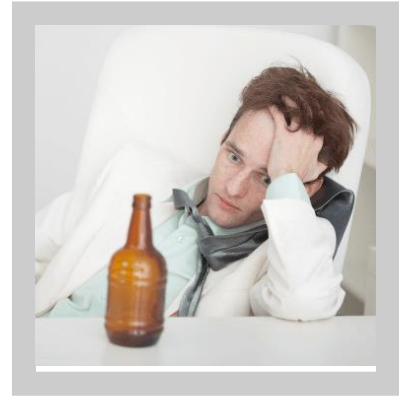


Name _____

Date _____

Veisalgia

Veisalgia, more commonly known as a hangover, is the name for the range of unpleasant physical effects that occur following the excessive consumption of alcoholic beverages. The most commonly experienced effects include nausea, vomiting, sensitivity to light and sound, headache, thirst, and lethargy. The degree of the hangover's severity is determined by factors occurring both before and after the alcohol is metabolized. Currently, there is no scientifically proven way to treat the symptoms of a hangover. Furthermore, if current research trends are any indication, there is no cure for veisalgia on the horizon.



The main pre-metabolic cause of veisalgia is the quantity of alcohol consumed. Binge drinking is one of the most notorious contributors to hangovers. Empirical research suggests that even an increase in consumption from four to six beers can result in twice the susceptibility to end up with a hangover. Another pre-consumption factor that contributes to hangovers is the amount of congeners present in the alcohol. Congeners are chemical substances produced during the fermentation process that give the alcohol color, taste, and aroma. Recent studies have shown that alcohol with a high congener content, such as bourbon (which is brown), is three times as likely to cause a hangover as the same amount of a low-congener alcohol, such as vodka (which is clear).

Post-metabolic causes of veisalgia have less to do with the amount or kind of alcohol consumed and more to do with genetics. One of the major post-metabolic causes of veisalgia is the production of acetaldehyde. During the initial stages of metabolization, the liver produces an enzyme known as alcohol dehydrogenase. This enzyme works to convert the ethanol present in alcohol into the compound acetaldehyde. Studies have shown that individuals who lack this enzyme—and thus also lack the ability to break down ethanol in the liver—have a much higher rate of hangover occurrence, and experience more immediate and more severe hangover symptoms.

Treatments and preventative measures for veisalgia range from home remedies to pharmaceutical solutions. Pliny the Elder, an ancient Roman naturalist, suggested that one eat raw owl eggs to treat the symptoms of a hangover. Modern home remedies range from honey to hot sauce to "the hair of the dog," an expression meaning "more alcohol." None of these cures have any scientific basis, and, instead of making symptoms better, they often actually exacerbate the situation. While popular cures are plentiful, very few clinical trials have been conducted to counteract the symptoms of hangovers. One team of scientists theorized that extract from the globe artichoke (*Cynara scolymus*) would treat the symptoms, while others have administered doses of propranolol, tolafenamic acid, glucose, or various herbal extracts to sufferers. None of these efforts has been met with any degree of definitive success.

Developing a clinical cure for veisalgia is particularly difficult because hangover symptoms can be arbitrary and hard to quantify. Additionally, clinical preventions are also troublesome to generate, because there is a lack of qualitative research on the causes of veisalgia. This lack of research is likely due to the fact that the scientific community does not generally view veisalgia as a serious ailment. Health care professionals are much more likely to spend time and grant money researching solutions to more critical problems, such as alcohol abuse. Hangovers, on the other hand, are generally viewed as somewhat beneficial: nature's disincentive against drunkenness.

- 1) The primary purpose of the passage is to
- A. warn readers about the dangers of excessive alcohol consumption
 - B. inform readers about the scientific causes of, and potential remedies for, hangovers
 - C. investigate the scientific reasons why some people are genetically predisposed to experience more severe hangover symptoms than others
 - D. provide a historical overview of various treatments for hangovers
 - E. convince medical professionals to devote more time to researching treatments for hangovers
- 2) According to the author, which of the following pre-metabolic factors would increase the likelihood of a person developing a hangover?
- I. drinking dark rum
 - II. lacking a specific enzyme
 - III. drinking small amounts over longer periods of time
- A. I only
 - B. II only
 - C. I and II only
 - D. II and III only
 - E. I, II, and III
- 3) The author suggests that genetics can play a part in the severity of one's hangover symptoms because
- A. people can be born with genetic dispositions that will make them more likely to become alcoholics, and thus experience hangover symptoms more frequently
 - B. mutations of certain genes can cause some people to experience kidney dysfunction, which can worsen dehydration and other hangover symptoms
 - C. people whose livers produce excessive amounts of alcohol dehydrogenase experience increased conversion of ethanol into acetaldehyde, and thus, more severe hangover symptoms
 - D. people whose livers do not produce enough alcohol dehydrogenase lack the ability to break down ethanol, which results in more severe hangover symptoms
 - E. mutations of certain genes can cause the liver to have difficulty processing congeners, which can result in more severe hangover symptoms

- 4) As used in paragraph 4, which is the best antonym for **exacerbate**?
- A. improve
 - B. compose
 - C. advance
 - D. purify
 - E. validate
- 5) Based on the information in paragraph 4, it can be inferred that
- A. the ancient Romans experienced less severe hangover symptoms than modern people
 - B. the benefits of modern science have brought society a long way from the “primitive” cures espoused by writers like Pliny the Elder
 - C. although there is no definitive cure for hangover symptoms, scientific solutions are generally more successful than home remedies
 - D. home remedies for hangover symptoms are often more successful than pharmaceutical solutions, because they have withstood the test of time
 - E. hangovers have plagued human beings for centuries, and we are no closer to figuring out a method of treatment than the ancient Romans were
- 6) In the final paragraph, the author suggests that medical professionals are disinclined to research a cure for hangovers for all of the following reasons EXCEPT
- A. researching cures for hangovers would waste precious money that could be better spent on other, more serious, illnesses
 - B. subjective reports of symptoms of veisalgia are not reliable
 - C. it is more productive to study the genetic causes of sensitivity to veisalgia
 - D. there is not enough research on what causes a hangover in the first place
 - E. some people believe that hangovers actually serve to deter people from over-indulging
- 7) The passage ends with the idea that hangovers are actually “somewhat beneficial” because they serve as “nature’s disincentive against drunkenness.” Respond to this claim. Can hangovers be truly beneficial, in your opinion? Why or why not?
