



# THE FACTS ABOUT ♦ FASTING ♦ DURING RAMADAN

AN EDUCATIONAL PROGRAM FOR  
PEOPLE WITH TYPE 2 DIABETES



## 1 Introduction




### Ramadan; one of the five pillars of Islam

Fasting is an important spiritual aspect of many religions. The Islamic month of Ramadan is one of the longest periods of religious fasting. During this time, Muslims abstain from eating, drinking and taking medication from before sunrise to sunset.

According to guidelines from both religious and medical organizations, most people living with diabetes are excused from fasting because of the increased associated health risks, including hypoglycemia, hyperglycemia, dehydration and thrombosis.

Still, choosing to fast is a personal decision and many people with diabetes do not adhere to these guidelines.

Recognizing the challenges of fasting when you have type 2 diabetes, Merck has developed this information kit as part of *The Facts About Fasting During Ramadan* program – an initiative that provides guidance and useful tools to support people with type 2 diabetes who choose to fast during the holy month.

 More than  
**50 million**  
people with diabetes  
fast during Ramadan.

★  
according to a Merck-sponsored survey  
**73%**  
of physicians agreed that cultural factors, such as fasting, impact the blood sugar control of their patients with type 2 diabetes.

## 2 Preparing for Ramadan

### Effectively preparing for Ramadan



If you choose to fast during the holy month, it is important to schedule an appointment with your healthcare professional **up to three months before Ramadan**, to establish a diabetes management plan you can follow to control your blood sugar levels during the holy month.



During this pre-Ramadan medical assessment, you should expect to have your general well-being checked, as well as your blood sugar, blood pressure, and lipids. It will also be a good opportunity to discuss your medication and any changes that may need to be made before Ramadan begins.

## Preparing for your medical assessment

It is important to understand what you need to do to prepare for the fast, as well as how to control your blood sugar levels throughout Ramadan.

### Questions to help you prepare for fasting during Ramadan

Here are some questions you may wish to ask your healthcare professional as part of your pre-Ramadan medical assessment:

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?

How frequently should I check my blood sugar?

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

Do I need to make changes to my diabetes management plan, including my medication?

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

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

How should I control my blood sugar levels during Ramadan? How frequently should I check?

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

How do I treat high blood sugar (hyperglycemia) during Ramadan?

How do I treat low blood sugar (hypoglycemia) during Ramadan?

Are there any situations when I should break my fast?

Whom should I contact in case of an emergency?

## Individually-tailored advice



During your pre-Ramadan medical assessment, your healthcare professional may provide you with individually-tailored advice to help minimize the risks associated with fasting, for example:



**Changes to treatment**, as some type 2 diabetes medications can increase the risk of developing hypoglycemia. Hypoglycemia can be serious and if left untreated, may lead to a loss of consciousness or seizures that require emergency treatment.



**It is important to monitor** your condition closely during Ramadan and check your blood sugar periodically, as directed by your healthcare professional. Remember to break your fast if your blood sugar is:

- Less than 60 mg/dL (3.3 mmol/L); or
- Less than 70 mg/dL (3.9 mmol/L) in the first few hours after the start of fasting; or
- Higher than 300 mg/dL (16.7 mmol/L)



**Healthy eating and diet tips** to ensure a balanced diet and the importance of staying active.

### 3 During Ramadan

#### Managing your diabetes during the fast

If you have type 2 diabetes and choose to fast, it is important you understand that you are at an increased likelihood of developing the following health risks:



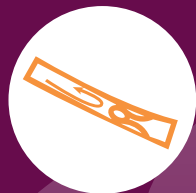
**Hypoglycemia**, or low blood sugar, occurs when the level of sugar in your blood drops below normal levels. Long gaps between food intake, along with certain diabetes medications, are risk factors for hypoglycemia. Symptoms may include sweating, dizziness and irritability.



**Hyperglycemia**, or high blood sugar, occurs when there is too much sugar in your blood, and can be caused by an increase in food or sugar intake, or by an excessive reduction in dosages of diabetes medications. Symptoms may include weight loss, increased thirst and frequent urination.



**Dehydration**, or excessive loss of body fluid, can be caused by limited fluid intake. Symptoms of dehydration may include thirst, dry mouth, muscle cramps and heart palpitations.



**Thrombosis**, or clotting of the blood within a vein, may occur with dehydration. Symptoms may include the following: pain, swelling and redness at the blood clot site; a heavy ache; or warm skin in the affected area such as a lower limb.

#### Establishing a healthy diet

Below are some simple diet tips to consider during Ramadan:



**At Suhr**, try slow-release energy foods such as brown bread, semolina and beans.



**At Iftar**, consume fruits, followed by slow-acting carbohydrates such as brown rice, oats and vegetables.



**Avoid foods high in saturated fat**, such as ghee, samosas and pakoras.



**Increase your fluid intake** during non-fasting hours and especially at Suhr and Iftar.

On many evenings during Ramadan, family and friends gather to open the fast. If you have type 2 diabetes, it is a good idea to talk to the person in charge of the meal about preparing foods that can help you manage your blood sugar levels by allowing a slow release of energy.

“I’ve found that talking to family and friends has really helped me manage my diabetes during Ramadan. My family usually all eats Iftar together and my grandmother tends to cook for everyone, which meant I often wasn’t in control of what I was eating. After I was first diagnosed with diabetes, I spoke to my whole family about my diet during Ramadan. Now, my grandmother alters her recipes to make sure I’m getting the healthy food I need.”

*Patient living with type 2 diabetes*

**It is important to monitor your condition closely during Ramadan and consult your healthcare professional immediately if you have problems controlling your blood sugar.**

## 4 Following Ramadan

Following Ramadan, it is important to continue to take your medications as prescribed and maintain a balanced diet and healthy lifestyle. You may also want to schedule a follow-up consultation with your healthcare professional to discuss your experience managing your diabetes during Ramadan and if necessary, make any adjustments to your medication.

Controlling blood sugar levels continues to be a challenge for people with diabetes, and about one-third are not at their recommended A1C (average blood sugar level over the past 2-3 months) goal. Diabetes increases the risk of many serious complications, including heart and blood vessel disease, stroke, kidney disease, blindness, as well as nerve damage. Controlling blood sugar may help reduce the risk of complications of type 2 diabetes, so it is extremely important that people with type 2 diabetes continue to work with their healthcare professionals to manage their diabetes throughout the year.

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### Glossary

- **Suhr (Suhoor)** – A small meal traditionally eaten before dawn (or around midnight) during Ramadan; the final meal before the day's fast begins
- **Iftar** – A meal served at the end of the day during Ramadan, to open the day's fast