



PATIENT & CAREGIVER EDUCATION

Kombucha

This information describes the common uses of Kombucha, how it works, and its possible side effects.

Tell your healthcare providers about any dietary supplements you're taking, such as herbs, vitamins, minerals, and natural or home remedies. This will help them manage your care and keep you safe.

What is it?

Kombucha has not been shown to treat cancer or AIDS in humans.

Kombucha is a beverage made by fermenting sweetened black tea (green and oolong tea are also used) with a symbiotic culture of bacteria and yeasts (SCOBY). Believed to have originated in China, kombucha has gained worldwide popularity as a functional food. It is used as an immunostimulant, and to treat diabetes, cancer and AIDS.

The high caffeine and sugar content of the tea may account for increase in energy levels following consumption of kombucha. However, it can be easily contaminated during fermentation. Allergic reactions, jaundice, serious illness, and death have been associated following consumption of home-grown kombucha tea. It may also reduce the absorption of drugs that are sensitive to gastric pH level.

What are the potential uses and benefits?

- **To treat atherosclerosis (hardening of arteries)**
Evidence is lacking to support this claim.
- **To treat cancer**
Animal studies have shown that kombucha has antioxidant effects, but human studies are lacking.
- **To treat diabetes**
Animal studies have shown that kombucha has antidiabetic effects, but human studies are lacking.
- **To treat AIDS**
Evidence is lacking to support this claim.
- **To lower blood pressure**
Evidence is lacking to support this claim.
- **To stimulate the immune system**
Animal studies demonstrate immune-stimulating activity, but human data are lacking.

What are the side effects?

Case Reports

Cutaneous anthrax: In 20 people following topical use of kombucha grown in unhygienic conditions.

Consumption of oral kombucha has been reported to cause:

- Severe illness and death
- Lead poisoning from kombucha brewed in a lead-glazed ceramic pot
- Hepato- and gastrointestinal toxicities including allergic reactions, jaundice and nausea, vomiting, head and neck pain
- Yeast infections
- Myositis associated with pleural effusions, pericardial effusion with

tamponade, and 'mechanic's hands'

- Severe metabolic lactic acidosis in a 54-year-old asthmatic woman after she drank kombucha tea
- *Clostridium septicum* sepsis due to bacteremia and hematogenous spread, resulting in encephalitis and pneumocephalus in a patient following consumption of kombucha tea and performing coffee enemas

What else do I need to know?

Patient Warnings:

- Growing kombucha in unsanitary conditions has resulted in contaminated product.
- Lead poisoning has been associated with kombucha tea brewed in glazed ceramic pots.

Do Not Take if:

- You have a **suppressed immune system**: Contaminated kombucha beverages can activate the immune system.
- You are taking **drugs that are sensitive to stomach pH levels**: Kombucha may reduce the absorption of these drugs.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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