

★ Stool frequency (Bonfiglio, 2021)

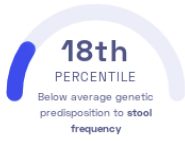
Ferdinando Bonfiglio, et al.
Cell Genomics

Intestines

STUDY SUMMARY

This report is based on a study that discovered 14 genetic variants associated with stool frequency.

YOUR RESULT



STUDY DESCRIPTION

When you gotta go, you gotta go. But, while there is no "normal" number of bowel movements, many healthcare providers agree that healthy bowel movement frequency can range from three times a day to three times a week. For some individuals, such as those affected by irritable bowel syndrome, stool frequency can be much higher. To discover genetic variants associated with stool frequency, this study examined 167,875 individuals of European ancestry. The researchers identified 14 genetic variants associated with an individual's stool frequency. Among other genes, scientists found an association with BDNF. It encodes a protein that plays a role in the function of nerve cells throughout the body.



The number of bowel movements a person has each day can greatly vary

DID YOU KNOW?

A typical person has around 500 species of bacteria living in their gut. These bacteria are actually beneficial, and help with digestion!

YOUR DETAILED RESULTS

To calculate your genetic predisposition to stool frequency we summed up the effects of genetic variants that were linked to stool frequency 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 stool frequency. The variants highlighted in blue have **negative effect sizes** and decrease your genetic predisposition to stool frequency. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to stool frequency. By adding up the effect sizes of the highlighted variants **we calculated your polygenic score for stool frequency to be 0.08**. 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 stool frequency is in the **18th percentile**. This means that it is higher than the polygenic scores 18% of people. We consider this to be a **below average genetic predisposition to stool frequency**. 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 [Ⓞ] | GENE [Ⓞ] | EFFECT SIZE [Ⓞ] | VARIANT FREQUENCY [Ⓞ] | SIGNIFICANCE [Ⓞ] |
|----------------------|----------------------------|-------------------|--------------------------|--------------------------------|---------------------------|
| rs12273363_T | T / C | BDNF | 0.03 (↑) | 80% | 4.80×10^{-21} |
| rs11176001_A | C / C | - | 0.03 (-) | 13% | 1.60×10^{-16} |
| rs2732706_T | C / C | ARL17B | 0.02 (-) | 22% | 4.40×10^{-12} |
| rs12700026_A | C / C | LFNG | -0.03 (-) | 89% | 1.40×10^{-10} |
| rs4556017_T | T / T | MUC12 | 0.02 (↑) | 85% | 1.00×10^{-9} |
| rs39819_A | G / A | SNX24 | 0.02 (↑) | 67% | 1.20×10^{-9} |
| rs11240503_A | G / G | CDK18 | 0.02 (-) | 30% | 7.80×10^{-9} |
| rs6486216_T | C / C | CALCB | 0.02 (-) | 28% | 1.10×10^{-8} |
| rs3858648_A | C / A | - | -0.02 (↓) | 51% | 1.20×10^{-8} |
| rs10957534_C | C / G | - | -0.02 (↓) | 37% | 1.30×10^{-8} |
| rs62482222_A | G / G | FBXO24 | 0.02 (-) | 12% | 1.40×10^{-8} |
| rs10492268_T | C / C | - | 0.02 (-) | 55% | 1.60×10^{-8} |
| rs13162291_A | G / G | KIF4B | 0.02 (-) | 19% | 2.70×10^{-8} |
| rs5757162_T | C / T | FAM227A | 0.02 (↑) | 29% | 4.00×10^{-8} |