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 1/3rd 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