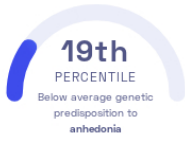


STUDY SUMMARY

Identification of 11 novel genomic regions associated with anhedonia, the inability to feel pleasure.

YOUR RESULT



STUDY DESCRIPTION

Anhedonia refers to a condition characterized by an inability to feel pleasure from activities that are considered enjoyable. It's a common symptom of depression and other psychiatric disorders and reduces the quality of life. The genetic underpinnings of anhedonia are not well understood. This genome-wide study of over 375,000 individuals of European ancestry discovered 11 genomic regions that are associated with feelings of anhedonia (5 variants with defined IDs are shown in the table below). Together, these variants may explain over 5% of the heritability of anhedonia. The discovered variants were also found to be associated with smaller volumes of brain regions linked to reward and pleasure processing as well as other structural changes in the brain.



People suffering from anhedonia are unable to feel pleasure.

DID YOU KNOW?

Because drugs that are commonly used to treat depression often fail to promote feelings of pleasure, researchers are currently exploring talk therapy as a treatment for anhedonia. Talk therapy can help kickstart a positive feedback loop in the brain that may enable patients to feel pleasure again.

YOUR DETAILED RESULTS

To calculate your genetic predisposition to anhedonia we summed up the effects of genetic variants that were linked to anhedonia 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 anhedonia. The variants highlighted in blue have **negative effects sizes** and decrease your genetic predisposition to anhedonia. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to anhedonia. By adding up the effect sizes of the highlighted variants **we calculated your polygenic score for anhedonia to be -0.05**. 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 anhedonia is in the **19th percentile**. This means that it is higher than the polygenic scores 19% of people. We consider this to be a **below average genetic predisposition to anhedonia**. 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 [Ⓞ]	YOUR GENOTYPE [Ⓞ]	EFFECT SIZE [Ⓞ]	VARIANT FREQUENCY [Ⓞ]	SIGNIFICANCE [Ⓞ]
rs72923287_C	C / C	-0.01 (↓)	35%	2.10×10^{-8}
rs35416728_G	G / G	0.01 (↑)	75%	1.10×10^{-8}
rs1965449_T	T / C	-0.01 (↓)	23%	1.60×10^{-8}
rs766739942_AAATT	/	0.01 (-)	5%	2.70×10^{-8}
rs113740933_A	A / A	-0.02 (↓)	95%	4.70×10^{-8}