

Ramadan and Diabetes:

A guide for patients

This leaflet has been created to help answer common questions regarding your diabetes and how it may be affected in Ramadan

Fasting in Ramadan has many spiritual and health benefits.
Ramadan gives us the opportunity to fulfil our duty to Allah (SWT), cleanse our bodies and souls,
and practice self-restraint.

For some people with diabetes, fasting can be dangerous or can cause problems to your health.

In the UK, Ramadan is now in the summer months. With long hours of fasting, this can also cause additional health problems, especially if you have diabetes.

Before you choose to fast, please read the advice below and consult your GP, diabetes doctor or diabetes nurse.

Ramadan and diabetes: A guide for patients



1. What happens to my body when I fast?

When we don't eat during a fast, at about 8 hours after our last meal our bodies start to use energy stores to keep our blood glucose (sugar) levels normal. For most people, this is not harmful. If you have diabetes, your body cannot use the glucose as well. With diabetes, especially if you take certain tablets or insulin, you are at risk of **hypoglycaemia** or "hypos" (low blood sugar levels). This year, the fasts are long and the risks of hypoglycaemia and **dehydration** (lack of water) are high. Another problem that can occur if you have diabetes, are **high blood sugar levels** following the larger meals that we eat before and after fasting (at Suhoor/ Sehri and Iftar).

Hypoglycaemia, high blood sugar levels and dehydration can be dangerous if you have diabetes

2. I have diabetes, can I fast?

Most people with health problems, such as diabetes are exempt from fasting. Choosing to fast is a personal decision that you should make with advice from your diabetes team.

Speak to your GP, diabetes nurse or diabetes doctor before fasting

In the table below, we have divided people with diabetes into high risk, moderate risk and low risk for problems with fasting. If you are low risk (your diabetes is well-controlled with diet or tablets and you do not have any complications of diabetes), you should be able to fast.

If you are high risk or moderate risk, then you should not fast unless approved by your diabetes doctors, because your body may not cope well with fasting.

High Risk Advised not to fast	 Type 1 diabetes If you use insulin injections more than two times a day If you have poor control of your diabetes If you have problems with frequent low blood sugar levels If you have had a hospital admission within the last six months for very high blood sugar levels If you have had a hospital admission within the last six months for very low blood sugar levels If you have low blood sugar levels If you have low blood sugar levels with no symptoms If you have problems with your kidneys, liver, heart or poor vision If you have an acute illness, including a diabetic foot infection or foot ulcer If you are pregnant
Moderate Risk Do not fast unless agreed with doctor	 If you have moderate control of your diabetes and no major complications of diabetes Well-controlled diabetes on certain tablets, like gliclazide
Low Risk You should be able to fast with advice	 Diabetes controlled with diet Diabetes well controlled with certain tablets, like Metformin, Sitaglipin, Linagliptin, Pioglitazone and Dapagliflozin, as well as injections like Liraglutide.

Remember, if you cannot fast, you can complete your duties by offering charity or providing food to the poor. Speak to your local Imam for more information about this, or use Muslim charities such as Islamic Relief, Islamic Aid and Muslim Aid.



Remember, if you cannot fast this Ramadan, you may be able to make up the fast at a later date, perhaps during the winter months.

If you choose to fast, you must liaise with your diabetes team prior to Ramadan at least 2 months before, to ensure that you obtain the best support and advice to make the most of this blessed month, and to stay safe.

Preparation is very important, especially if you are taking any medications and/ or insulin for your blood glucose control.

3. I am pregnant and have diabetes, should I fast?

No, if you are pregnant and have diabetes, you are exempted from fasting.

If you fast then you could put yourself and your unborn child at risk.

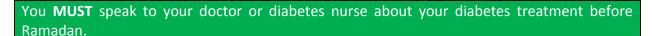
Remember that you can complete your duties by offering charity or providing food to the poor and you may be able to make up the fast at a later date.



4. Should I continue to take my medications?

Yes, it is **very important that you continue** to take your medications in Ramadan. However, some treatments may give you low blood sugar levels (hypo). When you don't eat and take these types of treatments, you may be at greater risk of low blood sugar levels. The dose and timings of your medications may need to be changed.

If you do not take your medications, due to the change of the type of foods eaten in Ramadan and timings of meals, you may be at risk of high blood sugar levels.



5. What problems could I encounter in Ramadan with my diabetes?

There are three main problems that can occur in Ramadan if you have diabetes:

- Low blood sugar levels (also known as Hypoglycaemia or hypos)
- High blood sugar levels
- Dehydration

In the UK, Ramadan is now in the summer months and the length of fasts is very long (up to 18 hours long). Long fasts put you at higher risk of low blood sugar levels and dehydration. If the weather is hot you can also become dehydrated without drinking, which can make you ill. High blood sugar levels can also occur if you become dehydrated and/ or if you eat excessively at Suhoor or Iftar.

6. What is Hypoglycaemia or a Hypo?

This is a low blood sugar level, below 4.0mmol/l.

