

CLINICAL LEAD AND TRAINING DIRECTORS' NEWSLETTER October 2023- Care of Diabetic

Diabetes is a serious condition where your blood glucose level is too high. It can happen when your body doesn't produce enough insulin or the insulin it produces isn't effective. Or, when your body can't produce any insulin at all.

Types of diabetes

There are two main types of diabetes: type 1 and type 2.

1. When you've got type 1 diabetes, you can't make any insulin at all. If you've got type 2 diabetes, it's a bit different. The insulin you make either can't work effectively, or you can't produce enough of it. They're different conditions, but they're both serious.
2. Other types of diabetes include gestational diabetes, which some women may go on to develop during pregnancy. And there are many other rarer types of diabetes such as type 3c and Latent Autoimmune Diabetes in Adults (LADA) too.
3. In all types of diabetes, glucose can't get into your cells properly, so it begins to build up in your blood. And too much glucose in your blood causes a lot of different problems. To begin with, it leads to diabetes symptoms.

Causes of diabetes

What all types of diabetes have in common is that they cause people to have too much glucose (sugar) in their blood. But we all need some glucose. It's what gives us energy. We get glucose when our bodies break down the carbohydrates that we eat or drink. And that glucose is released into our blood.

We also need a hormone called insulin. It's made by our pancreas, and it's insulin that allows the glucose in our blood to enter our cells and fuel our bodies.

One in 15 people in the UK have diabetes, including one million people who have type 2, but haven't been diagnosed.







If you don't have diabetes, your pancreas senses when glucose has entered your bloodstream and releases the right amount of insulin, so the glucose can get into your cells. But if you have diabetes, this system doesn't work.

Symptoms of diabetes

The common symptoms of diabetes include:

- ✓ Going to the toilet a lot, especially at night
- ✓ Being really thirsty
- ✓ Feeling more tired than usual
- ✓ Losing weight without trying to
- ✓ Genital itching or thrush
- ✓ Cuts and wounds take longer to heal
- ✓ Blurred vision

Symptoms of Diabetes

 <p>Increased thirst.</p>	 <p>Slow-healing cuts and sores.</p>	 <p>Fatigue.</p>
 <p>Blurred vision.</p>	 <p>Frequent urination.</p>	 <p>Unexplained weight loss.</p>



Diabetes complications

Over a long period of time, high glucose levels in your blood can seriously damage your heart, your eyes, your feet and your kidneys. These are known as the complications of diabetes.

But with the right treatment and care, people can live a healthy life. And there's much less risk that someone will experience these complications.

Diabetes-related conditions

Having some conditions, such as polycystic ovary syndrome, can mean you are more at risk of developing diabetes. And there are other conditions linked to diabetes that you should be aware of.

Prediabetes

Some people may have a blood sugar level that is higher than usual, but not high enough to be diagnosed with type 2 diabetes. This is called prediabetes, and means you're at risk of developing type 2 diabetes.

Diabetes remission

Some people with type 2 diabetes are able to put their diabetes into remission. This means your blood sugar levels are healthy without taking any medication. For many people, this can be life-changing. That's why we've put together guidance and advice for those of you who want to know more about diabetes remission.

Managing your diabetes

Getting used to life with diabetes can be difficult, but we've got lots of information to help you learn how to treat and manage your condition effectively.





Best foods for people living with diabetes

1. Fatty fish
2. Leafy greens
3. Avocados
4. Eggs
5. Chia seeds
6. Beans
7. Greek yogurt
8. Nuts
9. Broccoli
10. Extra-virgin olive oil
11. Flaxseeds
12. Apple cider vinegar and vinegar
13. Strawberries
14. Garlic
15. Squash
16. Shirataki noodles

Here are a few foods that you should limit or avoid if you have diabetes.



