Dietary advice for impaired glucose tolerance and impaired fasting glucose

Delivering the best in care

UHB is a no smoking Trust

To see all of our current patient information leaflets please visit www.uhb.nhs.uk/patient-information-leaflets.htm
This dietary advice leaflet gives some general information to help you make the recommended changes to your diet. If you need more detailed advice or if you are following a special diet that makes it difficult to make these changes, please ask to see a dietitian.

If you have impaired glucose tolerance (IGT) or impaired fasting glucose (IFG) your body is not using glucose (sugar) properly. You do not have diabetes.

Impaired glucose tolerance (IGT)
This is diagnosed following an oral glucose tolerance test. During this test your fasting blood glucose is tested first. You then take a drink with a measured amount of glucose in it. Your blood glucose is tested after 1 hour and finally after 2 hours. You have impaired glucose tolerance if your blood glucose level after 2 hours is above 7.8mmol/L, and below 11.1mmol/L. This is too low to diagnose diabetes.

Impaired fasting glucose (IFG)
This is diagnosed following a fasting blood glucose test. This is when you have not eaten before the blood test. You have impaired fasting glucose if your blood glucose is: above 6.1mmol/L, and below 7.0mmol/L. This is too low to diagnose diabetes.

You have diabetes only if your fasting blood glucose level is over 7.0mmol/L or your 2-hour oral glucose tolerance test result is over 11.1mmol/L.

What does it mean if your blood test shows you have IGT or IFG?
It means your body does not use glucose as well as it should. Poor diet, being overweight and not being active enough are all risk factors for IGT and IFG.
Insulin resistance

The hormone insulin controls glucose levels. If you have IGT or IFG, it means that you are producing insulin but your body is not using it properly. This is called insulin resistance.

You can help to overcome insulin resistance by:

- Losing weight
- Improving your diet
- Being more active

With IGT and IFG there is an increased risk of developing diabetes. You can reduce this risk by making the changes suggested above.

Portion control

Controlling your portions can help reduce your risk of diabetes and reduce your weight. Using your plate as a rough guide will help you eat foods in the recommended proportions. The plate below is an example of a plate if you are trying to loose weight.
Carbohydrates and starchy foods

Your body breaks these starchy foods (carbohydrates) down into glucose (sugar). All starchy foods can be eaten, but some will raise your blood sugar less than others.

Some diets recommend cutting out carbohydrates for weight loss; it is important not to cut this food group from your diet as carbohydrates are our main energy filler and provide lots of essential vitamins and minerals.

It is important to try and choose the wholemeal and wholegrain varieties as listed below:

**Breakfast cereals** – Porridge, no added sugar muesli, Special K, All Bran, Shredded Wheat, Weetabix, Fruit and Fibre, Branflakes (small bowl)

**Rice or maize meal** – 2 tablespoons cooked
Pasta – 3 tablespoons cooked all kinds
Potatoes – 3 small tinned potatoes or sweet potatoes
Bread – 2 slices multigrain, granary, rye or 1 pitta bread

Fruit and vegetables
Aim to have 2 or 3 portions of fruit and at least 2 or 3 portions of vegetables or salad each day.

A portion of fruit is:
- 1 large fruit e.g. apple, small banana, pear, orange
- 2 small fruits e.g. plums, apricots, prunes
- 2 tablespoons stewed/tinned fruit in juice
- 1 small glass of unsweetened fruit juice (about 100ml)
- 10 large grapes or cherries

Note: be careful with fruit juice. It may be labelled as ‘no added sugar’ but it will still contain a lot of natural sugar.

A portion of vegetables is:
- 2 tablespoons of cooked, raw, frozen or canned vegetables or beans
- a small bowl of salad

Meat, fish, cheese, eggs, nuts and beans
Choose two small portions each day from the following list:
- Lean meats or poultry without skin
- Fresh or frozen fish - preferably not in batter or bread crumbs
- Eggs - cooked without fats and oils
- Cheeses – low fat pasteurised soft cheeses or small amounts of hard cheeses
- Baked beans, lentils, kidney beans, chick peas and similar beans, tofu
Dietary and lifestyle advice

Eat regular meals – include a starchy food at each meal, such as bread, potatoes, rice, pasta or breakfast cereals. Don’t skip breakfast. Research has shown that people who have breakfast tend to be leaner than those who skip breakfast and miss meals.

