

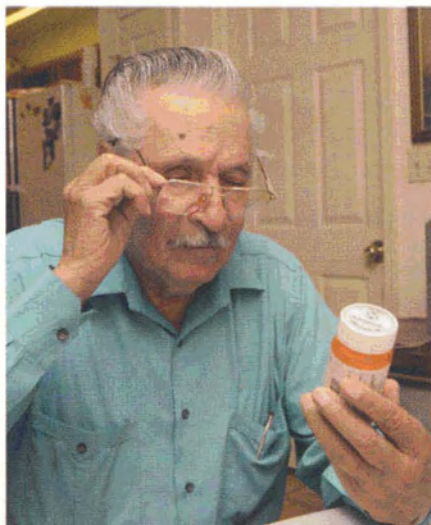


# **A SENIOR'S GUIDE TO THE SAFE USE OF MEDICATIONS AND HERBS**



UTEP/UT-AUSTIN  
COOPERATIVE PHARMACY PROGRAM

in association with  
THE AGELESS HEALTH INITIATIVE OF  
THE PASO DEL NORTE HEALTH FOUNDATION





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# Introduction

The use of several different medications and herbal products may be an issue that is unavoidable for most seniors who rely on these agents to treat their diseases. Although these drugs may help treat or cure these conditions, there are potential dangers for seniors to be aware of when they are using various medications, herbal products, and supplements. Therefore, it is very important for both patients and their caregivers to be educated about the risks of “polypharmacy” and “polyherbacy.”

One purpose of this booklet is to introduce the concept of polypharmacy and polyherbacy to seniors. These two words are now being used by healthcare professionals and scientists to describe the situation in which an individual person is taking a variety of medications, herbal products and supplements. This booklet provides a more detailed explanation of polypharmacy and polyherbacy as well as a discussion of the potential dangers of using several medications and herbal products.

Despite getting help from health care professionals such as physicians and pharmacists for guidance on drug therapy, it is ultimately up to the patient and their caregivers to manage medication regimens. This can be difficult to do, especially when patients are taking several different medications at once. Thus, it is important to provide these patients, particularly seniors, with information that they can use to safely manage their drug therapy. Useful medication management tips are included within this booklet. In addition, we have included a table summarizing herbal products that should be used with caution if one is also taking prescription and/or over-the-counter (OTC) medications.

The purpose of the information contained in this booklet is to prevent injury among seniors by educating them about the potential dangers of polypharmacy and polyherbacy, and by providing them with recommendations regarding the safe use of medications and herbal products. Ultimately, it is our goal to empower seniors to possess the knowledge and necessary tools to safely manage their own drug therapy.

## What is polypharmacy?

The term **polypharmacy** literally means “many drugs.” There are many definitions that specify the number of drugs that a patient must be taking to be considered polypharmacy.

Most commonly, polypharmacy is defined as the use of 5 or more medications used at the same time, in the same person. However, some consider polypharmacy to include the use of 2 or more medications.

**“Polypharmacy is the use of several different medications at the same time in the same person.”**

## What is polyherbacy?

**Polyherbacy** means taking more than one product containing herbs, including teas, capsules, tablets or extracts. Nutritional supplements are often included in this category, and they usually refer to products such as vitamins and minerals.

There are many different plants that are often safely used to treat or cure certain diseases and conditions. However, it is important to be aware that some herbs or herbal products may be toxic or harmful to our health.

Unfortunately, advertisements for herbal products such as those in newspapers, magazines, and on television, may be misleading in that they portray certain herbal products as harmless because they are “natural.”

**“Remember: Just because a product is “natural,” doesn’t mean that it is safe”**



# How common are polypharmacy and polyherbacy?

It is not known how many people experience polypharmacy. Some experts\* say that 25% of women and 15% of elderly men take more than 5 prescriptions per week in the United States. If non-prescription medications, also known as over-the-counter (OTC) medications, are added to this amount, the estimates increase to 57% of elderly women and 43% of elderly men who experience polypharmacy. Unfortunately, these estimates don't take into account the various herbal products and nutritional supplements (such as vitamins and minerals) that seniors take.

For many seniors, polypharmacy is appropriate. In other words, it is sometimes necessary for a person to be taking several different medications to treat various diseases and medical conditions, as long as each medication has an appropriate reason for use. However, polypharmacy can also occur when a patient is taking more drugs than necessary.

