



Diabetes Research &
Wellness Foundation



A healthy **DIET** and **DIABETES**

By: Pam Dyson
Specialist Diabetes Dietitian
Oxford Centre for Diabetes, Endocrinology
and Metabolism (OCDEM)

A healthy diet and diabetes

Healthy eating is important for everyone and this leaflet explains why a healthy diet is a key part of the treatment for diabetes. It answers the questions about what healthy eating is and why we should all be eating a healthy balanced diet.

Healthy eating for people with diabetes is important because it can help:

- Maintain blood glucose control and thereby reduce the risk of complications
- Reduce the risk of cardiovascular disease and the tissue damage associated with high blood glucose levels
- Support management of body weight
- Maintain quality of life and general health

A healthy diet is higher in vegetables, fruits, whole grains, low-fat dairy products, seafood, legumes and nuts; lower in red and processed meat; low in sugar-sweetened foods and drinks and refined grains.

Carbohydrates

The main type of nutrient in food that raises blood glucose levels is called carbohydrate, often referred to as 'carbs'. Carbohydrates are found mainly in starchy and sugary foods. All carbohydrates, whether sugar or starch, processed or unprocessed, will affect blood glucose levels. Examples of foods containing carbohydrate are:

- Starchy foods including bread, potatoes, pasta, noodles, rice and all foods made with flour
- Pulses such as lentils, peas and beans including baked beans, chickpeas and mushy peas

1



Figure 1 Eat a rainbow of fruit and vegetables to get your five-a-day.

2



Figure 2 Studies have shown that people who eat a lot of oily fish have lower rates of heart disease.

- Sugary foods including cakes, chocolates, jams, squashes and fizzy drinks
- Foods containing natural sugar. All fruit contains a natural sugar called fructose. Milk contains a natural sugar called lactose

Recent evidence suggests that unprocessed and wholegrain carbohydrates (vegetables, fruit, wholegrain cereals) are healthier than potatoes and processed starches such as white bread, pasta and rice. Including some of these wholegrain starchy foods is a useful way of providing your body with the essential energy that it needs. Low carbohydrate diets have recently become popular for managing type 2 diabetes. However, although they are effective there is no evidence that they are any better than other diets. The challenge is to get the balance between meeting your energy needs and maintaining blood glucose levels.

Carbohydrate counting

Many people who have type 1 diabetes have adopted a system known as carbohydrate counting. This involves calculating the total amount of carbohydrate in a meal or snack and injecting insulin to match the amount eaten. Studies have shown that this system can improve blood glucose control and quality of life and is a primary strategy for those with type 1 diabetes. Most diabetes services in the UK offer structured education programmes. If you would like to take part, see your diabetes healthcare professional.

Glycaemic index (GI)

The GI diet is based on the fact that some carbohydrate foods cause more fluctuations in blood glucose levels than others. Low GI diets are no longer recommended as a strategy for people with type 1 diabetes, although they offer limited benefit in people with type 2 diabetes.

What about sugar?

New guidelines recommend that sugar should be kept to a minimum in both the general population and people with diabetes. The maximum recommended amount for adults is approximately 6 teaspoonfuls a day. If you are attempting to lose weight you would be advised to keep sugary foods to a minimum.

Sugar substitutes and sweeteners

Non-nutritive sweeteners, commonly called artificial sweeteners, have little effect on blood glucose levels. There are now 11 non-nutritive sweeteners licensed for use in the UK including aspartame, cyclamate, saccharine, acesulfame-K, stevia and sucralose. There are other sweeteners known as nutritive sweeteners e.g. sorbitol and fructose. These nutritive sweeteners have some effect on blood glucose levels and provide calories so are not recommended for weight loss. Sorbitol and similar sugars have a laxative effect if consumed in quantity.

Diabetic foods

Products labelled as 'suitable for diabetics' are generally not deemed necessary to use as they are usually more expensive and can have a laxative effect. If you like 'ordinary' (not sugar free) chocolate or cake, small amounts can be included as part of a healthy diet.

