



# Preparing for Ramadan

Fasting during Ramadan is a religious obligation for all healthy adult Muslims. However, it is exempted for those who are suffering with illness including diabetes.



## Fasting is not advised if you have:

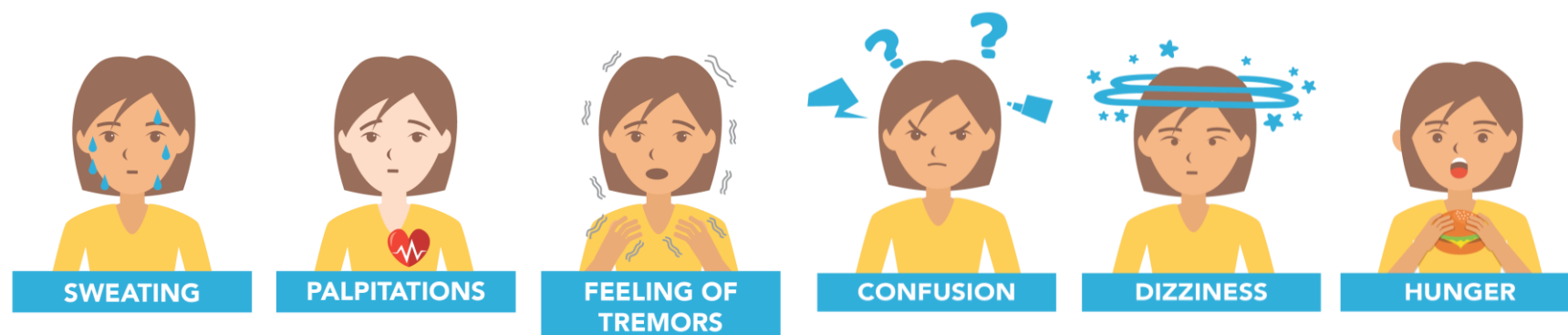
- Frequent hypoglycaemia
- Recent admission for DKA or hypoglycaemia
- Poorly controlled diabetes
- Not been following advice on diet, medication and daily activities
- Serious complications such as kidney disease, stroke, heart problems or uncontrolled hypertension
- Pregnant or breastfeeding



# Signs you should stop fasting

## Low Blood Glucose

### Symptoms

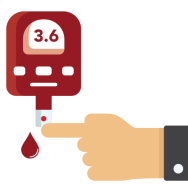


### Treatment

- 

If you have low glucose symptoms
- 

Test if glucose level is  $<4\text{mmol/L}$
- 

Drink half cup of glucose drink (15g)
- 

Wait for 15 min and retest again
- 

If  $<4\text{mmol/L}$ , to repeat step 2 again.  
If  $>4\text{mmol/L}$ , and your next meal is within an hour. Take a meal.  
Otherwise, take a light snack.



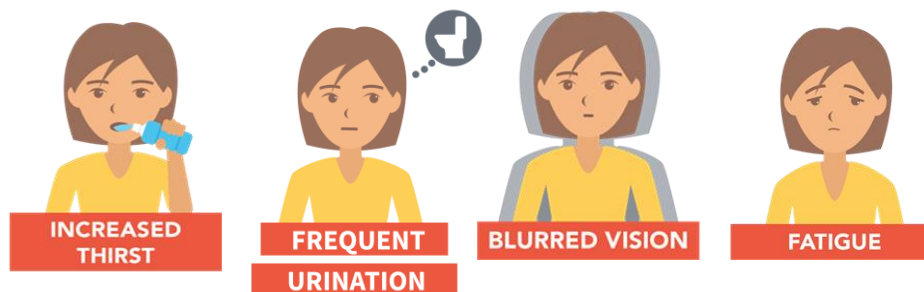
# Signs you should stop fasting

Hyperglycaemia (High Blood Glucose) and Diabetic Ketoacidosis (DKA)

## High Blood Glucose

## DKA

### Symptoms



### Treatment



Take your medication as directed



Drink more water to remove excessive glucose from your body and to avoid dehydration



Maintain normal levels of physical activity



Seek for medical advice if persistent high blood glucose level



# Signs you should stop fasting

Dehydration (Fluid Loss)

## Symptoms



DIZZINESS



CONFUSION



FALL

## Treatment



Consume plenty of water  
and food that have high  
water content



Avoid doing activities  
under **extreme heat**  
weather conditions



# Preparing for Ramadan

Discuss with your healthcare team before Ramadan to ensure good blood glucose control during fasting. Do not adjust or stop any medication on your own.

Ask your healthcare team about:



## GLUCOSE CONTROL

How frequent should I check my blood glucose level?



## MEDICATIONS

Should I make any adjustments to my diabetes medications?



## DIETARY ADVICE

What are the types of dietary advice I should follow?



## PHYSICAL ACTIVITY

Is it safe to maintain my usual level of physical activity while fasting?



## CARE YOUR FEET

How to care for my feet?



