<u>Post-Traumatic Ear Infection Syndrome</u> By Kelly Dorfman, MS, LND

Ear infections are not a benign childhood ailment. Even though most children outgrow earaches by age four and ruptured ear drums usually heal without complications, frequent ear infections can still leave a legacy of attention problems that continue into adulthood. I have named this phenomenon, Post-Traumatic Ear Infection Syndrome (PTEIS).

PTEIS occurs when ear infections interfere with optimum auditory processing development. Inefficient and inaccurate auditory processing causes distractibility and attention issues. Several studies have found children with frequent early ear infections are much more likely to have attention problems in elementary, middle and even high school.

Ear Infections and Auditory Processing

Most children are born with hearing but must learn how to listen. Between birth and age three, children learn to distinguish sounds and understand what they mean. The sounds coming out of a caretaker's mouth have to be converted from gibberish into language that can be repeated and used appropriately. Unimportant sounds such as the air conditioner compressor turning on or a garbage truck rumbling by outside need to be filtered out so a child can pay attention to more important information in her environment.

Ear infections or long periods of excessive ear fluid during these early critical developmental periods negatively affects how a child learns to use her ears and prioritize the noise around her. Youngsters whose ears are clogged with fluid hear distorted sounds. Imagine trying to learn a foreign language underwater. They also do not learn how to effectively ignore distracting sounds.

Other Reasons Ear Infections Are a Problem

Frequent ear infections are a sign of weak immune function. A classic study done by Dr. Nsouli, a Washington, DC based ear, nose and throat specialist, found that about 90% of children with ear infections or fluid have food allergies. When the offenders are eliminated (most often some combination of dairy, soy, wheat and/or eggs), ear infections subside.

Frequent illness, including other upper respiratory infections and asthma, is a common symptom of undiagnosed allergies and reactions. The immune system is busy reacting to foods or environmental irritants rather than fighting germs. Many children on the autism spectrum have underlying immune problems. One study found children with autism were ten times more likely to have frequent ear infections than their peers.

What to Do about Ear Infections

Consider a food elimination trial. Of the four foods associated with ear infections, dairy is the most likely to be the culprit. Before trying an extreme elimination diet, talk to your health care practitioner about removing foods made from mammal milk. The potentially problematic protein is called casein. Avoid milk, cheese, yogurt, ice cream and puddings. Butter contains very little of the casein protein and is usually not an issue. Goat milk contains a different casein than cow's milk, but many people react to both so for trial purposes, avoid both. If the test goes well, consider whether to add goat products back as a separate trial. Be sure to replace calcium and vitamin D.

A weak diet can also leave a child vulnerable to illness, including ear infections. Make sure your little one is consuming enough vitamins A, C and D and zinc. These four nutrients are critical for optimum immune function. Diverse and balanced gut bacteria are also associated with better immune function. Supplements can close the gap between what a child consumes and what they need. Many pediatricians recommend vitamin D, for example, because toddlers are not outside, "consuming" enough sunshine. Probiotics are also recommended for toddlers who take antibiotics for ear and other infections or have frequent loose stools.

PTEIS is common and mostly preventable. A legacy of distraction can live on decades after the last earache is forgotten. One or two ear infections can happen to anyone but a child with three or more ear infections, is calling for further immune support. An ounce of early intervention is worth a pound of ADHD medicine.