

# Lithium Therapy

Patient Information Booklet



## About this booklet

There are two parts to this booklet:

- an information section, and
- a record book.

**The Lithium Record book is on page 19.**

## Information section

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

Lithium is a mood stabiliser that is prescribed to treat mood disorders. Lithium is a chemical element that is very like sodium. Sodium is the salt you use in your food. You may hear people talk about lithium salts. This is another way to describe the lithium you are prescribed.

When you swallow lithium, it goes from your stomach into your bloodstream. It then travels around your body. Finally, it is removed from your body by your kidneys.

## Lithium uses

### To prevent mood swings

It can prevent mood swings caused by bipolar affective disorder - this is also known as 'manic depression' or sometimes just 'bipolar'.

### To treat mania

Lithium can treat people who feel very excited and over-active.

### Severe depression

Lithium can help to treat depression that has been:

- severe,
- lasted a long time, or
- keeps coming back.

For people who have not responded to standard antidepressant medications, lithium may be used in combination with antidepressants.

## 2. What checks are needed before starting lithium?

Before prescribing lithium for you, your doctor will want to check that you are in good physical health by checking:

### **Weight and body mass index (BMI)**

Your doctor will check you have a healthy weight or a healthy weight-to-height ratio – known as your body mass index (BMI).

### **Kidneys**

Your kidneys remove lithium from your body, so it is important that they are in good working order. This can be checked with a blood test called e-GFR ('estimated glomerular filtration rate').

### **Thyroid**

The thyroid is a gland in your neck. If it is underactive, you can feel very tired and lack energy. Over time, lithium can affect the way your thyroid works. Your doctor will want to keep a check on this with regular blood tests. These blood tests are called TFTs (thyroid function tests).

### **Calcium**

Over time, lithium may affect your calcium level, so your doctor will want to keep a check on this with regular blood tests.

### **Heart**

If you have heart problems, lithium may not be 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 (electrocardiogram).

### 3. How do I take lithium?

Lithium is available in various forms and strengths. Priadel® is the most commonly used brand.

Brand:	Type of lithium salt:	Strength:
Priadel® tablet	Lithium carbonate	200mg or 400mg
Camcolit® tablet	Lithium carbonate	400mg
Priadel® liquid	Lithium citrate	5ml is equal to 200mg of lithium carbonate
Li-Liquid®	Lithium citrate	5ml is equal to 200mg of lithium carbonate

It is important to take the same brand and form of lithium every time. **If you are given a different brand or form, please tell your pharmacist immediately before you take any doses.**

#### **If you need to change from tablets to a liquid**

If you need to change from tablets to a liquid, your doctor and pharmacist will need to change the way you take your dose and the times you take it. It is essential that you talk to your doctor and pharmacist as they will calculate this and advise you of the switch.

## How much to take

The starting dose is usually 200-600mg daily. Then, depending on the levels of lithium in your blood, the dose is usually slowly increased.

The usual dose of lithium may be between 400mg and 1,200mg every day. It may take some time to get the dose right for you.

## How to take lithium

It is best to take your lithium at the same time every day.

### If you are taking tablets

- Take your tablet at night **unless** your doctor tells you differently.
- Swallow the tablet(s) whole. Do not crush or chew.

If you need to divide your tablet in half, discuss this with your pharmacist.

If you find tablets difficult to swallow, talk to your doctor about taking a liquid instead.

### If you are taking a liquid

- Take your liquid twice a day, morning and night, unless your doctor tells you differently.

**It is important to take the prescribed dose. For your safety, do not increase or decrease it unless your doctor tells you to. If you have questions or concerns about your dose, talk to your doctor or pharmacist.**

## How long will it take lithium to work?

Lithium, like many medicines, does not work straight away. Although some people feel better as soon as they begin taking lithium, most improve more gradually. It may take several days or even weeks for some symptoms to improve.

## What if I forget to take a dose?

If you forget a dose, **do not take two doses** the next time.