If you get any symptoms of low blood sugar levels whilst you are fasting, you must stop fasting. If you have a blood glucose monitoring machine, you must check your blood glucose (sugar) level and break your fast if you have hypoglycaemia.

Symptoms of low blood sugar levels include:

Feeling sweaty
Feeling dizzy
Feeling anxious or unwell
Trembling and shaking
Tingling of the lips
Feeling hungry
Going pale
Palpitations/ heart racing

7. How do I treat a hypo?

Your fast MUST END if:

- Your blood sugar level falls to or below 3.3mmol/l at any time of the fast
- Your blood sugar level is 3.9mmol/l at the start of the fast and you are on insulin or gliclazide

You must treat the low blood sugar level IMMEDIATELY with one of the following:

- A small glass (150-200ml) of pure fruit juice
- A small amount (90-120ml) of original Lucozade
- Glucose tablets, such as 5-7 Dextrosol® tablets or 4-5 Glucotabs®
- 5 sweets e.g. Jelly Babies



Check your blood glucose after 10 - 15 minutes and if it is still less than 4.0mmol/l, repeat the treatment as above.

After you have treated the low blood sugar level, you must have a snack, such as a slice of toast, half a sandwich or a bowl of cereal.

Never ignore the warning signs of hypoglycaemia, or you could become very unwell.

Low blood sugar levels are very dangerous and if untreated may lead to accidents, becoming unconscious or having a seizure.

Your family must know what signs to look out for if you get low blood sugar levels (hypo) and be able to treat you.

If your hypo is more severe and you cannot treat it yourself or if you are unconscious, your family or friends should **call an ambulance immediately**.

8. Why are high blood sugar levels a problem during the fast?

High blood sugar levels can make you unwell, dehydrated and can lead to damage to the nerves, blood vessels and body organs, such as the kidneys and eyes. If your blood sugar levels become very high, then you may become unconscious.

To avoid high blood sugar levels:

- Always take your diabetes medications
- See your doctor before Ramadan as your diabetes medications may need to be changed
- Eat sugary foods in moderation
- Drink plenty of fluids between Iftar and Suhoor
- Do not fast if you are unwell

If you are on insulin, there is a risk that your blood sugar levels may become too high. This can lead to serious life threatening conditions requiring hospitalisation.

Symptoms of high blood sugar levels:

- Feeling very thirsty
- Passing a lot of urine
- Extreme tiredness

You should check your blood sugar levels regularly when you are fasting and if you start to feel unwell.

Your fast MUST END if:

Your blood sugar level goes over 16mmol/l

If your blood sugar levels stay high and you have symptoms, speak to your doctor or diabetes nurse.

9. Am I at risk of dehydration?

Dehydration is when there is not enough water in your body. This Ramadan, the fasts are longer and this means long hours without fluid intake. Dehydration can also happen if your blood sugar levels are too high. If you become dehydrated, your blood sugar levels can get very high and you can become very ill.



The risks of dehydration are higher if you are:

- diabetic
- have high blood sugar levels
- elderly
- pregnant
- taking tablets called diuretics (often taken for high blood pressure)
- in hot weather

Make sure you have plenty of sugar-free drinks, such as water, before you start the fast and between the times of Iftar and Suhoor.

Remember tea, coffee and some fizzy drinks, such as cola, contain caffeine, which is a diuretic and make you dehydrated.

Symptoms of dehydration include:

- Dizziness
- Becoming disorientated
- Loss of consciousness
- Very little urine output

If you get any of these symptoms you MUST break the fast and drink.

10. If I fast, how should I stay safe?

Please see you doctor or diabetes nurse BEFORE Ramadan

- You may be advised not to fast if it is not safe for you
- You may need changes to your medications



Safety tips:

- Always carry glucose treatment with you.
- Always have diabetes identification, such as a medical alert bracelet.
- Test your blood regularly to monitor your glucose (sugar) levels. This will not break your fast.
- Test your blood glucose level if you feel unwell during the fast.
- If your blood sugar level is high or low, you MUST treat this.
- If your blood sugar level falls less than 3.3mmol/l, end the fast immediately and treat the low blood sugar level.
- If your blood sugar level is 3.9mmol/l at the start of the fast and you are on insulin or gliclazide, do not fast.
- If your blood sugar level is higher than 16 mmol/l, end the fast immediately.
- If you become dehydrated, end the fast immediately.
- You should never stop your insulin, but you MUST speak to your doctor because you may need to change the dose and times of your insulin injections.

11. Is it OK to test my blood glucose in Ramadan while I am fasting?

Yes, testing your blood glucose levels regularly is important and will keep you safe whilst fasting. This will not break your fast.



12. Do I need to wake up for Suhoor (Sehri)



Yes. Now Ramadan will be in summer for some years, with fasts as long as 18 hours in the UK. Long hours without eating and drinking in diabetic people, increases the risk of low blood sugar levels and dehydration. You MUST eat a meal at Suhoor just before sunrise and not at midnight, as this will help to keep your sugar levels more balanced through the fast.

