

Information FOR PATIENTS AND CARERS



Alcohol Allergy Frequently Asked Questions

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Q 1: What is alcohol allergy?

Allergic reactions to alcohol (ethanol) are very uncommon. Alcohol is more likely to cause flushing and irritant and contact reactions, but these reactions are not caused by an allergy to alcohol. In people with alcohol allergy, as little as 1ml of pure alcohol (found in about 10ml of wine or a mouthful of beer) is enough to cause severe rashes, difficulty breathing, stomach cramps or collapse. Consuming alcohol can also increase the risk of severe allergic reactions (anaphylaxis) from other causes such as food.

Q 2: What contains alcohol?

As well as drinks like beer, wine and spirits, there are other products that contain alcohol. These include:

- Alcoholic soft drinks, mixes, spiked drinks, food marinades and tomato puree.
- Fruit that is overripe can contain enough alcohol to trigger a reaction (due to fermentation).
- Some medicines also contain alcohol, such as cough syrups and injected medicines.

Q 3: What happens to alcohol in the body?

Alcohol is processed in the body by the liver. The alcohol that we consume is broken down and converted to a chemical called acetaldehyde. Acetaldehyde is then transformed by the body to acetic acid (vinegar). Problems occur if alcohol cannot be broken down properly as acetaldehyde can build up and cause adverse effects.

Q 4: What tests can be performed for alcohol allergy?

Allergy tests for alcohol are usually negative, but are sometimes positive to breakdown products of ethanol such as acetaldehyde or acetic acid. The human body constantly produces small amounts of alcohol, so it is unknown why some people have allergic reactions when they consume alcohol.

Q 5: Is flushing when drinking alcohol an allergic reaction?

Some people (most commonly people with an Asian background) develop severe facial flushing (redness in the face) if they consume small amounts of alcohol. This is not an allergic reaction.

Facial flushing is not always caused by alcohol and can be caused by other things like low blood sugar, menopause, skin conditions or taking certain medicines.

Consuming alcohol can cause other effects such as fluttering of the heart (palpitations), feeling hot, headaches, gut discomfort or a drop in blood pressure. The reason for these effects is usually due to high blood acetaldehyde levels.

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Q 6: What else is in alcoholic drinks?

As well as ethanol, alcoholic drinks contain a mixture of other products including:

- Substances derived from grapes, yeast, hops, barley or wheat.
- Natural food chemicals such as salicylates.
- Substances and preservatives derived from wood such as sodium metabisulfite.
- Egg and seafood proteins, which are sometimes used as "fining agents" to make drinks less cloudy. It is not certain whether levels of these proteins are enough to trigger allergic reactions.

Allergic reactions including anaphylaxis can occur in people who do not have an allergy to alcohol itself, but have allergies to grapes, yeast, hops, barley or wheat when they consume alcoholic drinks.

Q 7: Can asthma symptoms be caused by consuming alcohol?

Up to a third of people with asthma complain that wine, beer or spirits will worsen their asthma:

- Beer, wine and champagne contain a preservative called sodium metabisulfite (additive 220, 221).
 Consuming drinks that contain this preservative may cause people with asthma (especially if it is not well controlled) to wheeze. Sodium metabisulfite may not be the only cause of these symptoms.
- More of this preservative is in white wine than red wine, and more in cask (box) wine than bottled
 wine. Sulfite levels are different in different brands and some low sulfite wines are available, but
 people may still react to these if they are very sensitive to sulfites.
- Other sources of metabisulfite include vinegar, pickled onions, dried fruit, crustaceans, some restaurant salads and fruit salads.

Further information on sulfite allergy is available on the ASCIA website: www.allergy.org.au/patients/product-allergy/sulfite-allergy

Another cause of asthma symptoms can be acetaldehyde which may build up when the body cannot break down alcohol properly.

Q 8: Is there histamine in alcoholic drinks?

Wines can contain histamine in varying amounts:

- In general, there is more histamine in red than white wines and more in Shiraz than Cabernet.
- Histamine can trigger sneezing, runny nose and sometimes wheeze, stomach upset and headache.
- Studies have found that antihistamines may reduce some of the effects felt from drinking wine, but probably won't prevent a hangover.

Q 9: How is alcohol allergy managed?

Anaphylaxis to alcohol should be managed in the same way as anaphylaxis due to other allergies:

- Identify and avoid the cause
- Wear a medical identification bracelet
- Carry adrenaline (epinephrine) as part of an emergency action plan

Accidental exposure to alcohol may lead to unexpected reactions. Further information on anaphylaxis is available on the ASCIA website: www.allergy.org.au/patients/about-allergy/anaphylaxis.

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Q 10: Can alcohol cause skin reactions?

In people with hives (urticaria), alcohol can sometimes trigger symptoms or make them worse.

Rashes from skin contact with alcohol can happen but are very rare and it is not known why this occurs.

Q 11: What other reactions can you get from alcohol?

Some people will get anxiety and agitation when they drink due to the drug-like activity of alcohol.

Consuming alcohol in large amounts (alcohol toxicity), can have negative effects on the liver, stomach, brain and mental functioning. None of these reactions are caused by allergy.

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