

# “THE FACTS ABOUT FASTING DURING RAMADAN”

INFORMATION FOR  
PEOPLE WITH TYPE 2 DIABETES



# INTRODUCTION

According to diabetes guidelines, most people with diabetes are excused from fasting. Choosing to fast is a personal decision and you should talk it over with your doctor at least 1 to 2 months before Ramadan begins. An MSD-sponsored international survey found that 73% of physicians surveyed agreed that cultural factors, such as fasting, impact the blood sugar control of their patients with type 2 diabetes.

This booklet is designed to help you understand the risks associated with fasting and provide tips for talking to your doctor or healthcare professional if you are thinking about fasting during Ramadan. It includes recommendations to help you decrease your risk of hypoglycaemia and useful tools to help you manage your diabetes should you choose to fast, including a Blood Sugar Tracker and a Ramadan calendar.

## Which patients with type 2 diabetes should avoid fasting?

Diabetes Ireland recommendations advise that you should avoid fasting if you have additional serious complications to your diabetes. For example, people with diabetes who have suffered severe hypoglycaemia, or low blood sugar, i.e. hypoglycaemia that causes a loss of consciousness or require assistance from a third party within three months prior to Ramadan, or have a history of recurrent hypoglycaemia, are categorised as very high risk and should not fast during Ramadan in most cases. Additionally, the recommendations categorise all patients with type 1 diabetes who choose to fast during Ramadan as very high risk.

# KEY FACTS ABOUT FASTING

You should always discuss any lifestyle changes you are planning, such as fasting and dieting, with your healthcare professional to ensure he or she is able to provide you with relevant information and advice.

## What are some of the factors a person with type 2 diabetes should consider before fasting?

### Hypoglycaemia and its symptoms

Fasting can affect your blood sugar levels because you are not eating during the day. **Hypoglycaemia** or low blood sugar, occurs when the level of sugar in the blood drops below normal levels. Long gaps between food intake along with certain diabetes medications are risk factors for hypoglycaemia. It is important to check your blood sugar levels more often during fasting. In an MSD-sponsored international survey, 42% of physicians surveyed recorded recent fasting for cultural reasons as a factor given for their patients with type 2 diabetes experiencing hypoglycaemia. Symptoms of hypoglycaemia in people with type 2 diabetes can range from mild to severe and may include:



- Sweating



- Shakiness



- Headache



- Confusion and dizziness



- Drowsiness



- Hunger



- Irritability



- Fast heartbeat

### Why is it important to prevent low blood sugar?

It is important to prevent hypoglycaemia because it can lead to serious medical problems. If untreated, hypoglycaemia can lead to a loss of consciousness, convulsions or seizures, which require emergency treatment.

## Hyperglycaemia and its symptoms

**Hyperglycaemia**, or high blood sugar, occurs when there is too much sugar in the blood. Frequent or long periods of hyperglycaemia can cause damage to nerves, blood vessels and other body organs.

### Symptoms of hyperglycaemia include:

- Weight loss
- Increased thirst
- Loss of concentration
- Frequent urination
- Fatigue
- Headache

Hyperglycaemia can be caused by excessive reduction in dosages of diabetes medications.

### Why is it important to prevent high blood sugar?

If blood sugar levels become very high it can cause loss of consciousness and coma.

### Other considerations associated with fasting

There are additional issues associated with fasting that your healthcare professional can help you understand and provide advice on should you choose to fast:

- **Dehydration**, or excessive loss of body fluid, is caused by limited fluid intake during fasting, which may be more severe in hot and humid climates. Symptoms of dehydration may include: thirst, dry mouth, muscle cramps, nausea, vomiting and heart palpitations.
- **Increased risk of thrombosis** or clotting of the blood within a blood vessel may occur with dehydration. Symptoms of thrombosis may include: pain, swelling and redness at the blood clot site, a heavy ache in the affected area like the lower limb, prominent veins that stick out from your skin and an itchy skin rash or warm skin in the area affected.

## PREPARING FOR RAMADAN

Fasting during Ramadan is a personal decision but one that should be made with the advice and support of your healthcare professional. The American Diabetes Association recommends that people with type 2 diabetes undergo a medical assessment at least one to two months before Ramadan begins and the South Asian Guidelines for Management of Endocrine Disorders in Ramadan advises planning for Ramadan at least three months before. However, remember that you can discuss lifestyle changes such as fasting with your doctor or healthcare professional at any medical appointment.

### What should I do?

If you wish to fast during Ramadan start with making an appointment to undergo a medical assessment with your healthcare professional.

### Why is this important?

Speaking to your healthcare professional and undertaking a medical assessment will help ensure that fasting is carried out as safely as possible.

### When should I have this assessment?

The medical assessment should take place at least one to two months before Ramadan.

### What will this assessment involve?

The assessment will check your general well-being, measure your control of your blood sugar, blood pressure, and lipids, and discuss your medication requirements during Ramadan.



