



### Overview

**Topiramate (Topamax® and generic forms)** belongs to a group of medications called “anticonvulsants” and is used to treat seizure disorders (epilepsy). In adults, topiramate is used for prevention of migraine headaches and as a “mood stabilizer” to treat bipolar disorder. In children and adolescents, this medication may be used to treat mood disorders such as bipolar disorder

### What is *topiramate* used for?

Topiramate is approved by Health Canada for the treatment of seizure disorders (epilepsy) in children and adults. Health Canada has also approved topiramate for prevention of migraine headaches in adults. Like many other medications prescribed for children and adolescents, Health Canada has not approved topiramate for management of bipolar disorder. This is called “off-label” use and this occurs when your doctor has determined that the benefits of you taking this medication are greater than the risks (e.g. side effects). Topiramate may be used for the following conditions in children and adolescents:

- Treatment of episodes of mania (elevated mood) associated with bipolar disorder
- Prevention of migraine headaches
- Management of aggressive or impulsive behaviours
- Treatment of alcohol dependence

Your doctor may be prescribing this medication to you for another reason. If you are unclear why topiramate is being prescribed, please ask your doctor.



### How does *topiramate* work?

Topiramate may affect the activity of brain chemicals (neurotransmitters) called GABA and glutamate. This medication has a “stabilizing” effect on nerves, which in turn helps to reduce severe mood fluctuations (e.g. mania) associated with bipolar disorder. The exact way topiramate improves symptoms of bipolar disorder is still not fully known.

### How well does *topiramate* work in children and adolescents?

Topiramate may reduce symptoms of a manic episode associated with bipolar disorder. It may also prevent future episodes of mania from occurring. This medication may be used alone or in combination with other mood stabilizers.

When treating a manic episode, topiramate may improve symptoms such as: an elevated, expansive or irritable mood; a reduced need for sleep; fast/increased talking; an inflated self-esteem or feelings of grandiosity; being easily distracted; racing thoughts; high-risk behaviours; taking part in an excessive amount of activities.

When effective, topiramate stabilizes your mood and returns your activity level to normal. This medication may help you to have more control over your emotions and to improve your overall functioning. Whenever possible, adding education about your condition (for example: teaching you how to recognize early warning signs of a manic episode and the appropriate coping strategies) increases the chance you will benefit from taking this medication.

Topiramate may be particularly helpful for patients who have aggressive behaviour and alcohol dependence. In addition, this medication may counteract the side effect of weight gain caused by other mood stabilizers (e.g., divalproex/valproic acid (Epival®/Depakene®)) and neuroleptic medications (e.g., quetiapine (Seroquel®)). When used to prevent recurring migraine headaches, topiramate may reduce the frequency of migraines.

## How should *topiramate* be taken?



Topiramate comes in tablets and sprinkle capsules. The tablets should be swallowed whole with water, and should never be split or broken. The sprinkle capsules may be swallowed whole. You may also open the sprinkle capsules carefully and sprinkle the contents on a teaspoon of soft food (e.g., applesauce, custard, ice cream, oatmeal, pudding or yogurt). This mixture should be swallowed immediately and should not be stored for later use to prevent the drug from breaking down. Do NOT chew this mixture. Take topiramate with food to reduce the chance of stomach upset.

When starting treatment with topiramate, your doctor may initially prescribe a low dose of topiramate that is taken once daily at bedtime in the first week. Then, the dose may be slowly increased every 1 to 2 weeks. After the first week, topiramate is usually taken twice daily for the remainder of treatment. However, some patients may be instructed to take it once daily. Your doctor will determine how much you should take, according to your weight and your response to this medication.

Topiramate needs to be taken regularly on a daily basis in order to be effective (even if you feel well). Topiramate should be taken at the same time(s) each day as directed by your doctor. Try connecting it with something you do at those times (for example: brushing your teeth) to help you remember the doses. Treatment with topiramate should usually not be stopped suddenly, as this may trigger seizures.

Do not drink alcoholic beverages while taking topiramate, as this may result in increased side effects. It is important to drink plenty of fluids throughout the day while taking this medication to decrease your risk for kidney stones. Avoid ketogenic diets (diet high in fat and low in sugar and protein) or other low-carbohydrate diets, as this may lead to an increased risk for potentially serious side effects.

## When will *topiramate* start working?

Topiramate usually needs to be taken for at least 2 weeks before you notice an improvement in your symptoms. You may notice an improvement earlier if topiramate is combined with other medications. Unless directed by your doctor, do not increase, decrease, or stop taking the medication if there are no improvements in the first few weeks. A delay in response is normal. Topiramate may not work for everyone. If you find this medication has not helped you after a month of treatment or the side effects are too bothersome, your doctor may recommend switching you to a different medication.



## How long do I have to take *topiramate*?

This depends on the symptoms you have, how frequently they occur and how long you have had them. Most people who have bipolar disorder need to take topiramate for at least 6 months. This allows your symptoms to stabilize and for you to regain functioning while decreasing your risk of another mood episode. After 6 months of treatment, you and your doctor can discuss the benefits and risks of continuing treatment.

If you have had several episodes of mania or aggression and you tolerate this medication well, you may be asked to take this medication indefinitely. By continuing to take this medication, your risk of having another mood episode may be significantly decreased. Even if you are feeling better, do not stop taking this medication suddenly without first discussing it with your doctor. After you have been taking topiramate on a regular basis, stopping it suddenly may increase your risk for having a seizure. If you and your doctor decide to stop using topiramate, your doctor will explain how to safely lower the dose gradually.

When used for the prevention of migraine headaches, you may need to take topiramate for at least 6 months. When topiramate is taken for epilepsy and this medication works well for you, you may be asked to take this medication indefinitely. Discuss with your doctor about how long you need to take topiramate.

