

What is Methotrexate?

Methotrexate is an anti-cancer agent used to treat some types of leukaemias.

How does it work?

Methotrexate is a folate antimetabolite. It interferes with the use of folic acid and inhibits the synthesis of DNA. Methotrexate binds to an enzyme, called dihydrofolate reductase, preventing the enzyme from being used to make the building blocks of DNA.

How is it given?

Methotrexate can be given by mouth as a tablet.

Special instructions:

- Methotrexate is to be taken ONCE a WEEK on the same day each week. Take the tablets on an empty stomach about 1 hour before or 2 hours after a meal.
- Do not take methotrexate within 2 hours of drinking milk or eating milk products. You may drink milk and eat milk products at other times of the day.
- While receiving methotrexate, your blood will be checked to see how your liver is functioning and what your blood counts are. Based on your blood counts, the dose of your methotrexate may need to be adjusted. A doctor or nurse will tell you if the dose needs to change and how many tablets to take.
- If you vomit within 30 minutes after taking your methotrexate by mouth, inform your doctor or nurse right away.

Safe Handling:

All chemotherapy taken by mouth can pose a health hazard to caregivers and patients. Take care when handling this medicine and try to prevent the medication from touching your skin. Taking precautions will protect both the patient and the caregiver.

- We suggest that the caregiver wears gloves while handling this medicine. If your skin comes into contact with the medicine, wash your hands or the area of contact right away.
- Prepare a clean area where the drug can be handled safely (away from areas where food is prepared, out of reach of children and away from any fans or air vents). Clean up spills in the area where the medicine is prepared.

If your child cannot swallow the methotrexate tablets, the tablets may be given in the following way:

- You will need the following:
 - An oral syringe
 - A dedicated measuring cup or glass or container
 - Dedicated rubber gloves or disposable gloves (optional) –not to be used for any other purpose
- 1. Place the required number of tablets in the measuring cup
- 2. Place a little water on the tablet(s) and allow the tablet(s) to disperse. This may take a few minutes. Do not try to make the tablets disperse faster by stirring or shaking the container
DO NOT CRUSH THE TABLET(S)
- 3. Using the oral syringe, draw up the dispersed tablets and give the dose to your child.
- 4. Rinse the oral syringe, measuring cup and rubber gloves (if not disposable) in warm water and allow to dry. These can be used again for further doses but do not use them for any other purpose. Do not place the oral syringe in the dishwasher.

Methotrexate (oral)

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Patient/Caregiver Information

Possible Side Effects:

Listed below, but not limited to, are the more commonly experienced side effects that you may see. The side effects your child might experience may be temporary and some may be permanent.

	Likely Happens to 21-100 children out of every 100	Less Likely Happens to 5-20 children out of every 100	Rare but serious Happens to <5 children out of every 100
Immediate Within 1-2 days of receiving the medicine	<ul style="list-style-type: none"> ▪ Liver irritation or damage seen by high levels of certain enzymes in the blood 	<ul style="list-style-type: none"> ▪ Nausea and/or vomiting ▪ Loss of appetite 	<ul style="list-style-type: none"> ▪ Severe allergic reaction which can be life threatening with shortness of breath, low blood pressure, rapid heart rate ▪ Chills and/or fever ▪ Dizziness ▪ Drowsiness ▪ Blurred vision ▪ Rashes with itching and hives ▪ Seizures* ▪ Severe rashes which can cause peeling, redness, or loss of skin, or damage to mucous membranes
Prompt Within 2-3 weeks, prior to the next course		<ul style="list-style-type: none"> ▪ Fewer white and red blood cells and platelets in the blood. A low number of white blood cells may make it easier to get infections. Fewer red blood cells may make you feel tired and weak. Fewer platelets may cause you to bruise and bleed more easily ▪ Inflammation and/or sores in the mouth, gums, throat and/or oesophagus ▪ Sensitivity to sunlight and increased risk of sunburn ▪ Tiredness or a sense of not feeling well 	<ul style="list-style-type: none"> ▪ Acne ▪ Hair loss, inflammation of the hair follicles ▪ Damage to the kidney ▪ Inflammation of the intestines which may cause bleeding ▪ Diarrhea ▪ Tearing and inflammation of the eyes

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Delayed Anytime later during therapy, excluding the above conditions		<ul style="list-style-type: none"> ▪ Learning disability^{*^} 	<ul style="list-style-type: none"> ▪ Darkening of the fingernails ▪ Cough and wheeze due to damage, inflammation and/or scarring of lung tissue[^] ▪ Inflammation and scarring of the liver[^] ▪ Damage to the bone[^] ▪ Inflammation of the heart ▪ Fluid buildup around the heart ▪ Temporary damage to the brain such that you may experience headaches, drowsiness, difficulty speaking or forming words, blurred vision or temporary blindness, and decreased reflexes[*]
Late Anytime later after completion of therapy			<ul style="list-style-type: none"> ▪ Severe damage to brain tissue which over time could lead to difficulty carrying out normal daily tasks or could lead to coma^{*^}
<p>*May be enhanced by high doses and/or radiotherapy to the brain ^Toxicity may occur later</p>			

This information sheet is a brief overview. Each individual can respond differently to the medication, it is vital that you communicate all signs and symptoms you observe to your doctor or nurse.

If you have any questions about the information provided please discuss them with your oncologist or haematologist.

Further information can be obtained from your doctor, nurse or pharmacist or at the following website:
<http://medsafe.govt.nz/consumers/medicine/where.asp>