# BLOOD SUGAR TRACKER

If you choose to fast during Ramadan, regularly keeping track of your blood sugar will help you and your healthcare professional see how your diabetes management plan is working during this time. Use this form to record your blood sugar readings throughout the day. Note that the times given for testing your blood sugar levels are recommendations. Speak to your healthcare professional about how often you should test your blood sugar and setting your target level. It is recommended that you photocopy/print out copies of the tracker for each week of fasting and take your completed trackers along to your next medical appointment.

Week <input type="text"/>		Sunday	Monday
<p>Choose most appropriate option for this box and all of the below</p> <p><b>Blood sugar levels</b></p> <p><b>My target</b></p> <p><b>Before meals:</b></p> <input type="text"/> <p><b>After meals:</b></p> <input type="text"/>	<p><b>Option 1: Before Suhr</b></p> <p><b>Option 2 : Before sunrise</b></p>		
	<p><b>Option 1: 1–2 hours after Suhr</b></p> <p><b>Option 2: 1–2 hours after sunrise</b></p>		
	<p><b>Option 1: Around Zohr prayers</b></p> <p><b>Option 2 : Around 1.00 pm</b></p>		
	<p><b>Option 1: Before Iftar</b></p> <p><b>Option 2 : Before sunset</b></p>		
	<p><b>Option 1: Before going to bed</b></p> <p><b>Option 2 : 2 hours after Iftar</b></p>		
Weight			
Time medication taken			
Food eaten at Iftar			
Notes/any problems experienced (such as breaks of fast)			

**Remember to break your fast if:**

- Your blood sugar is less than <4.0mmol/L in the first few hours after the start of fasting; or higher than >15.0mmol/L
- Ketones are present in your urine or blood

Speak to your healthcare professional about how often you should test your blood sugar and setting your target level.

Tuesday	Wednesday	Thursday	Friday	Saturday

# MANAGING YOUR DIABETES DURING RAMADAN

Your pre-Ramadan medical assessment will provide you with individually tailored advice to help minimize the risks associated with fasting. However it is also important to monitor your condition closely during Ramadan and consult your healthcare professional immediately if you have problems controlling your blood sugar. You may also want to schedule a follow-up consultation after Ramadan to discuss any necessary readjustments to your medication.

## What might this advice include?

### Changes to treatment

Certain diabetes medications may increase your risk of hypoglycaemia during fasting. Therefore, your treatment regimen may need to be altered to ensure your blood sugar levels are effectively controlled during Ramadan. Speak to your healthcare professional about your current treatment/dosage and discuss any adaptations required.



### More frequent monitoring of blood sugar levels

Speak to your healthcare professional about how often you should test your blood sugar and setting your target level during Ramadan.



### Healthy eating and diet tips

Your diet during Ramadan should be healthy and balanced. Try to eat foods such as wheat, semolina and beans at Suhr before beginning the fast, because these foods release sugar slowly. This will stabilize your blood sugar levels and help to reduce your cravings and appetite through fasting hours. At Iftar, it is advised to eat foods that release sugars quickly, such as fruits, which will rapidly increase your blood sugar levels, followed by slow-acting carbohydrates. You should avoid foods high in saturated fat, such as ghee, samosas and pakoras and try to increase your fluid intake during non-fasting hours.



### Exercise

Normal levels of physical activity may be maintained when fasting. Light-to-moderate exercise is safe to participate in, however it is best to avoid rigorous exercise because this may increase your risk of hypoglycaemia. Regular Taraweeh (optional prayers) should be considered as part of your exercise regimen.



### Breaking the fast

You should break your fast immediately and seek advice from your healthcare professional if you experience any of the following symptoms:

- Hypoglycaemia (low blood sugar) – blood glucose less than 4.0mmol/L
- Hyperglycaemia (high blood sugar) – blood glucose higher than 15.0mmol/L
- Dehydration



You may want to share this information with your friends, family and caregiver to ensure they are aware of the signs and symptoms of hypoglycaemia and other health concerns associated with fasting that you may experience as someone living with diabetes.



# BELOW ARE SOME QUESTIONS YOU MAY WISH TO ASK YOUR HEALTHCARE PROFESSIONAL AS PART OF YOUR PRE-RAMADAN MEDICAL ASSESSMENT:

## Questions to help prepare for fasting during Ramadan

What factors should I consider before fasting based on my specific health history?

What changes will I need to make to my diet during Ramadan to ensure my blood sugar is appropriately controlled?

Do I need to make changes to my medication or treatment regimen?

How frequently should I check my blood sugar?

Can I maintain my usual level of physical activity during Ramadan?

After I finish my fast, will I need to book a follow-up appointment?

## Questions to ask about managing your blood sugar during Ramadan

How should I control my blood sugar levels during Ramadan?

How frequently should I check my blood sugar?

How will I know if I am experiencing low blood sugar?