**Tablets:** if you take your tablets once daily, and you have missed your regular time by less than 10 hours:

- Take the normal dose you missed, and then
- Take the next dose at the usual time.

If you have missed your normal dose by **over 10 hours:**

- Skip the missed dose
- Take the next dose at the usual time.

**Liquid:** if you take liquid twice a day, and you have missed your regular time by **less than 5 hours:**

- Take the normal dose you missed, and then
- Take the next dose at the usual time.

If you have missed your normal dose by **over 5 hours:**

- Skip the missed dose
- Take the next dose at the usual time.

It is important to take the correct dose at the same time every day.

If you are missing doses, talk to your doctor about it.

## How long should I take lithium for?

Make sure you talk to your doctor about how long you may need to take lithium. Most people need to remain on lithium for quite a long time, and sometimes this can mean taking it for many years.



## Is lithium addictive?

Lithium is **not addictive**. There is no evidence that people taking lithium become physically dependent on it.

## If I feel better, can I stop taking lithium?

No, you should not stop taking lithium if you feel better. It is really important that you do not suddenly stop taking it. If you stop taking lithium suddenly:

- you may experience unpleasant physical feelings
- your original symptoms are very likely to return.

If you would like to reduce or stop your medicine, talk to your doctor and make a plan to reduce your lithium gradually. This will help prevent unpleasant physical feelings or a return of your original symptoms.

## 4. What blood tests do I have when I take lithium?

You will need to have regular blood tests when you are taking lithium.

- Lithium blood levels (checked every 3 - 6 months)
- Kidney and thyroid function and calcium levels (every six months)

These tests will help your doctor make sure your lithium levels are correct and your physical health is good.

## Checking how much lithium is in your blood

Depending on your age and your illness, your lithium blood level should be between 0.4mmol/L and 1.0mmol/L. mmol/L means millimoles per litre, which is a way of describing an amount of lithium in one litre of blood.

You will need to have blood tests using the schedule below:

- When you start taking lithium, about **one week after** you start and then **once a week** until the level of lithium in your blood is right.
- **Every 3-6 months** to check that you still have the right level of lithium in your blood.
- If your lithium dose is changed or you start taking a new medicine that may interact with lithium, you will need a blood test about **one week after** to check the lithium level.

Depending on each result, your doctor may increase the dose, decrease the dose or leave the dose the same.

**You will also need to have the test for your lithium blood levels at specific times of the day.**

Your blood test should be about 12 hours after you took your last dose of lithium.

- If you take your tablet(s) at night, it is best to have your blood test done the next morning.
- If you take liquid lithium morning and night, it is best to have your blood test done in the morning **before** you take your lithium. You can then take your morning dose immediately **after** your blood test.

**Checking your kidneys and thyroid**

**Every six months**, you need to book a blood test with your doctor which will check if your kidneys and thyroid are working well. They will also check your calcium levels.

## 5. What side effects can lithium cause?

Side effects are usually related to the amount of lithium in the blood. **Many people do not experience any side effects.**

### Side effects when you start taking lithium

Some side effects are relatively mild and only occur during the early part of treatment, while your body is adjusting to lithium. They are not usually medically serious, and most get better or go away after a few weeks.

Side effects and when they occur	What you can do
<b>Mild stomach cramps or nausea</b> These usually occur when you start taking lithium.	<ul style="list-style-type: none"><li>• Take your lithium with or after food as this may help.</li><li>• Talk to your pharmacist or doctor if nausea continues or you start vomiting.</li></ul>
<b>Mild diarrhoea (loose stools)</b> This usually occurs when you start but stops after a few days.	<ul style="list-style-type: none"><li>• Talk to your pharmacist or doctor if it continues for more than a few days.</li></ul>
<b>Metallic taste in the mouth or dry mouth</b> May occur when you start taking lithium and should wear off within a few weeks.	<ul style="list-style-type: none"><li>• Chew sugar-free gum or suck sugar-free boiled sweets.</li><li>• Talk to your pharmacist or doctor if the metallic taste is still there or your mouth is still dry after a few weeks.</li></ul>