*\*From Hite M., "Improving adherence in the polypharmacy management of disease".  
Business Briefing: Pharmatech 2004.*

## Why should one be concerned about polypharmacy and polyherbacy?

There are significant problems that can happen in people who are taking several medications. Some of these problems include the following:

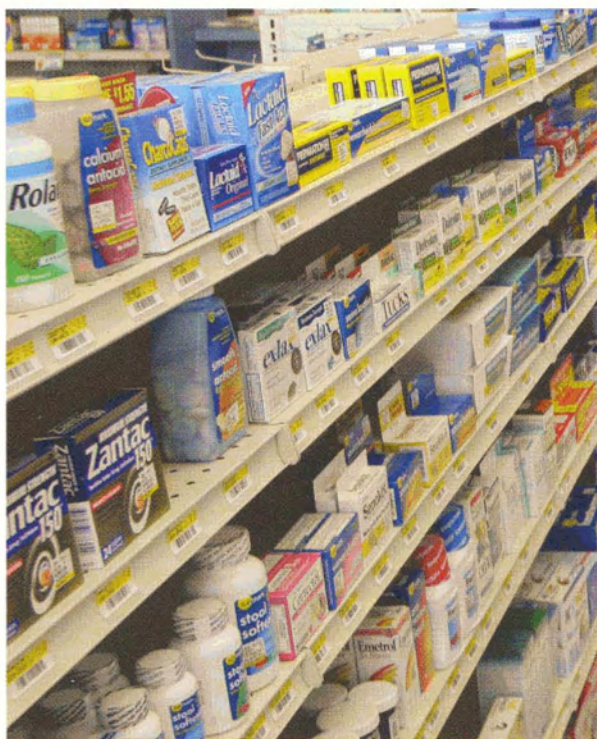
- It may be difficult to follow dosing instructions for many different medicines.
- Side effects can occur as a result of the combination of several drugs and herbs.
- There is a risk of interactions with other drugs, herbal products, foods, and drinks.
- There is an increased chance that medication errors may occur.

## Problem 1: It may be difficult to follow dosing instructions for many different medications.

Because there are several drugs to manage, mistakes in dosing and administration of these medications can occur.

Patients may become confused and take medications only when they need to instead of on a regularly scheduled basis as prescribed. Other patients may become frustrated with many different dosing regimens and they may accidentally take extra doses or skip doses of medication. Also, patients may end up taking medications at the wrong times, potentially increasing or decreasing the amount of time between doses of medications.

Drug administration mistakes can lead to a variety of problems. Medications may become ineffective if not taken as prescribed, and others may cause toxicity if they are taken more often or in higher doses than intended.





## **Problem 2: Side effects can occur as a result of the combination of several drugs and herbs.**

Every medication has the potential to cause side effects, ranging from very minor effects to severe reactions.

People who are taking several medications may experience a variety of side effects due to the individual drugs. However, combining drugs together can result in additive side effects. In other words, two or more drugs may cause the same side effect individually, but when taken together, the side effect can become much more pronounced.

One example of how this happens is described here. Patients taking both prescription pain medications and allergy medications may experience dizziness and drowsiness from each drug alone; however, these symptoms can be increased as a result of the combination of the drugs. This can be a very serious problem in the elderly, in which dizziness can lead to an increased risk of falls.

## **Problem 3: Interactions can occur between medications, herbal products, nutritional products, foods and drinks.**

There are many drug interactions that can occur between two or more medications when they are taken together. Some of these interactions may only have minor effects, while others might result in dangerous, life-threatening outcomes.

Unfortunately, interactions are not limited to drugs alone. They can also occur between medications and herbal products or supplements. Furthermore, certain foods and drinks may interact with medications as well.

There are different types of interactions that can occur. Some interactions lead to increases in drug levels in the body, which can potentially cause increased toxicity. Other interactions lead to decreases in drug levels, which can then cause a decrease in the effectiveness of the medication to treat the condition it was prescribed for.



## **Problem 4: There is an increased chance that medication errors may occur.**

It makes sense that the more drugs a person is taking, the harder it is for both patients and healthcare professionals, such as physicians and pharmacists, to keep track of them.

It has been reported that the risk of medication errors is higher with an increase in the number of drugs that a patient is taking. Fortunately, there are a number of strategies that one can use to lower the chance that these errors will happen. This booklet will review some of these strategies.

## **Why do polypharmacy and polyherbacy particularly affect seniors?**

The number of chronic diseases that one suffers from increases with age, and the number of medications that are used increases with the number of diseases. As a result, the elderly are more likely to suffer from polypharmacy than other age groups.

