Simply said, a red face, otherwise known as alcohol flush reaction or Asian flush, describes the body’s inability to break down or metabolize alcohol completely. The science of it is that normally when a person drinks, the alcohol is first converted to acetaldehyde – a potentially toxic substance that gets converted into acetic acid to avoid harming the body. This triggers our body to release aldehyde dehydrogenase-2 (ALDH2) to break down the toxic acetaldehyde into carbon dioxide, water and fats which can then be processed. Then the carbon dioxide and water is removed by the body and the fats are absorbed.

But some people are unable to break down acetaldehyde and it then accumulates in their system, causing flushing. Other symptoms can include nausea or vomiting, headache, dizziness, increased pulse and drowsiness. This occurs primarily in people of Asian descent (thus the name Asian flush) and Native Americans. Because it’s genetic, there isn’t much you can do to prevent a red face. People who have experienced this reaction often choose not to drink or drink very moderately. Basically, individuals can be protected against or predisposed to alcohol dependence by variations in the enzymes that metabolize alcohol.

Alcohol abuse is also one of the causes of red face, particularly for fair-skinned people. Frequent drinking causes the blood vessels in the face and neck to dilate or expand thus increasing the blood circulation in the face.

So don’t ask your red-faced friends to drink up. They’ll have much more fun without the extra shots.