



Methotrexate

Drug information

Methotrexate is used to treat a number of conditions, including rheumatoid arthritis and psoriatic arthritis.

Methotrexate should effectively treat your condition, and stop it causing damage to your joints. It has been tested and has helped many people. However, as with all drugs some people will have side-effects. This leaflet sets out what you need to know.

What is methotrexate and how is it used?

Methotrexate is a disease-modifying anti-rheumatic drug (DMARD). It reduces the activity of the body's defence mechanism (immune system), which may be overactive in some conditions. Methotrexate modifies the underlying disease process to limit or prevent joint damage and disability, rather than simply treating the symptoms.

It's a long-term treatment, so it may be 3–12 weeks before you start to notice the benefits. Unless you have severe side-effects (in which case please see a health professional) it's important to keep taking methotrexate:

- even if it doesn't seem to be working at first
- even when your symptoms improve (as it will help to keep the disease under control).

Methotrexate can be prescribed for people with:

- rheumatoid arthritis
- psoriatic arthritis
- juvenile idiopathic arthritis
- vasculitis.

Methotrexate can also be used by doctors who treat other conditions that have nothing to do with arthritis. For example it is used to treat some forms of cancer, but the dose used for cancer is usually much higher than for arthritis.

When and how do I take methotrexate?

Methotrexate is usually taken in tablet form once a week on the same day.

The tablets should be swallowed whole and not crushed or chewed.

Methotrexate tablets come in two strengths, 2.5 mg and 10 mg. To avoid confusion it's recommended that only the 2.5 mg tablet is used. **The two strengths are different sizes but are a very similar colour, so you should always check the dose is correct.**



Methotrexate can limit or prevent joint damage, or disability, caused by inflammatory arthritis.

In the early stages of a condition it's often treated more aggressively and so the starting dose can range from 7.5–15 mg per week. Your doctor may then increase this dose if it isn't helping your symptoms, but it won't usually go higher than 25 mg weekly.

Alternatively, methotrexate may be given once a week by injection, usually subcutaneous, if there are side-effects with tablets. A subcutaneous injection is given into a layer of fat between the skin and muscle, rather than intravenously which means directly into a vein.

Possible risks and side-effects

As with all medications, methotrexate can sometimes cause side-effects. Methotrexate may cause nausea (feeling sick), vomiting, diarrhoea, mouth ulcers, hair loss (usually minor) and skin rashes.

It can also affect the blood (causing fewer blood cells to be made) and your liver. You'll therefore need to have blood tests before starting methotrexate and at regular intervals while you're taking it. You may be asked to keep a record of your blood test results in a booklet, and you should take it with you when you visit your GP or the hospital.

Methotrexate can affect the lungs so you'll have a chest X-ray before starting it. Patients suffering from long-term lung diseases like fibrosis or emphysema are often not suitable for methotrexate.

You must not take methotrexate unless you're having regular blood checks. These are usually done every two weeks when you start on methotrexate and the dose is being built up, then every six weeks when you are on a stable dose.

Because methotrexate affects the immune system, it can make you more likely to develop infections. You should tell your doctor or nurse specialist straight away if you develop any of the following after starting methotrexate:

- a sore throat, fever or any other signs of infection
- shortness of breath
- unexplained bruising or bleeding
- yellowing of the skin or eyes (jaundice)
- any other new symptoms or anything else that concerns you.

You should stop methotrexate and see your doctor immediately if any of these symptoms are severe or you're becoming very unwell. In rare cases, methotrexate causes inflammation of the lung with breathlessness. If this happens to you, see your doctor.

You should also see your doctor if you develop chickenpox or shingles or come into contact with someone who has chickenpox or shingles. These infections can be severe in people on methotrexate. You may need antiviral treatment, and you may be advised to stop taking methotrexate until you're better.

In rare cases, methotrexate causes inflammation of the lung with breathlessness. If this happens to you, see your doctor.

Most doctors prescribe folic acid tablets to patients who are taking methotrexate as this can reduce the likelihood of side-effects. Some doctors advise that it shouldn't be taken on the same day as methotrexate.