1. Refined grains
2. Sugar-sweetened beverages
3. Fried foods
4. Alcohol
5. Breakfast cereal
6. Candy
7. Processed meats
8. Fruit juice

HYPERGLYCAEMIA (hyper)

Hyperglycaemia is the medical term for high blood glucose levels

Symptoms can include: increased thirst and a dry mouth, needing to urinate more frequently, tiredness, blurred

vision, unplanned weight loss and recurrent infections such as thrush, bladder and skin infections

Very high blood glucose levels can cause life-threatening complications, such as:

- Diabetic Ketoacidosis (DKA) – a condition caused by the body needing to break down fat as a source of energy, which can lead to a diabetic coma. This tends to affect people with type 1 diabetes

- Hyperosmolar Hyperglycaemic State (HHS) – severe dehydration caused by the body trying to get rid of excess sugar. This tends to affect people with type 2 diabetes

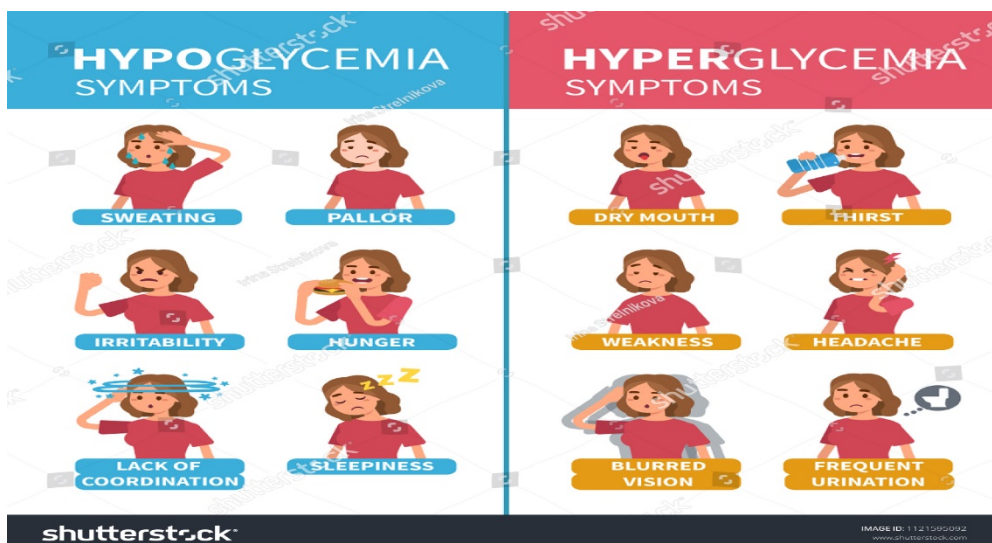
HYPOGLYCAEMIA (hypo)

When blood glucose levels fall below 4mmols/L (always thoroughly wash and dry the hands of the resident and the carer before carrying out the blood glucose meter test to ensure an accurate result)

Symptoms can include: sweating, weakness, tiredness, confusion, anxiety, nervousness, hunger, dizziness, fast heartbeat, trembling and shaking, tingling of the lips, temporary loss of consciousness

Severe Symptoms can include: unresponsiveness leading to a coma indicated by inability to rouse and prolonged incidence of low blood sugar, seizures

1. To treat hypoglycaemia, the Service user should take 15 to 20 grams of fast acting carbohydrate such as glucose tablets (i.e. 4 to 5 Glucotabs), sweets (i.e. 4 jelly babies), sugary fizzy drinks (i.e. 150ml coke or 170ml original Lucozade™) or pure fruit juice (i.e. 200ml). Please note amounts may vary - always check carbohydrates on packaging.
2. A blood glucose test should be taken 15 minutes after treating the hypo (always thoroughly wash and dry hands of the Service user and carer before retesting) to re-check blood glucose levels. If the level is still less than 4mmol/L repeat the hypo treatment.
3. When blood glucose levels are over 4mmol/L, give a long acting carbohydrate of the Service user's choice i.e. 2 biscuits, a slice of toast or a sandwich, or their meal if it is due.
4. If the Service user has diagnosed dysphagia (swallowing difficulties) and needs thickened drinks and/or a soft or pureed diet it is important to request specialist advice from GP/ Speech and Language Therapist and/or Dietitian regarding treatment for hypoglycaemia and record this in the specific actions advice.
5. If a Service user become drowsy and unconscious, they will need immediate emergency treatment – someone should dial 999 for an ambulance. The Service user should be put in the recovery position (on their side with their head tilted back).
6. When a hypo has been treated, inform the care home diabetes lead or manager and also the Service user's GP or Diabetes Specialist Nurse who may review the Service user's diabetes treatment to prevent further hypos and also may request blood glucose levels are monitored more closely for a time. Document the advice provided in the Service user care plan.
7. Glucose treatments should NOT be put in their mouth if service user is unconscious or not responding



