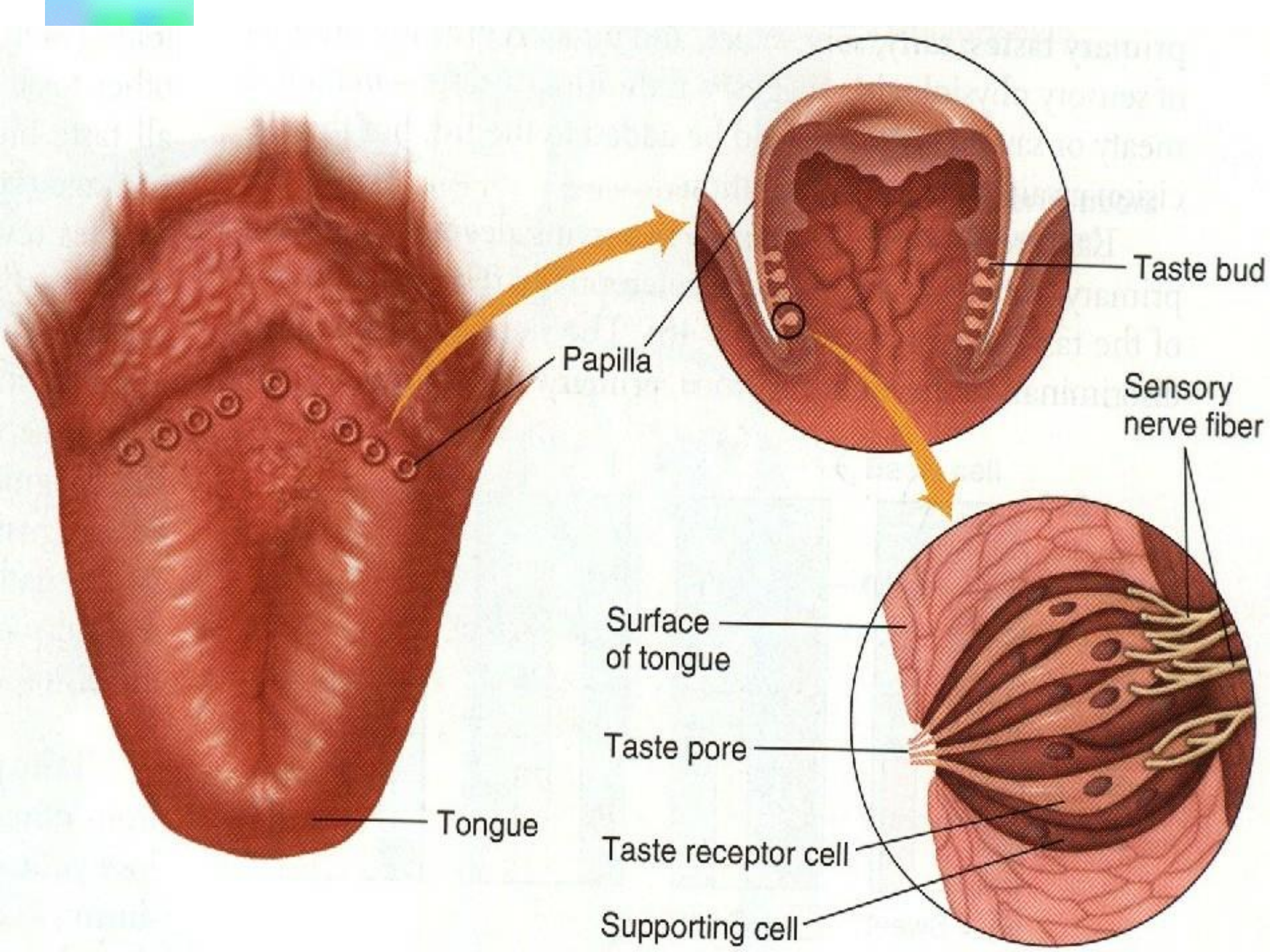


Taste

- 
- A vertical decorative bar on the left side of the slide, featuring a colorful, abstract pattern of green, blue, and purple. At the top of this bar is a small, 3D-style triangle with a blue and purple gradient.
- **Taste bud is specialised receptors in the oral cavity but mainly on the tongue, some on the palate**



