



 **PREVENTING, MANAGING, & THRIVING WITH THROMBOSIS**

## A Guide to INR Levels

**A**fter being diagnosed with a blood clot (thrombosis), your healthcare provider may prescribe warfarin for treatment. Warfarin is a medication that works by blocking the formation of vitamin-K-dependent clotting factors, which are substances in the blood that cause clotting.

Although warfarin can prevent blood clots from forming, it can also cause other problems like bleeding. To make sure that the medication is working effectively, patients on warfarin need routine blood tests to check a level called the INR.

### What does INR stand for?

INR stands for **international normalized ratio** and is measured with a blood test called PT-INR. PT stands for **prothrombin time**. The test measures how much time it takes for your blood to clot and will determine if you're receiving the right dose of warfarin.

If your INR is too low, you could be at risk for a blood clot – but if it's too high, you could experience bleeding.

A typical INR target ranges from 2-3 but can vary from patient to patient. Patients with a tendency towards clotting may have a range targeting 3-4, whereas patients with a higher bleeding risk may have a lower INR between 2-2.5.

### How often is testing needed?

Testing needs depend on how stable a patient's INR is over time. According to the American Heart Association (AHA), patients should be tested at least once a month, but some patients will require testing as often as twice a week. INR tests can be done at a lab or clinic but can also be done at home for some patients. Home testing requires the use of an in-home INR monitoring machine and test strips. After self-testing with this device, you can report your INR results to your care team to determine if you need to adjust your warfarin dose. Learn more about home testing here or talk to your healthcare provider.

### What can I do to help keep my INR level where it should be?

First, always listen closely to your doctor's instructions and take your medication exactly as prescribed. If you miss any doses, you should contact your healthcare provider and ask about how to safely restart it.

When filling your warfarin prescription, try to fill it at the same pharmacy to ensure the brand of warfarin you're on stays consistent.

Finally, you'll also need to watch your diet and keep track of foods that may have vitamin K in them. Because warfarin works by blocking vitamin-K-dependent clotting factors, increasing your vitamin K intake can make warfarin less effective by lowering your INR level and potentially putting you at risk for a blood clot. Foods with high levels of vitamin K include kale, broccoli, and Brussels sprouts. Other changes to your nutrition, such as starting a new diet or taking new supplements, can also cause your INR level to fluctuate.

Talk to your doctor before starting any new diet/nutrition regimens.

### Looking Forward

Starting a new medication can be challenging and warfarin is no exception. If you have questions or concerns about taking warfarin, be sure to contact your healthcare provider. In addition, pharmacists at either your local hospital or retail pharmacy are an excellent resource. Sometimes your doctor may refer you to a specialized clinic called an anticoagulation management service. The medical staff in these clinics will check your INR and help make adjustments to your warfarin dose if needed.