Map your course to get results

Be an active participant in your diabetes care decisions.

Talk to your diabetes care team about your goals.

A1C

- **At least 2 times a year, have your A1C level checked**
- Goal is less than 7% for most people
- The A1C test measures your average blood sugar over the last 2 to 3 months
- The chart shows how the A1C and blood sugar go together

A1C Levels	Average Blood Sugar
6%	126 mg/dL
7%	154 mg/dL
8%	183 mg/dL
9%	212 mg/dL
10%	240 mg/dL
11%	269 mg/dL
12%	298 mg/dL

Recommendations based on American Diabetes Association. Standards of medical care in diabetes—2011. Diabetes Care. 2011;34(suppl 1):S11-S61.

Cholesterol

- **At least once a year, have blood cholesterol checked**
- Below are the goals for most people with diabetes. Know your numbers

LDL ("bad") cholesterol	
• Without heart disease	Less than 100 mg/dL
• With heart disease	Less than 70 mg/dL
HDL ("good") cholesterol	
• Men	More than 40 mg/dL
• Women	More than 50 mg/dL
Triglycerides	Less than 150 mg/dL

Blood Pressure

- **Every time** you visit the doctor, get your blood pressure checked
- **Goal is less than 130/80 mm Hg** for a person with diabetes



Eye Exam

- **Once a year, get a dilated and comprehensive eye exam** by an eye-care specialist



Feet



- **Check your feet every day** for any sign of injury. Report any injury that does not heal
- **Once a year, get a complete foot exam** by your doctor

Kidneys

- **Once a year, have your urine tested for protein**



Stop Smoking

- It is really important to stop smoking if you have diabetes
- For free help, call **1-800-QUIT-NOW** (1-800-784-8669) or visit 1800quitnow.cancer.gov



Diabetes Care Plan

- Work with your diabetes care team to manage your diabetes

Meal plan
Physical activity plan
A plan for how and when to check your blood sugar
When to take your diabetes medicines
Other health goals (such as managing weight and blood pressure)
A schedule for regular health check-ups
Ways to deal with stress

Cornerstones4Care™

Recommendations based on American Diabetes Association. Standards of medical care in diabetes—2011. Diabetes Care. 2011;34(suppl 1):S11-S61.



DIABETES MANAGEMENT CHECKLIST

Wear a medical bracelet to alert people about your diabetes



PREVENT COMPLICATIONS

Look for cuts, sores or blisters before they turn septic



Stock up on sweets for low blood sugar emergencies



Be aware of blood sugar fluctuations by testing yourself regularly



EMERGENCY PLANNING

Protect your feet from injuries by wearing appropriate slippers and shoes



Hydrogen Peroxide: Helps clean wounds



FIRST AID KIT ESSENTIALS

Antiseptic Cream: To treat wounds



Sterile Gauze Tape: To dress sudden injuries



Eat healthy foods that contain minerals, vitamins, antioxidants, and fibre



DIET & EXERCISE

Stay hydrated to control blood sugar



Get at least 30 mins of exercise everyday



www.medanta.org

Diabetic care plan

Problem Priorities

The following are the nursing priorities for Service users with diabetes:

Glycemic control. Managing and maintaining blood glucose levels through medication, diet, and lifestyle modifications.

