



*National Patient  
Safety Agency*

National Reporting  
and Learning Service

# Lithium

# Therapy

Important information

for patients



COLLEGE CENTRE FOR QUALITY IMPROVEMENT



PRESCRIBING OBSERVATORY  
FOR MENTAL HEALTH



## Your information

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Your name:

Address:

  
  
  
  

Postcode:

Home  
telephone:

Mobile  
telephone:

NHS number:

## Your mental health provider's information

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In an emergency call:

Name of clinician/consultant:

Address:

Postcode:

Telephone number:

## Your community health provider's information

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In an emergency call:

Name of GP:

Address:

Postcode:

Telephone number:

# Your treatment

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Date treatment  
started:

Brand of lithium:

Tablet – strength  
(as carbonate salt):

Tablet –  
daily dose in mg:

or

Liquid – strength  
(as citrate salt):

Liquid –  
daily dose in ml:

**Blood level range**

Blood level (mmol/L)  
should not be above:

Blood level (mmol/L)  
should not be below:

People managing  
your lithium therapy:

## What is this booklet for?

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Lithium is a medicine which can work well for people with some mental health problems. However, for the medicine to work properly and safely, people taking it need to take special care:

### **Not everyone can take lithium**

You need some health checks before you start, to see if it is safe for you to take lithium (see Section 2 ‘Checks needed before you start to take lithium’).

- These include checks on your kidneys, thyroid and heart.
- You also need to talk to your doctor if you might become pregnant.

### **You need to keep the amount of lithium in your blood at the right level**

Too much lithium in your blood can make you very ill.

- You need to know the signs of a high level of lithium in your blood (see Section 6 ‘What happens if the level of lithium in my blood is too high?’).
- You need to know how to stop the level of lithium in your blood getting too high (see Section 7 ‘What can make the level of lithium in my blood get too high?’).

## **Different brands release the lithium into your stomach differently**

You need to keep on the same brand of lithium. Please inform your doctor or pharmacist if you are supplied a different brand of lithium.

Common brands of lithium are Camcolit, Li-Liquid, Liskonum, Lithonate and Priadel.

This purple booklet explains why these things are important and what you need to do. A healthcare professional will go through this booklet with you and explain what it all means. If you have any questions now, or later on, always ask them. When we say 'healthcare professional' in this booklet we mean the doctors, nurses or pharmacists involved in your lithium treatment.

There are some blank pages at the end of the booklet. Write down on these pages any other information that is important to you. These might be things that you have talked about with your healthcare professional which you want to remember.

## What other information will I be given?

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Inside this purple folder, as well as this booklet, there is a 'Lithium Alert Card' and a 'Record book'.

With your medicine, you will also be given a 'patient information leaflet' from the manufacturer.

Below is some more information about these three things.

### 1. 'Lithium Alert Card'

Remove the card from this purple folder. Fill in the card and carry it with you all the time. You could carry it in your wallet or purse. Show this card if you:

- buy a new medicine or supplement over-the-counter;
- visit your dentist or other healthcare professional;
- are admitted to hospital.

It is important to carry it with you because in an emergency healthcare professionals need to know:

- that you take lithium;
- the brand of lithium you take.

Healthcare professionals need to know these things before they give you any other treatment.



## 2. 'Record book'

**You need to show your record book every time you:**

- **see your GP;**
- **attend a clinic;**
- **are admitted to hospital;**
- **visit a community pharmacy;**
- **request a new prescription;**
- **have a prescription dispensed.**

Write down in the book all the records of:

- the doses of your lithium;
- your lithium blood levels;
- other blood test results;
- your weight.

Write these down in the book each time you visit your GP, clinic or see your healthcare professional. Having this information in the record book helps your healthcare professional to have up-to-date information on your lithium therapy. It can also help you to understand how your treatment is going and what you need to be doing.

After your visit you may also be sent a printed sheet with these details on it – keep these sheets in your purple folder.

If you go to a clinic or GP surgery, you will find places at the beginning of this booklet, in the record book and on the alert card for them to add their contact details. This is in case you need to phone them about anything to do with your therapy or to discuss your appointments.

Your community pharmacist will also ask to see this information when he or she dispenses your prescription.

