### HEARING HEALTH WEWS





2024 is a big year for our clinic. In June, we will celebrate 10 years since our grand opening. Many things have changed since that humble beginning, but our commitment to exceptional, patient-centered care has become even more central to all we do. Our clinic service offerings have expanded greatly based on the needs of our community. Diagnostic offerings now include auditory processing evaluations, cochlear implan services and, of course, hearing diagnostic and treatment options for all ages.

Headed up by Dr. Cortney Mitchell, our balance clinic is slowly growing. Area physicians and dizzy patients are realizing we can provide strong insights into the balance system. Knowing where the problems are (and are not) allows rehabilitation to be more targeted and effective.

This month, I am completing advanced training from Dr. Pawel Jastreboff regarding tinnitus and misophonia diagnostic and treatment options. I am excited to expand our clinic's tinnitus treatment options with tinnitus retraining therapy.

As this new year begins, what will you make of it? Are you hoping to take a vacation? Spend more time with loved ones? How will better hearing help you enjoy these moments? How will feeling confident and healthy help you achieve your goals? We're excited to do our part to help you stay connected, more relaxed and balanced.



### **LEARN MORE**

To learn more about our services, visit mtharrisonaudiology.com.



### **COULD YOU HAVE REACTIVE TINNITUS?**

If you've noticed that your tinnitus (ringing in your ears) worsens when exposed to everyday sounds in your environment, you may be experiencing reactive tinnitus.

According to Brian Taylor, Au.D., senior director of audiology at Signia, "Reactive tinnitus is a form of tinnitus that changes in loudness, quality or pitch, in response to average or even low-level noise."

#### **Causes of Reactive Tinnitus**

Any average-sounding noise you encounter could be a potential reactive tinnitus trigger, from a car horn blaring to crickets chirping to a song you play on your quitar.

Fortunately, while the resulting discomfort from the heightened tinnitus symptoms may be annoying, it is usually short-lived, with people tending to experience less severe noises or habituating over time.

#### Is Reactive Tinnitus the Same as Hyperacusis?

The short answer is no.

People with hyperacusis have an intense oversensitivity to normal sounds, making them seem painfully loud. For example, someone with hyperacusis may find their cat's meow as loud as a lion's roar.

Reactive tinnitus, on the other hand, causes an uptick in tinnitus symptoms in response to sound stimuli. Interestingly, 30% to 50% of people with tinnitus also have hyperacusis.<sup>2</sup>

Both conditions are likely the result of blockages impacting the nervous system.

"The underlying problem in hyperacusis and reactive tinnitus is thought to be an increase in neural inhibition or activity, in response to various stimuli," said Dr. Taylor.

#### **Diagnosis & Management Options**

Since no imaging or laboratory test can determine if you have reactive tinnitus, your doctor will make a diagnosis based on your symptom history.

They may also ask you to complete the Sound Sensitive Tinnitus Index (SSTI), a self-reporting questionnaire, take the Loudness Discomfort Level Test, check for any underlying physical issues and test your hearing.

Common Management Options for Reactive Tinnitus Include:

- Trying tinnitus sound therapy, which combines counseling with sound therapy
- Changing hearing device settings to ensure a too-loud volume won't trigger reactive tinnitus
- Wearing hearing protection to minimize your level of noise exposure

Think you may have reactive tinnitus? Schedule a consultation today with our tinnitus experts to start finding relief.

1 Whelan, C. (2023). What is reactive tinnitus? Healthy Hearing. https://www.healthyhearing.com/report/53507-What-is-reactive-tinnitus

2 Refat, F et al. (2021). Co-occurrence of hyperacusis accelerates with tinnitus burden over time and requires medical care. Frontiers in Neurology. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8012887/#:"·text=



# Your Ears Involuntarily Perk Up Around Interesting Sounds

You slam the front door shut, and your dog's ears move toward the unexpected sound. But did you know your ears may be unconsciously doing the same thing, just much more subtly?

