Your doctor has prescribed you an anti-thyroid medicine to treat hyperthyroidism (overactive thyroid).

There are two anti-thyroid medicines: methimazole (also called Tapazole®) or propylthiouracil (PTU).

The medicine prescribed for me is:

☐ Methimazole (Tapazole®) ___ mg, ___ times a day
☐ Propylthiouracil (PTU) ___ mg, every ____ hours

**What is hyperthyroidism?**

The thyroid is a gland at the front of your neck that makes thyroid hormone. When your thyroid is overactive, there is too much thyroid hormone. This is called hyperthyroidism. Hyperthyroidism causes symptoms like losing weight, diarrhea, feeling anxious, and heart palpitations.

Hyperthyroidism can cause serious problems. It can make your bones weaker and it can make it hard for your heart to beat regularly.

**Is this medicine the only treatment option?**

Taking an anti-thyroid medicine is one option to treat hyperthyroidism. The other options are surgery or treatment with radioactive iodine. Your doctor will work with you to choose the best treatment for you. In some cases, your doctor may want you to take an anti-thyroid medicine before you have surgery or before treating you with radioactive iodine.
How will this medicine help?
This medicine works by reducing how much hormone your thyroid produces. Your symptoms should improve in about 6 weeks.

How long do I need to take the anti-thyroid medicine for?
Each person is different. Your doctor will talk to you about the plan for your treatment.

- Some people only need the anti-thyroid medicine until they have surgery or treatment with radioactive iodine.
- Some people continue to take anti-thyroid medicine for a long time.
- Many people use the anti-thyroid medicine for 12 to 18 months, until their thyroid hormone is in balance.

After you stop taking the medicine, hyperthyroidism can come back in the future. If you take this medicine for Graves’ Disease, there is a 30% to 50% chance that your hormones will continue to stay in balance after you finish a full course of treatment.

How do I take my anti-thyroid medicine?
You can take your anti-thyroid medicine with or without food. Follow your doctor’s directions.

- **Before starting the anti-thyroid medicine, you will need to have blood tests.** This includes tests of your liver and your blood count.

- **You will also need to have blood tests before each appointment.** This is to re-check your hormone levels. Your doctor will use your thyroid hormone levels to adjust the dose of your medicine.
What are the side effects of my anti-thyroid medicine?

**More common** side effects are rash, joint pain, nausea, and stomach upset. These side effects can happen in 1 or 2 people out of 20.

<table>
<thead>
<tr>
<th>Possible side effect</th>
<th>What should I do?</th>
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| Stomach upset or nausea | - Take the medicine with food.  
- If you take methimazole once a day, you may need to split up the dose into 2 times a day. For example, if your prescribed dose is 20 mg once a day, split it to 10 mg in the morning with food and 10 mg in the evening with food. |
| Joint pain | - If the pain is mild, monitor and see if it goes away by itself.  
- If the pain is severe or you also have fever or hives, contact your doctor as soon as possible. You may need to stop taking the medicine. |
| Rash | - Contact your doctor. They will assess your rash to make a treatment plan.  
- If the rash is itchy, you can take an antihistamine like Benadryl® for relief. |

**Rare** complications are agranulocytosis (a severe decrease in white blood cell count) and liver damage. Another rare but serious complication is vasculitis (inflammation of the small blood vessels) which can lead to kidney or lung damage.

<table>
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<tr>
<th>Possible side effect</th>
<th>How common is it?</th>
<th>What should I do?</th>
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| Agranulocytosis (low white blood cell count) | 1 in 300 to 1,000 people | - If you have a fever above 38 degrees Celsius with or without a sore throat, stop taking the medicine.  
- Go to the nearest emergency department or urgent care clinic immediately to get a blood test to measure your white blood cell count. |
| Liver damage | Less than 1 in 10,000 people | Watch for signs of liver damage:  
- Jaundice (yellow skin colour)  
- Pale stools (poo)  
- Itching  
- Dark urine  
- Pain in the abdomen  
- Nausea that doesn't go away  
If you notice these symptoms, stop taking the medicine and go to the nearest emergency department. |
**Possible side effect** | **How common is it?** | **What should I do?**
--- | --- | ---
Vasculitis (inflammation of small blood vessels) | Rare | If you notice a purple-red rash or experience joint and muscle pain that does not go away, contact your doctor.
Watch for signs of kidney or lung problems:
- Blood in the urine
- Unusually low amount of urine
- Difficulty breathing
- Coughing up blood
If you notice these symptoms, stop taking the medicine and go to the nearest emergency department right away.

If you notice any other side effects that are not listed here, tell your doctor.

**Are anti-thyroid medicines safe during pregnancy?**

If you are planning to get pregnant, talk to your doctor first. Your medicine may need to be changed or adjusted.

**Methimazole is not safe** to take during the first 3 months of pregnancy. It can cause birth defects. In the second and third trimesters, methimazole can be used. If you are planning to get pregnant, take propylthiouracil (PTU).

During pregnancy, your doctor will need to check your thyroid hormone levels regularly to adjust your medicines.

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