# Blood Glucose **Monitoring**

It is recommended to check blood glucose levels at least four times a day

- ❖ 10 am – 11 am
- ❖ 3 pm – 4 pm
- ❖ 3 hours after Iftar
- ❖ Before Sahur





# Medication Adjustment

## Tips for Medication

- Confirm your medication dosage with your doctors before Ramadan
- Dose adjustments may be required, so that you will not suffer from low blood glucose
- You must also be aware about when to take your medicine

## Reminder!

- It is advisable to consult your doctor instead of changing your dosage yourself



| Before Ramadan                                                                                                                                                              | During Ramadan                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Metformin</b> <ul style="list-style-type: none"><li>• Once daily dosing</li><li>• Twice daily dosing</li><li>• Three times daily dosing</li><li>• Slow release</li></ul> | <ul style="list-style-type: none"><li>• Take at Iftar</li><li>• Take at Sahur and Iftar</li><li>• Take morning dose at Sahur, take afternoon and night dose at Iftar</li><li>• Take at Sahur</li></ul> |
| <b>Pioglitazone</b>                                                                                                                                                         | Take at Iftar                                                                                                                                                                                          |
| <b>Acarbose</b>                                                                                                                                                             | Take at Sahur and Iftar                                                                                                                                                                                |
| <b>Sitagliptin</b>                                                                                                                                                          | Take at Iftar                                                                                                                                                                                          |
| <b>Linagliptin</b>                                                                                                                                                          | Take at Iftar                                                                                                                                                                                          |
| <b>Dapagliflozin</b>                                                                                                                                                        | Take at Iftar (with caution)                                                                                                                                                                           |
| <b>Empagliflozin</b>                                                                                                                                                        | Take at Iftar (with caution)                                                                                                                                                                           |
| <b>Glipizide/Gliclazide</b> <ul style="list-style-type: none"><li>• Once a day</li><li>• Twice a day</li></ul>                                                              | <ul style="list-style-type: none"><li>• Dose should be given before the Iftar meal</li><li>• Use half the usual morning dose at the Sahur meal and the usual dose at Iftar meal</li></ul>              |

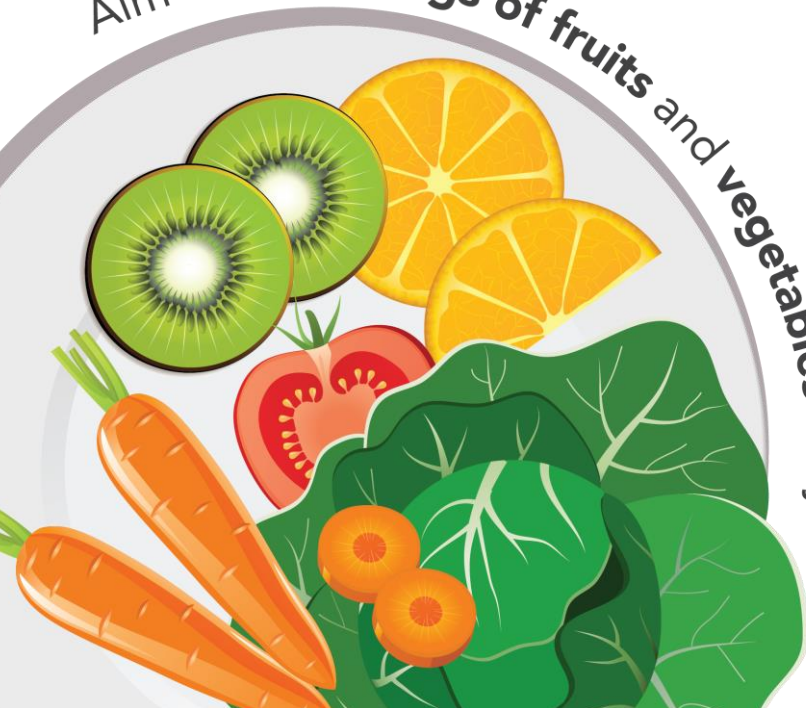


# Dietary advice for individuals with diabetes during fasting

Be aware of overeating during Iftar. Have a **balanced meal** with a good combination of protein, fibre and healthy carbohydrates (wholegrain, lean source of meat, fish and poultry).



Aim for **2 servings of fruits and vegetables** daily



Break fast with just **1 or 2 dates** as they are high in glucose



**Avoid** food high in fats and carbohydrates

**Do not skip Sahur.** A healthy pre-dawn meal should consist of complex carbohydrates with slow energy release foods (brown rice, wholegrains and beans)



