METHOTREXATE is used to treat a number of conditions, including rheumatoid arthritis, psoriatic arthritis, vasculitis and juvenile idiopathic arthritis.
Introduction

Methotrexate is a drug that can help prevent your condition causing damage to your body. You can discuss the benefits and risks of taking methotrexate with healthcare professionals before you start treatment, so you’re able to make an informed decision.

What is methotrexate and how is it used?

Methotrexate is a type of disease-modifying anti-rheumatic drug (DMARD). It’s used to reduce the activity of the immune system for people who have certain conditions.

The immune system normally protects the body from infections or bacteria by causing inflammation to fight them. Inflammation can cause swelling, heat, redness and pain.

But in some conditions, the immune system can attack parts of the body, such as the joints, by mistake.

Methotrexate can be given to people with various types of arthritis and related conditions, including:

- rheumatoid arthritis
- psoriatic arthritis
- reactive arthritis
- vasculitis
- enteropathic arthritis.

It can also be given to children who have:

- juvenile idiopathic arthritis
- lupus (SLE)
- juvenile dermatomyositis
- vasculitis
- uveitis
- localised scleroderma.
Methotrexate doesn’t just treat the symptoms of your condition but also reduces the risk of long-term damage to your joints that can be caused by inflammation that’s not kept under control.

It can take a while to start working, so it may be 3 to 12 weeks before you start to notice any difference, but you should still keep taking it. You should also carry on taking methotrexate if your symptoms improve or if you start to feel better.

Methotrexate is also used by doctors to treat other conditions, such as cancer, but the dose used for cancer is usually much higher than for arthritis and related conditions.

See Versus Arthritis booklets ‘Rheumatoid arthritis’, ‘Psoriatic arthritis’, ‘Reactive arthritis’, ‘Vasculitis’. You can view all our information online at www.versusarthritis.org

Is methotrexate suitable for me?

Before you start methotrexate, your doctor will need to check if:

- you’re pregnant or planning a family
- you’re breastfeeding
- you have an infection
- you have a liver or kidney disease
- you’ve had a recent vaccination
- you’ve had ulcers in the stomach or bowel.

If you have side effects from the drug, speak to your doctor as you might not be able to carry on taking the drug. Side effects can happen immediately, but mild ones often settle over time.
When and how do I take methotrexate?

Methotrexate is taken either as a tablet or given as an injection, especially if you have side effects with the tablets. It is also available as a liquid.

You’ll take methotrexate once a week on the same day. You’ll be given a starting dose of methotrexate while your rheumatologist tries to bring your condition under control, but this might be increased if it isn’t helping your symptoms.

Methotrexate tablets come in two strengths: 2.5 mg and 10 mg. To avoid confusion, it’s recommended you only be given one strength, usually 2.5 mg. If you are prescribed your dose as two strengths, you should be very careful as the tablets are similar in colour, but they are different sizes.

If you take methotrexate by injection, it will be given into a layer of fat between the skin and muscle. This is known as a subcutaneous injection. This injection can be given by a health professional, but often you’ll be shown how to do the injection yourself using a syringe or an injector pen.

Possible risks and side effects

Methotrexate can sometimes cause side effects, which may include:

- feeling sick
- headaches
- vomiting
- diarrhoea
- shortness of breath
- mouth ulcers
- minor hair loss and hair thinning
- rashes.
If you have severe side effects, you should contact a health professional for advice.

It’s very important that you have blood tests before starting methotrexate and regularly while you’re taking it, as it can affect your liver and cause your body to make fewer blood cells.

When you first start taking methotrexate, you’ll need to have blood tests at least every two weeks, but this can drop to as little as every two to three months once you have been on the same dose for a while. These blood tests will continue for as long as you’re taking methotrexate.

You’ll usually need to have a chest x-ray before starting it. If you have any long-term lung conditions, such as fibrosis or emphysema, you’ll need to have lung function tests and a chest x-ray. You may need to have other tests, as you may not be able to take methotrexate.

If you smoke, it’s worth cutting down or preferably giving up, as smoking increases the risk of complications of your condition and its treatments.

Because your condition and methotrexate affect the immune system, this can make you more likely to get infections. If you’re unwell with an infection, or taking antibiotics, you might need to miss your methotrexate until you’re feeling better. But speak to your nurse specialist or a doctor about this first.

You should tell your doctor or nurse specialist straight away if you notice any of the following while taking methotrexate:

- a sore throat, raised temperature or fever
- flushing or sweating
- loss of appetite
- bruising or bleeding when you don’t know what has caused it
• yellowing of the skin or eyes, known as jaundice
• any new symptoms or anything else that concerns you.

