

Adverse Reactions to Complementary and Alternative Medicines

Frequently Asked Questions

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Q 1: What are complementary and alternative medicines?

Complementary and alternative medicines or therapies are sometimes used with or instead of standard medical treatment but are not considered to be standard treatment. Examples of complementary and alternative therapies include acupuncture, homeopathy, herbal medicine, dietary supplements such as vitamins and nutrition/diet.

Q 2: Do alternative medicines cause allergic reactions?

Complementary and alternative medicines are often thought to be safe, but side effects and allergic reactions can occur. Allergic reactions are most common in people with other allergic diseases, such as asthma or allergic rhinitis (hay fever). These people are often sensitive to many allergens, including those in herbal medicines.

Q 3: Can alternative medicines be used with prescribed drugs?

It is important to let your doctor know if you are taking complementary and alternative medicines. This is because these medicines can interfere with the action of prescribed drugs (medications) and side effects may occur. Complementary and alternative medicines have not always been through the extensive clinical trial and safety processes required for prescribed drugs.

Q 4: Why should people be cautious about alternative medicines?

Some complementary and alternative medicines are known to cause allergic reactions, including severe allergic reactions (anaphylaxis). They can also interfere with the way the body reacts to drugs.

The following is not a complete list of adverse reactions and interactions:

- **Andrographis paniculata** – also known as the 'king of bitters', this herb is commonly marketed to boost immunity, and for relief of cold and flu symptoms. Since 2019, the Therapeutic Goods Administration (TGA) has received more than 200 reports of severe allergic reactions (anaphylaxis) and/or hypersensitivity reactions to medicines containing andrographis, including a report of fatal anaphylaxis in June 2024. More information is available on the [TGA website](#).
- **Echinacea** – can have a short-term stimulatory effect on the immune system and is commonly marketed to boost immunity. Echinacea should be avoided in patients with autoimmune disease and in organ transplant patients. Echinacea is thought to inhibit wound healing and should be avoided before and after surgery.
Allergic reactions to echinacea include anaphylaxis, acute asthma attacks, severe urticaria (hives), and swelling. Other adverse reactions to echinacea include:
 - Burning or stinging of the tongue

- Shivering, fever, and muscle weakness when injected
- Hepatitis (liver inflammation)
- Rashes, muscle aches and pains, delayed asthmatic reactions, and stomach upset
- **Echinacea, milk thistle, and chamomile** – can interfere with some liver enzymes that play a major role in drug breakdown and detoxification by the liver. This can lead to increased side effects or reduced benefit from taking these medicines.
- **Feverfew** – has aspirin-like activity and may increase the risk of bleeding while taking blood thinners like warfarin or aspirin. Chamomile contains natural warfarin-like coumarins which increase the risk of bleeding in those taking warfarin as a medication.

It is important to check with your doctor or pharmacist about complementary and alternative medicines.

Q 5: What herbal medicines contain Asteraceae?

Many herbal medicines are made from Asteraceae flowering plants, such as echinacea, dandelion, chamomile, feverfew, milk thistle, and wormwood. Exposure to these plants is common and hard to avoid. Pollen from Asteraceae plants are an important cause of allergic rhinitis (hay fever) and asthma.

Asteraceae plants include:

- Flowering plants such as chrysanthemums, dahlias, sunflowers, marigolds, safflowers and daisies - the pollen from chrysanthemum and sunflower cause symptoms in some people who are exposed to heavy concentrations, such as flower growers.
- Edible plants such as lettuce, safflower, chicory, and artichoke.
- Weeds such as Ambrosia (ragweed) species, Artemisia (mugwort, sagebrush, wormwood) species, and Parthenium (feverfew) - pollen from these plants causes allergic rhinitis (hay fever) and asthma.

Q 6: What reactions can be caused by Asteraceae?

Allergic sensitisation to Asteraceae pollen is linked with allergic reactions to plant-derived complementary and alternative medicines such as echinacea, royal jelly, bee pollen extracts and chamomile, as well as foods like celery, honey, sunflower seeds, carrot, lettuce, watermelon, and nuts.

Asteraceae plants may also cause contact allergic dermatitis:

- Echinacea, daisies, chrysanthemum, chamomile, tansy, dandelion, feverfew, and sunflowers have all been linked with contact allergy in gardeners and florists.
- Similar symptoms can be caused by plant extracts in cosmetics, shampoos, and massage oils.
- Contact with airborne plant-derived allergen can trigger rashes in exposed skin, commonly known as Australian bush dermatitis.

In pregnancy, the use of complementary and alternative medicines containing Asteraceae should be avoided. For example:

- Chamomile causes malformations in animal studies.
- Feverfew can trigger pregnancy loss in cattle and stimulate uterine contractions in pregnant women.
- Safflower, tansy, feverfew, calendula, chamomile, yarrow, milk thistle, and wormwood promote menstruation, stimulate uterine contraction, and can trigger abortions in animals.

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