

Treatment of Diabetes Mellitus

Medication Information Leaflet

Treatment of Diabetes Mellitus: Tablets

Treatment of Type 2 Diabetes Mellitus (T2DM) begins with controlling what you eat. If controlling your diet alone is unable to control your blood sugar levels, then diabetes medications in the form of tablets or injections should be started.

Oral medications for diabetes are used to treat high blood sugar levels caused by T2DM.

Tell Your Doctor if You

- Are allergic to any medications
- Are pregnant or planning to get pregnant
- Are breastfeeding
- Are taking any other medications
- Have any other medical conditions

Some Guidelines to Follow When Taking Your Diabetes Tablets

- Know the name and dosage of your diabetes tablet(s).
- Take your medication(s) regularly at the correct times and as instructed by your doctor. Do not make any changes to your medication routine without checking with your doctor.
- Take your tablet(s) even when you are sick. However, in some cases the dose of your medication may need to be adjusted, so you should see a doctor if you are unwell.
- Some medications should not be taken if you are fasting, for example if you are going for a blood test. Please check with your healthcare professional in advance if you should take your medication when you fast.
- Follow your meal and exercise plan. A healthy diet and regular exercise are important for good control of diabetes.
- If you missed a dose of the medication(s), take it as soon as possible. If it is time for your next dose, do not take the missed dose on top of the next dose. You should go back to your regular dosage schedule.
- Check with your doctor or pharmacist before taking any other medications, including over-the-counter medications.

Will you become dependent on diabetes medications?

You can never become dependent on medications used to treat diabetes. This is a common misunderstanding among patients who may not like the idea of taking medications for a long period of time.

The right way to think about diabetes medications is this: the tablets only work for a specific duration. If you take your diabetes medications only three days of the week instead of every day as instructed, you can expect your blood sugar to be high on the four days that you do not take the medications.

Medications used to treat diabetes are meant to help keep you well. However, they will not work if you do not take them.

Class of Diabetes Medications	How it works	How to take the medication	What to take note of
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<p>Biguanides eg. Metformin (Glucophage®)</p>	<p>Helps the body to use insulin more effectively and decrease the amount of sugar made by the liver</p>	<p>Take the medication tablet(s) with meals or after meals to reduce stomach side effects.</p>	<p>The medication may cause:</p> <ul style="list-style-type: none">• Stomach discomfort• Nausea• Vomiting• Diarrhoea• Loss of appetite• Metallic taste in your mouth <p>This should get better with time after your body gets used to this medication.</p> <p>Inform your doctor if you will need an examination involving the injection of a dye or contrast or if you are going for any major surgery. You may need to stop taking this medication for a certain time before and after the examination or the surgery.</p>
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<p>Sulphonylureas eg.</p> <ul style="list-style-type: none">• Glipizide• Gliclazide (Diamicon®)• Tolbutamide (Rastinon®)• Glimepiride (Amaryl®)• Glibenclamide (Daonil®)• Chlorpropamide	<p>Helps your pancreas to release more insulin</p>	<p>Take the medication tablet(s) immediately before meals.</p> <p>Do not miss or delay meals. Otherwise, your blood sugar level may fall too low.</p>	<p>This medication may cause weight gain.</p> <p>Inform your doctor if you have a genetic condition called Glucose-6 Phosphate Dehydrogenase (G6PD) deficiency, a genetic condition in which your red blood cells break down faster than they are made.</p> <p>Alcohol can affect some of these medications. Check with your pharmacist if you are planning to drink alcohol. For example, having alcohol with chlorpropamide increases the risk of side effects like facial flushing and vomiting.</p>
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<p>Dipeptidyl peptidase-4 (DPP-4) inhibitors eg. Linagliptin (Trajenta[®]) Sitagliptin (Januvia[®]) Vildagliptin (Galvus[®]) Saxagliptin (Onglyza[®])</p>	<p>Helps to increase insulin release after a meal and reduce the amount of sugar made by your liver</p>	<p>Take the medication before food or after food.</p>	<p>Inform your doctor immediately if you have severe stomach pain that does not go away. This could be a sign of the inflammation of the pancreas, a condition known as pancreatitis.</p> <p>Other symptoms include:</p> <ul style="list-style-type: none">• Pain, which may spread to your back• Nausea and vomiting that does not go away• Fever
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<p>Sodium-glucose co-transporter-2 (SGLT2) inhibitors eg. Dapagliflozin (Forxiga®) Empagliflozin (Jardiance®) Canagliflozin (Invokana®)</p>	<p>Prevent the kidneys from reabsorbing sugar (glucose) back into the blood, hence increasing the amount of sugar that is removed in the urine</p>	<p>Take the medication before food or after food.</p>	<p>This medication may cause genital and urinary tract infections. This can be prevented by maintaining good genital hygiene.</p> <p>This medication may cause low blood pressure and result in giddiness. You can prevent this by getting up from a sitting or lying position slowly.</p> <p>Stop the medication and inform your doctor immediately if you experience:</p> <ul style="list-style-type: none"> • Pain in the stomach or abdominal area • Nausea or vomiting that does not go away • Confusion, tired or unusually sleepy • Difficulty breathing • Feel very thirsty or have a sweet fruity smell in your breath
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<p>a-glucosidase inhibitors eg. Acarbose (Glucobay®)</p>	<p>It works by slowing down the breakdown of carbohydrates from our diet to simple sugars. Carbohydrates are a type of nutrient found in starchy foods such as bread, noodles, potatoes and rice. This slows down the absorption of sugar and the quick rise of your blood sugars.</p>	<p>Take the medication immediately before or with the first mouthful of food.</p>	<p>This medication may cause:</p> <ul style="list-style-type: none"> • Stomach discomfort • Bloating or gas • Diarrhoea <p>This should get better with time after your body gets used to this medication.</p>
<p>Meglitinides eg. Repaglinide (Novonorm®)</p>	<p>Help your pancreas to release more insulin</p>	<p>Take the medication immediately before meals.</p> <p>Do not miss or delay meals. Otherwise, your blood sugar level may fall too low.</p>	
<p>Thiazolidinediones eg. - Pioglitazone (Actos®)</p>	<p>Makes your body more sensitive and responsive to the effects of insulin. Insulin helps to control the level of blood sugar in your body.</p>	<p>Take the medication before food or after food.</p>	<p>Inform your healthcare professional if you have any heart condition.</p> <p>Inform your healthcare professional if you have had a fall more than once in the past year as this medication can increase the chances of broken bones.</p>

Disclaimers

Please take note that the above is not a complete list of all possible side effects. If you have any concerns about your medication or if you have other side effects that you think are caused by this medication, please consult your doctor or pharmacist.

If you take more than the recommended dose, please seek medical advice immediately. The information provided on this page does not replace information from your healthcare professional. Please consult your healthcare professional for more information.

This article is jointly developed by members of the National Medication Information workgroup, and supported by the Ministry of Health. The workgroup consists of cluster partners (National Healthcare Group, National University Health System and SingHealth), community pharmacies (Guardian, Unity and Watsons) and Pharmaceutical Society of Singapore. The content does not reflect drug availability and supply information in pharmacies and healthcare institutions. You are advised to check with the respective institutions for such information.

Please visit www.moh.gov.sg/knowyourmeds and www.ndf.gov.sg for more information on medication.

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