# **GUSTATION (SENSE OF TASTE)** p.1

Flavor = smell + taste

#### **Learned Taste Aversion**

Taste buds, with multiple taste receptors on each bud
Each sensory neuron receives multiple kinds of taste signals
At least 5 basic tastes: sour, sweet, salty, bitter, and "meaty" (unami)
Location on tongue

## Pathway into brain:

Receptors --- **3 cranial nerves** (VII facial – anterior 2/3rds of tongue; IX glossopharyngeal – posterior 1/3<sup>rd</sup> of tongue; X vagus – throat) --- **Solitary nucleus** (medulla) --- **ventral posterior nucleus of thalamus** --- **Primary gustatory cortex** (near face area of SI, somatosensory cortex)

### Primarily an **ipsilateral sense** (unique)

# Other interesting information:

**Ageusia** – loss of sense of taste, rare

Can occur after middle-ear damage because facial nerve branch Carrying taste information on chorda tympani branch goes through The middle ear area

### Specific taste "blindnesses"

Inability to taste bitterness of caffeine, of saccrine (cannot taste PTC) "Super-tasters" find PTC really bitter (dislike cabbage family, coffee, diet sodas, green tea)

25% do not taste bitter, 50% taste medium, 25% super-tasters