### **3. 'Patient information leaflet'**

You will get a patient information leaflet with your medicine pack. This comes with your medicine pack every time you collect it from the pharmacy.

Read this patient information leaflet as well as this booklet to get all the information about lithium.

## In this booklet

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**The purple booklet you are looking at now talks about important safety information.**

1. What is lithium and what is it used for?
2. Checks needed before you start to take lithium
3. How to take lithium
4. Blood tests after starting to take lithium
5. What side effects can lithium cause?
6. What happens if the level of lithium in my blood is too high?
7. What can make the level of lithium in my blood get too high?

## 1. What is lithium and what is it used for?

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Lithium is a chemical element that is very like sodium. Sodium is in the salt you use in your food.

Lithium is found naturally in many types of mineral water. However, this is much smaller than the amount needed when used as a medicine.

When lithium is swallowed, it goes from your stomach into your bloodstream. It then travels around the body and is finally removed from the body by the kidneys.

### What is lithium used for?

Lithium is used to:

- prevent mood swings caused by ‘bipolar affective disorder’ – this is also known as ‘manic depression’, or sometimes just ‘bipolar’;
- treat mania – feeling very excited and being over-active;
- treat depression – in people who have had depression that has been very severe, lasted a long time, or keeps coming back. For these people, lithium can help to keep their mood stable.

## 2. Checks needed before you start to take lithium

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Your doctor will want to do some checks before he or she prescribes lithium for you. He or she will want to know that you are in good physical health. This will include measuring your weight or weight-to-height ratio, known as your body mass index (BMI), as well as checking your:

- **Kidneys** – lithium is removed from your body by your kidneys. This means it is important that your doctor checks that your kidneys are in good working order. This can be done with a blood test called **e-GFR** ('estimated glomerular filtration rate').
- **Thyroid** – this is a gland in your neck. If it is under-active, you can feel very tired and lack energy. This can be mistaken for being depressed. So your doctor needs to check that your thyroid is in good working order. These blood tests are called **TFTs** ('Thyroid Function Tests').

Also, in the longer term, lithium can affect the way your thyroid works. Your doctor will want to keep a check on this with regular blood tests (see Section 4 'Blood tests after starting to take lithium').

- **Heart** – if you have heart problems, this can affect whether lithium is suitable for you. If you are older, have had heart problems (or someone in your close family has heart problems), your doctor may want to do a heart trace. This is called an **ECG** ('electro-cardiogram').

Ask your doctor if you would like to know more. These checks are recommended by the National Institute for Health and Clinical Excellence ([www.nice.org.uk](http://www.nice.org.uk)).

## **Pregnancy and contraception**

It is best not to take lithium while pregnant, as it can harm the unborn baby. However, some women decide to keep taking it.

- If you are a woman who might become pregnant, it is important that you use contraception while taking lithium.
- If you are taking lithium and you are pregnant or might become pregnant, speak to your doctor as soon as possible. He or she will tell you about the best treatment for you and your unborn baby.
- If you decide to keep taking lithium while pregnant, you will need extra health checks.

## 3. How to take lithium

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### How much to take

- You will start with a low dose – usually 200mg to 400mg – at night, and the dose will be increased as required to reach the right lithium blood level for you.

### Check with your doctor or pharmacist before taking if:

- **the dose of your lithium has been changed and no one has explained why;**
- **you are given a different brand of lithium – this is because alternative brands release the lithium into your stomach differently.**

### How to take lithium tablets

If you are taking lithium tablets:

- swallow them whole;
- do not crush or chew them.

If you find your tablets difficult to swallow, ask your doctor if a liquid preparation would be worth trying instead.

## When to take lithium

Take your lithium each night at the same time. You need to take it at night because blood tests need to be done during the day, 12 hours after a dose (see Section 4 ‘Blood tests after starting to take lithium’).

If you are taking twice daily doses of liquid lithium, remember to take your morning dose *after* you have had your blood test.

## What if you forget a dose?

If you forget to take a dose, take your next dose at the correct time. Do not try to catch up on missed doses.

It is important to take the prescribed dose and not to increase or decrease it. Only then will the monitoring of the lithium levels in your blood help make your therapy effective and safe.

## How long should I take lithium for?

Talk to your doctor about how long you may need to take lithium. It is usually a long-term treatment.