The normal aging process itself can also affect how the body handles medications. For example, the body undergoes changes in how drugs are absorbed and distributed throughout the body. In



addition, aging causes changes in how the body breaks down and eliminates drugs. As a result, drugs are more likely to accumulate and potentially cause toxic effects.

Because of these age-related changes, seniors are at higher risk for medication-related problems.

**Aging alters how the body handles medications, and as a result, seniors are at higher risk of adverse events from polypharmacy and polyherbacy.**

## **What can seniors do to decrease their risk of adverse effects from polypharmacy and polyherbacy?**

There are many things that seniors can do to decrease their risk of the potential dangers of taking several medications and herbal products. Many of these strategies are listed below. Each one of these tips will be discussed individually in this booklet:

- Keep a list of all medications, herbal products, and nutritional supplements
- Use the same pharmacy for all of your drug needs
- Follow directions
- Know what the medications you take are for
- Pay attention to side effects of new medications and/or herbal products
- Communicate effectively with healthcare providers
- Get rid of expired or unnecessary medications, herbal products, or supplements
- Schedule an appointment with your doctor or pharmacist to discuss your medications and/or herbal products
- Self-educate before you self-medicate

# Strategy 1: Keep a list of all of your medications, herbal products, and nutritional supplements

## Why is it important that I keep a list?

Never assume that your doctor or pharmacist knows all of the medications that you are taking!

Many patients incorrectly assume that their medical chart at their physician's office or their computer record in the pharmacy has all of the updated information about their prescription medications. Unfortunately, this is not always the case.

In addition to the problem of outdated medication lists in doctor's offices and pharmacies, these charts and pharmacy databases often do not contain information about herbal products or supplements that a patient takes.

This problem is an even greater one if a patient visits several different physicians or pharmacies. Patients can not guarantee that physicians will clearly communicate changes in drug therapy to other physicians involved in the patient's care. Pharmacies that do not share the same computer system with other pharmacies that a patient is using will not be able to easily obtain information about drugs that patients are filling at the various pharmacies.

The easiest way to avoid confusion among healthcare providers about your medications is to keep a list of everything you take and keep it handy so that you can provide that information to any healthcare professional involved in your care. Keeping a list of everything you take is easier and safer than carrying around every bottle or box of medication with you to each visit. There can be danger of losing your medications if you carry them all with you, and drugs can also be damaged or destroyed if they are not stored properly. (There are benefits from carrying your actual medications to visits with your doctor or pharmacist, but this will be discussed later in this booklet.)

## How do I go about keeping a list?

**Write down all of your prescription drugs, over-the-counter (OTC) medicines, herbal products or supplements.** Unfortunately,



some people don't inform their physician or pharmacist about herbal products and supplements. However, many of these agents can cause serious side effects or interactions when mixed with prescription drugs and so it is very important for your doctor and pharmacist to know that you are taking these products.

**So remember, don't leave OTC drugs, herbal products and supplements off your list!**

When you write down what you take, it is best to include the following information:

- Name of the drug (You can write the brand (trade) name, generic name or both.)
- How you take it (Include the dose and how often you take it.)
- What you take it for
- Who prescribed it
- The date you started or stopped taking it

In addition to medications and herbal products on your list, you should also keep the names and contact numbers of physicians and pharmacies.

There are many ways to keep a list. Some patients keep a list on a piece of notebook paper. Others use their computers to keep an electronic copy of their list, which they print out when they go to their doctor or pharmacist. There are also portable medication records that are available as handy, pocket-size cards that can be easily carried in a wallet or purse to physician offices or pharmacies. Use whatever method works for you!

**We have developed a portable medication record to help you keep track of prescription and OTC medications, herbal products and supplements. If you are interested in obtaining one of these tools, feel free to contact us at the phone number listed at the back of this booklet.**

