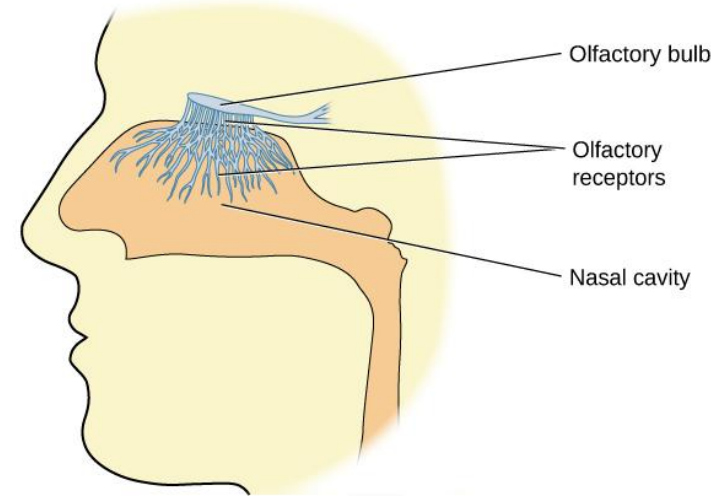


SMELL

Salam, Natalia B., Karol

OLFACTORY RECEPTOR CELLS

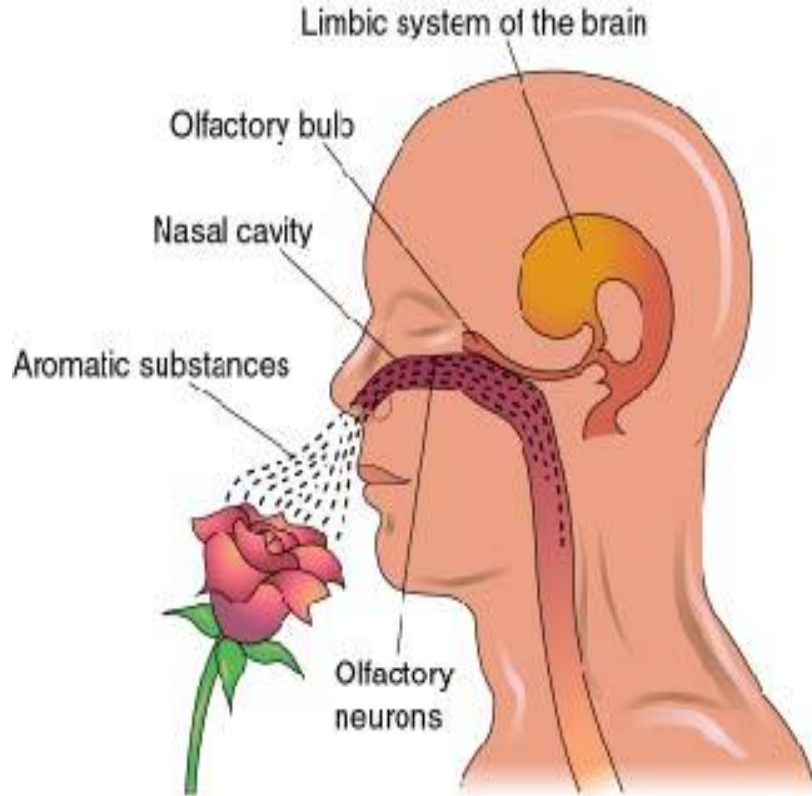
- These cells respond selectively- such as perfume, or a baking cake.
- Immediately, they alert the brain through their axon fibers.
- Then, olfactory neurons bypass the thalamus.



HOW DO WE EXPERIENCE SMELL?

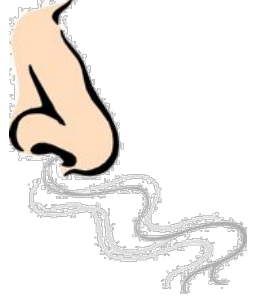
- Humans can distinguish between 10,000 different odors.
- Odor experts: people who are trained to recognise smells. Ex) Perfume experts, wine experts.
- These experts do not have a more sensitive nose, they are just better at recalling names of odors from memory.
- Dogs are more sensitive to smells than humans. Their receptors aren't any better, they just have 1 billion receptors compared to only 10 million in humans.

HOW DO WE SMELL PT.2



- We smell when molecules of a substance are carried in the air and reach a tiny cluster of 5 million or more receptor cells at the top of each nasal cavity.
- These are called olfactory receptor cells.
- Sense of smell is 10,000 times more sensitive than any other of our senses.

WHY DO WE SMELL?



- Smell is a chemical sense
- Smell is the most important sense for most animals
- For humans smell might not be the most important, but we use it more than we think
- Smell has to do with taste
- Many foods we taste, are actually a function of smell.



EXPERIMENT

- 1) Without lifting up the construction paper, smell the hand sanitizer.
- 2) Write down what you think the scent is.
- 3) After that, lift the construction paper and see if what you guessed is correct.
- 4) Repeat steps 1-2 with each bottle of hand sanitizer.



QUESTIONS

- 1) WHAT ARE OLFACTORY RECEPTOR CELLS?
- 2) WHY ARE DOGS MORE SENSITIVE TO SMELLS THAN HUMANS?
- 3) WE SMELL WHEN SUBSTANCE MOLECULES REACH WHAT?
- 4) DID THE COLOR OF HAND SANITIZER HAVE AN IMPACT ON THE SCENT YOU GUESSED? WHY?
- 5) DID SMELLING THE HAND SANITIZER BRING BACK ANY MEMORIES?