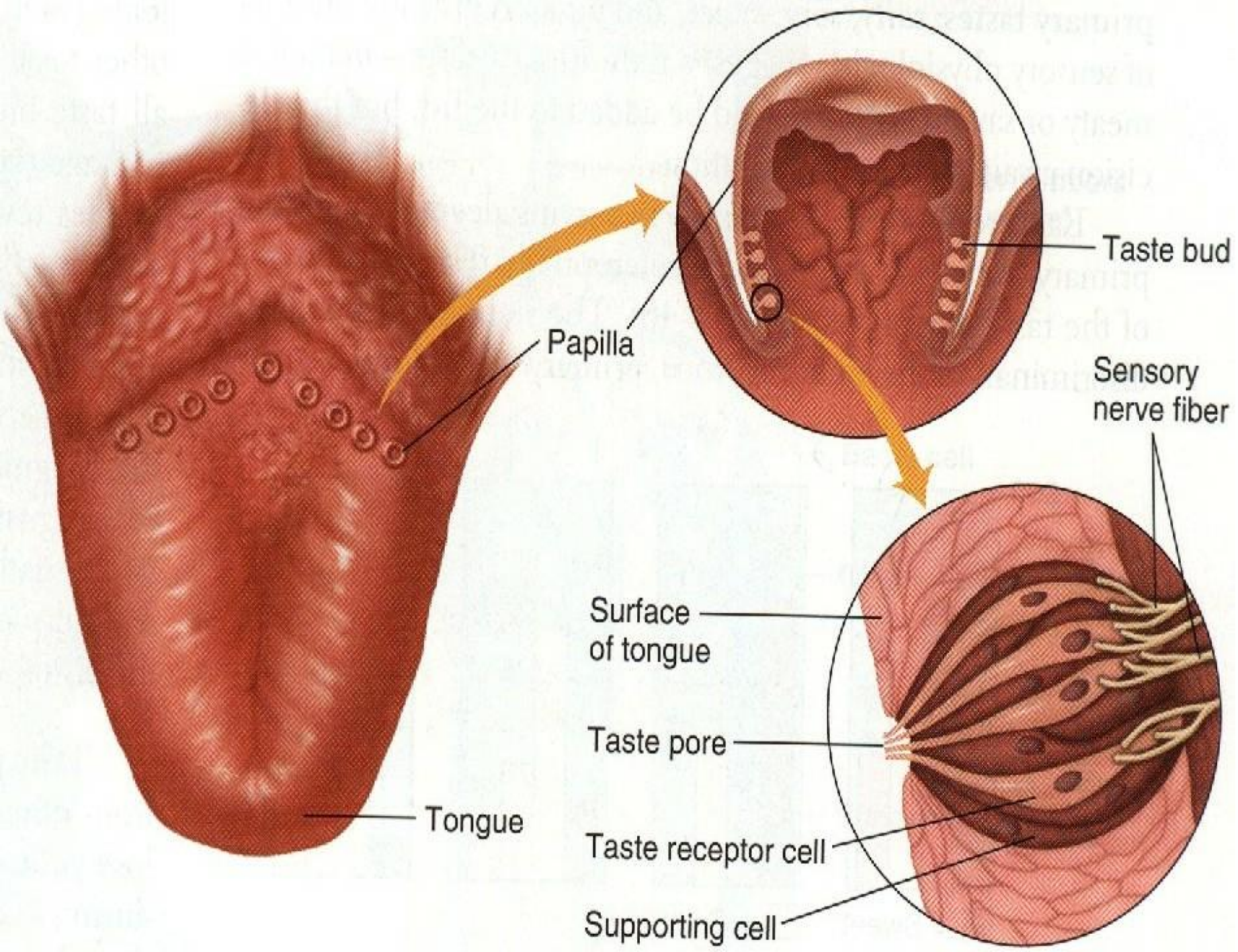
# Taste Receptors



A decorative vertical bar on the left side of the slide, featuring a colorful triangle at the top and a blurred, multi-colored background below. The triangle is composed of blue, purple, and green segments. The background of the bar is a vertical strip with a blurred, multi-colored pattern of green, blue, and purple.

