



Drug interactions: What should you know?

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Millions of people take medications and supplements to manage high blood pressure, diabetes, cholesterol, and other conditions. These medications can be tremendously beneficial for your health. But, many people do not know these medications can interact with each other, with herbal preparations and supplements, with foods or beverages, or with a medical condition. Some interactions may cause minor symptoms such as temporary nausea or diarrhea, but some interactions can be deadly. There are many different examples; consider some of the following:

Drug-Drug Interactions. When two drugs are taken at the same time, one may affect the other. One of the drugs might not work well, or one of the drugs might work too well.

- Antibiotics or antifungals with birth control pills. When taken together, the birth control pills are often less effective, and pregnancy is more likely to occur.
- Antidepressants (SSRIs). Reactions can arise when taken with other similar antidepressants, pain medications, and many over-the-counter drugs such as antihistamines. You might feel drowsy, or your heart, breathing or muscles might be affected.
- Hydrochlorothiazide (HCTZ) can interact with many other medications, with myriad symptoms.
- Over-the-counter decongestants can decrease the effectiveness of blood pressure medications, resulting in high blood pressure.
- Cholesterol-lowering drugs (statins) can be affected by many other medications.
- Anti-fungal drugs, such as fluconazole, can affect the kidneys. Fluconazole is affected by hydrochlorothiazide, warfarin, cholesterol-lowering medications, and medications for diabetes, among others.
- Amiodarone and digoxin are also potentially quite dangerous when taken with certain drugs.

Drug-Supplement Interactions. When a drug and supplement are taken at the same time, one may affect the other.

- St. John's Wort can affect many prescribed medications. In some cases, the drugs will work too well and potentially be dangerous, and in other cases they might not work well at all.
- Taking a Vitamin B complex can cause muscle or kidney damage when combined with a statin, a drug used to lower cholesterol.
- Cholesterol-lowering drugs (statins) can be affected by many herbals and supplements.
- Other supplements that often cause undesirable interactions include ginseng, vitamin E, and Ginkgo Biloba.

Drug-Food/Beverage Interactions. When a drug is taken with certain foods or conditions, the drug may not work or may cause a dangerous reaction.

- Glycyrrhizin, found in natural black licorice root, can cause elevated blood pressure. It should not be taken by those with high blood pressure, or those taking a blood pressure medication.
- Grapefruit juice affects the processing of many medications. If you are drinking grapefruit juice, check with your doctor or your pharmacist if you are starting a new medication. This is especially true if you are starting a cholesterol-lowering medication, called a statin.
- Calcium blocks the absorption of many drugs.
- A high-salt diet may decrease the effectiveness of blood pressure medications.
- Alcohol is dangerous in combination with many medications. When in doubt, avoid alcohol when taking medications.

- Hot drinks. Do not mix medicines with hot fluids, such as coffee or tea. The heat may reduce the effectiveness of the medication.
- Lotions. Hand and body lotions and oils can block the absorption of medications applied to the skin.

Drug-Condition Interactions. When a drug is taken with certain conditions, the drug may not work or may cause a dangerous reaction. This may not be obvious to your prescriber because some side effects are rare.

- Glycyrrhizin (found in black licorice root) should not be taken by patients with high blood pressure, or those taking a blood pressure medication.
- Cholesterol-lowering drugs (statins) can be affected by many medical conditions, especially muscle disorders.
- Genetics. Many drugs can be ineffective or potentially quite dangerous if the person has a genetic anomaly. For instance, many people have a gene that affects the processing of drugs by their liver, resulting in some drugs being too effective, and others being less effective.
- Many drugs should be avoided when a person has kidney disease or heart disease.

Multiple Interactions. Some drugs interact with many other drugs, herbs, supplements and foods. They require very specific management. Blood thinners (warfarin, aspirin) and autoimmune drugs (methotrexate) are examples, but there are others.

CAUTIONS:

The lists of interactions above **ARE NOT** all-inclusive! There are many other medication interactions that may affect your health. Always tell each of your doctors about *all* medications and supplements you are using, whether pill, cream, or inhaled.

When starting a new drug or medicine always ask your doctor about interactions. Be completely open about every drug, herb or supplement you take. If your doctor is unfamiliar with an herb or supplement, encourage him/her to research it and look into it yourself.

Always follow your doctor's instructions when taking any medication. Read the insert the pharmacy provides for your medications. Ask your doctor or pharmacist if you have questions. **Be your own best advocate.** With respect to medications, there are no '*dumb*' questions.

This article *does not* address the fact that *every* medication has its own list of side-effects. Discuss your symptoms and concerns with your doctor. If you believe you are having a reaction to a new medication, call your doctor or your pharmacist immediately. In some cases, it may be necessary to stop the medication until you are able to speak with your doctor or pharmacist.

Consumer information:

The following is an excellent reference for consumers, provided by the Food and Drug Administration (FDA):
<http://www.fda.gov/ForConsumers/ConsumerUpdates/default.htm>

References:

- <http://www.aafp.org/afp/2000/0315/p1745.html>
- <http://www.azcert.org/medical-pros/druginteractions.cfm>
- <http://www.medicinenet.com/fluconazole/article.htm>
- <http://www.nola.com/health>
- www.aafp.org
- www.droz.com