

## Major nutrient groups

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Foods provide different textures, flavours, colours and nutritional values and eating a variety will ensure the best combination for good health. Foods are usually classified under three main nutrient groups: carbohydrate, protein and fat.

### Carbohydrate

All carbohydrate foods are eventually digested into glucose, which is then absorbed into the bloodstream directly from the digestive tract (gut). Glucose is the body's main source of energy. Some carbohydrates are broken down into glucose more quickly than others, and may demand a large sudden supply of insulin, while others take longer to be digested and absorbed.

It may be easier for your body to regulate blood glucose levels if you eat regular, small to moderate sized meals that are spread over the day. Blood glucose control can improve if meals are based on wholegrain breads and cereals, vegetables and fruit, with small serves of lean meats and low fat dairy products.

Carbohydrate foods that are digested slowly have a low glycaemic index and can help improve diabetes control as glucose from these foods enters the blood slowly. These foods are found on page two underlined. Try and include at least one of these foods at each meal.

### Protein

Protein in the diet is essential for your body's growth and repair. Foods that contain protein supply us with essential vitamins and minerals such as iron, zinc and calcium. Foods that are classified as protein are broken down in our gut into amino acids before they can be absorbed. They do not contain glucose therefore they cannot raise blood glucose levels directly.

Fatty protein foods can cause weight gain and the types of fats that these foods contain can also raise cholesterol levels and increase your risk of heart disease.

Being above your most healthy weight may make your body's insulin less effective or stop insulin working properly, which may then raise blood glucose levels. Choose low fat protein foods and use low fat cooking methods to minimise weight gain.

### Fat

Foods classified as fat are very energy dense (high in calories / kilojoules) and are broken down to chains of fatty acids in the body. When we eat excess fat it is usually stored as fat in the body. Large amounts of fat in the diet can lead to weight gain. Carrying excess body fat can contribute to blood glucose levels rising.

'Good fat' such as poly and mono unsaturated fat (most plant oils & margarines) can assist in lowering cholesterol but are still energy dense. Saturated fat and trans fat are known as 'bad fat' as they can raise cholesterol and can increase the risk of heart disease.

If you are trying to reach your most comfortable healthy weight, limit fat in your diet, especially trans and saturated fats.

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### For more information

The Diabetes Centre, The Queen Elizabeth Hospital, 8 Woodville Rd, Woodville South SA 5011  
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## Better carbohydrates choices

Food underlined breaks down the slowest to glucose

Aim for \_\_\_\_\_ serves for breakfast, lunch & dinner and \_\_\_\_\_ serves for morning & afternoon tea & supper  
(Amounts shown indicate 1 serve or exchange = 15g of carbohydrate)



dense whole grain bread  
1 slice



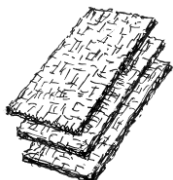
wholemeal / rye / light rye bread  
1 slice



fruit loaf  
1 slice



½ regular pita bread or 1 round crumpet



Wholegrain crackers  
eg 2 Ryvita biscuits



⅓ cup cooked rice  
Doongara / Basmati rice



pasta  
½ cup cooked



1 cup cooked polenta or  
⅓ cup cooked couscous



¾ cup Guardian or porridge,  
½ cup All-bran  
½ cup oat bran



1½ Weetbix / Vitabrits



⅓ cup Sustain or Just Right  
or ¼ cup Natural Muesli



1 medium sweet potato  
or 1 medium potato



sweetcorn legumes  
1 cup kernels or (dried & tinned)  
1 medium cob ½ cup cooked



250ml low fat milk



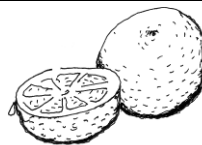
200g yoghurt  
(low fat natural / diet fruit)



20 medium grapes



1 medium pear



1 large orange



1 medium apple



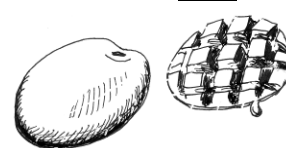
1 large peach



16 medium cherries



4 slices/rings pineapple



1 small mango



2 medium mandarins



6 medium apricots



1½ cups diced  
rockmelon / watermelon



1 small banana



1 tablespoon  
sultanas / raisins



6 dried apricot halves or  
6 dried apple rings



unsweetened fruit juice  
1 small glass (150ml) a day



tinned fruit in natural juice  
drained – ½ cup

# Major nutrient groups

## Occasional Carbohydrates

High in saturated fat & added sugar



cakes / pastries



sweet biscuits



chocolate

## High in added sugar



ordinary jelly



lollies



ordinary soft drink / cordial / sport drinks

## Protein foods – Low in fat



grilled fish or  
tinned fish in brine or water



lean cold meats  
egg lean ham



lean roast and grilled steak  
(trimmed)



lean chicken and turkey  
(no skin)



lean mince



poached / boiled eggs



low fat cheese



low fat ricotta / cottage cheese

## Protein foods – High in fat



turkey / chicken with skin



fatty pork / bacon



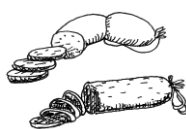
sausages / chops



offal



fatty mince



fritz / salami / metwurst

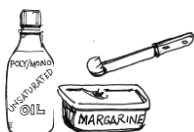


full fat cheese or  
ordinary cheese slices



battered / crumbed fish/meat

## Healthy Fats – Best choices



most poly/mono unsaturated oils  
& margarines



avocado



olives



raw seeds, nuts (unsalted)  
peanut butter

## Unhealthy Fats – Saturated or trans fats



butter



cream



palm / coconut oil



copha / lard / dripping



coconut / coconut cream / milk



pies / pasties / sausage rolls



most takeaways



crisps

# Major nutrient groups

## Unrestricted foods

These foods are low in energy (calories / kilojoules), high in vitamins, minerals and fibre, and may be eaten as desired.



asparagus



beetroot



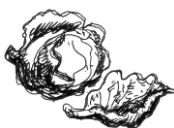
broccoli



brussel sprouts



turnips



lettuce



carrots



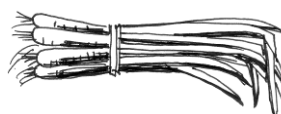
capsicum



cauliflower



onions



spring onions



garlic



cucumber



cabbage



tomatoes



radishes



mushrooms



pumpkin



celery



green beans



spinach



peas



eggplant



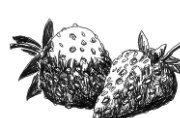
zucchini



herbs / spices



lemons / lemon juice



strawberries  
(up to 1 punnet)



grapefruit  
(up to 1)

## Miscellaneous foods that are suitable



tea / coffee / water



vinegar



condiments in small amounts



low fat dressings / mayonnaise



diet jelly & diet jam



diet cordial / diet soft drinks  
plain mineral water / soda water



vegemite \*\*



tomato / soy / oyster sauce\*\*

**\*\* These foods are high in salt – limit to small amounts.**