# Types of papillae (projection)

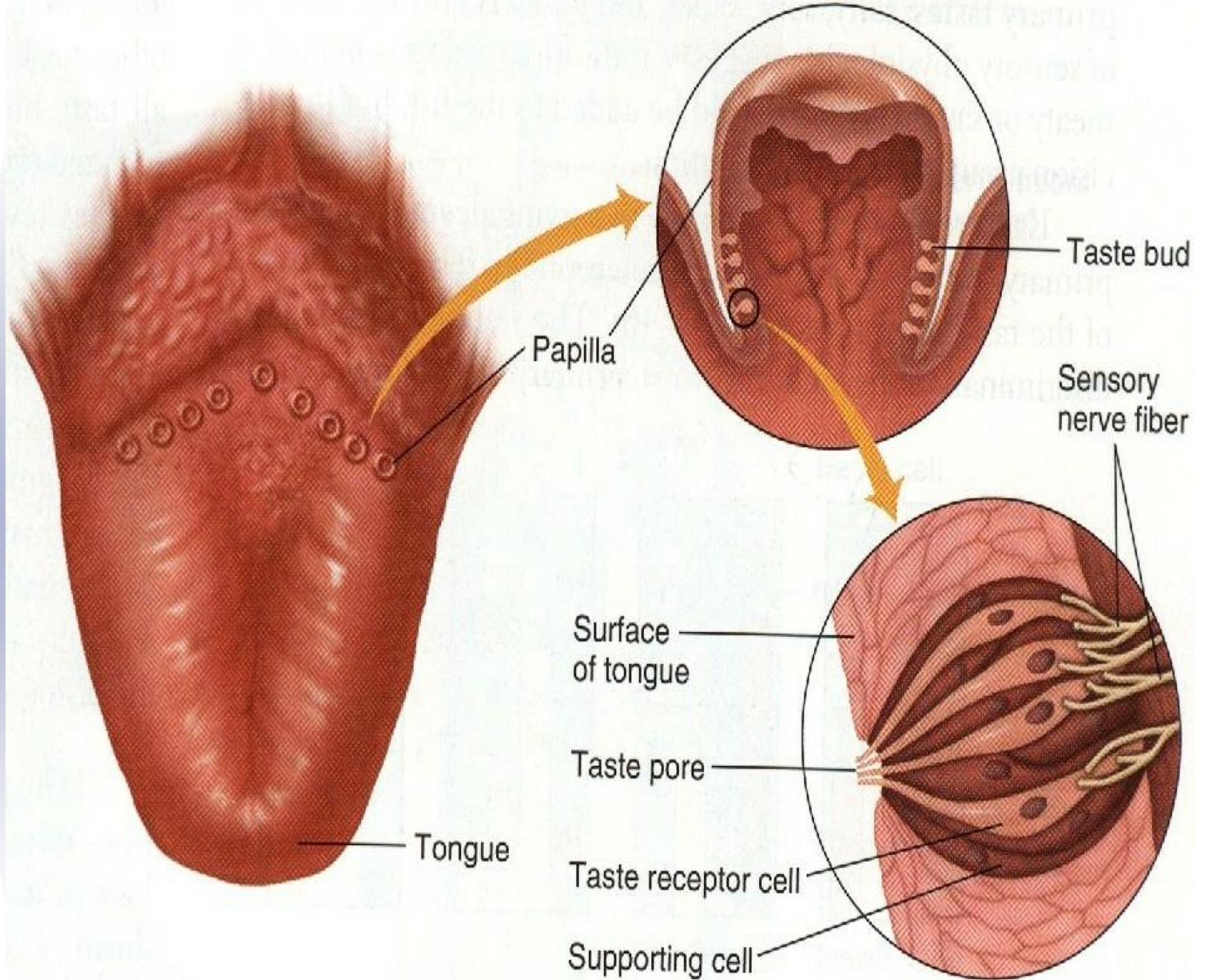
- **Filiform**
- **Fungiform**
- **Circumvallate**
- **No taste buds on the mid dorsum of the tongue**