Avoid added sugar and sugary foods (see table below).

Being physically active helps lower your blood glucose levels. It can also make your muscles use insulin more effectively. Try increasing your activity levels e.g. walking, swimming, tennis, gardening and cycling.

Eat plenty of fruit and vegetables – all fruit contains natural sugar so spread your fruit through the day.

If you are overweight, cut down on fats. Use small amounts of monounsaturated fats and oils, such as olive oil and rapeseed oil. Avoid saturated fats including butter, lard, suet and ghee. Avoid fried foods, cut fat off meat and limit pastry, cakes and biscuits. Choose low-fat milk and cheese.

Low-fat foods have less than 5g fat per 100g of food. However, be careful of foods that are labelled ‘low fat’, such as biscuits, cakes, desserts, and ice-cream. These foods often contain a lot of sugar and are not suitable for your diet.

Sugar swaps

<table>
<thead>
<tr>
<th>To reduce your sugar intake avoid</th>
<th>Have instead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar</td>
<td>Sweetener e.g. Canderel, Hermesetas, Sweetex, Splenda, Truvia®</td>
</tr>
<tr>
<td>Large servings of ordinary jam, marmalade, honey, syrup</td>
<td>Small servings (1 teaspoon) jam, marmalade, honey or reduced sugar jam or marmalade</td>
</tr>
<tr>
<td>Sugar coated breakfast cereals</td>
<td>Plain breakfast cereal or porridge</td>
</tr>
<tr>
<td>Fruit squash, fizzy drinks, pure fruit juice</td>
<td>Diet or sugar free squash and fizzy drinks</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Sugary cakes or biscuits</td>
<td>Scones, teacakes, crumpets, crackers, plain biscuits such as Marie, Garibaldi or Rich Tea</td>
</tr>
<tr>
<td>Sweets and chocolates</td>
<td>Sugar free sweets</td>
</tr>
<tr>
<td>Fruit tinned in syrup, fruit stewed in sugar</td>
<td>Fruit tinned in natural juice or fruit juice, stewed fruit with sweetener</td>
</tr>
<tr>
<td>Custard and milk puddings made with sugar</td>
<td>Custard and milk puddings made with a sweetener</td>
</tr>
<tr>
<td>Yogurts and fromage frais with more than 10g of carbohydrate per 100g</td>
<td>Yogurts and fromage frais with less than 10g of carbohydrate per 100g, such as Mullerlight, Shape Solo, Weight Watchers and natural low fat yogurt</td>
</tr>
<tr>
<td>Drinking chocolate, malted drinks</td>
<td>Low sugar chocolate and malted drinks, such as Options, Highlights</td>
</tr>
</tbody>
</table>

**Measure your waist not just your weight**

A large waist is a sign there is too much fat, not just under your skin (subcutaneous) but also around your organs (visceral) and inside your organs (fatty liver). By reducing your waist measurement you can lower your risk of diabetes, heart disease and fatty liver.

Fat accumulation around the waist is assessed by measuring waist circumference – this is measured at the point of your belly button.

Check how your waist compares using the table on the following page.
<table>
<thead>
<tr>
<th>Increased risk</th>
<th>Substantially increased risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td>more than 94cm</td>
</tr>
<tr>
<td></td>
<td>more than 102cm</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>more than 80cm</td>
</tr>
<tr>
<td></td>
<td>more than 88cm</td>
</tr>
</tbody>
</table>

**Changing your habits**

It is not always easy to stick to a sensible eating plan. Eating is often triggered by certain situations, emotions or feelings, not just hunger. Changing the way you think about eating can take time but it will help you keep your blood sugars under control.

Keeping a diary can be a useful start. This may help you understand your eating patterns and how they affect your blood glucose levels. Be honest and write down everything you eat and drink for a few days.

Make a note of:
- when you ate or drank
- how much you had
- where you were
- how you felt at the time and afterwards

The Trust provides free monthly health talks on a variety of medical conditions and treatments. For more information visit www.uhb.nhs.uk/health-talks.htm or call 0121 371 4957.

---

**HIV Clinic**

Queen Elizabeth Hospital Birmingham
Mindelsohn Way, Edgbaston
Birmingham, B15 2WB

Telephone: 0121 204 1700