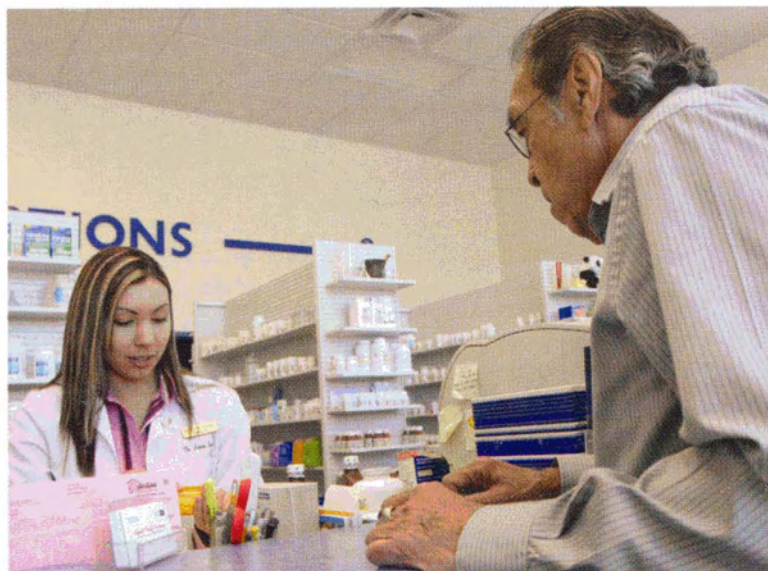
**Keeping the list updated is very important!** Be sure to make changes to your list if your healthcare provider starts, stops, or alters the dose of any medications you are taking. Don't forget to provide this updated information to other healthcare professionals involved in your care by carrying it with you when you go to the doctor or pharmacy.

Once again, you can use any method you like to keep track of your medications and herbs, as long as you remember the following:

- Keep a list!
- Keep it handy!
- Keep it updated!

## **Strategy 2: Use the same pharmacy for all of your drug needs**

It is very important to use the same pharmacy for all of your drug needs. Although there may be advantages to “shop around” for the lowest prices on prescription and over-the-counter medications, there is no substitute for getting to know your pharmacist and making sure that they are aware of everything you take.





Pharmacists are able to assist you in determining whether or not there are any potential interactions between the medications, herbal products, and nutritional products that you take. They can also help educate you about potential side effects that can occur due to certain combinations of drugs. However, if they are unaware of everything you take, they are unable to perform a complete assessment.

The computer databases in pharmacies allow pharmacists to keep track of all of the medications that you take or have taken in the past. However, they are often not able to identify medications that you have filled at other pharmacies unless they share access to the same computer system. By not filling your prescription medications at the same pharmacy, it is very difficult for your pharmacist to review everything that you take to identify potential interactions or problems.

## Strategy 3: Follow directions

Although this seems obvious, it is not uncommon for patients to make their own decisions about how they take their medications. Some people decide to take their medications more or less often, depending on how they are feeling. Others will take extra doses or skip doses without thinking about the consequences of their actions. There are patients who decide to cut or split tablets or capsules in order to make them easier to take, or to save money and allow their supply to last longer.

Each one of these actions, plus the numerous other mistakes that patients make when administering their medications, can have very serious effects. Taking medications more often than prescribed or taking extra doses can lead to over-dosing and potential toxic effects. Decreased effectiveness of the medication can be caused by skipping doses or taking the medications less often. Cutting or splitting tablets or capsules can be a safe option for certain medications. But with others, splitting tablets or capsules can lead to a sudden release of medication that can cause serious side effects or even death. This should never be done without the advice of a pharmacist or physician.

It is very important to follow directions carefully. Be sure to read the labels on prescription and non-prescription medications. If you are unsure of how to take your medications, be sure to ASK questions! It is the responsibility of your pharmacist to counsel you about the medications that you have filled at the pharmacy, and they are available to answer your questions about herbal products and over-the-counter medications as well as your prescription drugs.

## **Strategy 4: Know what the medications you take are for**

It is important to know the reason for use of each medication that you are taking. If you are unclear about why a particular medicine is being prescribed, be sure to ask your healthcare professional. This is especially important if you have more than one physician. Several medications can be used for different medical conditions and disease states, so the reason you are taking a particular drug may not always be clear to your healthcare provider if it was started or recommended by someone else. It is a good idea to write the reason you are taking the medications on your portable medication list so that everyone who is involved in your care will be aware. This helps your healthcare providers review your medications to determine if you still need to continue taking them.

## **Strategy 5: Pay attention to side effects of new medications and/or herbal products**

It is important to look out for the development of side effects after you start any new medication. It may be that the new medication is responsible, or perhaps, it is due a combination of drugs and herbal products.

If you experience any bothersome side effects, you should discuss your symptoms with your physician and/or pharmacist. They can review your symptoms as well as any medications or herbal products that you are taking to determine if your side effects are being caused or worsened by polypharmacy and polyherbacy.