You should stop taking methotrexate and see your doctor straight away if any of these symptoms are very bad or if you’re becoming really unwell.

In rare cases, methotrexate can cause breathlessness. If this happens to you, see your doctor as in rare cases methotrexate can cause inflammation of the lungs.

You should also see your doctor urgently if you develop chickenpox or shingles, or come into contact with someone who has chickenpox or shingles. These infections can sometimes be very serious in people who are taking methotrexate.

You might need treatment against chickenpox or shingles, and you might be told to stop taking methotrexate until you’re better.

You’re likely to be given folic acid tablets to take on a different day of the week to reduce the side effects of methotrexate. Your doctor will tell you when to take folic acid. Generally, you should avoid taking it on the same day as methotrexate, because it can affect how well it works.

### Tips to reduce your risk of infection

• Try to avoid close contact with people you know have an infection.
• Wash your hands regularly and carry around a small bottle of antibacterial hand gel.
• Keep your mouth clean by brushing your teeth regularly.
• Stop smoking if you’re a smoker.
• Make sure your food is stored and prepared properly.
• Try to keep your house clean and hygienic, especially the kitchen, bathrooms and toilets.
Taking other medicines

Methotrexate can sometimes be given along with other drugs to treat your condition. You can usually carry on taking a non-steroidal anti-inflammatory drug (NSAID), such as ibuprofen, or painkillers like paracetamol if needed, unless your doctor advises otherwise.

Check with your doctor before taking any new drugs, and remember to mention you’re on methotrexate if you’re treated by anyone other than your usual doctor or nurse specialist.

Some drugs can affect methotrexate and could affect how it works, including:

- over-the-counter preparations or herbal remedies – you shouldn’t start taking these without discussing it first with your healthcare team
- antibiotics such as trimethoprim and Septrin – these drugs should not be taken with methotrexate. If you have an infection that requires antibiotics, you should speak to a healthcare professional about stopping your methotrexate until you are better
- theophylline, which is a drug for asthma – this can affect the levels of methotrexate in your blood and vice versa. Discuss this with your healthcare team if you’re taking theophylline.

See Versus Arthritis booklet ‘Painkillers and NSAIDs’. You can view all our information online at www.versusarthritis.org.
**Vaccinations**

Depending on the dose of methotrexate and what other drugs you're taking, you may need to avoid live vaccines, such as yellow fever, while taking it. Your GP will be able to discuss the risks and benefits of vaccinations with you.

The pneumonia vaccine and yearly flu vaccines are not live vaccines and don’t affect methotrexate, so it’s recommended that you have these.

If you’re offered a shingles vaccination you should speak to your rheumatology team before having it, as even though this is a live vaccine, you might still be able to have it if you’re on a low dose of methotrexate.

**Having an operation**

If you’re due to have surgery, you might need to stop taking methotrexate or other drugs beforehand. You should speak to your doctor about this first.

**Alcohol**

Alcohol and methotrexate can both affect your liver, so it’s important you don’t drink more alcohol than the government’s recommended limits.

The government guidelines say both men and women should have no more than 14 units of alcohol a week, and that you should spread these through the week rather than having them all in one go.

Some rheumatologists may suggest stricter limits. If you’re concerned, discuss your alcohol intake with your healthcare team.

You can find out more about units of alcohol at www.drinkaware.co.uk.
Fertility, pregnancy and breastfeeding

You shouldn’t take methotrexate if you’re pregnant or trying for a baby, as it can affect how an unborn baby develops. Speak to your healthcare team about this if you’re planning a family.

Women using this drug should use contraception or encourage their partner to do so, and should carry on using contraception for three months after stopping methotrexate. 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 it was recommended that men stop methotrexate three months before trying for a baby, but research has now been done that suggests that they may not need to. You should still talk to your healthcare team for advice about trying for a family.

You shouldn’t breastfeed if you’re on methotrexate, as the drug could pass into breast milk, and we don’t yet know what effects this could have on a baby.

This leaflet is a guide to methotrexate, its benefits and potential side effects. If there’s anything else you’d like to know about this drug, just ask the healthcare professionals in charge of your care.
Thank you!

A team of people helped us create this booklet. We would like to thank Deborah Bond, Naomi Scott and Dr Fraser Birrell for helping us with reviewing this booklet.

We would also like to give a special thank you to the people who shared their opinions and thoughts on the booklet. Your contributions make sure the information we provide is relevant and suitable for everyone.