

Alcoholic beverages are enjoyed together with meals worldwide, but their excessive intake is associated with an increased risk of various diseases. We investigated whether *S*-allyl-L-cysteine sulfoxide (ACSO), a sulfuric odor precursor of garlic, suppresses elevation in plasma ethanol concentration by accelerating ethanol metabolism and preventing ethanol absorption from the gut in rats. ACSO and garlic extract with a high ACSO content (Garlic-H) suppressed elevation in concentrations of ethanol and acetaldehyde in plasma and promoted the activities of alcohol dehydrogenase and aldehyde dehydrogenase. However, ACSO and Garlic-H did not affect plasma acetate so much. Furthermore, we examined the change in plasma ethanol concentration by injecting ACSO or Garlic-H into the ligated stomach or jejunum together with ethanol solution. ACSO and Garlic-H suppressed the absorption of ethanol from the stomach and jejunum, but suppression in the jejunum was less than in the stomach. In conclusion, ACSO inhibits ethanol absorption and accelerates ethanol metabolism.

A garlic odor precursor suppresses blood ethanol elevation.