## Strategy 6: Communicate effectively with your healthcare providers

Good communication with your healthcare providers is key! Although time constraints can prevent you from spending adequate time discussing your drug therapy concerns with your physician or pharmacist, there are things that you can do to make the most of the time that is available to you. Being prepared is the most important thing you can do! Here's how:

**Keeping a list of all of the medications and herbal products that you take is the first step to good communication.** Take this list with you to visits to the doctor or pharmacist so that they can easily and quickly review what you are taking. You will be surprised how much time this can save, and it helps your healthcare provider update their records.

**Write down questions ahead of time so that you won't forget.** This will help you focus on the important issues and maximize the time that you have with your physician or pharmacist. Although your physician and pharmacist will undoubtedly be busy, don't be afraid to ask these questions. If there is not enough time to discuss your concerns during the visit, then ask them if there would be another time in which they would be available to answer your questions. Remember, there are never dumb or silly questions when it comes to your drug therapy.

## Strategy 7: Get rid of expired or unnecessary medications, herbal products, or supplements

Drugs are chemicals that may break-down over time and lose effectiveness. It is primarily the loss of drug potency that is the main concern, rather than dangerous effects of expired medications. However, there are some drugs that can become toxic after they expire. Therefore, it is important to look at the packaging that the medication or product comes in to see when the drug expires.

Most drug companies generally print an expiration date on the bottle or package that is 2 or 3 years from the date that the drug was made. Pharmacists who dispense medications in pharmacy bottles

after they have been removed from their original containers usually put an expiration date that is a generally a year from when the product was dispensed. This is a "beyond-use date." This date will depend on the medication, since some products, especially liquids or suspensions, may break-down much faster. If you are unsure of when a drug expires, ask your pharmacist for guidance. **A good rule of thumb is that if you are in doubt of how old a product is, and you are unable to determine when it expires, then throw it out!**

Getting rid of medications that are no longer needed is important, too! Keeping medications that have been discontinued by your doctor can lead to confusion. In fact, polypharmacy often results from patients failing to stop taking medications that are no longer necessary. This can result in a variety of problems such as over-medication, additional side effects, or drug interactions. It is never a good idea to keep medications for use at a later date, and you should never share your unused prescription medications with others. **Throw away those unnecessary medications or herbal products!**

Disposing of your medications is something you need to take care in doing. Throwing your medications away in the trash is generally acceptable. However, if there are small children or pets in your household, then simply placing these products in the trash will put them at risk for coming into contact with the medication. If this is the case, you may want to secure the trash or arrange for another way to dispose of them. There have been reports that flushing your medications down the toilet may have harmful effects on the environment, and so this is not recommended as a way to dispose of your medications. Ask your pharmacist for advice on proper disposal, and some pharmacies may even have programs in place to dispose of medications for you. You can also contact your local waste disposal company to see if they have a policy or program for medication disposal.

It is a good idea to look through all of your medications, herbal products, and supplements at least once a year to make sure that there are no expired or unnecessary medications that could potentially cause problems for you or your loved ones.



## **Strategy 8: Schedule an appointment with your doctor or pharmacist to discuss your medications and/or herbal products**

A “brown-bag session” is an activity in which you put all of the medications, supplements and herbal products that you take into a bag and take them to your healthcare professional to review them with you. This is an excellent opportunity to have them help you look for expired or unnecessary medications.

Your doctor or pharmacist can also look for potential interactions or combinations of drugs that can put you at high risk for certain side effects. In addition, they can answer questions about administration of your medications or any other concerns that you have about the medications that you take.

These sessions can take up to an hour or more depending on the number of products that you are taking, and so the best thing to do is set up an appointment with your doctor or pharmacist for this purpose alone. Usually a consultation fee is typically required for one of these visits, but there are sometimes free “brown-bag sessions” in your community that are set up by various agencies using volunteer services from local pharmacists or physicians.

Ask your doctor about this at your next visit, or touch base with your pharmacist to see if he or she provides this service or if they know of other pharmacists in the community who perform these sessions.

## **Strategy 9: Self-educate before you self-medicate**

There are a wide variety of over-the-counter (OTC) medications, also known as non-prescription drugs, that are available in pharmacies and retail stores. Many of these are safe treatment options for certain conditions when they are used appropriately. However, using these products can cause drug interactions and side effects with other medications, supplements or herbal products that you are taking.

Unfortunately, many people believe that these drugs can't cause harm since they are "weak" and don't require a prescription. But, there are OTC medications that can cause harm if you have certain medical conditions or if you are taking certain medications.

