY'S INSIDE FROM 28 WEEKS OF PREGNANCY

[www.sleeponside.org.nz](http://www.sleeponside.org.nz)



Research shows that going to sleep on your side from 28 weeks of pregnancy halves your risk of stillbirth compared with sleeping on your back.

### **Why should I go to sleep on my side?**

Lying on your back in the last three months of pregnancy (from 28 weeks) presses on major blood vessels which can reduce blood flow to your womb and oxygen supply to your baby.

### **Is it best to go to sleep on my left or right side?**

You can settle to sleep on either the left or the right side – any side is good from 28 weeks of pregnancy.

### **But what if I feel more comfortable going to sleep on my back?**

Going to sleep on your back is not best for baby after 28 weeks of pregnancy. Most women find side sleeping is more comfortable in pregnancy, especially in the last three months.

### **What if I wake up on my back?**

It's normal to change position during sleep and many pregnant women wake up on their back. The important thing is to start **every** sleep (daytime naps and going to bed at night) lying on your side and settle back to sleep on your side if you wake up.

### **What is the risk of stillbirth if I go to sleep on my back?**

Stillbirth in the last three months of pregnancy affects about one in every 500 babies. However, research has confirmed that going to sleep on your side halves your risk of stillbirth compared with sleeping on your back.

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**For more information please contact your midwife, nurse or doctor.**

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