



Grapefruit affects more medications

I know you're not supposed to eat grapefruit or drink grapefruit juice with some types of medication. Which ones do I need to be concerned about?

Actually, there's quite a long list, according to the researchers who first discovered the interactions more than 20 years ago. In a review published earlier this year in the *Canadian Medical Association Journal*, the same researchers report there are now more than 85 drugs that are known to or are predicted to react with grapefruit. And, they said, the number of medications that can cause serious adverse effects increased from 17 to 43 between 2008 and 2012.

The Berkeley Wellness Letter provides a link to the list of interacting drugs that researchers included in their review, and you can see it online here: <http://tinyurl.com/grapefruit-interacting-drugs>. The most common ones are some statin drugs used to lower cholesterol, such as simvastatin (Lipitor) and pravastatin (Pravachol), and some blood-pressure medications, such as nifedipine (Nifediac and Afeditab).

In a February 2012 Consumer Update report, the U.S. Food and Drug Administration explained why grapefruit is so problematic. Apparently, many drugs are broken down, or metabolized, with the help of an enzyme called CYP3A4 found in the small intestine. But grapefruit juice has certain substances that

block this enzyme, so instead of being broken down, potentially dangerous levels of the drug could enter the bloodstream and remain active longer than anticipated.

The FDA update also explained that, surprisingly, grapefruit juice can have the opposite effect with some drugs. For example, a common over-the-counter allergy relief medication, fexofenadine (Allegra), can be less effective when taken with grapefruit, orange or apple juice, because they block the action of proteins that help move the drug into cells for absorption.

What should you do?

- Read all prescription and over-the-counter medication labels for warnings about reactions with grapefruit. Non-prescription medications will have that information on the Drug Facts label. Asking your doctor, pharmacist or other health care professional is also a good idea.

- If there is a warning about grapefruit, also avoid tangelos (a cross between tangerines and grapefruit) and Seville oranges (often used in orange marmalade), and check the ingredients listings on fruit juice to make sure it doesn't contain juices from those fruits.

Chow Line is a service of Ohio State University's College of Food, Agricultural, and Environmental Sciences and its outreach and research arms, Ohio State University Extension and the Ohio Agricultural Research and Development Center. Send questions to Chow Line, c/o Martha Filipic, 2021 Coffey Road, Columbus, OH, 43210-1044, or filipic.3@osu.edu.



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