How do I treat hypoglycaemia during fasting?

How do I treat high blood sugar during Ramadan?

Are there any situations where I should break my fast?

Whom should I contact in a case of emergency?

Given that eating a balanced diet is an important part of diabetes management, you can find a variety of diabetes-friendly recipes to encourage healthier eating during Ramadan and help you better control your blood sugar levels when opening the fast. Go to [www.diabetes.ie](http://www.diabetes.ie) for more information.



# 2014 RAMADAN CALENDAR

The Ramadan timetable below is for [city], [country]. Remember to speak to your healthcare professional before you start to fast.

Date	Day	Fajr (Dawn)	Shorook (Sunrise)	Zohr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
28 Jun	Sat	2:49	4:55	1:30	5:56	10:00	11:30
29 Jun	Sun	2:50	4:55	1:30	5:56	10:00	11:30
30 Jun	Mon	2:50	4:56	1:30	5:56	10:00	11:30
1 Jul	Tue	2:51	4:57	1:30	5:56	10:00	11:30
2 Jul	Wed	2:52	4:57	1:31	5:56	10:00	11:30
3 Jul	Thu	2:53	4:58	1:31	5:56	9:59	11:29
4 Jul	Fri	2:53	4:59	1:31	5:56	9:59	11:29
5 Jul	Sat	2:55	5:00	1:31	5:56	9:57	11:27
6 Jul	Sun	2:57	5:00	1:31	5:56	9:57	11:27
7 Jul	Mon	2:58	5:01	1:31	5:56	9:56	11:27
8 Jul	Tue	3:00	5:02	1:31	5:56	9:56	11:26
9 Jul	Wed	3:00	5:03	1:31	5:56	9:56	11:26
10 Jul	Thu	3:01	5:04	1:31	5:56	9:55	11:26
11 Jul	Fri	3:04	5:05	1:31	5:56	9:53	11:26
12 Jul	Sat	3:06	5:06	1:31	5:55	9:52	11:25
13 Jul	Sun	3:07	5:08	1:31	5:55	9:52	11:25
14 Jul	Mon	3:08	5:09	1:31	5:55	9:51	11:25
15 Jul	Tue	3:10	5:11	1:31	5:55	9:49	11:25
16 Jul	Wed	3:12	5:12	1:33	5:53	9:48	11:24
17 Jul	Thu	3:14	5:13	1:33	5:53	9:48	11:24
18 Jul	Fri	3:15	5:14	1:33	5:53	9:47	11:24
19 Jul	Sat	3:17	5:15	1:33	5:52	9:45	11:24
20 Jul	Sun	3:20	5:16	1:33	5:52	9:44	11:23
21 Jul	Mon	3:22	5:18	1:33	5:52	9:42	11:23
22 Jul	Tue	3:23	5:19	1:33	5:52	9:41	11:23
23 Jul	Wed	3:25	5:21	1:33	5:51	9:40	11:22
24 Jul	Thu	3:27	5:23	1:33	5:51	9:38	11:22
25 Jul	Fri	3:30	5:25	1:33	5:49	9:37	11:22
26 Jul	Sat	3:31	5:26	1:33	5:49	9:36	11:22
27 Jul	Sun	3:34	5:28	1:33	5:48	9:33	11:19

City	Fajr	Shurooq	Dhuhr	Asr	Maghrib	Isha
CORK	+12	+17	+9	+6	+1	+1
LIMERICK	+12	+14	+10	+9	+6	+6
SLIGO	+7	+4	+9	+11	+13	+13
WATERFORD	+6	+9	+4	+1	-3	-3
BALLYHAUNIS	+9	+8	+10	+11	+12	+12

City	Fajr	Shurooq	Dhuhr	Asr	Maghrib	Isha
CLONMEL	+8	+11	+5	+4	-1	-1
CASTLEBAR	+7	+6	+13	+14	+13	+14
LETTERKENNY	+2	-3	+6	+10	+15	+15
BELFAST	-5	-8	-1	+1	+5	+5
GALWAY	+11	+11	+11	+11	+11	+11

## GLOSSARY FOR REFERENCE

### Suhr (or Suhoor)

A small meal traditionally eaten before dawn (or around midnight) during Ramadan; the final meal before the day's fast begins

### Fajr (Dawn)

One of the 5 daily Islamic prayers, performed before the break of dawn

### Shorook (Sunrise)

Sunrise

### Zohr (or Zohor) (Noon)

One of the 5 daily Islamic prayers, performed after mid-day

### Asr (Afternoon)

One of the 5 daily Islamic prayers, performed in the afternoon

### Iftar

A meal served at the end of the day during Ramadan, to break the day's fast

### Maghrib (or Magrib) (Sunset)

One of the 5 daily Islamic prayers, performed just after sunset (Islamic evening begins at Maghrib)

### Isha (Night)

One of the 5 daily Islamic prayers, performed at night time

