



Nutrition & Diabetes

What is diabetes?

Diabetes is a chronic disease characterised by high blood glucose levels resulting from the body being resistant to, or deficient in insulin. Insulin is a hormone needed for glucose to enter the cells to be converted to energy.

Two main Types

Type 1 diabetes (insulin dependent)

- Represents 10-15% of all cases of diabetes
- Characterised by a complete deficiency of insulin when the pancreas is unable to produce it.
- It is not caused by lifestyle factors

Symptoms

- Excessive thirst & urination
- Unexplained weight loss
- Weakness & fatigue

Type 2 diabetes (non-insulin dependent)

- Represents 85 to 90% of all cases of diabetes
- Occurs when the pancreas is not producing enough insulin and the insulin is not working effectively
- A genetic predisposition and lifestyle factors contribute to the development
- Risk factors include overweight/obesity

Symptoms

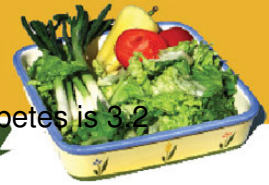
- Same as for Type 1
- Blurred vision
- Skin infections
- Slow healing
- Tingling and numbness in feet

Diabetes Statistics

- Diabetes is the sixth leading cause of death in Australia.
- Diabetes is Australia's fastest growing chronic disease.
- People with diabetes are almost three times as likely to be obese, have high blood pressure or elevated blood fats (eg. Cholesterol, triglycerides).
- People with diabetes are two to three times more likely to have cardiovascular disease.
- One in four Australian adults has either diabetes or impaired glucose metabolism.
- One person is diagnosed with diabetes every 7 minutes.
- More than 740, 000 Australians are officially diagnosed with diabetes, for every diagnosed person - another is undiagnosed.

Diabetes: A new Australian dilemma

Eat Your Greens



➤ The total number of people with diabetes and pre-diabetes is 3.2 million.

Nutrition

Healthy Food Pyramid

Nutrition Australia (as The **Australian Nutrition Foundation**) developed the **Healthy Eating Pyramid** which enables you to make healthy food choices that will fit in with your individual lifestyle.



EAT MOST	FOODS	TIPS
<p>Breads and Cereals</p> <p><i>Nutrient value:</i> Low fat, high fibre foods containing starch, some protein, vitamins B1, niacin, folate and vitamin E, and the minerals iron and zinc.</p>	<p>These include bread, particularly wholemeal and mixed grain, wholegrain crispbreads, rolled oats and ready-to-eat wholegrain breakfast cereals (such as Weet Bix, puffed wheat, etc.), rice (try Sunbrown Quick), pasta and barley. Also, bagels, pita bread, focaccia, fruit bread, crumpets, pikelets and scones.</p>	<p><i>Include some of these foods in all your meals and snacks.</i></p>

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Vegetables and Fruits

Nutrient value: Low fat, high fibre foods, rich in vitamin C and beta carotene (used by the body to make vitamin A), folate, and vitamin E and the mineral iron.

These include citrus fruits, tropical fruits, Chinese gooseberries, berry fruits, green, red and yellow peppers, Brussels sprouts, cauliflower and cabbage for vitamin C and folate. Yellow, orange and red vegetables and fruit and green leafy vegetables for beta carotene and folate.

Legumes (dried peas, beans and lentils) are low fat protein rich vegetables suitable as meat substitutes and meat extenders. They are a good source of the B group vitamins and iron.

Fruit and vegetables can be fresh or frozen. Canned and dried foods can be used as a convenient alternative if the others are unavailable.

Enjoy a variety of fruits and vegetables with all your meals and use fresh fruit for some of your between-meal snacks.

EAT MODERATELY	FOODS	TIPS
<p>Lean Meat, Chicken, Fish, Eggs and Nuts</p> <p><i>Nutrient value:</i> High protein foods which also contain significant amounts of fat.</p>	<p>Choose varieties with less fat (e.g. lean meat and skinless chicken).</p> <p>Good sources of the vitamins niacin, vitamin B1 and riboflavin, and the minerals iron and zinc.</p>	<p><i>Include 1 or 2 servings each day.</i></p> <p><i>Remember that legumes (dried peas, beans and lentils) including canned baked beans, kidney beans, soy beans, mixed beans and chick peas can be substituted for meat or used as a meat extender.</i></p>
<p>Milk, Yoghurt and Cheese</p> <p><i>Nutrient value:</i> Protein and variable amounts of fat. The vitamins riboflavin, B1, niacin and vitamin A (less in reduced fat and low-fat varieties) and the minerals calcium and some zinc.</p>	<p>These products provide about 60% of the calcium in the Australian diet. Soy beverages, with added vitamins and calcium, such as "So Good" are suitable as a substitute for milk.</p> <p>One serving:</p> <ul style="list-style-type: none"> - 1 glass (250 ml) milk or "So Good" (include low fat or reduced fat varieties), - 1 tub (200 gm) yoghurt (including low-fat varieties), - 40 gm Cheddar cheese (including reduced fat varieties) 	<p><i>Include 2 or 3 servings of these calcium rich foods daily.</i></p> <p><i>Women are advised to use 3 servings because of their higher risk of developing osteoporosis.</i></p>

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EAT IN SMALL AMOUNTS	FOODS	TIPS
<p>Butter, Margarine, Reduced fat spreads, Oils (Canola, olive and polyunsaturated)</p> <p><i>Nutrient value:</i> Butter and table margarines are good sources of vitamin A and D. Vegetable oils, margarines and reduced fat spreads made from vegetable oils are good sources of vitamin E, and butter contains some vitamin E.</p>	<p>These foods are high fat foods - oil 100%, butter and margarines 80%, and reduced fat spreads 60% or less (check the label).</p>	<p><i>Because of their high fat content these foods should be eaten only in small amounts.</i></p>
<p>Sugar and foods containing a lot of sugar</p> <p><i>Nutrient value:</i> Table sugar contains no vitamins or minerals. It is a simple carbohydrate and contains no complex carbohydrates (starch or dietary fibre). The nutrients in raw sugar and brown sugar are in very small quantities and they are nutritionally insignificant.</p>	<p>White sugar, raw sugar, brown sugar, glucose, maltose and lactose are all sugars. Honey is about 80% sugar and many foods are made with sugar as a major ingredient. For example - jam (65%), lollies (45-75%), sweet biscuits (20-40%), sugar sweetened soft drinks (average 10%).</p>	<p><i>If these foods are making up a large part of your diet then replace some of them with the "Eat most" food group such as fruit and bread.</i></p>