These involuntary, nearly imperceptible ear muscle movements are controlled by your vestigial auriculomotor system. Experts believe that the vestigial auriculomotor system is likely a "neural fossil" that's been part of the human brain for 25 million years.<sup>1</sup>

In short, although you can't move your ears in the direction of interesting sounds on your own, your vestigial auriculomotor system tries to—and often does!

### **What Research Shows**

In a 2020 study, the participants read a boring text while surprising sounds, such as footsteps, a traffic jam or a crying baby, played. They then listened to a podcast while a second podcast was playing in another direction. Researchers recorded the electrical activity in the ear muscles and used video recording to track any ear movements during both experiments.

After reviewing the data, they determined that "tiny involuntary movements in muscles surrounding the ear closest to the direction of a sound the person is listening to" occurred. Additionally, when participants were trying to hear one podcast and ignore the other, their ears made small movements in the direction of the podcast they preferred.<sup>1</sup>

These results show that human ears do "perk up" when encountering an interesting sound, physically shifting toward what they want to focus on.

**The most exciting part?** The study's findings could be used to develop more advanced hearing aids, which could "sense the electrical activity in the ear muscles and amplify sounds the person is trying to focus on, while minimizing other sounds."

Although today's hearing aids are not this advanced yet, they do offer other incredible features.

Talk to our team to discover how you can benefit from the latest life-changing technology!



## Monthly Recipe



## **20-Minute Udon Noodle Soup** with Buttery Tomato Broth

The scents of cinnamon and star anise add big flavors to this quick soup. Butter adds body and a silky texture. Fresh udon noodles take only a few minutes to cook, but dry udon noodles work well here, too. There's no need to strain the broth to remove the spices. You can simply remove the spices with a slotted spoon when you pour the broth over the noodles, if desired.

By Julia Levy | Published on December 23, 2023 | EatingWell.com

Active Time: 10 mins | Total Time: 20 mins

Nutrition Profile: Nut-Free Soy-Free Egg-Free

### Ingredients

- · 1 tablespoon canola oil
- · 1 tablespoon garlic paste
- · 1 tablespoon ginger paste
- 1/4 cup unsalted tomato paste
- · 4 cups reduced-sodium chicken broth
- 1 (3-inch) cinnamon stick
- · 3 whole star anise
- 1 teaspoon black peppercorns
- 4 tablespoons unsalted butter, cut into pieces
- · 2 teaspoons fish sauce

- 9 ounces fresh udon noodles
- · 4 teaspoons toasted sesame oil
- 1/4 cup thinly sliced scallions
- 1 teaspoon toasted white or black sesame seeds

### **Directions**

### Step 1

Heat canola oil in a medium saucepan over medium-high heat. Add garlic paste and ginger paste; cook, stirring constantly, until fragrant, about 1 minute. Add tomato paste; cook, stirring constantly, until slightly darkened, about 1 minute. Stir in broth, cinnamon stick, star anise and peppercorns; cover and bring to a boil over high heat. Reduce heat to medium to maintain a simmer; simmer for 10 minutes. Stir in butter and fish sauce, whisking to melt the butter completely.

### Step 2

Meanwhile, bring a large pot of water to a boil. Cook noodles according to package directions. Drain.

### Step 3

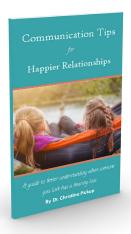
Divide the noodles among 4 shallow bowls. Ladle 1 cup of the broth over each; drizzle each bowl with 1 teaspoon sesame oil. Sprinkle with scallions and sesame seeds.

### **Nutrition Facts**

**Per serving:** Serving Size 1 3/4 cups Calories 322, Fat 22g, Saturated Fat 8g, Cholesterol 31mg, Carbohydrates 27g, Total Sugars 4g, Added Sugars 0g, Protein 5g, Fiber 1g, Sodium 681mg, Potassium 202mg

### From the DOCTOR'S DESK

Dr. Pickup recently finished a book that describes how hearing loss affects relationships and communication and explains how to communicate more effectively. This book is perfect for you if you suspect a loved one has hearing loss or if you want to help your family understand how to better communicate with you. Our clinic has copies available for **FREE**. Call to order one, visit our website or stop by to pick one up.





# We are so grateful to be able to serve you and our community.