Side effects and when they occur	What you can do
<p><b>Tiredness, feeling drowsy</b></p>	<ul style="list-style-type: none"> <li>• Do not drive or operate machinery until you feel alert. Talk to your doctor if you are concerned.</li> </ul>

## Possible side effects when you continue taking lithium

### Increased thirst

- Try to drink the same amount of fluids every day, unless you are dehydrated or in a hot climate when you will need to drink more water.
- Avoid fizzy or sugary drinks.
- Talk to your pharmacist or doctor if thirst becomes a problem.

### Needing to pass water (pee) often (usually lasts for a time)

- Talk to your pharmacist or doctor if this problem persists.

### Fine hand tremor (shake)

- Talk to your pharmacist or doctor if the tremor is troublesome or gets worse.

## Possible side effects when you continue taking lithium

### Weight gain and fluid retention (oedema)

- Try take regular exercise.
- Try to eat a diet full of fruit, vegetables and wholegrain cereals to try and prevent weight gain.
- Avoid hidden calories in fizzy and sugary drinks.
- Talk to your doctor if your legs are retaining fluid (swollen).

### Sexual dysfunction (reduced libido)

- If you experience any change, talk to your pharmacist or doctor.

### Skin problems (acne, rash, psoriasis)

- If you have new skin problems or existing problems get worse, talk to your pharmacist or doctor.

### Changes in kidney function

- Your doctor will monitor your kidney function with regular blood tests.

### Changes in thyroid function

- Your doctor will monitor your thyroid function with regular blood tests.

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

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 straight away**.

### Symptoms if there is too much lithium in your system

- Severe hand shake (tremor).
- Vomiting or severe nausea and persistent 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 lithium in their blood is too high. This is why it is important to have regular checks. Regular checks can prevent long-term problems.

## 7. What can make lithium blood levels too high?

### Three most common reasons

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

- getting dehydrated
- big changes to the level of salt in your diet
- taking some other medications.

### 1. Getting dehydrated

You can get dehydrated if you:

- are in a hot climate
- have sickness and diarrhoea
- have had too much alcohol to drink.

To avoid dehydration, follow these tips.

- Try to drink plenty of water, especially in a hot environment such as when you are on holiday.
- Drink more water if you are exercising heavily.
- Avoid spending a lot of time in the sun.
- Avoid sudden changes in how much tea, coffee, colas or other drinks containing caffeine you drink.
- Avoid saunas.

## **Consult your doctor if you are ill**

If you are sick and have diarrhoea for more than a day or two, consult your doctor immediately. You will have to get your lithium level checked. If your lithium blood levels are too high, you may be advised to skip a lithium dose or doses. Your doctor will advise you what to do. Remember: do not change your medicines without talking to your doctor.

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

Changes in how much salt you eat may affect your lithium levels. Speak to your doctor before changing your diet or going on a low salt diet.

## **3. Taking some other medicines**

- Always remind your doctor or pharmacist that you take lithium before you are prescribed or take any new medicines.
- Always check with your pharmacist before buying any medicine or supplements over the counter (OTC) to make sure they are safe to take with lithium.

Avoid the following (over-the-counter) medicines because they can change your lithium blood levels.

- Antacids like sodium bicarbonate (for example: Gaviscon®)
- Non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin and ibuprofen (Nurofen®).

NSAIDs are painkillers that can be used for headaches, period pain, toothache, muscle pain and other types of pain. Instead, take paracetamol.



## 8. Pregnancy and lithium: what do I need to know?

It is important to take a pregnancy test before you start on lithium.

If you might become pregnant and you are taking lithium or any medication, it is important to discuss family planning options, including contraception, with your doctor.

If you are taking lithium and wish to plan a pregnancy, it is important to talk to your doctor to discuss treatment options and plan in advance.