A vertical decorative bar on the left side of the slide, featuring a colorful, abstract pattern of green, blue, and purple. At the top of this bar is a large, semi-transparent triangle with a gradient from blue to purple.

# Anatomy

- **Taste bud : gustatory cells with microvilli (gustatory hair)**
- **They are receptors cells with cilia projected through taste pore in between there are supporting cells**







## Taste bud:

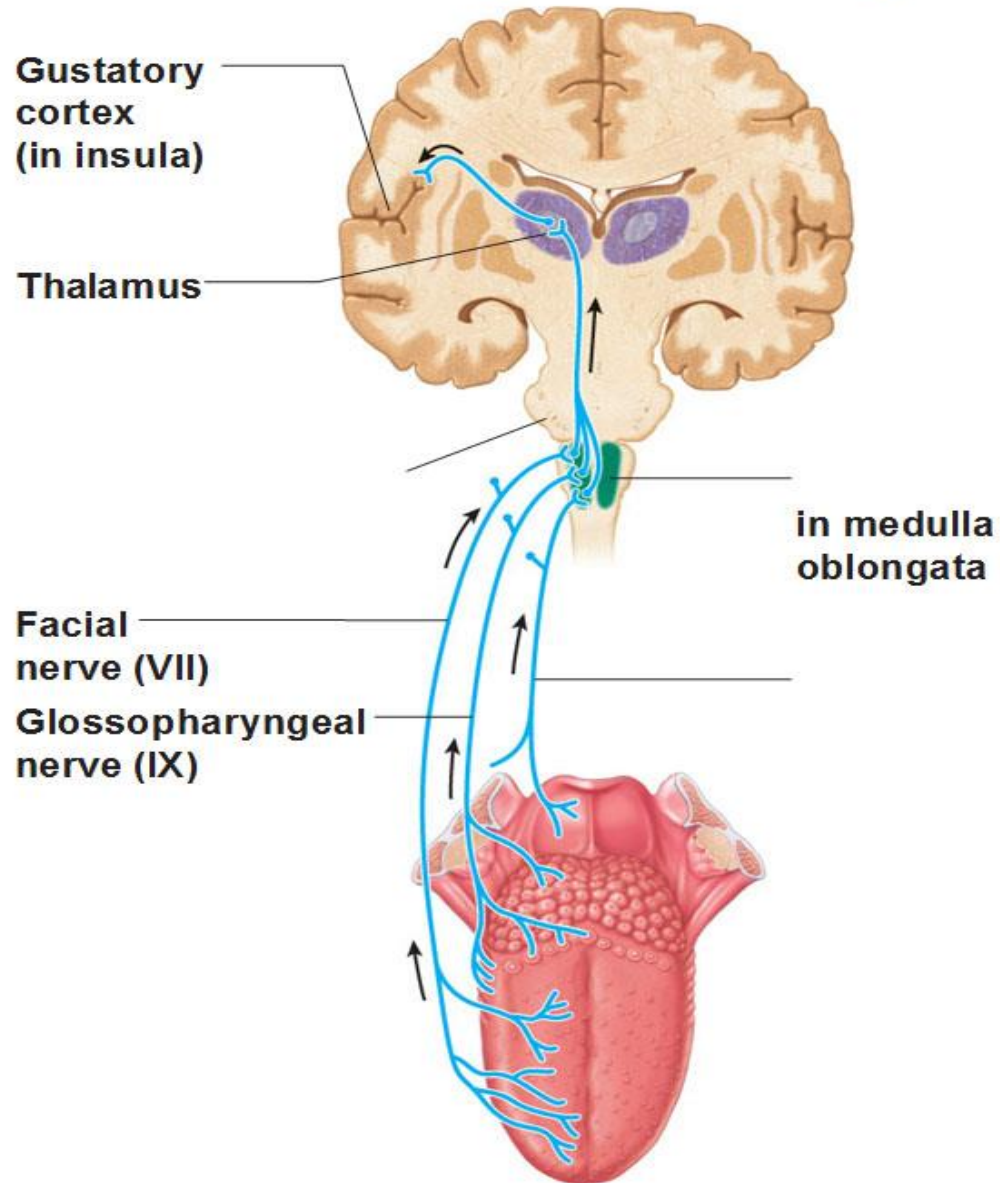
- **When stimulated produce nerve impulse to specific brain area through:**
- **Anterior 2/3 of the tongue »»»»» VII**
- **Posterior 1/3 of the tongue »»»»» IX**
- **Receptors on the palate, pharynx, epiglottis »»»»» X**

