

Answer on Question #83917, Chemistry / General Chemistry

Water has no taste?

Answer

While water itself does not produce a taste in humans, there is a concept known as the "water taste" that was studied pretty extensively by Linda Bartoshuk. The idea is that if the tongue is exposed to a particular taste stimulus at a constant concentration for an extended period of time - say, a minute or more - it will experience a short-term adaptation to this stimulus. While this adaptation is in effect, one of three things can occur:

1. If the tongue continues to be exposed to the same stimulus at the same concentration, then it does not detect anything.
2. If the tongue is exposed to the same stimulus but at a higher concentration, this stimulus is perceived as more intense than normal.
3. If the tongue is exposed to the same stimulus but at a lower concentration, this stimulus is often perceived as being a different taste entirely.

After all, how often are our mouths exposed to a non-stop stream of a single unchanging stimulus? In fact, exposure to saliva is exactly that. Saliva is mostly water, but it also contains low concentrations of various minerals and enzymes that are unique to each person, including a very low concentration of salt. It doesn't taste salty to you because you have adapted to it. When you drink very pure water, your saliva is temporarily diluted, which is similar to situation #3 above.

This is why some people identify pure water as tasting bitter or otherwise unpleasant. It is also why people insist that one brand of bottled water or another has the best taste; they are likely responding positively to water with a mineral composition that is similar enough to their saliva so as to not create the perception of bitterness. BUT the water itself doesn't have a taste in that it does not activate the tongue's taste receptors.

Source

<https://www.quora.com/Does-ordinary-water-really-have-no-taste-or-is-it-just-that-humans-lack-the-ability-or-the-necessary-taste-buds-to-perceive-it>