If you are taking lithium and discover you are pregnant, it is important to talk to your doctor immediately and get advice.

It is usually best not to take lithium while you are pregnant as it can harm the unborn baby. But, in rare circumstances where a mother's mental health is at risk, the benefits of taking lithium while pregnant may outweigh the risks.

## 9. Alcohol and lithium: what do I need to know?

- Be careful and aware if you are drinking alcohol while taking lithium. Both lithium and alcohol can cause drowsiness. If the two are taken together, severe drowsiness can result. This can lead to falls and accidents.
- Drinking alcohol may make mania, depression and anxiety worse.
- Alcohol may cause dehydration, which can change the level of lithium in the blood.
- When you are used to taking this medication, small amounts of alcohol may not be harmful.
- Talk to your pharmacist or doctor about how to drink alcohol safely when you are taking lithium.

### Finally

**We hope this booklet has been helpful. If you have any questions, please talk to your doctor or pharmacist.**

## Lithium record book

This lithium record book is used to record your:

- weight
- dose of lithium
- lithium blood level
- your other blood test results: thyroid, kidney and calcium
- date of next blood test.

There are two ways to fill this and we show you these in the examples on the first two rows. You can fill in the date, your lithium dose, and level, as a number. For thyroid, kidney and calcium checks you can simply put a tick if these are in range, and/or enter the results if you have the support to do so.

The record book should be filled in each time you visit your doctor (GP or Consultant Psychiatrist), clinic or hospital, and each time there are changes or you get new results from different health checks. Your healthcare provider can help you with this. If you get a printout of your results, you can keep this in this booklet.

Keeping your results in your record book:

- helps your healthcare professionals stay up to date with your lithium therapy
- helps you understand how your treatment is going
- keeps you keep up to date with blood test results and dose changes.

Bring this booklet when you visit your doctor and pharmacist so they can see your current results. It is up to you to schedule blood tests and appointments.

# Lithium therapy record book – your healthcare professional can help you fill this in

	<b>Date</b>	<b>Daily Dose (mg):</b>	<b>Lithium blood level (mmol/L)</b>	<b>Kidney Checks (eGFR/ Creatinine) + Ref Range</b>	<b>Thyroid checks TSH (mIU/L): + Ref Range</b>	<b>Thyroid checks Free T4 (pmol/L): + Ref Range</b>	<b>Adjusted Calcium (mmol/L): + Ref Range</b>	<b>Weight/ BMI:</b>	<b>Date of next blood test:</b>
	Example 1: 2/3/22	600mg	0.8	eGFR 85	2.59 (0.27-4.2)	13 (12-22)	2.25 (2.1-2.6)	67kg	6/6/22
	Example 2: 2/3/22	600mg	0.8	✓	✓	✓	✓	67kg	6/6/22
1									
2									
3									
4									
5									
6									
7									
8									

# Lithium therapy record book – your healthcare professional can help you fill this in

Date	Daily Dose (mg):	Lithium blood level (mmol/L)	Kidney Checks (eGFR/ Creatinine) + <i>Ref Range</i>	Thyroid checks TSH (mIU/L): + <i>Ref Range</i>	Thyroid checks Free T4 (pmol/L): + <i>Ref Range</i>	Adjusted Calcium (mmol/L): + <i>Ref Range</i>	Weight/ BMI:	Date of next blood test:
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								

## Your Information

**Your personal details – you may find it helpful to fill this in**

Your name:

Date of birth:

Address:

Phone number:

Medical Card or Drugs Payment Scheme number:

In case of emergency call, phone number:

### **Your mental health provider's information**

Name of consultant:

Phone number:

## Your Information

### Your community health provider's information

Name of GP:

Address:

Phone number:

Name of community or hospital pharmacist:

Address

Phone number

### Your treatment

Date lithium started:

Brand name and formulation (tablet/liquid) of lithium:



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