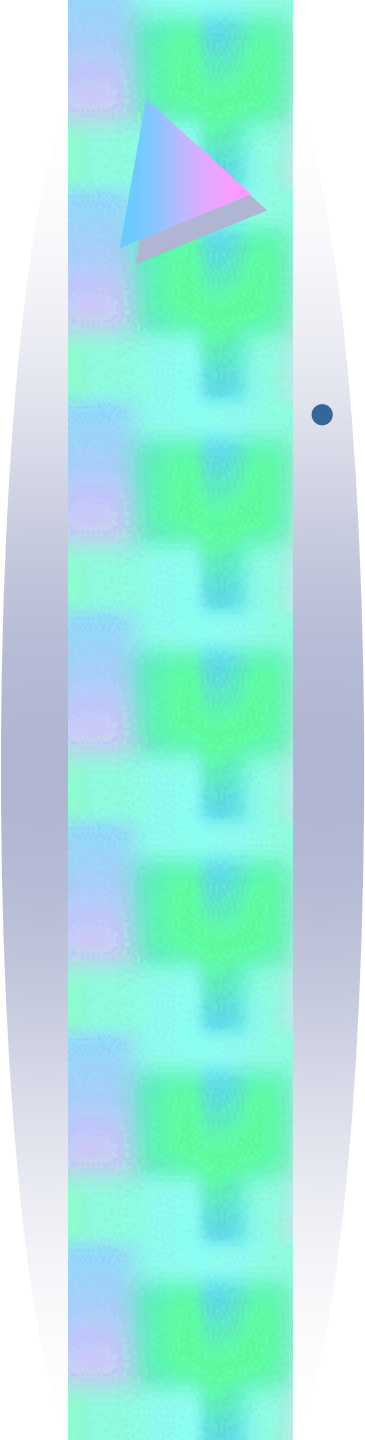


# Taste pathway

- **First order neurone:**
  - Taste fibres from the three cranial nerves form tractus solitarius »»»»» end in the nucleus of tractus solitarius (medulla)
- **Second order neurone:**
  - From TS cross the midline to ascend in the medial lemniscus to the thalamus

