



## What is Warfarin?

Warfarin is a drug used to reduce the risk of clotting. The natural antidote to Warfarin is Vitamin K, which is found in leafy green vegetables. It is safe to eat green vegetables, but you should try to maintain a steady quantity in your diet. Alcohol can be used safely in small quantities.

Warfarin is not a new drug, and has been used in patients for many years. Although it is the active ingredient in Ratsak, it is safe to use in people when prescribed in very measured doses.

### When is Warfarin used?

Warfarin is used in patients who are at risk of forming blood clots that could lead to stroke, heart attack, or thrombosis in the legs or lungs. Warfarin is only prescribed with other anti-clotting drugs like Aspirin in specific circumstances.

### What are the side effects of Warfarin?

Warfarin is safe when monitored closely by your doctor and has few major side effects.

- **Risk of bleeding:** Warfarin does not cause bleeding, but it will make you bleed more freely if you cut or injure yourself. None-the-less, patients on Warfarin do have low but increased annual risk of major bleeding compared to people taking regular Aspirin (<2.0% vs 1.0%). Patients on Warfarin also have a slightly greater risk of intra-cranial bleeding when compared to people taking Aspirin (0.3%vs 0.1% pa). This risk is higher in the very elderly, and in people with a history of recent stroke and poorly controlled hypertension. Despite this, the risk of intra-cranial bleeding is substantially (>10x) lower than the risk of stroke due to other causes that Warfarin helps prevent. Hence Warfarin has a clear net protective effect against stroke compared to Aspirin or other therapy in selected patients at risk of stroke.
- **Other risks:** Very rarely (1:10,000) Warfarin has been associated with ulceration of the skin, which typically occurs within the first week of starting therapy. This is more common in people with a rare clotting disorder (Protein C deficiency).

### **How is Warfarin used?**

Warfarin comes in variable size tablets (typically 5, 2 and 1 mg). You need to have each required to be on hand in case of a change in dose (eg. 6mg = 5mg + 1mg, 4mg = 2+2mg). Although the average maintenance dose of Warfarin is about 5mg/day, it may vary over time. Furthermore, the average dose varies widely (1mg – 15mg/day) between individuals. There are different formulations of Warfarin. They are all effective, but it is important that you always use the same formulation as their effect on the blood differs.

### **How is the effect of Warfarin measured?**

The effect of Warfarin is measured by a blood test called INR. The INR is an International Normalised Ratio of the anti-clotting effect on our blood. That is, it is an agreed international measure, which means that the results should be the same when checked anywhere in the world.

### **What should the INR be?**

In a person not taking Warfarin the INR is  
1.0. Levels <2.0 are not likely to be effective  
Levels > 4.0 are unnecessarily high  
Levels >6.0 can be dangerous

### **How often is the INR checked?**

When starting Warfarin the INR needs to be checked every 3-4 days in the first few weeks, but when the dose has been stabilized, in most patients monthly checks are adequate unless a problem arises or a new drug is started.

### **Who can change the dose of Warfarin?**

Normally your doctor will advise you of the dose of Warfarin you need. The advice given will depend on the INR result.

For example, if the INR is:

- <2.0 the dose should be increased by 1 mg and the INR rechecked in 1 week.
- 2-3 no change would be advised and the INR would be rechecked in 3-4 weeks.
- > 4 stop Warfarin for a day, reduce the dose by 1 mg and recheck the INR in 1 week
- > 6 stop Warfarin and speak with your doctor about what advice to follow. Sometimes patients with an INR > 6 are advised to take 1-2 mg of oral Vitamin K and to recheck the INR within 12-24 hours. However, if you are bleeding you should go to hospital.

## When should I seek advice from the doctor?

You should seek advice from your doctor if:

- You are actively bleeding or the colour of the bowel motion turns black (internal bleeding).
- You are taking medications that your doctor may not know about
- If you start any new medication including self prescribed vitamins
- You have not had an INR check for > 4 weeks
- You need surgery or need to see the dentist

## Starting Warfarin

Your target INR is \_\_\_\_\_ to \_\_\_\_\_

1. On \_\_\_\_\_ take 5mg at about 6pm
2. On \_\_\_\_\_ take 5mg at about 6pm
3. On \_\_\_\_\_ take 5mg at about 6pm
4. On \_\_\_\_\_ have a blood test in the morning. See your GP in the afternoon. Your GP will advise you of the next dose of Warfarin and when you should have your next blood test.
5. Stop anti-inflammatory drugs (and Aspirin, if advised by your doctor)