

THE CARBOHYDRATE CONNECTION!

What are carbohydrates?

Foods found in the Eat Most section of the Food Pyramid are the carbohydrate rich foods. They contain starch or natural sugar, and include legumes, breads, breakfast cereals, pasta, rice, grains, fruits and vegetables. They are low in fat and should form the basis of all meals and snacks.

Carbohydrate foods are digested (broken down) by the body to glucose, which is then absorbed into the bloodstream. This makes the level of glucose in the blood rise, which happens in everyone. Glucose is fuel for the body, just like petrol is for a car. The level of glucose in the blood is usually controlled within a certain range. People with diabetes, however, have difficulty controlling the level of glucose in the blood, which can rise well above the normal range.

In order to help this problem, it is important to know which carbohydrate foods will have the best effect on blood glucose levels.

Which are the best carbohydrates?

- All carbohydrate foods listed in the Eat Most section of the Pyramid are great for people with diabetes. The ones highlighted in **bold** print, however, are even better! Why?
- The foods in **bold** print are s-l-o-w-l-y digested by the body. This means that the glucose is released into the bloodstream s-l-o-w-l-y, resulting in a s-l-o-w-e-r, flatter rise in blood glucose levels, which is better for people with diabetes.
- These foods are often described as:
 - Slow acting
 - Slow release
 - Low glycaemic index (low GI)

Choose the description that you like best!



Food choices

The Eat Most section of the Pyramid are listed below.

Remember, all of these foods are great for people with diabetes, but the ones written in **bold** print are even better because they are s-l-o-w acting.

- ✓ Legumes (dried peas, beans and lentils), both dried and conned varieties, especially **kidney beans, haricot beans, chick peas** and **baked beans**. Add them to soups, casseroles, lasagna, stir fries, curries, pasta sauces and dips.
- ✓ Bread, including wholemeal, rye, **Pumpernickel, heavy wholegrain** and **heavy fruit breads**.
- ✓ Wholegrain breakfast cereals, especially the s-l-o-w acting varieties, such as **rolled oats, untoasted, muesli, rice bran** and **oat bran**.
- ✓ **Spaghetti** and **pasta**. All varieties are s-l-o-w acting and therefore suitable choices of carbohydrate.
- ✓ All fruit, including fresh, frozen, dried and canned, are suitable for people with diabetes, but especially good are **apples, pears, oranges, grapes, cherries, grapefruits, peaches, plums, kiwi fruit** and **firm bananas**.
- ✓ Grains such as **barley, buckwheat, bulgur** and **couscous**.
- ✓ Rice, especially **Basmati** and **Dungaree**.
- ✓ All vegetables, including fresh, frozen and canned. Especially good are **sweet potato, corn** and **yam**.
- ✓ Dry biscuits . low fat varieties.

Here's a tip! Whether a food is s-l-o-w acting or not cannot be predicted by reading the label. It can only be determined by testing the food on people under controlled conditions. The testing of a wider range of foods is continuing, so consult a dietitian regularly for and update of foods to add to the list of **bold** print foods.

How much carbohydrate?

Foods from the Eat Most section of the Pyramid are encouraged to form the basis of all meals and snacks. In other words, they should fill up $\frac{3}{4}$ of the plate. Try to choose at least one s-l-o-w acting carbohydrate food (in **bold** print) at each meal. This will help to s-l-o-w the effect of the whole meal.

For individual guidance on the quantity of carbohydrate, consult an Accredited Practicing Dietitian.

added advantage of also being high in fibre. There are

- Soluble fibre
- Insoluble fibre

Soluble and insoluble fibre occur in foods together, although different foods will have larger amounts of one type of fibre than the other.

SOLUBLE FIBRE	INSOLUBLE FIBRE
<ul style="list-style-type: none"> • Can improve blood glucose control by slowing digestion and absorption of food. • Can lower blood cholesterol of cholesterol via the bowel. • Sources: <ul style="list-style-type: none"> - Legumes - Oats, Barley - Some Fruits and Vegetables - Nuts, Seeds (caution: high in fat) 	<ul style="list-style-type: none"> • Important for maintaining a healthy bowel. • Sources: <ul style="list-style-type: none"> - Wholegrain Breads and Cereals - Some Fruits and Vegetables

- ❖ **The foods found in the Eat Most section of the Healthy Food Pyramid are carbohydrate foods, and include legumes, breads, breakfast cereals, pasta, rice, grains, fruits and vegetables.**
- ❖ **Carbohydrate foods should form the basis of all meals and snacks.**
- ❖ **Carbohydrate foods written in bold print are known as s-l-o-w or “low glycaemic index” choices. They are especially good for people with diabetes because they have a s-l-o-w-e-r, flatter effect on blood glucose levels.**
- ❖ **Try and choose at least one s-l-o-w acting, or low glycaemic index, food at each meal.**
- ❖ **Fibre is important for good health. For people with diabetes, soluble fibre has particular benefit. Try to include sources of soluble fibre on a regular basis to help diabetes control.**