## Is *topiramate* addictive?

Topiramate is not addictive. You will not have “cravings” for it like some people do with nicotine or street drugs.

## What are the side effects of *topiramate* and what should I do if I get them?

As with most medications, side effects may occur when taking topiramate. However, most side effects are mild and temporary. Sometimes the side effects may occur before any of the beneficial effects. It is also possible for some individuals to experience side effects that they feel are concerning or long-lasting. If this occurs, speak to your doctor about ways to manage them. Below are some of the more common side effects of taking this medication. In brackets are suggested ways to lessen these effects.

### Common side effects

Side effects are usually more common when starting a medication or after a dose increase. If any of these side effects is troublesome for you, please discuss them with your doctor, nurse or pharmacist.

- Clumsiness, unsteadiness (*do not take part in activities that require physical coordination until you know how this medication affects you*)
- Daytime drowsiness, tiredness, slowed movements (*do not drive or operate machinery until you know how this medication affects you.*)
- Decreased sweating (*be sure to drink lots of fluids in hot weather and avoid prolonged, strenuous exercise in the sun to avoid becoming overheated. Talk to your doctor if you are not sweating as usual or show signs of increased body temperature, particularly in hot weather*)
- Difficulty concentrating, slowed thinking, confusion or forgetfulness (*discuss this with your doctor*)
- Dizziness (*try getting up slowly from a sitting or lying down position*)
- Fever or headache (*try using a fever reducer/pain reliever like acetaminophen (Tylenol<sup>®</sup>)*)
- Nervousness, tremors (shakiness)
- Stomachache, nausea, vomiting, diarrhea (*try taking the medication with food*)
- Tingling sensations in hands/feet (*discuss this with your doctor*)
- Upper respiratory tract infections: e.g., colds, bronchitis (*get a yearly flu shot; wash your hands regularly*)
- Vision problems (e.g., double vision); altered taste of certain foods or drinks
- Weight loss, decreased appetite (*this may sometimes be desirable to offset the weight-gain effects of other medications. If this is a problem, try drinking nutritional supplement drinks like Boost<sup>®</sup>*)



This medication may affect your ability to drive, operate machinery or carry out tasks that require mental alertness. This effect may be more pronounced if this medication is taken with alcohol.

### Potentially serious but uncommon side effects (e.g. those that occur in less than 5% of patients)

There are risks involved with taking any medication. Make sure you have had a conversation with your doctor about the potentially serious effects of topiramate.

**Contact your doctor IMMEDIATELY if you have any of these potentially serious side effects:**



- Blood in the urine, lower back pain, or pain in the genital area
- Decreased alertness, fatigue, tiredness, vomiting
- Depressed mood or any other abnormal changes in mood or behaviour
- Increase in aggressive behaviour
- Increased frequency of seizures
- Speech problems, memory problems, confusion, difficulties concentrating or paying attention
- Sudden worsening of vision, blurred vision with painful and/or red eyes
- Thoughts of self-harm, hostility or suicide
- Unexplained tiredness, loss of appetite, irregular heartbeat, rapid breathing, impaired consciousness
- Over the long-term: slowed growth rate, softening of bones (rickets)

## What precautions should my doctor and I be aware of when taking *topiramate*?

Many medications may interact with topiramate, including birth control pills; antihistamines or sleep aides such as diphenhydramine (Benadryl<sup>®</sup>, Nytol<sup>®</sup>); some anti-anxiety medications such as clonazepam (Rivotril<sup>®</sup>); some antidepressants such as amitriptyline (Elavil<sup>®</sup>); some anticonvulsants such as valproic acid/divalproex (Depakene<sup>®</sup>/Epival<sup>®</sup>) carbamazepine (Tegretol<sup>®</sup>) and phenytoin (Dilantin<sup>®</sup>); digoxin (Lanoxin<sup>®</sup>), and several others. If you are (or begin) taking any other prescription or over-the-counter medications, be sure to check with your doctor or pharmacist to see if they are safe to use. Your doctor may need to change the doses of your medication(s) or monitor you carefully for side effects if you are taking certain other medications.

### It is important to tell your doctor if you:

- have any allergies or have experienced a bad reaction to a medication
- have a history of kidney stones
- have a history of kidney or liver problems
- have a growth problem
- have a history of seizures (epilepsy)
- have depression, bipolar disorder or any other psychiatric condition
- currently or in the past, have had thoughts/attempts of suicide or self-harm
- have glaucoma (an eye disease)
- drink alcohol regularly or have a history of alcohol abuse
- Follow (or start) a ketogenic diet (high in fat and low in protein and sugar) or other low-carbohydrate diets
- Miss a period, are pregnant (or are planning to become pregnant) or are breast-feeding. Tell your doctor right away if you become pregnant while taking topiramate

## What special instructions should I follow while using *topiramate*?

- Keep all appointments with your doctor.
- Do not allow anyone else to use your medication.

## What should I do if I forget to take a dose of *topiramate*?

If you take topiramate regularly and you forget to take it, take it as soon as you remember. However, if it is almost time for your next dose (e.g., within 4 hours), skip the missed dose and continue with your regular dosing schedule. Do NOT double your next dose.



## What storage conditions are needed for *topiramate*?

- Store this medication away from moisture and heat (e.g., not in the bathroom). Keep the container tightly closed.
- Keep this medication out of reach and sight of children.

You may wish to share this information with your family members to help them to understand your treatment options. Since every person's needs are different, it is important that you follow the advice provided to you by your own doctor, nurse and/or pharmacist and speak to them if you have any questions about this medication.

*Developed by the health care professionals of Child & Adolescent Mental Health Programs and reviewed by the staff of the Kelty Resource Centre.*