Face turns red after drinking [1]

Alice,

I'm a Filipino-Chinese student who has discovered drinking recently. There is one problem, I turn really red!!! I have heard that this happens because I am Asian. I like to drink socially, but am very embarrassed by the whole red thing. What is it that causes this and what can I do about it?

— Wanna drink

Answer

Dear Wanna drink,

You're probably not the only red one in the bar; more than one-third of people of Asian descent experience a flushed complexion after drinking alcohol. This is why the terms "Asian glow" or "Asian flush" are often used to describe the rosy cheeks, but the more technical name is alcohol flush reaction, which describes the body's inability to break down ingested alcohol completely. For those who experience this kind of reaction, it's most likely due to an inactive enzyme, aldehyde dehydrogenase 2 (ALDH2), which is normally responsible for breaking down acetaldehyde, a byproduct of the metabolism of alcohol. Because it's genetic, it can be hard to prevent the flushing reaction in your face.

Now, to break down the science behind the flush: Acetaldehyde is a toxin and if your body can't break it down, it accumulates and may lead to a sensation of warmth and visible reddening of the skin, most often in the face, neck, upper portion of the chest, and upper limbs. Flushing typically begins shortly after alcohol ingestion and will reach its peak after about 30 minutes. If more alcohol isn't consumed, the feelings of warmth and redness will generally subside after 60 to 90 minutes. Other more severe symptoms such as increased pulse and alcohol-induced asthma may occur in a small percentage of people with inactive ALDH2. A common misconception is that lacking an active form of ALDH2 makes a person more likely to become drunk on small amounts of alcohol. This isn't the case as ALDH2 doesn't affect the levels of alcohol in the blood and therefore doesn't offer that "drunk off one beer" type of feeling. For a more in-depth explanation of the mechanism behind alcohol-related facial flushing see the question Pepcid AC and alcohol [2].
Tolerance levels and the severity of flushing and other symptoms vary from individual to individual, so you might want to observe how much alcohol it takes before your rosiness becomes noticeable. If your coloring makes you self-conscious, sometimes the room is dark enough that people may not notice. If people do notice, they may think you're warm or excited to see them. You could also explain to any drinking partners why you're turning red, but it's likely they will soon forget about your flushed face. If your friends do tease you about your coloring, you may want to let them know it isn't something you can control, and it isn't funny to you.

Interestingly, some studies have shown that flushing may provide a form of protection from the pressure to drink and can be an additional cue to friends to encourage those who are flushing to reduce or stop drinking at that time. This isn't to say that you need to cut back or limit your alcohol intake (although it's always wise to drink in moderation [3]), but rather offers another perspective on your reddened complexion as your facial flushing may be used as a tool to mitigate the degree of risk of you over drinking.

With this in mind, there are a number of health risks associated with drinking, and the facial flushing may be a clue to some of them. The risk of developing cancer from exposure to alcohol varies with individual drinking patterns and behaviors such as drinking and smoking, and potentially from the buildup of acetaldehyde. Facial flushing perhaps may be the only visible sign of heightened cancer risk associated with alcohol use, but without more research it just appears to be an annoyance for many. More research needs to be done before a definitive answer can be given on whether deficiencies in alcohol metabolism do increase the risk of alcohol's adverse consequences. All of this being said, alcohol generally has few health benefits. Studies have shown links between heavy drinking and certain types of cancers of the mouth, throat, and stomach in additional to cirrhosis of the liver, and late-onset Alzheimer's disease. If you're concerned about your flushing response or the effects of drinking on your body, you may find it helpful to reach out to a health care provider to learn more. On the glowing side, your reddened complexion may mask the ever-so-unwanted blushing when you feel embarrassed or your crush walks into the room.

Alice!

Related questions

How can I be responsible while drinking? [9]
Alcohol poisoning [10]
Alcohol and liver damage [11]

Resources