

★ Heavy alcohol consumption (Thompson, 2020)

Andrew Thompson, et al.
Science Advances

Behavior Addiction

STUDY SUMMARY

Identification of 6 genomic regions associated with heavy alcohol consumption.

YOUR RESULT



STUDY DESCRIPTION

Heavy alcohol consumption is a common disorder. It is characterized by heavy drinking patterns that can lead to dependence on alcohol, and eventually result in major health issues like liver disease and heart problems. To better determine the factors associated with heavy alcohol consumption, this study examined the genomic data of over 125,000 white British individuals. The study identified 6 genetic variants associated with heavy alcohol consumption. One of the variants is near the GOKR gene that encodes a protein that acts as a sugar sensor.

DID YOU KNOW?

Exercise is an emerging way to treat addiction, especially when used in combination with other treatments.

YOUR DETAILED RESULTS

To calculate your genetic predisposition to heavy alcohol consumption we summed up the effects of genetic variants that were linked to heavy alcohol consumption in the [study that this report is based on](#). These variants can be found in the table below. The variants highlighted in green have **positive effect sizes** and increase your genetic predisposition to heavy alcohol consumption. The variants highlighted in blue have **negative effect sizes** and decrease your genetic predisposition to heavy alcohol consumption. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to heavy alcohol consumption. By adding up the effect sizes of the highlighted variants **we calculated your polygenic score for heavy alcohol consumption to be 2.41**. To determine whether your score is high or low, we compared it to the scores of 5,000 other Nebula Genomics users. We found that your polygenic score for heavy alcohol consumption is in the **86th percentile**. This means that it is higher than the polygenic scores 86% of people. We consider this to be an **above average genetic predisposition to heavy alcohol consumption**. However, please note that genetic predispositions do not account for important non-genetic factors like lifestyle. Furthermore, the genetics of most traits has not been fully understood yet and many associations between traits and genetic variants remain unknown. For additional explanations, click on the column titles in the table below and visit our [Nebula Library tutorial](#).

VARIANT ^⓪	YOUR GENOTYPE ^⓪	EFFECT SIZE ^⓪	VARIANT FREQUENCY ^⓪	SIGNIFICANCE ^⓪
rs1229984_C	C / C	0.46 (↑)	98%	2.30×10^{-68}
rs144198753_C	C / C	0.51 (↑)	99%	4.10×10^{-29}
rs13130794_T	T / T	0.07 (↑)	63%	5.70×10^{-16}
rs1260326_C	T / C	0.06 (↑)	61%	1.50×10^{-13}
rs11214609_G	G / C	0.06 (↑)	40%	4.30×10^{-9}
rs13107325_C	C / C	0.11 (↑)	93%	6.70×10^{-9}