- If you do not think you need to take lithium any more, talk to your doctor about the best thing to do for you.
- It is important that you do not stop taking your lithium suddenly. This is because your illness may come back quite quickly.



## 4. Blood tests after starting to take lithium

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While you are taking lithium you need to have regular blood tests to see how much lithium is in your blood.

It is important that blood tests for lithium levels are taken at least 12 hours after you took your last dose of lithium. If blood is taken before this time, the lithium level will not have settled down in your blood since the last dose. So if you take your dose at 10 o'clock at night, you cannot have the blood test before 10 o'clock in the morning.

### Checking how much lithium is in your blood

- **The first few weeks** – a blood sample will be taken from you about a week after you start taking lithium. This is to see how much is in your blood. Your blood will be tested again each week until the level of lithium in your blood is right.
- **Every three months** – your doctor will do a blood test to check that you still have the right level of lithium in your blood.

Depending on each result your doctor may:

- leave the dose the same;
- increase it;
- decrease it.

Depending on your age and the illness you have, the level the doctor is aiming for is between 0.4 mmol/L and 1.0 mmol/L of lithium in your blood (mmol/L means 'millimoles per litre' which is a way of describing an amount in a specific volume, in this case the amount of lithium in one litre of blood).

In a very small number of people, a slightly higher level of lithium in the blood may be needed.

### **Checking your kidneys and thyroid**

Your doctor will also do a blood test every six months to check that your kidneys and thyroid are working well.

## 5. What side effects can lithium cause?

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Lithium can cause:

- upset stomach – particularly at the start of treatment;
- fine shake ('tremor') of your hands;
- metallic taste in your mouth;
- weight gain;
- swelling of your ankles;
- feeling more thirsty than usual and passing a lot of urine.

If you get any of these side effects or any other problems you think might be side effects, talk to your healthcare professional.

Lithium can also:

- make your thyroid less active;
- affect the way your kidneys work.

That is why you need the regular thyroid and kidney blood tests, as mentioned earlier.

All the side effects of lithium are listed in detail in the **patient information leaflet** that comes with your medicine. If you do not have one of these leaflets, ask your pharmacist for one.

## 6. What happens if the level of lithium in my blood is too high?

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If you have too much lithium in your blood, this is called lithium toxicity (or lithium poisoning). This can make you very ill.

Read the following list very carefully. **If you get one or more of these problems at any time, talk to your doctor or another healthcare professional straight away.** If this is not possible, ring NHS Direct on 0845 4647.

- Severe hand shake ('tremor')
- Stomach ache along with feeling sick and having diarrhoea
- Muscle weakness
- Being unsteady on your feet
- Muscle twitches
- Slurring of words – so that it is difficult for others to understand what you are saying
- Blurred vision
- Confusion
- Feeling unusually sleepy

A small number of people may not have any immediate symptoms of toxicity when the level of lithium in their blood is too high. Regular checks can prevent long-term problems.

## 7. What can make the level of lithium in my blood get too high?

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The three most common causes of too much lithium in your blood are:

**1. Getting dehydrated:** you can get dehydrated if you are in a hot climate, have sickness and diarrhoea, or have had too much alcohol to drink.

- Getting dehydrated can make the level of lithium in your blood too high.
- To help stop you getting dehydrated, **try to drink plenty of water.**
- If you have sickness and diarrhoea for more than a day or two, see your doctor to have your lithium level checked.

### **2. Big changes in the level of salt in your diet**

- Do not go on a low salt diet – talk to your doctor first.

**3. Taking some other medicines:** other medicines can affect the way your kidneys deal with lithium. Taking these medicines can make the level of lithium in your blood go up.

- **Always remind your doctor and pharmacist that you take lithium before you take any new medicines. This includes medicines prescribed by your doctor or bought from a pharmacy or other shop.**
- For example, if you are prescribed medication for blood pressure, heart problems or pain, check with your doctor or pharmacist. Ask them if this medicine could affect the level of lithium in your blood.
- Before buying a medicine to treat pain, you should check that it is safe to take with lithium.

**Every time you are prescribed a new medicine, always check that it is safe to take with your lithium.**

**If you have any questions or worries about your lithium therapy, talk to your healthcare professional.**













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