Education and self-management. Providing Service user education on diabetes management, including medication administration, monitoring blood glucose levels, meal planning, exercise, and recognizing signs of hyperglycemia or hypoglycemia.

Preventing potential complications. Addressing risk factors for cardiovascular diseases, nephropathy, retinopathy, and neuropathies common among Service users with diabetes.

Weight management. Promoting a healthy weight through appropriate nutrition and physical activity, considering individual needs and comorbidities

Foot care. Ensuring proper foot hygiene, regular inspection, and addressing any signs of neuropathy or foot ulcers to prevent diabetic foot complications

Goals and expected outcomes may include:

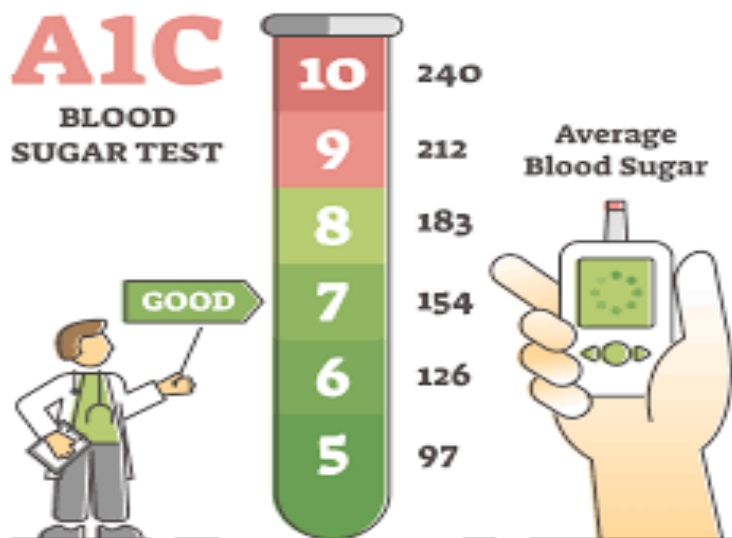
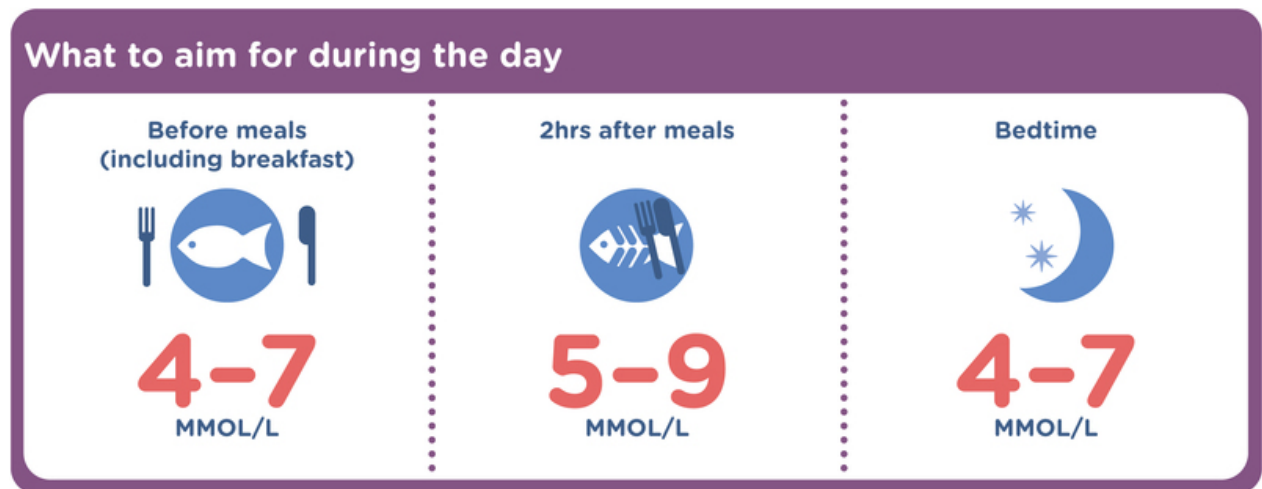
1. The Service user will consistently maintain blood glucose readings of less than 180 mg/dL, fasting blood glucose levels of less than 140 mg/dL, and a hemoglobin A1C level below 7%. Additionally, the Service user will demonstrate understanding of key factors that can impact glucose stability.
2. The Service user will accurately demonstrate knowledge of insulin injection techniques, recognize symptoms and appropriate treatment of hypoglycemia, and exhibit understanding of dietary requirements for managing their condition.
3. The Service user will actively acknowledge feelings of helplessness, identify healthy coping strategies to deal with these emotions, and actively participate in planning their own care while independently assuming responsibility for self-care activities.
4. The Service user will effectively demonstrate knowledge of diabetes self-care measures, including proper procedures, and verbalize a comprehensive understanding of the diabetes disease process and potential complications, while providing clear explanations for the rationale behind their actions.
5. The Service user will consume appropriate amounts of calories and nutrients as per their individual needs, exhibit their usual energy level, and demonstrate weight stabilization or gradual progress towards their usual/desired range, with laboratory values within the normal range.
6. The usual target range for Blood sugar test is 4-7 mmol/l before meals and below 9mmol/l when tested 2 hours after meals.