13. What types of food should I eat?

Remember to eat sensibly and healthily all year round but also in Ramadan. Overeating and eating carbohydrate foods in large quantities will not only make you put on weight but will also lead to big increases and imbalances in your blood sugar levels. Remember that Ramadan is also about self-control and discipline. Please see your dietician for further advice. You MUST eat a meal at Suhoor just before sunrise, as this will help to keep your sugar levels more balanced through the fast.

Some food tips:

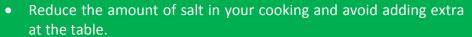
- Have only 1-2 dates to break the fast, as they contain a lot of sugar.
- If you are having fruit juice, choose a small glass (120mls) of juice.



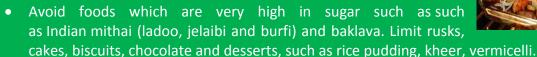
At Suhoor and Iftar, eat starchy carbohydrates as these release energy slowly, which are better for blood sugar control. Examples are basmati rice, whole wheat chapatti, semolina, pasta and granary/ seeded bread. Remember to keep portion sizes moderate.



- Choose lean meats and chicken to help reduce the amount of saturated fat in food.
- Lentils, beans and pulses are naturally low fat source of protein.
- Include fruit, vegetables and salads in your meals.
- Try to use healthier cooking methods such as baking and grilling.
- Reduce the amount of oil used in your cooking. Try to measure the oil in spoonfuls rather than pouring it into food.
- Avoid using ghee and butter.
- Avoid fried foods such as paratha, puri, samosas, chevera, pakoras, katlamas, fried kebabs, fried chicken and chips.













14. What types of drinks can I have?

Fasting can put you at risk of dehydration, particularly now that Ramadan is falling in the summer months in the UK, with long hours of fasting and also if you have high blood sugar levels. Drink plenty of fluids (sugar-free), particularly water at Suhoor and after Iftar.

Advice about drinks:

- Avoid drinking tea or coffee, these contain caffeine and can make you dehydrated.
- Drink sugar-free drinks.
- Some sugar-free drinks, such as diet cola also contain caffeine, so avoid these.
- Moderate the amount of fruit juices you drink to a small (120ml) glass.

15. What types of food should I eat at Eid-ul-Fitr?

Many celebratory foods can be high in fat and sugar. Be sensible and moderate the amounts you eat on this auspicious day.

16. Can I pray Taraweeh?

Remember Taraweeh can be a strenuous activity and you could become dehydrated or have low blood sugar levels. Make sure you eat your evening meal before going for Taraweeh prayers. This will help prevent low blood sugar levels and keep your blood sugar levels more balanced throughout the evening and night.



To avoid problems during Taraweeh, make sure you:

- Eat starchy carbohydrate foods with Iftar as they are digested slowly.
- Drink plenty of water following Iftar.
- Take a bottle of water and glucose treatment with you to Taraweeh.

If you are having low blood sugar levels after Taraweeh, you may need to adjust your diabetes treatment. You must see your diabetes doctor or nurse.

17. Can I walk to Taraweeh?

Unless you have foot problems related to your diabetes, walking to Taraweeh is a good exercise. **Remember** if you are taking insulin and walking long distances or walking regularly, you may need to reduce your insulin dose or eat a piece of fruit before you walk to stop your blood sugar level going low.

Make sure that you carry hypo treatment with you at all times.

18. Is Ramadan a good time to give up smoking?

If you have diabetes, smoking increases your risk of heart problems. Ramadan is a good time to build up your self-control and give up smoking. Talk to your GP if you are interested. There is also the NHS Smokefree website www.smokefree.nhs.uk/ and helpline 0800 022 4 332 to speak to a trained, expert adviser. They have advisers in other languages.



Please take note of the advice that your diabetes team gives you.

If you have been advised NOT to fast, please take this advice on board and do not fast.

References and Useful links:

- Ramadan, fasting and diabetes Diabetes UK. www.diabetes.org.uk/ramadan
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- 3. Looking after diabetes during Ramadan. A guide for patients. Information booklet, University Hospitals Leicester. http://www.leicestershirediabetes.org.uk/668.html
- 4. NHS Smokefree website: www.smokefree.nhs.uk
- 5. The facts about fasting during Ramadan. Information Kit for people with Type 2 diabetes. Produced by MSD.
- 6. Hospital Management of Hypoglycaemia in Adults with Diabetes Mellitus. Guidelines by the Joint British Diabetes Society. www.diabetes.nhs.uk/document.php?o=217
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- 8. Al Arouj M, Assaad-Khalil S, Buse J, Fahdil I, Fahmy M, Hafez S, Hassanein M, Ibrahim M, Kendall D, Kishawi S, Al Madini A, Nakhi A, Tayeb K, Thomas A. Recommendations for the management of diabetes during Ramadan. *Diabetes care* 2010;33:8.

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