

COVID-19 GUIDELINES:

ADVICE FOR PATIENTS WITH DIABETES

Dasman Diabetes Institute Medical Sector PEOPLE WITH DIABETES, over the age 18 are no more likely to contract COVID-19 than people without diabetes, but they could be up to twice as likely to die from complications. Research suggests that diabetes is one of the most common comorbidities among people infected with COVID-19; however, its exact prevalence remains unclear.

With the ongoing events concerning COVID-19, and to ensure your health and safety, we at Dasman Diabetes Institute have provided below a set of guidelines for our patients. We must work together as a community to limit exposure to the virus and reduce risks. As there is no current treatment or vaccine, prevention is the best strategy.

Please follow the below advice and contact us for further information.

⚠ NB Regulations are changing frequently in Kuwait and Internationally, and at the time of producing these guidelines the information was up to date. We will be updating our guidelines according to new information we may receive, so please check our website for these.



STAYING AT HOME

Everyone has been told to stay at home during curfew hours, except in exceptional circumstances. This is more so for people with diabetes.

Please ask other household members for essential items that require you to leave your homes, such as food and medicine.

Try limiting physical interactions with others
If you must leave your home, please follow social distancing rules
(2 meters apart from other people) and wear a mask and gloves.

Follow strict hygiene rules Wash your hands with soap and water for at least 20 seconds.

If you cannot wash your hands, use a hand sanitizer with at least 60% alcohol.

Try as much as possible to not touch surfaces in public places.

If you need to work outside your home, take extra precautions.

HOW TO MAINTAIN STRICT PERSONAL HYGIENE

- BE CAUTIOUS; always act as though you have the virus and could pass it to those around you.
- Wash your hands regularly every time you touch something or a surface outside your home, after using the bathroom, and before touching your face.
- Regularly clean and disinfect high touch/high risk surfaces at home, including toilets, sinks, door handles, keyboards, tables, and sink taps.
- Avoid touching your face.
- Cough or sneeze into your elbow or tissue; make sure to throw the tissue in the bin straightaway.
- Disinfect your mobile when you come home.



WATER

AND SOAP



PALM TO PALM



BETWEEN FINGERS



FOCUS ON THUMBS



BACK OF HANDS



FOCUS ON WRISTS

HOW DO YOU MINIMSE PHYSICAL INTERACTIONS?

- Minimise contact with people not part of your immediate household.
- Avoid shaking hands, hugging, or kissing when greeting others.
- Limit your exposure when going out on errands for groceries or medications; plan ahead to make sure you have enough supplies for at least a week.
- DDI provides medication delivery service to lower your risk of going out; please find details below.
- When with family or friends, be sure to continue physical distancing with your face mask on. You can also continue meeting friends and family virtually. Social distancing does not mean social isolation.

WHAT IF YOU NEED TO WORK?

- Try to work safely from home if possible and if supported by your employer, even if it's a few days a week.
- If you need to leave the house, try ways to limit exposure:
 - Maintain two metres between yourself and others.
 - Adjust your work schedule to be around minimal people.
 - Discuss flexible work options with your employer for high-risk individuals, such as swapping high-risk tasks with those where social distancing is possible and working remotely.

HOW DO YOU MINIMSE PHYSICAL INTERACTIONS?

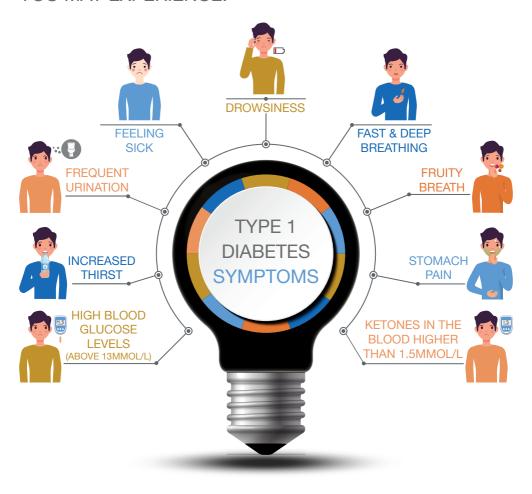
If you or a member of your family are showing two of the following symptoms, contact the MoH helpline number 151 for further direction:



HOW DOES COVID-19 AFFECT THOSE WITH DIABETES?