Non-prescription drug products can be very safe treatment options if the following precautions are taken:

**1. Consult a pharmacist or doctor before using a new OTC product.** It is a good idea to double check with your healthcare professional so that you can make sure that the product is safe for you to use.

**2. Read the ingredients and follow directions on the box.** The OTC product labels contain the names and doses of the active ingredients. In addition, the label will provide dosing instructions and advice on how long the product should be taken until it is recommended that you seek medical attention.

**3. Look for warnings on the label.** The OTC labels contain warnings for use. They will describe certain medical conditions in which the product may pose a risk to the individual if taken. They may also mention certain drugs that should not be taken with that medication.

**4. Limit use to a short-term basis.** OTC products are meant to be used for minor symptoms and for only a short-period of time. If your symptoms do not improve within a few days, you should consult a healthcare provider.

## Conclusion

Polypharmacy and polyherbacy can be appropriate for many individuals. However, there are always risks involved with taking several medications, supplements, and herbal products. By following some of the tips we have provided in this booklet, it is our hope that you will have the necessary tools to safely manage your drug therapy.



# Herbal products to be used with caution if taking prescription and/or over-the-counter medications (OTC's)

## Introduction

The following table has been developed in order to serve as a quick-reference guide that highlights herbal products that should be used with caution in people who are also taking prescription and/or over-the-counter (OTC) medications.

For each herbal product listed in the table, we list the common names of the herb, indications for use, form of use, potential drug interactions, and potential adverse reactions.

Common names (English/Spanish)	What is it used for?*	Form of use	May interact with what medications?	Possible adverse events
<b>Alfalfa, Lucerne</b>	Nutritional supplement for osteoporosis	Tea, tablets, sprouts, and capsules	Warfarin, aspirin, and other blood-thinners	Its vitamin K content may decrease the effects of some blood- thinning medications (anticoagulants)  Avoid seeds, sprouts, capsules or tablets in patients diagnosed with Lupus, as this may worsen the symptoms of the disease

Common names (English/Spanish)	What is it used for?*	Form of use	May interact with what medications?	Possible adverse events
<b>Algae, Algas marinas</b> (Kelp, Bladderwrack, Fucus, Laminaria, and others)	To treat thyroid gland conditions  Nutritional supplement sometimes used for weight loss	Tablets, capsules	Thyroid medications  Warfarin and other blood thinners	May contain high levels of iodine and interfere with thyroid medications  Algae may also contain high levels of sodium  May thin the blood and interfere with normal blood clotting
<b>Aloe vera, Sábila, Zábila</b>	The gel is applied to the skin for minor burns and wounds and is usually regarded as safe  The whole leaf is taken by mouth as a laxative or to treat ulcers and diabetes (not recommended)	Gel scraped from the fresh leaf, tablets and capsules  A beverage made from the whole Aloe leaf and sometimes combined with other plants	Whole leaf preparations may interact with oral diabetes medications	May lower blood sugar excessively  Prolonged internal treatment with the whole leaf containing a yellowish liquid (also known as "latex") may cause damage to the kidneys and intestines



Common names (English/Spanish)	What is it used for?*	Form of use	May interact with what medications?	Possible adverse events
<b>Arnica and Mexican arnica, Árnica del país</b>	To treat bruises  Arnica tea is taken by mouth to treat stomach ulcers, but may be toxic in large doses	Creams and ointments applied to unbroken skin only  Homeopathic drops or pills  Avoid swallowing concentrated tablets or capsules (toxic in large doses)	Warfarin and other blood thinners	Do not apply to people that are allergic to Arnica or other related plants, such as ragweed, for example  Homeopathic preparations should be diluted before swallowing; as such, these are usually safe, but only under medical supervision  Arnica may interfere with normal blood clotting
<b>Ashwagandha, Withania</b>	To promote sleep	Capsules, tablets	Sedatives (sleep aids)	May increase the effect of sedative medications (sleep aids)
<b>Astragalus, Huan Qi, Astrágalo</b>	To boost the immune system	Capsules, tablets	Warfarin, aspirin, and other blood-thinners	May thin the blood and interfere with normal blood clotting

