

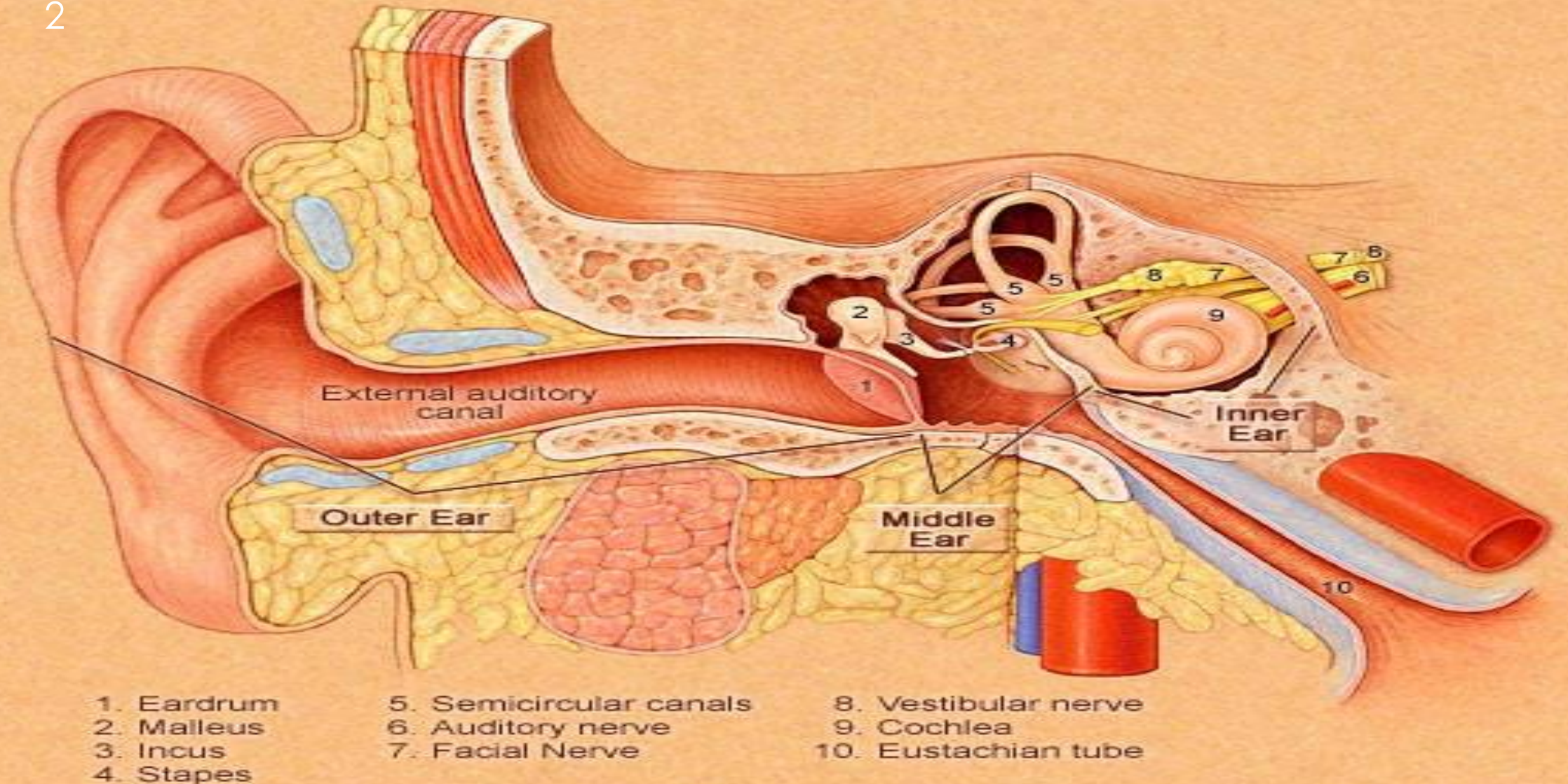
Raising Awareness About Ear Care



Betty Worthy & Graham Watts

Diagram of the Human Ear

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The Eustachian Tube (ET): CDC-PIA