People living with diabetes (type 1, type 2, gestational) are more vulnerable to infections, but this differs from person to another. Having diabetes does not mean you are more likely to be infected with SARS-COV-2, but it does mean that if you do contract SARS-COV-2, this may make your diabetes management more difficult and may lead to hyperglycaemia and diabetic ketoacidosis. Similar to when you have the flu, your blood glucose levels may vary. During illness, your body starts to release glucose in your blood to give you energy to fight the virus. With diabetes, your body does not have the required insulin to manage this, which leads to a rise in blood sugar. That is why you are at risk of developing diabetic ketoacidosis and hypoglycemia, which can also lead to long-term complications to your eyes and feet, in addition to other symptoms specific to COVID-19.

IF YOU HAVE TYPE 1 DIABETES AND ARE UNWELL, YOU MAY EXPERIENCE:





IF YOU ARE UNWELL (WHETHER YOU HAVE TYPE 1 OR TYPE 2 DIABETES):

- ✓ TRACK CHANGES IN YOUR BLOOD GLUCOSE READINGS
 - ✓ MEASURE YOUR HEART RATE AND TEMPERATURE
 - STAY WELL HYDRATED
 - NEVER STOP YOUR INSULIN OR MEDICATIONS (please discuss dose changes with your healthcare provider)

PLEASE FOLLOW THE SICK DAY RULES BELOW:

TYPE 1 DIABETES

FEEL UNWELL?

Test blood glucose and ketones

NO KETONES

(negative or trace on urine test; less than 1.5mmol/L on blood test) Blood glucose within target or slightly raised

MINOR ILLNESS

KETONES PRESENT

(More than a trace on urine test; more than 1.5mmol/L on blood test) Blood glucose raised (usually above 13mmol/L)

SEVERE ILLNESS

Sip sugar-free fluids (at least 100ml/hour)

Test blood glucose and ketones every 4-6 hours

Usual quick acting (QA)
INSULIN:CARB RATIO
IF EATING

If your blood glucose is raised, use QA correctives, even if you are not eating (you may find you need larger QA doses to reduce blood glucose)

If your blood glucose is within target range, you may only need basal insulin if you are not eating

Take your usual basal insulin but you may consider an increase in basal insulin by 1-2 units if you continue to be unwell for more than a day Test blood glucose and ketones every 2 hours

Calculate your 'average'
Total Daily Dose (TDD) of insulin
(Basal + all boluses in 24 hours)

Ketones + ++ On urine test

1.5-3 mmol/L on blood test meter

Ketones +++ ++++ On urine test

Over 3 mmol/L on blood test meter

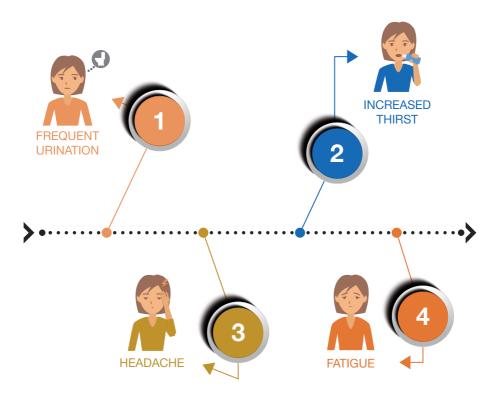
Give 10% of TDD as QA insulin every 2 hours Plus usual QA: Carb ratio if eating Plus usual basal Give 20% of TDD as QA insulin every 2 hours Plus usual QA: Carb ratio if eating Plus usual basal

If you start to vomit, are unable to keep fluids down, or unable to control your blood glucose or ketones, you must go to hospital as an emergency.

