3.04 Sensory functions and disorders of the tongue and skin

3.04 Understand the functions and disorders of the sensory system
3.04 Understand the functions and disorders of the sensory system

Essential Questions

• What are the functions of the sensory system?
• What are some disorders of the sensory system?
• How are sensory system disorders treated?
• How do you relate the body’s communication to the sensory system?
Understanding the functions of the tongue

Taste

3.04 Understand the functions and disorders of the sensory system
Understanding the functions of the tongue

- Gustatory receptors (taste buds)

3.04 Understand the functions and disorders of the sensory system
Taste Trivia

Did you know???

- An adult has on average 9,000 taste buds (a child even 10,000)
- More buds means the individual perceives more types of taste
- The spicy foods (like chili peppers) stimulate the pain receptors, not the taste buds
Structures of the tongue: taste buds

Did you know... eating chocolate makes the brain produce natural opiates

- Produces a sense of well-being
- Reduces pain
- Makes you happy!

Agreeable or disagreeable?
Identify the taste bud.

3.04 Understand the functions and disorders of the sensory system
Structures of the tongue: taste buds

Agreeable or disagreeable?
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Structures of the tongue: taste buds

Agreeable or disagreeable?
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Agreeable or disagreeable?
Identify the taste bud.
Understanding the functions of the tongue

- **Taste**
  - Sweet
  - Salty
  - Sour
  - Bitter
  - Umami
  - NEW!
Sense of Taste

What is the relationship between the sense of taste and the sense of smell?

3.04 Understand the functions and disorders of the sensory system
Understanding the functions of the tongue

Taste Activity

Do you like all of your taste buds?

3.04 Understand the functions and disorders of the sensory system
Disorders of the tongue

**Glossitis**

- Glossitis

- What is it?

- What are the benefits of good oral hygiene in treatment and prevention of glossitis? It reduces inflammation. Avoid irritants such as hot or spicy foods, alcohol or tobacco.
Disorders of the tongue

**Strawberry tongue** due to scarlet fever

How are disorders of the tongue relevant to taste?

3.04 Understand the functions and disorders of the sensory system
Disorders of the tongue:

**Thrush**

**What is it?** A yeast infection that causes white patches in your mouth.

**Who most likely gets it?** People with weakened immune systems, using antibiotics or taking cancer drugs or corticosteroids.

**How is it treated?** Antifungal medications

How are disorders of the tongue relevant to health?
3.04 Understand the functions and disorders of the sensory system
Understanding the sensory functions of the skin

**Touch**

- Tactile corpuscles (receptors)
- Temperature sensors
- Pain receptors
  - Referred pain
  - Phantom pain
Understanding the functions of the skin

Touch

Discuss the importance of touch.

3.04 Understand the functions and disorders of the sensory system
Understanding the functions of the skin

Touch Activity

Guess what’s in the bag?
Shhh...
Disorders of the skin

How do you think the disorders of the skin pictured impact the sensory function of the skin?

Burns

Dermatitis

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The End