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- ▶ Connects the middle ear to the throat³
- ▶ Drains fluid from the middle ear
- ▶ Can become blocked and trap fluid after a cold, throat infection or an allergy attack^{1& 3}
- ▶ Pain occurs with buildup of fluid that exerts pressure on the eardrum
- ▶ “I am fearfully and wonderfully made...” (Psalm 139:14)
 - ▶ Built up fluid tears the eardrum, which releases fluid trapped in ET, which subsequently heals²
 - ▶ Yellow, clear or bloody discharge can mean the eardrum has ruptured³
- ▶ Accumulated fluid and retention creates environment for bacterial or viral growth
 - ▶ An MD may... insert tube in ear drum..., [to drain] fluid in inner ear drain, ...[to ↓] infections and symptoms

Types of Ear Infection

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- ▶ AOM: Acute Otitis Media
 - ▶ Recurring ear infection
- ▶ OME: Otitis Media with Effusion
 - ▶ Fluid remains trapped in ear after infection subsides

Consequences of Untreated Ear Infection

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- Middle ear damage
- Eardrum ruptures
- Hardening of tissues in the ear
- A cyst in the middle ear
- Mastoid bone infection
- Facial paralysis
- Inflammation around or in the brain
- Small bones in the middle ear becomes infected, requiring surgery
- Hearing loss

Signs & Symptoms of Ear Infection

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- ▶ Two to seven days after upper respiratory infection (URI)²
 - ▶ Hearing loss
 - ▶ Feeling of pressure in the ear
 - ▶ Hearing popping or ringing [in the ear]²
 - ▶ Balance problems²
 - ▶ Dizziness²
 - ▶ Mild to severe ear pain²
 - ▶ Thick and yellow or clear fluid discharge from ear. Bloody if ear drum ruptures²
 - ▶ Low fever
 - ▶ Trouble sleeping

Etiology of Middle Ear Infection

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- ▶ Upper respiratory infection, such as cold, flu or allergy, causing:
 - ▶ Congestion and swelling of Eustachian tubes, nasal passages, and throat, (ENT)
 - ▶ Swelling, inflammation and mucus in the Eustachian tubes...
 - ▶ So fluid accumulates in middle ear
 - ▶ Bacteria or virus grows in the accumulated fluid in the Eustachian tube, producing severe middle ear infection

Precipitating/Risk Factors of Middle Ear Infection

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- ▶ Poor Air Quality
 - ▶ Tobacco smoke exposure
 - ▶ High level of air pollution
- ▶ Seasonal Factors:
 - ▶ Prevalence of colds, flu, or sinus infection during fall and winter
 - ▶ High pollen count increases likelihood in people with allergies
- ▶ History of:
 - ▶ Gastroesophageal reflux disease (GERD)
 - ▶ Allergies, like hay fever (a.k.a., sinusitis)

Prevention Tips (for Adults): PTSG

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- ▶ Practicing good hygiene, including washing hands regularly
- ▶ Treating acute ear infections, (professionally)
- ▶ Stopping smoking and avoiding environmental exposure to secondhand smoke
- ▶ Getting vaccines for influenza, pneumonia, and meningitis

