

# **GRAPEFRUIT IS NOT ALONE IN INTERFERING WITH MEDS RESEARCH SEEKS NEW DRUG OPTIONS**

Michelle Healy

Many people have seen prescription warning labels saying "Do not eat grapefruit or drink grapefruit juice while taking this medication." But other foods can interfere with medications, too.

Milk and other calcium products, for example, can block absorption of some antibiotics. Eating lots of chocolate with some antidepressants can cause a sharp rise in blood pressure. Black licorice can reduce effects of blood pressure drugs and diuretics.

It has been known for some time that grapefruit juice can "both increase or decrease the absorption of a small number of drugs," says Hartmut Derendorf, chairman of pharmaceuticals at the University of Florida College of Pharmacy. But a review in the Canadian Medical Association Journal found many new drug formulations are being added to the list.

"If the drug is metabolized in the gut wall to a large extent and this metabolism is blocked, then concentrations in the blood will go up. An example is the lipid-lowering drug simvastatin (Zocor)," Derendorf says. "For other drugs, such as the antihistamine fexofenadine (Allegra), grapefruit juice blocks the uptake into the bloodstream, and the concentrations in blood will go down."

He says alternatives are available that will not interact with grapefruit and other citrus fruits containing furanocoumarins, the culprit behind the "grapefruit juice effect." These include Seville oranges (used in marmalade), limes and tangelos, a cross between tangerines and grapefruit. Sweet oranges (navel, Valencia) contain no furanocoumarins.

There's more attention than ever being paid to reducing interactions, Derendorf says; researchers are seeking safe alternatives, removing chemicals that cause interactions and, in some cases, changing the genetic makeup of foods to stop interactions.

In December, a team at the University of Florida's Citrus Research and Education Center published a paper about efforts to create a grapefruit hybrid with significantly reduced interaction risk.

Vitamins, minerals and herbs also can interfere with some drugs.

Calcium supplements, for example, may decrease absorption of dietary iron, which is why people at high risk for iron deficiency are encouraged to take calcium at bedtime instead of with meals.

It's important to tell your physician about all the medications you're taking (prescription, over-the-counter and supplements), read packaging materials and ask about potential interactions, says Christine Gerbstadt, a registered dietitian and spokeswoman for the Academy of Nutrition and Dietetics.

Do you know which don't mix?

## **GRAPEFRUIT (AND JUICE)**

Can interact with some:

Cholesterol-lowering statins such as simvastatin (Zocor), atorvastatin (Lipitor), pravastatin (Pravachol)  
Blood pressure drugs (Nifediac, Afeditab)

- Drugs to prevent organ transplant rejection, such as Sandimmune. Neoral (both cyclosporine)
- Anti-anxiety drugs such as BuSpar (buspirone)
- Anti-arrhythmia drugs Cordarone, Nexterone (both amiodarone)
- Antihistamines such as Allegra (fexofenadine)
- Anti-malaria drugs Quinerva or Quinite (quinine)
- Halcion (triazolam) for insomnia

## BANANAS, ORANGES, GREEN LEAFY VEGETABLES

These potassium-rich foods can add to high potassium levels caused by ACE inhibitors including captopril (Capoten) and enalapril (Vasotec) used to lower blood pressure or treat heart failure. Too much potassium can cause irregular heartbeat, heart palpitations.

## LICORICE

The sweetening compound glycyrrhizin in black licorice may reduce effects of some blood pressure drugs or diuretics including Hydrodiuril (hydrochlorothiazide) and Aldactone (spironolactone).

- May increase toxicity of Lanoxin (digoxin), for congestive heart failure and abnormal heart rhythms

## CHOCOLATE

Contains caffeine; shouldn't be consumed with MAO inhibitors such as phenelzine (Nardil, Nardelzine) and tranylcypromine (Pamate).

- Can increase effect of stimulants such as Ritalin (methyl-phenidate)
- Can block effects of sedative-hypnotics such as Ambien (Zolpidem)
- Using caffeine with bronchodilators can increase side effects of excitability, nervousness,
- rapid heartbeat

## ST. JOHN'S WORT

Can reduce blood concentrations of drugs including:

- Digoxin (Lanoxin), used to treat congestive heart failure and abnormal heart rhythms
- Cholesterol-lowering drug lovastatin (Mevacor, Altacor) and erectile dysfunction drug sildenafil (Viagra)

## VITAMIN E

Taken with a blood-thinner such as warfarin (Coumadin), can increase anti-clotting activity and may increase bleeding risk.

## GINSENG

May increase risk of bleeding when taken with blood thinners (warfarin, heparin).

- Also can increase bleeding from aspirin and nonsteroidal antiinflammatory drugs such as ibuprofen and naproxen
- Combined with MAO inhibitors (Nardil, Pamate) may cause headache, trouble sleeping, nervousness, and hyperactivity

## GINKGO BILOBA

High doses can interfere with seizure drugs Tegretol, Equetro or Carbatrol (carbamazepine), and Depakote (valproic acid).

USA Today

January 23, 2013, p. 6D