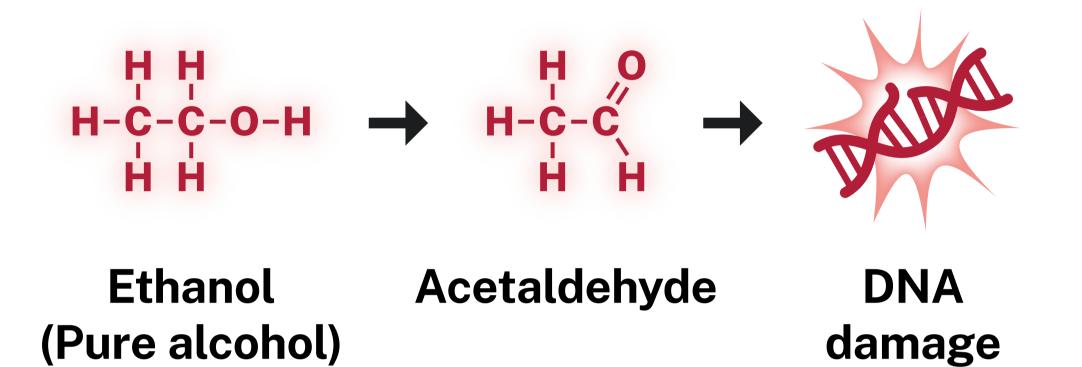
Four ways alcohol can cause cancer



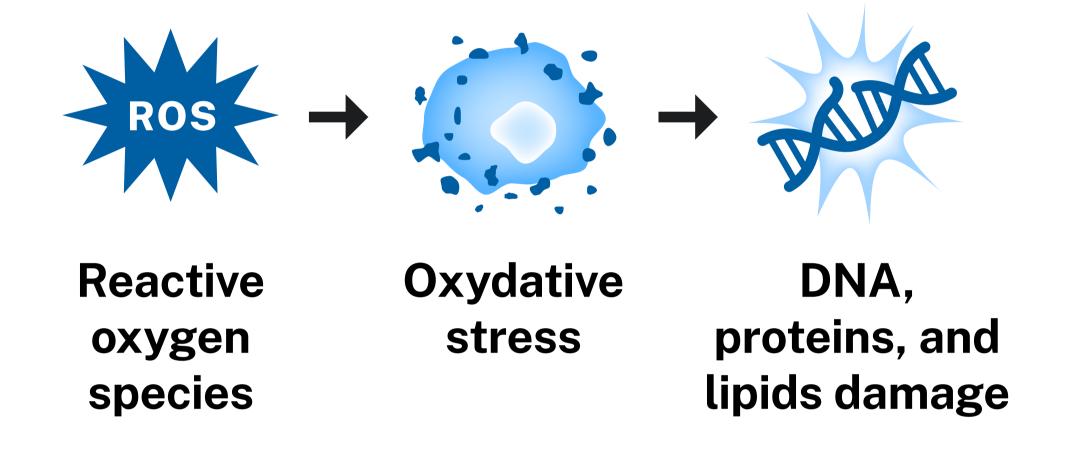
MECHANISM A

Alcohol breaks down into acetaldehyde which damages DNA in multiple ways, causing an increased risk of cancer.



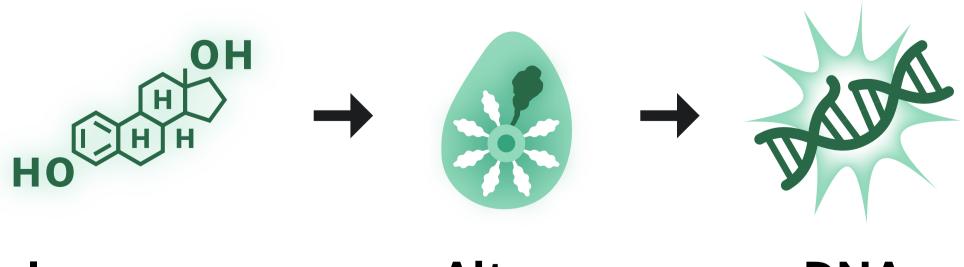
MECHANISM B

Alcohol induces **oxidative stress**, increasing the risk of cancer by damaging DNA, proteins, and cells and increasing inflammation.



MECHANISM C

Alcohol alters **levels of multiple hormones**,
including estrogen, which
can increase breast
cancer risk.



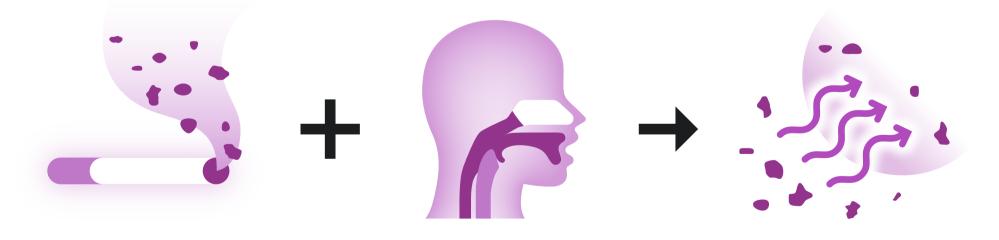
Increases estrogen

Alters breast tissue

DNA damage

MECHANISM D

Alcohol leads to greater absorption of carcinogens.



Carcinogens dissolve in alcohol

Alcohol alters cells in mouth and throat

Carcinogens more easily absorbed

*Rumgay et al. (2021) reviewed these four mechanisms through which alcohol can cause cancer along with several other possible pathways that appear to influence cancer risk. These include disruption of one-carbon metabolism, alteration of retinoid metabolism, and impaired immune function among others.

