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NHS Trust

Looking after diabetes during Ramadan

A guide for patients



**A Guide to your Diabetes
Management During Ramadan**

Introduction

In the UK there are 2.9 million people diagnosed with diabetes (Diabetes UK 2012). Many of these people are Muslim and will plan to fast during Ramadan.

If you are thinking of fasting for Ramadan then you might need to visit your Diabetes Team before Ramadan, for advice on how to manage your diabetes at this time. This might mean booking an appointment at least 2 months before the start of Ramadan.



It is important to discuss any medication changes before you start fasting. If changes are not made you may be at risk of **“hypoglycaemia”** or **‘hypos’** (*where your blood glucose levels fall to less than 4.0mmol/l*).

You could also have **high** blood glucose levels during this time, which could lead to health problems in the short and long term.

This booklet has been developed to give you advice about how to manage your diabetes during fasting. Further advice can be sought from your Diabetes Team.

Ramadan is the 9th month in the Islamic lunar calendar where daily fasting (not eating or drinking from dawn until dusk) is compulsory for all healthy Muslims every year. Ramadan lasts for 29-30 days each year depending on the sighting of the moon.

The lunar calendar is 10 days shorter every year so from now on so Ramadan will fall in the summer months and the hours of fasting each day will be much longer (**19+ hours**).

Eid-ul-Fitr is celebrated when the new moon is sighted after the fasting month.

For Muslims fasting is a time to go without food, liquids, tobacco, sexual activity and medication (*including oral, inhaler and injected medications*) between the hours of dawn until sunset. It's also a time to adopt a healthier lifestyle by observing self-control and making dietary changes.

Healthy Muslims will fast whilst continuing with their day-to-day routine and will perform extra prayers, good deeds and spend more time with family and friends. It's a time for spiritual reflection, prayers and purification of the body, mind and soul.

Month	Day	Start	End
1	MON	01 Sep	4:55 - 8:00
2	TUE	02 Sep	4:56 - 8:00
3	WED	03 Sep	4:57 - 8:00
4	THU	04 Sep	4:58 - 8:00
5	FRI	05 Sep	4:59 - 8:00
6	SAT	06 Sep	4:59 - 8:00
7	SUN	07 Sep	4:59 - 8:00
8	MON	08 Sep	4:59 - 8:00
9	TUE	09 Sep	4:59 - 8:00
10	WED	10 Sep	4:59 - 8:00
11	THU	11 Sep	4:59 - 8:00
12	FRI	12 Sep	4:59 - 8:00
13	SAT	13 Sep	4:59 - 8:00
14	SUN	14 Sep	4:59 - 8:00
15	MON	15 Sep	4:59 - 8:00
16	TUE	16 Sep	4:59 - 8:00
17	WED	17 Sep	4:59 - 8:00
18	THU	18 Sep	4:59 - 8:00
19	FRI	19 Sep	4:59 - 8:00
20	SAT	20 Sep	4:59 - 8:00
21	SUN	21 Sep	4:59 - 8:00
22	MON	22 Sep	4:59 - 8:00
23	TUE	23 Sep	4:59 - 8:00
24	WED	24 Sep	4:59 - 8:00
25	THU	25 Sep	4:59 - 8:00
26	FRI	26 Sep	4:59 - 8:00
27	SAT	27 Sep	4:59 - 8:00
28	SUN	28 Sep	4:59 - 8:00
29	MON	29 Sep	4:59 - 8:00



**No food
or drink**

Does everyone have to fast?

Not everybody needs to fast and Islam states that there are certain groups of people who are exempt from fasting. Those who do not have to fast during Ramadan include:

- Children (under the age of puberty)
- Older people
- The sick
- Those with learning difficulties
- Those with mental health problems
- Anyone who would be putting their health at serious risk by fasting

(i.e. people with uncontrolled diabetes, have complications of their diabetes such as damage to eyes, kidney or nerves, chronic kidney disease and cardiovascular disease)



Those people who are unable to fast such as:

- Pregnant and nursing mothers
- Menstruating women
- Those travelling more than 57.5 miles each day where fasting is difficult.

can make up the fast at a later date. (Qadha)