<b>Common names (English/Spanish)</b>	<b>What is it used for?*</b>	<b>Form of use</b>	<b>May interact with what medications?</b>	<b>Possible adverse events</b>
<b>Bilberry, Arándano</b>	To improve vision and as an antioxidant	Capsules, tablets	Warfarin, aspirin, and other blood-thinners	May thin the blood and interfere with normal blood clotting
<b>Bitter melon, Bitter gourd, Cundeamor</b>	To treat diabetes	Fried fruit, capsules, tablets	Oral diabetes medications	May lower blood sugar (glucose) excessively
<b>Boldo</b>	Liver, stomach and intestinal problems	Tea, capsules and extracts	Unknown	May cause irritation to gastrointestinal tract in large doses
<b>Bromelain, Bromelaína</b>	Nutritional supplement sometimes used against inflammation	Capsules, tablets	Warfarin, aspirin, and other blood-thinners	May thin the blood and interfere with normal blood clotting
<b>Cascara Sagrada, Buckthorn</b>	Laxative and weight loss	Capsules, tablets	Heart medications such as digitalis	May cause intestinal upset in patients suffering from colitis; avoid long- term use of this herb
<b>Cat's claw, Uña de gato, Savento</b>	Arthritis and cancer	Tea, capsules and extracts	Drugs to lower the immune system (immune-suppressants) such as cyclosporine	May cause the body to reject a tissue or organ transplant



<b>Common names (English/Spanish)</b>	<b>What is it used for?*</b>	<b>Form of use</b>	<b>May interact with what medications?</b>	<b>Possible adverse events</b>
<b>Creosote bush, "Chaparral", Gobernadora, Guamis, Hediondilla</b>	Kidney and gall bladder stones, cancer, and sexually transmitted diseases	Tea, capsules, tablets, and extracts	Unknown	May cause liver and kidney damage with prolonged internal use; capsules and tablets are more concentrated and should be avoided
<b>Devil's claw, Garra del diablo, Harpagófito</b>	Arthritis and to treat non-cancerous inflammation of the prostate gland	Tea, capsules, tablets, and extracts	Warfarin and other blood-thinners	May thin the blood and interfere with normal blood clotting
<b>Dong Quai, Chinese angelica, Angélica china</b>	Menstrual and stomach complaints	Tea, capsules, tablets, and extracts	Warfarin and other blood-thinners	May thin the blood and interfere with normal blood clotting
<b>Evening primrose, Onagra, Primula</b>	Nutritional supplement used to treat skin and menstrual conditions	Tea, oil, capsules, and tablets	Warfarin and other blood-thinners  Anti-seizure medications	May thin the blood and interfere with normal blood clotting  May make medications less effective in controlling seizures

Common names (English/Spanish)	What is it used for?*	Form of use	May interact with what medications?	Possible adverse events
<b>Fenugreek, Alholva, Fenogreco</b>	<p>To treat coughs and colds</p> <p>For the treatment of diabetes</p> <p>The seeds are taken as a nutritional supplement</p>	Tea, capsules, tablets, and extracts	<p>Warfarin and other blood-thinners</p> <p>Oral diabetes medications</p>	<p>May thin the blood and interfere with normal blood clotting</p> <p>May cause an excessive drop in blood sugar (glucose)</p> <p>Seeds used as a food flavoring are usually safe</p>
<b>Garlic, Ajo</b>	<p>To lower blood pressure</p> <p>To lower, blood sugar (glucose) levels</p> <p>To lower cholesterol levels</p> <p>Cloves ingested as a cancer preventative</p>	Raw cloves, capsules or tablets	<p>Warfarin, aspirin, and other blood-thinners</p> <p>Anti-HIV medications</p>	<p>Large doses may thin the blood and interfere with normal blood clotting</p> <p>May make Anti-HIV medications less effective</p>



<b>Common names (English/Spanish)</b>	<b>What is it used for?*</b>	<b>Form of use</b>	<b>May interact with what medications?</b>	<b>Possible adverse events</b>
<b>Ginkgo biloba</b>	To increase blood circulation  To prevent memory loss	Capsules, tablets, and extracts	Warfarin, aspirin, and other blood-thinners  Anti-seizure medications	May thin the blood and interfere with normal blood clotting  May lower the efficacy of anti-seizure medications
<b>Ginseng, Panax ginseng</b>	Nutritional supplement against stress	Tea, capsules, tablets, and extracts	Insulin and oral diabetes medications  Warfarin, aspirin, and other blood-thinners  High doses of ginseng may cause high blood pressure	May lower blood sugar (glucose) excessively  May thin the blood and interfere with normal blood clotting  Avoid prolonged use in patients with high blood pressure
<b>Grapefruit, Grapefruit juice, Toronja, Jugo de toronja</b>	Weight loss/ nutritional supplement or beverage	Juice or fresh fruit	Certain lipid (cholesterol) lowering drugs  Calcium channel blockers (heart medications)  Sedatives	May increase the strength of various medications,* possibly leading to toxicity  * Be sure to ask your healthcare provider if it is safe to eat/drink grapefruit products while taking prescription medications.

