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☆ Perceived intensity of licorice smell (Gisladottir, 2020)

Rosa Gisladottir, et al.
Current Biology

Nose Senses

STUDY SUMMARY

Identification of a region of the genome associated with how intensely the smell of licorice is perceived.

STUDY DESCRIPTION

The perception of smell is enabled by olfactory receptors, which are proteins that bind odor molecules. Humans have about 350 olfactory receptor genes that each can detect a number of different odor compounds that together can create a vast number of different scents. However, when presented with the same smell, different individuals may perceive the smell's intensity differently. This genome-wide association study looked at the genomes of over 11,000 Icelandic people to identify the genetics underlying differences in the perception of the scent of licorice, an ingredient found in a wide variety of candies or sweets. The study found one region of the genome associated with how intensely the scent of licorice is perceived. This variant is located in a gene known as OR6C70, which is an olfactory receptor and part of a larger family called the OR6C receptors. The same variant is also linked to the ability to distinguish the scent of licorice from other scents.

DID YOU KNOW?

In general, women are found to identify odors more accurately than men.

YOUR DETAILED RESULTS

The variants highlighted in green have **positive effect sizes** and increase your genetic predisposition to increased intensity of licorice smell perception. The variants highlighted in blue have **negative effect sizes** and decrease your genetic predisposition to increased intensity of licorice smell perception. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to increased intensity of licorice smell perception. 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 [ⓘ]	COMMENTS	EFFECT SIZE [ⓘ]	VARIANT FREQUENCY [ⓘ]	SIGNIFICANCE [ⓘ]
rs60683621_G 	C / C	In the OR6C70 gene	0.13 [-]	23%	8.80×10^{-16}