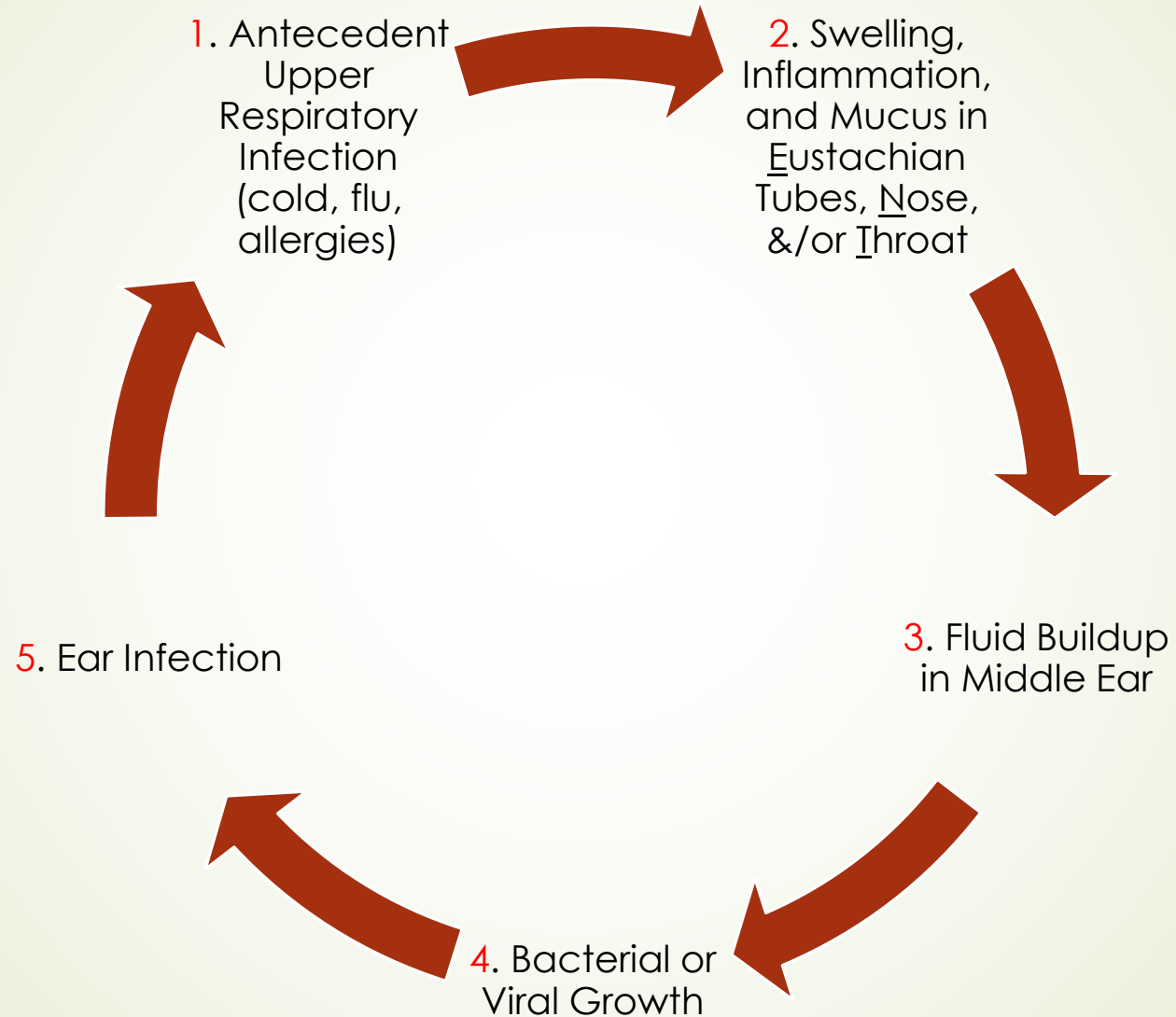
Home Remedies for Relief of Ear Infection: HUT

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- ▶ Holding warm or cool washcloth to the painful area
- ▶ Using numbing ear drops
- ▶ Taking an over-the-counter pain reliever—acetaminophen or NSAID (ibuprofen)

Summary: Capsule of Key Points

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Up Stream Prevention of Ear Infection

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- ▶ What can you do to break the cycle of ear infection? Before you answer, review the Summary slide, bullet points 1 to 4 or any other slides in this series. Then write a seven-point plan that describes your strategy for prevention of ear infection.

- ▶ How many types of ear infections were discussed?
- ▶ How can you tell if you have an ear infection?
- ▶ What can you do to care for your ear?
- ▶ Should you have an ear infection prevention plan?