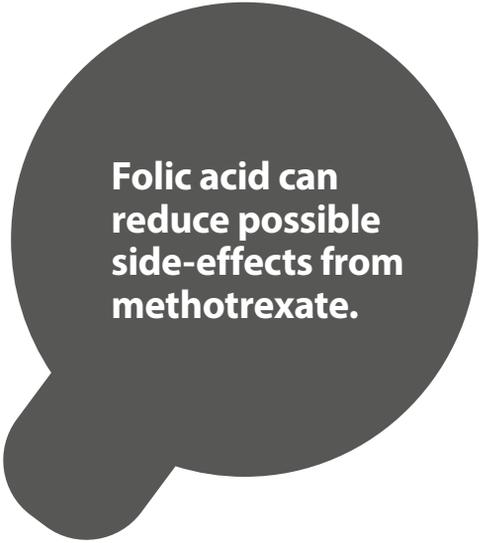
Reducing the risk of infection

- Try to avoid close contact with people with severe active infections.
- For advice on avoiding infection from food, visit: <http://www.nhs.uk/conditions/food-poisoning/pages/prevention.aspx>

Taking other medicines

Methotrexate may be prescribed along with other drugs to treat your condition. Some drugs however, can interact with methotrexate. Check with your doctor before starting any new medications, and remember to mention you're on methotrexate if you're treated by anyone other than your usual rheumatology team.

- You can carry on taking a non-steroidal anti-inflammatory drug (NSAID) or painkillers if needed, unless your doctor advises otherwise.



Folic acid can reduce possible side-effects from methotrexate.

- Don't take over-the-counter preparations or **herbal remedies** without discussing this first with your healthcare team.
- Some **antibiotics** can interact with methotrexate – for example, trimethoprim and septrin should not be taken with methotrexate. If you have an infection that requires antibiotics you may need to stop your methotrexate until you are better and off antibiotics.
- **Anti-epileptic medication** (phenytoin) and anti-asthma medication (theophylline) should be avoided as they may increase levels of methotrexate in your blood. However, it's important that you discuss this with your rheumatology team and that you don't simply stop your phenytoin.

Vaccinations

If you're on methotrexate it's recommended that you avoid live vaccines such as yellow fever. Your GP will discuss the possible risks and benefits of any vaccinations with you.

If you're offered a shingles vaccination you should speak to your rheumatology team – you may be able to have the shingles vaccine if you are on low-dose methotrexate.

Pneumococcal vaccine (which gives protection against the commonest cause of pneumonia) and yearly flu vaccines don't interact with methotrexate and are recommended.

Alcohol

You should only drink alcohol in small amounts because alcohol and methotrexate can both affect your liver. It's important to stay within government guidelines, which state that adults shouldn't drink more than 14 units per week and should have alcohol free days without 'saving units up' to drink in one go.

Advice can vary and some rheumatologists may suggest stricter limits. If you're concerned you should discuss your alcohol intake with your rheumatology team.

Fertility, pregnancy and breastfeeding

Current guidelines state that methotrexate may harm the baby if taken during pregnancy. You can still have a successful pregnancy if you stop taking methotrexate in plenty of time before trying for a baby.

Women using this drug should take contraceptive precautions. After stopping methotrexate you should continue using contraception for at least three months. You should talk to your doctor as soon as possible if you're planning to start a family. If you become pregnant while taking methotrexate, you should stop taking it and see your doctor as soon as possible.

Previously, there was concern that methotrexate may affect sperm and thus any fertilised egg but it has not been shown to be a problem in research studies. Therefore, current guidelines advise that men do not need to stop taking methotrexate before trying for a baby. You should talk to your rheumatologist about these matters.

The drug may pass into breast milk and the effects upon your baby are uncertain, so you shouldn't breastfeed if you're on methotrexate.

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We're dedicated to funding research into the cause, treatment and cure of arthritis so that people can live pain-free lives.

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Arthritis Research UK

Copeman House
St Mary's Gate
Chesterfield
S41 7TD

0300 790 0400

www.arthritisresearchuk.org

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 **/arthritisresearchuk**

Date published: 2015.

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A team of people contributed to this leaflet. It was written by Prof. Ariane Herrick and updated by Sue Brown and Dr Ian Giles. An **Arthritis Research UK** medical advisor, Prof. Anisur Rahman, is responsible for the content overall.

Please note: we have made every effort to ensure that this content is correct at time of publication, but remember that information about drugs may change. This information sheet is for general education only and does not list all the uses and side-effects associated with this drug.

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