Does cilantro taste like detergent to you? Food preferences are hard-wired

Ever wonder why some people think cilantro tastes like detergent while others scatter it over everything? Or why brussels sprouts are delectable to some and disgusting to others? Part of that difference of opinion may lay in our genes.

To some extent. There is still a lot about human perceptions of taste that we don't know about, but we are gradually forming a better picture of this sense and how are genes come into play. Humans perceive five basic tastes: sweet, sour, bitter, salty, and umami. We've identified receptors that are responsible for our perception of bitterness, sweetness, and umami, all of which bind to G proteins.

How much human perceptions of these tastes vary from person to person may depend on the variety of genes associated with our taste receptors. For example, a 2006 study published in Chemical Senses suggested that humans might have less variation in their perception of umami taste than in their perception of sweet taste because the genes that form the umami taste receptor (TAS1R1 and TAS1R3) showed less variation than did the TAS1R2 gene, which encodes part of the receptor for sweetness. (Although it is worth noting that a 2009 study published in the American Journal of Clinical Nutrition did find "a reliable and valid variation in human umami taste of L-glutamate" that correlated with variations in the TAS1R3 gene.)

Taste receptors are only part of the picture, however. Flavor, after all, is based on two senses: smell and taste. When considering whether there is a genetic component to our love or hatred of a certain food, it's not just the taste receptors but the olfactory receptors that can come into play.

Read full original story: Are there some vegetables you can't stand? It may be genetic.