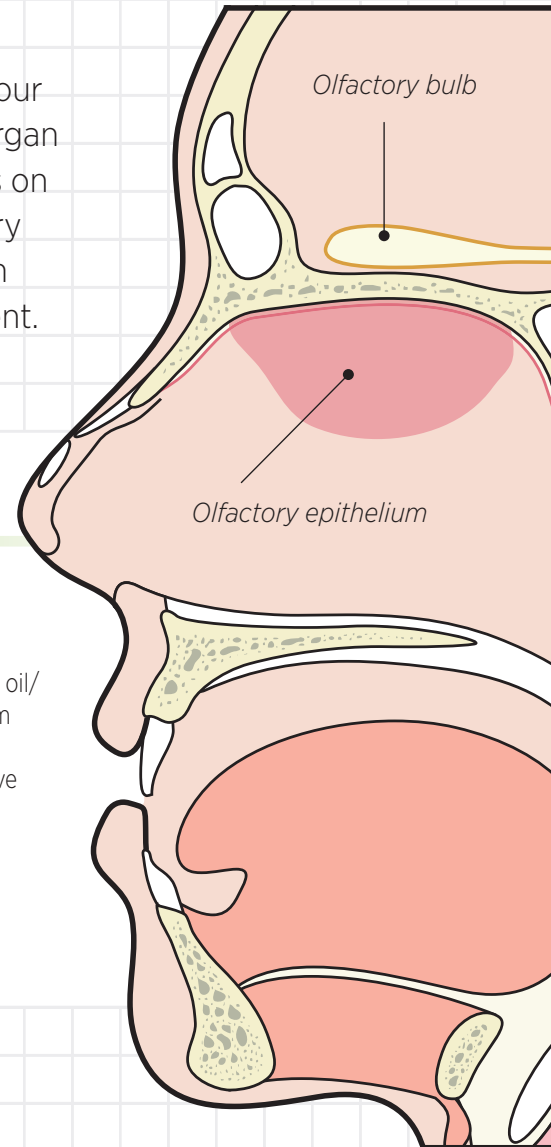


THE Nose Knows

The Olfactory System

When you smell an essential oil, volatile molecules are entering your nasal airspace and hitting your olfactory epithelium—that's the organ responsible for sampling the smells all around you. Receptor cells on the epithelium interact with the molecules, activating the olfactory bulb, which sends a signal to your brain for processing. Your brain takes those signals and uses them to understand your environment.



Factors Affecting Smell Perception

Physiological/ Genetic

- Gender (Females tend to have more neurons in the olfactory bulb)
- Hormones
- Body temperature
- Transient states (hunger, fatigue, sickness, emotions)
- Variation in skin oils
- Variation in metabolic enzymes on skin and/or in the nose
- Nasal epithelium topography
- Genetic aversions
- Type and thickness of skin

External

- Body position
- Previous experience
- Ambient aromas
- Concentration
- Location of application

Other

- Expectation
- Adaptation
- Type of carrier oil/delivery system
- Age (children tend to perceive aroma more intensely)

Experiment: Try this at home to demonstrate variability in smell perception!

1. Choose an essential oil blend that you like. Place 1-2 drops of oil on your wrist or your neck.

2. Place 1-2 drops of oil on your friend or family's wrist or neck. Let the oil absorb for 10-15 seconds

3. Smell and compare the scent on you versus the scent on your friend or family.

4. What do you think are the variables affecting this experiment? Do men perceive the aroma differently than women? Does age play a factor? Genetics?

5. Repeat the experiment by putting the oil in a different spot (back of the hand, bottom of the foot, etc.). Does that change the perceived aroma?