

The science behind misophonia, and possible treatments

By [lifewithmisophonia](#) on February 25, 2012

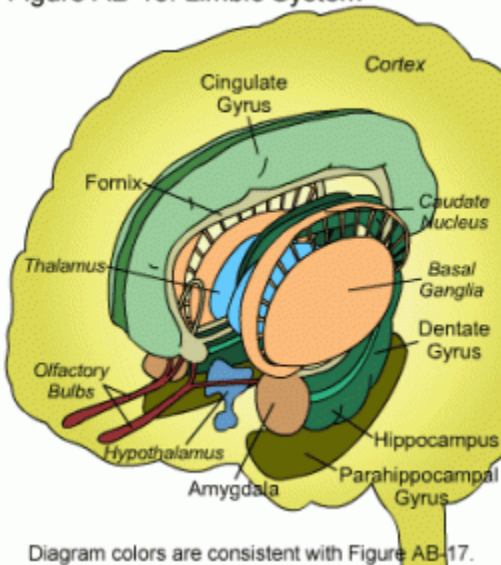
NOTE: Much has changes since I wrote this post. Please see my blog's [home page](#) for updates on what I've learned about this condition and the experimental treatments I'm trying.

I was poking around on [a website](#) that helps link misophonia sufferers to doctors who study the condition, and I found a document on the site that gives a thorough explanation of misophonia and its associated conditions, including phonophobia (fear of sounds).

The explanations were so good, I thought I would share them here. For more information, visit the [4S provider network website](#).

According to the document, this is how you pronounce the condition: mis-ō-fō'nē-ă (MISS OH PHONY UH)

Figure AB-16: Limbic System



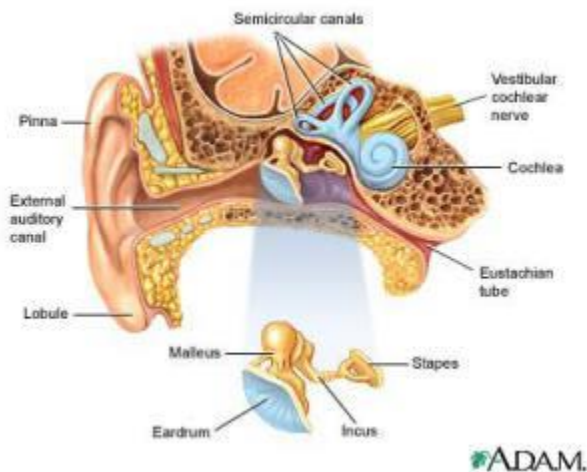
Theory behind why it happens: “The auditory pathways may be functioning normally, but there is an abnormally strong reaction of the limbic (emotional system) and autonomic nervous system (body control system) to which the auditory system is intimately connected.”

Several definitions are listed for the disorder, including:

1. “Abnormally strong negative reactions of the autonomic and limbic systems to specific sounds resulting from enhanced functional connections between the auditory and limbic systems for these sounds. The auditory system works in a normal manner, without abnormally high activation. At the behavioral level, sounds specific for a given patient evoke strong negative

reactions. This situation may cause general negative attitude to sound as well. When fear is dominant emotion (patient is afraid of sound) phonophobia occurs (phobia – fear). Phonophobia is a specific case of misophonia.”

2. “Selective sound sensitivity should be considered a type of misophonia, where soft sounds (typically eating and breathing sounds made by emotional attachment figures) are the focus, and the quality of those sounds causes annoyance and rage in the listener.”



3. “Pre-puberty seems to be a very common age of onset for the majority of those with misophonia, with lifetime persistence for most cases, and there appears to be a genetic component.”

4. “Misophonia can be considered abnormally strong connections between the autonomic and limbic resulting from enhanced connections between the auditory and limbic systems. These connections encompass both a high level of cortical level loop with involvement with cognition as well as subconscious connections, most probably involving the link between the medial geniculate body and the amygdale. The functions of these connections are governed by the principles of conditioned reflexes.”

The definitions are super technical, but I thought I would share them anyway in case someone wanted to understand just what was going on with the wiring in their heads. Looks like misophonia happens when the wires that affect your hearing get crossed with the wires that affect your emotions. It’s pretty fascinating, really. But I’d be much more fascinated if I didn’t have to deal with it every day of my life.

OK, so what about the current treatments?

According to the document, all of the following are being used to help treat (not cure) misophonia:

- Tinnitus retraining therapy has been tried using bilateral sound generators and directive counseling

- Earplugs are often prescribed to help block out intruding sounds
- Cognitive therapy
- Desensitization therapies including aversive exposure therapy, sensory integration auditory programs, and many others
- Counseling therapies
- Rotating cycles of pleasant sound therapy paired with unpleasant sounds
- Psychoanalysis