

# Dangers of Over-the-Counter Medications

Many people use herbal supplements on a regular basis. Because they are considered “natural”, it is usually assumed that they are safe. This is not always the case. Part 3 in this series will cover some commonly used herbal supplements and the problems that they can cause.

## Part III: Herbal Preparations:

### Regulation of herbal products:

All over-the-counter (OTC) and prescription products must show proof of safety and must produce the effect for which they are intended. Herbal products are considered food supplements and therefore do not have to meet the same requirements. Manufacturers are supposed to identify the ingredients of their product and make sure it is free of contamination but they do not have to address the safety or effectiveness of the product.

Ingredients listed on the labels of many OTC herbal products can be very misleading as other ingredients may be present but not listed. Preparations that contain multiple plants or herbs are especially concerning as manufacturers may intentionally or unintentionally add cheaper, more toxic herbs; heavy metals; and even other OTC medications such as acetaminophen, aspirin, or steroids. Serious allergic reactions can occur if, for example, an ingredient such as aspirin is not listed on the label and someone with an aspirin allergy ingests that product. Studies have shown that as many as one-third or more preparations on the market contain different products than those listed on the labels. There can also be variations between batches of the same product, even from the same manufacturer. A preparation that was tolerated in the past could now contain an ingredient that causes an allergic reaction in the consumer. Many Chinese medicine herbs contain lead and Indian herbal medicine products often contain lead, mercury, and arsenic.

### Medical issues:

Herbs are used to treat many different conditions. However since they are not regulated, the dose of the preparation may be excessive and thus cause problems. Also, there can be unrelated effects of the preparations that cause significant medical issues for some people. For example, a diabetic should not take a preparation such as Devil’s claw that causes elevated blood sugar levels. Someone with high blood pressure should not take an herb that raises the blood pressure level and thus counteracts the medication prescribed to treat high blood pressure in that person.

### Liver damage

Hepatotoxicity, or liver damage, can occur with the use of many drugs. However, liver damage has been shown to be the most frequent adverse reaction to herbal remedies. This may be difficult to diagnose because many people do not report the use of herbal remedies to their physicians. The symptoms can be non-specific at first with yellowing of the skin, nausea, vomiting, and abdominal pain. However with ongoing ingestion, the liver damage can worsen

and affect blood clotting and brain function. Finally, permanent liver damage and even acute liver failure with death can occur.

### **Other adverse effects:**

Other adverse medical affects can be seen with the use of herbal preparations. These include high blood pressure, heart palpitations, heart attack, stroke, and seizures. Many herbs cause a dangerously low or high blood sugar level. Herbs can affect hormone levels and lipid levels. Some herbs, such as aristolochia found in weight loss preparations, have been shown to cause kidney problems.

### **Herb-drug interactions:**

Herbal medicines can interact with prescription medications. One of the most frequent interactions seen is with Coumadin® (warfarin) and products such as St John's wort and Ginkgo biloba and can lead to an increased risk for bleeding.

### **Ephedra:**

Ephedra is often combined with caffeine and marketed for weight loss. During 1 year, Ephedra products were responsible for 64 percent of all herb-related adverse events reported to poison control centers. These adverse events included heart attacks, strokes, hypertension, and seizures. In 2004, the Food and Drug Administration banned the sale of products containing ephedra. Manufacturers have now substituted bitter orange (citrus aurantium) for ephedra in weight loss products. Citrus aurantium contains synephrine which is similar to ephedrine and has been associated with serious heart and nervous system side effects.

### **List of adverse effects and herbs associated with them:**

Following is a list of adverse effects that can be caused by different herbs. Some of the most common ailments for which these herbal remedies are used are listed in parentheses by each named herb. Evidence for effectiveness of most herbal supplements is lacking. Before anyone takes any herbal product, he/she should check with a physician to make sure there are no interactions or contraindications for use.

### **Liver damage:**

The most commonly reported herbs causing liver damage include:

- Ma-Huang (allergies, colds)
- Germander (diabetes)
- Valerian (muscle cramps)
- Mistletoe (dizziness)
- Skullcap (anxiety, irritable bowel)
- Chaparral (acne, dermatitis)
- Comfrey (burns, dry skin)
- Kava (fatigue, fibromyalgia)

## Blood sugar:

Those causing low blood sugar levels include:

- Alfalfa (hay fever, acne, anemia, gout)
- Fenugreek (used to flush out toxins)
- Ginseng (depression, stress, aging)
- Myrrh (athlete's foot, bedsores, dermatitis)
- Nettle (constipation); among others.

Those causing high blood sugar levels include:

- Devil's claw (autoimmune diseases)
- Elecampane (bronchitis, tuberculosis)
- Figwort (psoriasis)
- Ginseng (can cause both low and high levels) (depression, stress, aging)
- Hydrocotyle (leprosy)

## Hormone balance:

Those affecting estrogen levels include:

- Alfalfa (bursitis, colitis)
- Aniseed (indigestion, cough, cataracts)
- Black cohosh (menopause)
- Ginseng (depression, stress, aging)
- Pleurisy root (menstrual disorders)
- Wild carrot (gallbladder, gastrointestinal)

Those affecting thyroid levels include:

- Fucus (home remedy to treat thyroid problems)
- Horseradish (nasal polyps, sinus problems)

## Blood pressure:

Herbs that can increase blood pressure include:

- Bayberry (burns, muscle cramps, sinusitis)
- Capsicum (arthritis, diarrhea, fibromyalgia)
- Blue cohosh (hysterectomy-related problems)
- Coltsfoot (bronchitis)
- Gentian (fatigue, circulatory problems)
- Ginger (fevers, colds)
- Ginseng (depression, stress, aging)
- Licorice (sore throats and cough from post-nasal drip)