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★ Helicobacter pylori infection (Mayerle, 2013)

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Cancer Infection Stomach

STUDY SUMMARY

Discovery of 2 genetic regions associated with susceptibility to stomach infection with Helicobacter pylori bacteria.

STUDY DESCRIPTION

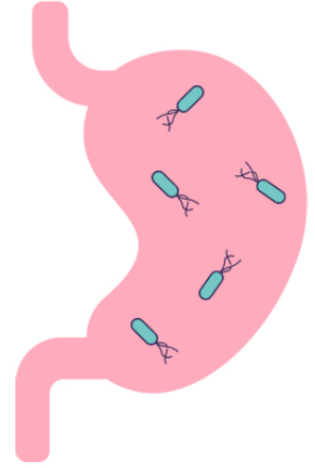
Helicobacter pylori is a bacterium that lives in the stomach of many people. Usually, it does not cause disease, but in some people, it can cause stomach sores and inflammation, which if left untreated can develop into stomach cancer. To better understand the heritability of Helicobacter pylori susceptibility, this genome-wide association study examined over 13,000 individuals of European ancestry. The study linked 2 genetic variants near TLR and FCGR2A genes to infection with Helicobacter pylori. TLR genes encode proteins that are found on the surface of some types of immune cells and enable the detection of bacterial molecules.

DID YOU KNOW?

The discovery that Helicobacter pylori infection can cause stomach issues and lead to cancer was awarded a Nobel Prize in 2005. It has enabled the use of antibiotics to prevent the development of stomach cancer.

YOUR DETAILED RESULTS

The variants highlighted in green have **positive effect sizes** and increase your genetic predisposition to helicobacter pylori infection. The variants highlighted in blue have **negative effects sizes** and decrease your genetic predisposition to helicobacter pylori infection. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to helicobacter pylori infection. 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](#).



Helicobacter pylori bacteria are commonly found in the stomach.

VARIANT [Ⓞ]	YOUR GENOTYPE [Ⓞ]	EFFECT SIZE [Ⓞ]	VARIANT FREQUENCY [Ⓞ]	SIGNIFICANCE [Ⓞ]
rs10004195_A ★	T / T	-0.36 (-)	25%	1.40×10^{-18}
rs368433_C ★	T / T	-0.31 (-)	16%	2.10×10^{-8}