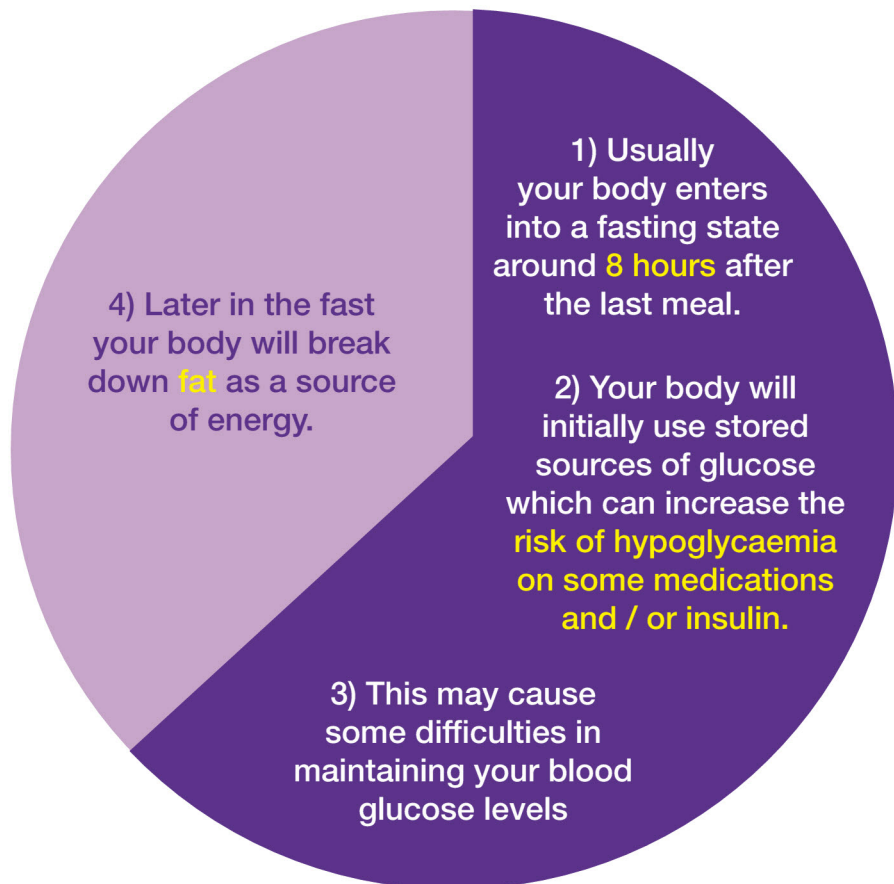
Those people who are unable to fast at all can:

- Provide food to others
- Offer donations to people less fortunate (give Fidyah)

Speak to your local Mosque leader for advice.

“If a fasting person becomes ill, they can end the fast during the day by eating or drinking”

What happens to your body during fasting?



Being safe whilst fasting

Many Muslim people will choose to fast during Ramadan and it is very important that you speak to your diabetes healthcare professional before this time. It is especially important if you are on certain tablets and / or insulin.



Your diabetes nurse or doctor will be able to make recommendations regarding your treatment to keep you safe.

To keep yourself safe whilst fasting you should test your blood glucose levels and keep in touch with your Diabetes Team as needed.

Blood Glucose Testing

Blood glucose testing will **not** break your fast, however be aware that you will have to end your fast and eat if your blood glucose levels fall **below 4.0mmol/l**. See *page 14* for how to treat a blood glucose reading of less than 4.0mmol/l.



In the following instances we advise people with diabetes not to fast during Ramadan for their own safety:

- Type 1 or Type 2 on a mixed insulin regime e.g. Novomix 30, Humulin M3
- Type 1 or Type 2 struggling with frequent hypoglycaemia.
- Pregnancy
- During illness

Is your diabetes controlled by diet only?

If your diabetes is managed by diet only you can fast without the risk of hypoglycaemia. It may be beneficial for you to follow the dietary advice *on page 12*.



Is your diabetes controlled by diet and tablets and/or Byetta (Exenatide) / Bydureon (Exenatide extended release) or Victoza (Liraglutide)?

If you belong to this group you **can fast** but you may be at risk of hypoglycaemia or a 'hypo'. Please speak to your diabetes team for tailored advice.



If you are on any of the tablets in the table below

<ul style="list-style-type: none"> • Gliclazide • Glipizide • Glibenclamide 	<ul style="list-style-type: none"> • Glimepiride • Tolbutamide 	<ul style="list-style-type: none"> • Repaglinide • Nateglinide
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You may be at risk of hypoglycaemia or a 'hypo'. Please speak to your Diabetes Team for tailored advice.

“Remember blood glucose testing will not break your fast”. Test your blood glucose 2-4 hours after you begin fasting.”

Is your diabetes controlled by diet and Metformin?

If you are on **Metformin alone** for your diabetes you can use the following management plan:



Changes to your treatment

One daily dose of Metformin in the morning

If you are taking only one dose of oral tablets in the morning, then continue with the same dose during Ramadan BUT the tablet should now be taken at the time of breaking your fast (Iftari) in the evening with your main meal.

Two daily doses of Metformin (one in the morning and one in the evening)

If you are on twice daily doses, continue to take these two tablets during Ramadan, but you may need to change the timing and quantities.



“You will need to adjust the times and dose of your medication during Ramadan”



For example:

- Prior to ending your fast at dawn (Sehri) reduce your dose to half your normal morning dose.
- At the time of breaking your fast (Iftari) at sunset take your normal evening dose.

Three daily doses of Metformin (morning, afternoon and evening)

If you are taking tablets three times a day then you are advised to **first consult with your diabetes team**, as the dose and the timings of your tablets will have to be adjusted to suit you.

“If you are taking any other tablets to manage your blood glucose levels please speak to your Diabetes Team”

Insulin Therapy

You can fast with both Type 1 and Type 2 Diabetes but it will depend on your insulin regime.



