

## Diabetes: Conversion to Insulin: Dietary Advice

*This dietary advice sheet gives some general information to help you make the recommended changes to your diet. We recommend that you are also referred to a registered dietitian to discuss these dietary changes in more detail.*

### What is Insulin?

- Insulin is a hormone, which is produced in the body and takes glucose (sugar) from blood into muscles and other tissues. This keeps blood glucose at the right levels.
- You need to take insulin because your own does not work effectively.

### When taking insulin, the principles of the diet remain the same:

- Do not miss meals.
- Eat regular meals and include a starchy food, such as bread, potato, pasta, rice or oats at each meal to avoid low blood sugars known as “hypos” (see opposite).
- Aim for no more than a  $\frac{1}{4}$  of your plate to be a starchy food, a  $\frac{1}{4}$  meat, fish, chicken or meat alternative and fill  $\frac{1}{2}$  of your plate with vegetables, salads, lentils and pulses.
- Limit added sugar or sugary foods.
- Eat plenty of fruit and vegetables.
  - All fruit contains natural sugar so spread your intake across the day.
- Eat less fat and fatty foods.

You may also need a bedtime snack, depending on your blood glucose levels. Your diabetes nurse or doctor can advise you on this.

- If you make significant changes to your diet, you may change your blood glucose levels and your insulin may need to be adjusted.

### Weight Control

- Taking insulin may lead to weight gain.
- It is much easier to control your diabetes if you are not overweight.
- You can help to control your weight and blood glucose by:
  - Eating a healthy diet
  - Being as active as possible
  - Avoiding snacking between meals, unless this is needed to prevent hypos
  - Limiting portion sizes

### When your blood glucose falls too low:

- You can experience something called a ‘hypo’ when your blood glucose falls below 4mmol/l.
- This can be caused by:
  - not eating enough starchy carbohydrate food at meals
  - delaying or missing meals
  - being more active than usual
  - drinking too much alcohol
  - injecting too much insulin
- The most common symptoms of a hypo are shaking, sweating, blurred vision, light-headedness, confusion, and irritability.

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### To treat a hypo:

1. First, to raise your blood glucose quick take **15-20g** fast acting carbohydrate such as:
  - 60ml of Lift glucose juice
  - or 5-7 dextrose tablets
  - or 5 fruit pastilles
  - or 3-4 jelly babies
  - or 5 Glucotabs
  - or 1-2 Glucogel tubes
  - or 150-200mls orange juice
  - or 150-200mls full sugar cola
2. Repeat blood test after 15minutes and repeat above treatment until blood glucose (sugar) levels are above 4mmols/l.
3. Then, take **15-20g** slow acting starchy carbohydrate to keep your blood glucose above your target level e.g.
  - Your next meal if it is due
  - or 1-2 digestive biscuits
  - or 3 Rich Tea/Cream crackers
  - or 1 slice of toast
  - or a portion of fruit such as an apple
  - or 300ml milk

**Always be ready to treat a hypo by carrying glucose tablets or glucose juice**

**Make sure family and friends know how to recognise signs of a hypo as they can help you treat it.**



### Illness

- Illness can result in your blood glucose being high. **You must continue your insulin even if you are not eating.**
- Eating little and often can be very useful if your appetite is smaller than usual. Continue to regularly have carbohydrate containing foods.
- **Consult your doctor or diabetes specialist nurse if problems continue for longer than 48 hours or you are concerned.**

### Alcohol

- Alcohol can lower your blood glucose level and lead to a hypo. The symptoms of a hypo are similar to being drunk, so it is important to have a starchy food during or after drinking.

### Activity

- Being more active than usual can lower your blood glucose and result in a hypo.
- You may therefore have to eat additional starchy foods with your meals or as a snack before and after the activity. Have potatoes, or rice, or pasta, or bread, or oats.
- You may also need to eat a sugary snack or have a sugary drink during any prolonged or strenuous activity, such as an hour's walk or jogging.
- Useful products include:
  - 3 – 4 jelly babies
  - or plain biscuits
  - or fruit
  - or glucose tablets