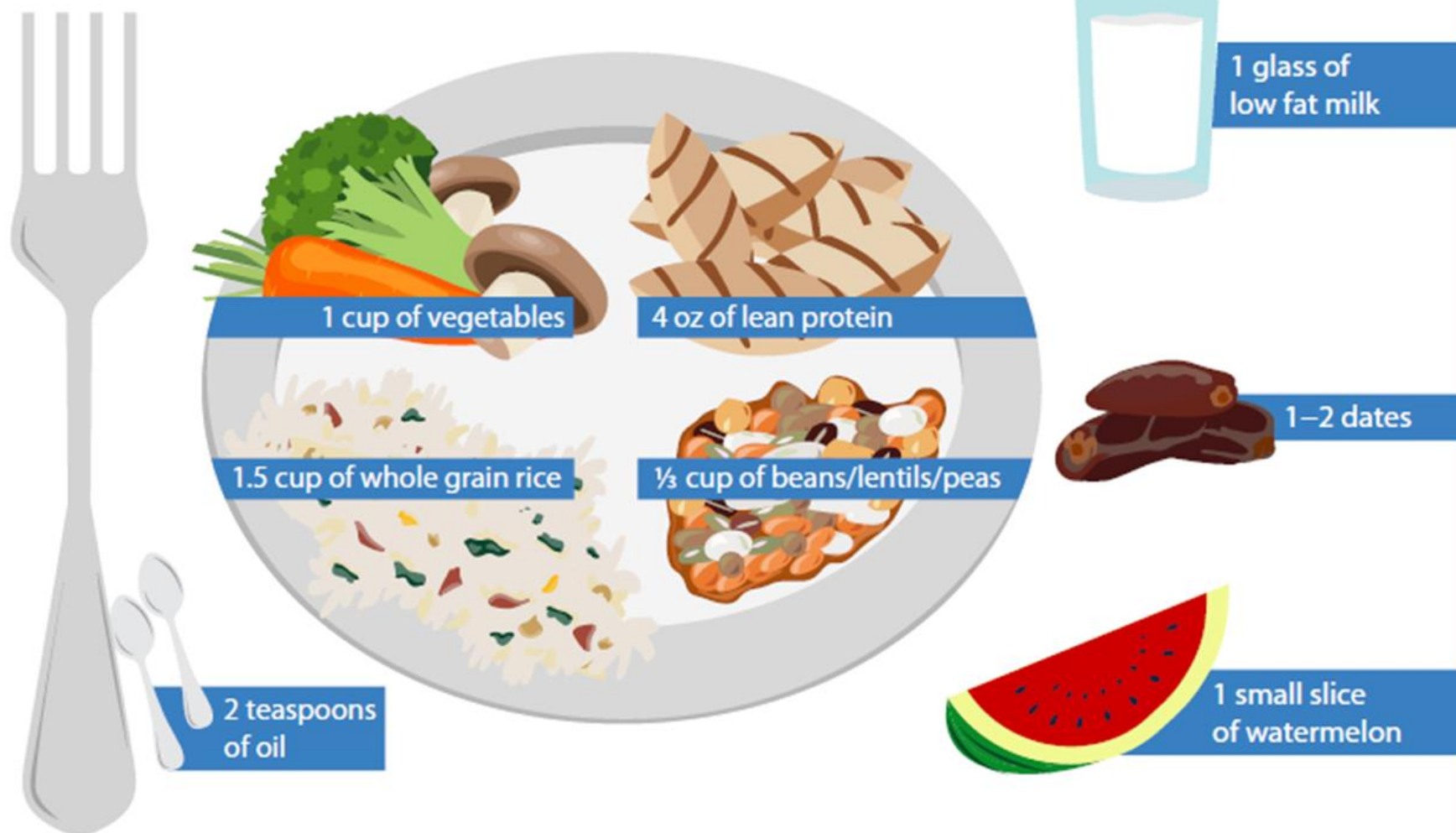
**Limit intake of glucose** from desserts and beverages



Drink **6 – 8 cups** of water and glucose-free beverages between sunset and sunrise to avoid dehydration



## Example: Ramadan Plate



This meal provides: 770 kcal, 45% carbohydrate, 20% protein and 35% fat

\*Plate to be adapted according to the individual's daily caloric target



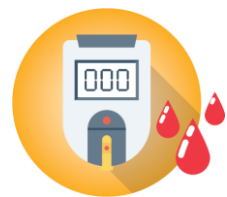
# Exercising for individuals with diabetes



Exercise helps to reduce the fat in body and improve the effects of insulin (a hormone that keeps your blood glucose balanced). Therefore, you are encouraged to have light-to-moderate exercise if you have diabetes.

## Exercising during fasting month

Rigorous exercise is not recommended during fasting as it may cause low blood glucose and/or dehydration. Please seek advice from your doctor on when and what kind of exercises you can do during fasting.



### Type 1 Diabetes

- Exercise is generally not advisable for individuals with Type I Diabetes during Ramadan



### Type 2 Diabetes

- Avoid doing strenuous exercise between Sahur and Iftar as you may be more prone to low blood glucose episodes
- Opt to exercise after you break your fast, and in the evening when the weather is cooler



## Foot care advice



Check your feet daily to ensure that there is no injury or open wound



Wear socks to protect your feet when walking around the mosque



Wear socks and well-fitted shoes when doing your Eid shopping or when you are going to crowded places

Wear slippers at home when doing chores



# When Ramadan Ends



Avoid over-eating  
(especially sweets or cookies)  
during Eid-ul-Fitr, as it may  
lead to high blood glucose



Continue monitoring  
your blood glucose



Visit your doctor to obtain  
guidance on changing the  
medication back to the  
previous schedule