Top tips for healthy eating

Manage your weight

If you have type 2 diabetes and are overweight, losing weight will have a significant positive effect on your blood glucose control and cardiovascular risk, and may even put your diabetes into remission.

Studies show that there is not one ideal diet for weight loss and many different strategies including calorie counting, low fat diets, low GI (glycaemic index) diets, low carbohydrate diets, Mediterranean-style diets and attending slimming clubs are all effective. The best diet is the one that suits your lifestyle and which you are able to adopt long-term.

Five-a-day

Many people are aware that they should be eating five or more portions of fruit and vegetables daily for good health. **See Figure 1**

There is growing evidence that a plant-based diet including at least five portions of fruit and vegetables daily reduces the risk of heart disease and cancer. A portion is about 80 grams (3 ounces) and you should try to eat a variety of fresh, frozen or canned (without added sugar) fruit and vegetables daily.

Potatoes are classed as starchy foods and do not contribute to your five-a-day. Remember fruit, and particularly fruit juices, contain natural sugars and will raise blood glucose levels but most vegetables, especially green and salad vegetables will have minimal effect.

Lower your risk of heart disease

A Mediterranean-style diet offers the greatest protection from heart disease and the key features are:

- Replacing saturated fats (found in red and processed meats and butter) with unsaturated fats (found in olive, rapeseed, sunflower and corn oils, nuts and seeds)
- Eating a plant-based diet of wholegrains, fruit and vegetables, nuts, seeds and legumes or pulses (peas and beans)
- Eating 2 or more portions of oily fish each week **See figure 2**
- Eating less red and processed meat, refined carbohydrates and sugar sweetened beverages
- Eating less salt (best achieved by reducing processed or convenience foods)

Lower alcohol intake

Recent UK Government guidelines state that there is no safe limit for alcohol, but that adults can lower risk by drinking no more than 14 units each week spread out over 3 days or more. Here is a rough guide to alcohol units:

- A pub measure of spirits (25ml): 1 unit
- Half a pint of ordinary strength beer, lager or cider (4%): 1 unit
- 1 small bottle (330ml) strong beer, lager or cider (5%): 1.5 units
- 1 small bottle (330ml) extra strong beer, lager or cider (6-7%): 2 units
- 1 medium glass (150ml) wine: 2 units

It is advisable to drink alcohol with or after foods containing carbohydrate. Alcohol is high in calories and can raise blood pressure, so keep drinking to a minimum. Also, remember that alcoholic drinks containing large amounts of sugar will raise blood glucose levels.

More information

Adopting a healthy diet can help you manage your blood glucose levels, maintain a healthy weight and reduce the risks of cardiovascular disease and cancer. But remember, it's not all about the food you eat — activity can help with weight and diabetes management.

Read more about healthy eating on the NHS website at:
www.nhs.uk/live-well/eat-well/

A wealth of information is available from the Foods Standards Agency. Their main website is: www.food.gov.uk/

As someone with diabetes you are entitled to a consultation with a dietitian. Speak to your GP or diabetes healthcare professional.



Diabetes Research & Wellness Foundation

www.drwf.org.uk

DRWF, Building 6000, Langstone Technology Park, Havant, Hampshire, PO9 1SA

Tel: 02392 637808

Email : enquiries@drwf.org.uk

Registered Charity No. 1070607

Registered in England, Company Number 3496304

Company Limited by Guarantee

Staying well until a cure is found...

The Diabetes Research & Wellness Foundation works towards educating, informing and reminding you of the best and healthiest choices to make.

Contact us to join the Diabetes Wellness Network
and request the full series of diabetes information leaflets.



Source references can be provided on request.
All details correct at time of print.

V8.0 (second print) published: October 2019

Due to be reviewed within

18 months of publication date

Printed by Holbrooks Printers Ltd.

Portsmouth, Hampshire, UK