YOU MUST NEVER STOP TAKING
YOUR BASAL INSULIN

IF YOU HAVE TYPE 2 DIABETES AND ARE UNWELL, THIS MAY LEAD TO HYPERGLYCAEMIA:

Be aware of hyperglycemia symptoms, especially if you do not routinely monitor your blood glucose. These symptoms include:



>>> Contact your healthcare professional if you experience the above.



PLEASE FOLLOW THE SICK DAY RULES BELOW:

TYPE 2 DIABETES PATIENTS ON INSULIN

FEEL UNWELL?

Test blood glucose at least 4 times a day

Blood glucose less than 11 mmol/L

Take insulin as normal.
Take carbohydrates as a meal

replacement and sip sugar-free liquids (at least 100 mL/hour if able)

Blood glucose more than 11 mmol/L

Take carbohydrates as a meal replacement and sip sugar-free liquids (at least 100 mL/hour if able) YOU NEED FOOD, INSULIN AND FLUIDS TO AVOID DEHYDRATION AND SERIOUS COMPLICATIONS

BLOOD GLUCOSE

INSULIN DOSE*

11-17 mmol/L	Add 2 extra units to each dose
17-22 mmol/L	Add 4 extra units to each dose
>22 mmol/L	Add 6 extra units to each dose

*Take your prescribed insulin according to these blood glucose levels. Once you have given the initial increased dose, contact your HCP for advice if you still feel unsure about adjusting your insulin doses

If you are taking more than 50 units in total daily, you should double the adjustments. All adjustments are incremental and should be reduced gradually as the illness subsides.

YES -REPEAT PROCESS Test blood glucose every 4 hours

Blood glucose more than 11 mmol/L?

: NO

As illness resolves, adjust insulin dose back to normal

If you start to vomit, are unable to keep fluids down, or unable to control your blood glucose or ketones, you must go to hospital as an emergency.

YOU MUST NEVER STOP TAKING YOUR BASAL INSULIN

HOW TO MANAGE YOUR DIABETES

With the current ongoing situation, and with clinics remaining closed, self-management of your diabetes is essential to maintain your blood glucose levels and health.



Keep in contact with your doctor/diabetes educator/dietitian for medication and lifestyle advice.



Monitor your blood glucose regularly (more often than before) and share your readings with your healthcare professionals. Prioritise keeping your readings in range during this stressful time.

Aim for 4-8mmol/L and HbA1c of less than 7%



If you are using continuous glucose monitoring systems (CGMS) or flash glucose monitoring (like FreeStyle Libre), feel free to connect with our free service, where our diabetes educators can keep in touch with you.

- Time in range should be 70% (3.9-10mmol/L)
- Those above 70 years: >50% (3.9-10mmol/L)



If you have type 1 diabetes, check your blood glucose at least 4 times a day (even overnight) and your ketones. Contact your healthcare professionals for advice dealing with ketones.



Be aware of hyperglycemia symptoms (previous diagram), especially if you do not routinely monitor your blood glucose. Contact your healthcare professional if you experience these.



Follow the rule of 15 if you experience hypoglycemia symptoms; make sure you have rapid-acting sugars nearby, such as fruit juice, or a glucagon injection and a family member knows how to administer it.



Ensure that a family member is able to check your blood glucose or give you your medications in case you cannot.

HOSPITAL OR DOCTOR APPOINTMENTS

If you already have a set medical appointment, call ahead to check if it is still valid. You may only need a phone or video consultation, which would limit your risk of catching the virus by leaving your home. Seek medical help from home by contacting us via the WhatsApp line +965 50465471 for any medical concern you may have, and a doctor will reply and provide appropriate advice.



For your safety, most of our clinics will operate virtually, so we can set a phone/video appointment with your healthcare professional. If you are a type 1 diabetes patient, please contact the DAFNE team through their hotline or your educator for follow-up.



If you do need to attend an appointment, make sure you are wearing a mask and gloves, and make sure you follow social distancing at the clinic. Follow the regulations for your health and safety and for those around you.

MEDICATIONS

There is no need to stockpile medications, as medicine supplies are sufficient to cover our patients.