# Gustatory Pathway

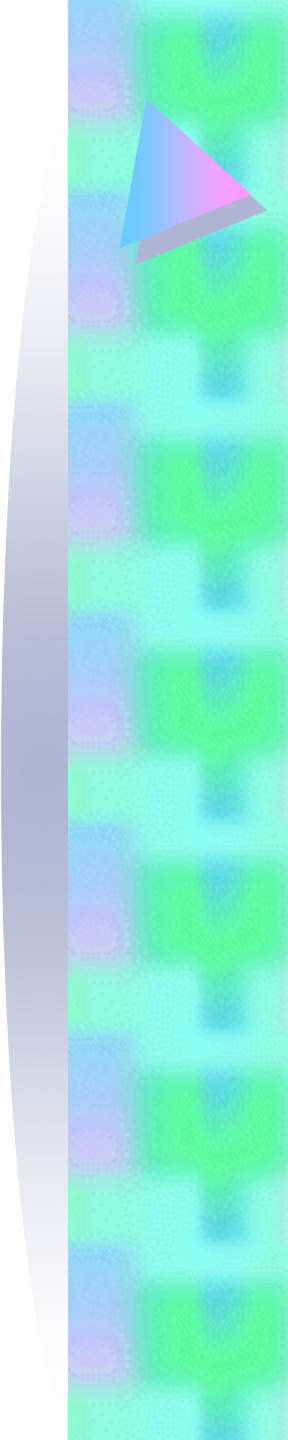


- 
- **Third order neuron:**
    - from thalamus project the cerebral cortex through thalamic radiation



# Taste sensation

- **Molecules dissolve in the saliva  
»»»»» attached to receptors on cilia  
of gustatory cells »»»»» receptors  
potential »»»»» action potential**
- **Combination between molecules and  
receptors are weak (since taste can  
be easily abolished by washing  
mouth with water)**

- 
- **Sweet receptors respond to » » » » » sugar, saccharine, some amino acids**
  - **Sour receptors respond to » » » » » H ion**
  - **Salty receptors respond to » » » » » salts**

- **Distribution of taste buds on tongue not uniform**
  - **sweet - tongue tip**
  - **sour - tongue margins**
  - **bitter - back of tongue**
  - **salt - widely distributed**





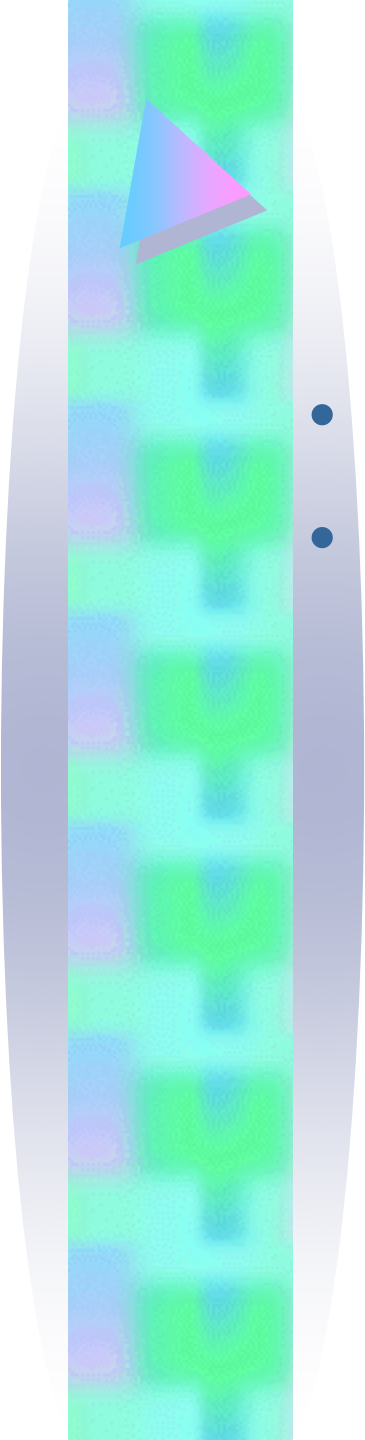
# Pathophysiology

- **Ageusia (complete loss of taste)**



- 
- A vertical decorative bar on the left side of the slide, featuring a colorful, abstract pattern of green, blue, and purple. A small, multi-colored triangle (blue, purple, and pink) is positioned at the top of the bar.
- **Dysgeusia (disturbed taste)**

- 
- A vertical decorative bar on the left side of the slide, featuring a repeating pattern of green, cyan, and purple squares. At the top of the bar is a 3D-style triangle with a blue-to-purple gradient and a shadow.
- **Hypogeusia**

- 
- A vertical decorative bar on the left side of the slide, featuring a colorful, abstract pattern of green, blue, and purple. At the top of the bar is a small, multi-colored triangle pointing to the right.
- **Hypergeusia**
  - **Adrenal insufficiency**