

## 76. Alcohol and warfarin (coumadin®)

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### **Q: "Does alcohol intake increase the INR?"**

A. I am not aware of any study that has looked in detail at the influence of alcohol intake on the INR in patients on warfarin (coumadin®).

I am aware of only 2 studies that somehow address the issue of alcohol and INR (references 1 and 2). Both studies showed that individuals who drink alcohol are not more likely going to be over-anticoagulated, i.e. have INRs above 6.0, than individuals who do not drink. In one of the 2 studies (reference 1) this was true even for individuals who drink heavily. However, these studies did not address the question whether alcohol intake actually has an influence on the INR values. The interaction between alcohol consumption and warfarin therapy is said to be complex. A review article (reference 3) concluded:

1. Intermediate use (2-3 drinks per day) probably does not alter the INR at all.
2. Intermittent large amount of alcohol drinking leads to an increase in INR, because the alcohol interferes with warfarin metabolism, i.e. warfarin is metabolized less rapidly.
3. Chronic heavy alcohol intake results in a decreased INR, because the alcohol actually increases the metabolism of warfarin.

**Personal comment:** I typically tell patients on warfarin (coumadin®) who drink mild to moderate amounts of alcohol (1-2 glasses of wine or 1-2 beers per day), that such alcohol intake is likely o.k. from a clotting and bleeding point of view.

### **References**

1. Penning-van Beest FJA et al: "Lifestyle and diet as risk factors for overanticoagulation". J Clin Epidemiol 2002;55:411-417.
2. Hylek EM et al: "Acetaminophen and other risk factors for excessive warfarin anticoagulation. JAMA 1998;279:657-662.
3. Buckley NA et al: "Drug interactions with warfarin". Med J Aust 1992;157:479-83.