Interventions and Actions

1. Providing Patient Education on Diabetes Management
2. Regularly evaluate self-care skills, such as insulin administration, blood glucose monitoring, foot care, and diet planning, especially in patients with deteriorating vision and memory.
3. Achieving Glycemic Control and Blood Glucose Monitoring

4. Monitor for signs and symptoms of hypo- and hyperglycemia.
5. Encouraging Regular Exercise and Physical Activity
6. Promoting Nutritional Balance and Weight Management
7. Preventing Hyperglycemia and Hypo glycemia
8. Minimizing Risk of Infection
9. Diabetes Foot Care
10. Providing Emotional Support Through Effective Coping
11. Promoting Self-Care and Hygiene

Average blood sugar Reading for diabetic person:



Proper foot hygiene helps prevent infections and skin breakdown. To minimize risk of diabetic foot, preventive measures may include the following:

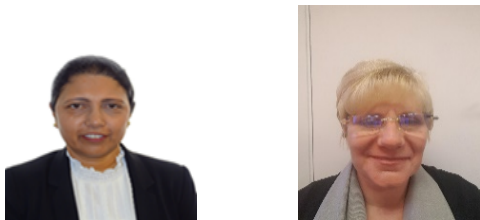
- ✓ Daily foot inspection for cuts, blisters, red spots, and swelling.
- ✓ Proper foot hygiene, including washing with warm water, thorough drying (especially between the toes), and applying lotion without accumulating moisture between the toes.
- ✓ Using closed-toed, well-fitting shoes, and considering orthotics or custom-made shoes for those with specific needs.
- ✓ Trimming toenails straight across, avoiding sharp corners.
- ✓ Reducing risk factors such as smoking and elevated blood lipids that contribute to peripheral vascular disease.
- ✓ Avoiding high-risk behaviors, such as walking barefoot, using heating pads, wearing open-toed shoes, soaking feet, or shaving calluses.
- ✓ Seeking professional help from podiatrists for pressure areas, calluses, and toenail care.
- ✓ Avoiding home remedies and self-medication for foot problems.
- ✓ Maintaining optimal blood glucose control to improve resistance to infections and prevent diabetic neuropathy.

ASSOCIATED DOCUMENTS (MOBIZIO):

- ✓ SU – Care plan
- ✓ SU – Risk assessment
- ✓ SU- MCA1 form
- ✓ SU-Evaluation
- ✓ SU- Diabetic checklist

ASSOCIATED AUDITS (ACCESS CARE COMPLIANCE):

- ✓ Provider Quality Audit
- ✓ Care plan Audit



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