If you chose to fast it is important that you consider the following:

- You should never stop your insulin particularly people with Type 1 diabetes as this could be life threatening.
- Your insulin regimen will need to be altered.
- Blood glucose monitoring is paramount and if you have a 'hypo' you must end your fast by treating the 'hypo'.
- If you are on a basal bolus insulin regimen (e.g. background insulin either once or twice a day and quick acting insulin with meals) you may be required to make alterations to your insulin. For example your dose of background long acting and the timing and amount of quick acting insulin in relation to meals may need to be altered.
- If you have Type 2 Diabetes on tablets and night time insulin, continue to take your night time insulin but you may need to alter your tablets according to the type of tablets and when you eat.
- If you are on a pre-mixed insulin regimen e.g. Novomix 30, Humulin M3, Humalog Mix 25 or Humalog Mix 50, you will need to seek advice on how to alter doses and timings of your insulin. You may need to change to a different insulin regimen during Ramadan.

Food choices for Ramadan

During Ramadan your eating pattern may be very different to normal. You should still aim to eat a balanced diet and include foods from all the food groups.

At dawn (Sehri)

Meals should be formed around starchy carbohydrates such as:

- Rice
- Chapattis
- Potatoes
- Bread
- Cereals



Starchy carbohydrates are broken down into glucose after eating and therefore have a direct effect on your blood glucose levels. Starchy carbohydrates are a good source of energy and should be included in the diet, however, to prevent high blood glucose levels after eating try to avoid large portions of these foods.

Try eating whole grain sources of starchy carbohydrates, lentils and/or oats as these foods release energy slowly which can help to maintain your blood glucose levels and make you feel less hungry.

Dehydration

Try drinking sugar free drinks to quench thirst instead of drinking tea or coffee at Sehri as caffeine stimulates faster water loss through urination. Try to avoid sweet or salted lassi, mango pulp, tropical juices and full sugar fizzy drinks.

Iftari - Ending the Fast

At sunset the fast is ended known as **IFTARI**. Traditionally a date or water is the first thing to be eaten/drunk to open the fast after which prayers are offered.

Dates are a good source of energy and fibre. Having a sensible portion will prevent high blood glucose levels. A sensible portion is 1-2 dates.



Constipation: Drink plenty of water when ending your fast and eat fibre rich foods including whole grain carbohydrates, fruits and vegetables with skins.

The main meal is eaten afterwards. If you are following a balanced diet then normal weight should be maintained. If you are overweight you may find that you lose some weight if you are reducing your portions and being more active. In particular, reducing portions of fatty (e.g. samosas, pakoras, chevda, oil) and sugary (e.g. burfi, jalebi) foods will help you achieve this.



(visit www.leicestershirediabetes.org.uk
Healthier Asian Recipes sections for ideas)

Exercise

Praying 5 times a day and the additional special night prayers (Taraweeh, which can last anything from 1-2 hours each night) is physical activity. It is advised that you test before and after prayers. It may be necessary for you to take 'hypo' treatment or eat a light snack e.g. fruit. You can determine whether this is necessary by looking at your results.



Smoking

Although smoking is forbidden in Islam, we know many people smoke. Therefore Ramadan is a good time to stop smoking for life. If you would like more information on the help and support available to stop smoking, speak to your Diabetes Team.



Use Ramadan as an opportunity to quit smoking for good

What is Hypoglycaemia or a 'hypo'?

Even after taking all precautions, a person with diabetes may experience a 'hypo' during the month of Ramadan. A 'hypo' is a blood glucose level of **less than 4.0mmol/l**.

Often when people have a 'hypo' they may experience the following symptoms:

- Sweating
- Feeling of anxiety
- Trembling and shaking
- Tingling of the lips
- Hunger
- Going pale
- Heart beating quickly (palpitations)

Symptoms vary from person to person, most people feel different very quickly but some people have no symptoms. If you have symptoms you should treat the 'hypo' immediately and the fast must be ended.

- 100-120ml Lucozade Original
- 200- 300ml Lucozade Sport
- 150- 200ml Orange juice
- 150- 200ml Cola (non-diet variety)
- 2 tubes Glucogel
- 5 - 6 Lucozade / Dextrose Tablets

You should treat the 'hypo' appropriately with one of the following:

If you do not feel better and your blood glucose level is still less than 4.0 mmol/l after 5-10 minutes, repeat one of these treatments.

After you have treated the 'hypo' you must follow this with eating some slow release carbohydrate or a starchy snack e.g.

- 1 piece of fruit
- 2 plain biscuits
- 1 slice of bread
- 1 small chapatti

It is important to consider what may have caused you to go 'hypo' and to contact your Diabetes Team for a medication review.

Useful Points to remember

Not everybody needs to fast and Islam states that anyone who would be putting their health at serious risk by fasting are exempt i.e. people with diabetes.

Contact your Diabetes Team **before** Ramadan for advice on how to manage your diabetes at this time.

A 'hypo' is a blood glucose level of less than 4mmol/l and must be treated by ending your fast.

To keep yourself safe whilst fasting you need to test your blood glucose regularly.

Acknowledgements: This publication was reviewed by The Leicestershire Diabetes Research Group (The LDFG)