



Using Medications Safely: Interactions Between Grapefruit Juice and Prescription Drugs¹

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How can Foods Interact with Drugs?

Foods can affect the way our bodies use medicines. The most common effect is for foods to reduce the amount of the drug that our body absorbs. This can make the drug less effective. For example, milk can reduce the absorption of tetracycline antibiotics.

Foods can also increase absorption of a drug, and can affect how quickly or slowly a drug is eliminated from the body.

How does Grapefruit Juice affect Medications?

Grapefruit juice increases the absorption of some medicines. While absorbing more of a drug sounds like a good thing, it isn't. If more medication is absorbed than expected, the drug will have an increased effect. For example, a drug to help reduce blood pressure might lower blood pressure too far. Having more of a drug absorbed also increases the risk for side effects.



What Types of Medicines Interact with Grapefruit Juice?

The good news is that most medicines *do not* interact with grapefruit juice. Interactions have been found between grapefruit juice and the some of the drugs in the following categories:

- drugs used to treat high blood pressure

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- "statin" drugs used to reduce blood cholesterol
- immunosuppressant drugs used after transplant operations
- protease inhibitors used to treat HIV/AIDS
- some anti-anxiety and antihistamine medications.

The generic and brand names of drugs that interact with grapefruit juice are listed on the following table.

Table 1.

Drugs that Interact with Grapefruit Juice	
Generic name	Trade name(s)
Drugs for high blood pressure	
felodipine	Plendil®
nifedipine	Procardia®, Adalat®
nimodipine	Nimotop®
nisoldipine	Sular®
nicardipine	Cardene®
isradipine	DynaCirc®
Immunosuppressant Drugs	
cyclosporine	Neoral®, Sandimmune®, SangCya®
tacrolimus	Prograf®
Drugs for High Cholesterol	
atorvastatin	Lipitor®
lovastatin	Mevacor®
simvastatin	Zocor®
Drugs for Anxiety, Insomnia, or Depression	
bupirone	BuSpar®
diazepam	Valium®
midazolam	Versed®
triazolam	Halcion®
zaleplon	Sonata®
carbamazepine	Tegretol®
clomipramine	Anafranil®
trazodone	Desyrel®

Table 1.

Drugs that Interact with Grapefruit Juice	
Antihistamine Drugs	
astemizole	Hismanal®
Protease Inhibitors	
saquinavir	Fortavase®, Invirase®

Should I Stop Drinking Grapefruit Juice?

You should first check with your physician or pharmacist to see if one of your medicines is affected by grapefruit juice. If so, your doctor may prescribe a different drug that doesn't interact with grapefruit juice.

If you have been taking one of the medicines listed in the table, and you drink grapefruit juice, talk with your doctor before making any changes.



If your medicine is not affected by grapefruit juice, there is no reason to remove it from your diet. Grapefruit juice is an excellent source of vitamin C and contains other compounds like potassium that may help improve heart health.

What about Other Citrus Juices?

Juices from oranges or other citrus fruits do not interact with medications in the same way. Citrus fruits are good sources of many nutrients, and should be included regularly in a healthy diet.

Where can I get more Information?

Talk to your pharmacist and physician about other interactions between foods and drugs. Keep in mind that herbal supplements can also interact with drugs! Check with your physician before taking any type of supplement. The Family and Consumer Sciences (FCS) agent at your county Extension office may have more written information and nutrition classes for you to attend. Also, a registered dietitian (RD) can provide you with reliable information.