Common names (English/Spanish)	What is it used for?*	Form of use	May interact with what medications?	Possible adverse events
<b>Hawthorn, Espino blanco</b>	To lower blood pressure and as a light sedative for anxiety (nervousness)	Tea, capsules, tablets, and extracts	Medications for high blood pressure	May increase effects of medications used for high blood pressure
<b>Kava kava</b>	Anxiety (nervousness) and insomnia (inability to sleep)	Beverage, capsules, tablets, and extracts	Sedatives (sleep aids)	May increase the effect of sedative medications (sleep aids)  May be liver toxic if combined with alcohol and certain medications
<b>Licorice, Liquorice, Orozuz, Regaliz</b>	Stomach ulcers, coughs and colds	Tea, capsules, tablets, and extracts	Medications for high blood pressure	May lower the effects of medications used for high blood pressure  Avoid prolonged use of this plant in patients with high blood pressure
<b>Papain, Papaína</b>	To promote digestion	Capsules, tablets	Warfarin, aspirin, and other blood-thinners	May thin the blood and interfere with normal blood clotting

<b>Common names (English/Spanish)</b>	<b>What is it used for?*</b>	<b>Form of use</b>	<b>May interact with what medications?</b>	<b>Possible adverse events</b>
<b>Pomelo</b>	Nutritional beverage	Juice	Immune system suppressants such as cyclosporine	May increase the strength of this medication, possibly leading to toxicity
<b>Rue, Ruda</b>	Rheumatism, colic	Tea, capsules, tablets, and extracts	Unknown	Plant is toxic; avoid swallowing any part of the plant
<b>Sassafras, Sasafrás</b>	Antiseptic, tonic, and to treat syphilis	Tea, capsules, tablets, and extracts	Unknown	May contain cancer- causing ingredients; avoid use



Common names (English/Spanish)	What is it used for?*	Form of use	May interact with what medications?	Possible adverse events
<b>St. John's wort, Klamath-weed, Hypericum, Hierba de San Juan, Hipérico, Corazoncillo</b>	Mild to moderate depression, anxiety (nervousness)	Tea, capsules, tablets, and extracts	<p>Anti-HIV medications</p> <p>Oral medications to prevent pregnancy</p> <p>Immune- system suppressants such as cyclosporine</p> <p>Antidepressants</p> <p>Asthma medications (theophylline)</p> <p>Warfarin and other blood thinners</p>	<p>May make Anti- HIV medications less effective</p> <p>May make these medications less effective</p> <p>May change the effect of these medications.</p> <p>May change the effects of antidepressant medications and cause negative side effects</p> <p>Reduces efficacy of theophylline</p> <p>St John's wort may reduce the efficacy of blood- thinning medications</p>
<b>Valerian, Valeriana</b>	Insomnia (inability to sleep), anxiety (nervousness)	Tea, capsules, tablets, and extracts	Sedatives (sleep aids)	May increase the effect of sleep aids

Common names (English/Spanish)	What is it used for?*	Form of use	May interact with what medications?	Possible adverse events
<b>Wereke</b>	Diabetes	Tea, capsules, tablets, and extracts	Oral diabetes medications	May cause an excessive decrease in blood sugar (glucose)
<b>Wormseed, Mexican tea, Epazote, Pazote, Paico</b>	<p>Stomachache and intestinal gas</p> <p>To expel intestinal parasites (worms)</p> <p>The leaves of the plant are used as a flavoring in some dishes (condiment)</p>	Tea, oil	Unknown	<p>The oil from the plant is toxic; avoid swallowing any preparation made from it</p> <p>The leaves added to beans and other dishes are usually safe only as a spice</p>
<b>Wormwood, Estafiate, Istafiate</b>	Stomachache and to expel intestinal parasites (worms)	Tea	Unknown	Wormwood tea may be toxic if taken in large doses or during prolonged periods of time

**\* Disclaimer: The herb/supplement use mentioned in this table refers only to the common application in traditional medicine, and is not intended as a recommendation. Before taking any herb or nutritional supplement, ask for the advice of a qualified health professional.**

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