- If your medications are due, please contact us via our WhatsApp line
 +965 1877877, and your medications will be delivered to your home.
- If you need sensors or blood glucose strips, please contact us on +965 1877877 via our WhatsApp line, and we will deliver to your doorstep.



- Always make sure you have medications (especially insulin) for a week when asking for a refill; do not wait till the last day to order.
- Make sure you have enough glucose and ketone strips.



SHOULD I STOP ANY OF MY MEDICATIONS?

Please do not stop any of your medications without consulting your healthcare professional. For any queries about your medications, please talk to your health care professional for advice.

If you are taking insulin, please continue with your therapy and regular blood glucose monitoring is essential in order to adjust doses accordingly.

INSULIN

If you are taking an ACE inhibitor such as Zestril (lisinopril) or Capoten (captopril), please continue and do not stop.

ACE INHIBITOR

If you are taking a DDP4 inhibitor, such as Tradjenta (linagliptin) or Januvia (sitagliptin), please continue and do not stop.

DDP4 INHIBITOR

If you are taking a GLP-1 agonist, such as Trulicity (dulaglutide), Bydureon (exenatide), Victoza or Saxenda (liraglutide), monitor your blood glucose closely and ensure you are well hydrated.

GLP-1 AGONIST

If you are taking an SGLT-2 inhibitor, such as Invokana (canagliflozin), Farxiga (dapagliflozin), or Jardiance (empagliflozin), and you are unwell, please consult your doctor who may advise you to stop as there is a risk of dehydration and diabetic ketoacidosis.

SGLT-2 INHIBITOR

IS THERE ANY MEDICATION I CAN TAKE TO PREVENT OR TREAT COVID-19?



Currently, there is no evidence that high doses of vitamin D prevent or cure COVID-19.

However, vitamin D deficiency can weaken the immune system.



Therefore we recommend people to consider a supplement if they are not getting sun exposure, and to adhere to a healthy lifestyle.



Another medication you may have heard of is hydroxychloroquine, which is used in malaria and rheumatoid arthritis.



Evidence is lacking on the long-term safety and effectiveness of this medication in people with diabetes and COVID-19, therefore more research is needed. Do not self medicate with this.

MAXIMISE YOUR PHYSICAL WELLBEING AND HEALTH PRIORITISE









HYDRATION NUTRITION PHYSICAL ACTIVITY

With preventative measures in place, do not forget to get some physical activity. Try to aim for 10,000 steps per day, which has been shown to have positive long-term effects on your health. You can exercise virtually! Dasman has provided exercise videos to follow; please reach out to your diabetes educators to share these with you. Some of these videos are already on our Instagram page adasmaninstitute.

IS THERE SPECIFIC FOOD THAT I SHOULD BE EATING?







OPT FOR BALANCED MEALS

Your nutritional intake is important. There is no evidence that certain food or diet (such as alkaline) can protect or prevent COVID-19. A healthy and balanced diet, rich in vitamin C, may have a benefit, although evidence is minimal. Doctors have found that patients with obesity were more likely to be hospitlised in intensive care and require intubation.

With many people required to stay at home, sun exposure is low. Make sure your vitamin D levels are sufficient.





YOUR EMOTIONAL AND MENTAL WELLBEING

During this time, it is normal to be worried or feel anxious about COVID-19 and how it might affect you and those around you. We are here to support you, so please contact us to help you with any stress you are going through. Follow the below tips as well:



Social distancing does not mean isolation. Keep in touch virtually with family, friends and colleagues. Make plans to group chat with friends at times you usually do.



If you are experiencing anxiety, talk to someone you trust. We have also collaborated with Al-Amiri Hospital to offer a confidential telepsychiatry service; please contact them on +965 98829633.



Decide on a routine to follow and plan activities.



Try to keep active; walk around your block or follow easy exercise routines at home. You can do this as a group with family members to encourage each other!



Do things you enjoy!



Stay away from news that increases anxiety; follow credible sources, such as the MoH and other Governmental social media outlets with up-to-date and trust-worthy information.



Keep hydrated and try to eat healthy, well-balanced meals.



Look after your sleep, as good quality sleep makes a big difference to how we feel.

NOTES	
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