



Tinnitus

What causes it?

How does it become a problem?

What can be done about it?

Kim Fredericks

Senior Audiologist

Purpose of today session:

- **Basic understanding of tinnitus**
- **Useful management advice**
- **Meet other people with similar condition**
- **Option for treatment if required**

What's in your pack?

- Hearing Test results
- Guide to Tinnitus management
- Guide to sleep and relaxation
- NDA support group timetable

Overview of Session

- What is tinnitus
- Anatomy and physiology of the ear
- Causes of tinnitus
- Hearing and hearing losses
- Model of tinnitus
- Treatment of tinnitus



What is tinnitus?

The sensation of hearing
a noise in the absence
of any external sound

Ringing

Buzzing

Hissing

Pulsing

And many more...

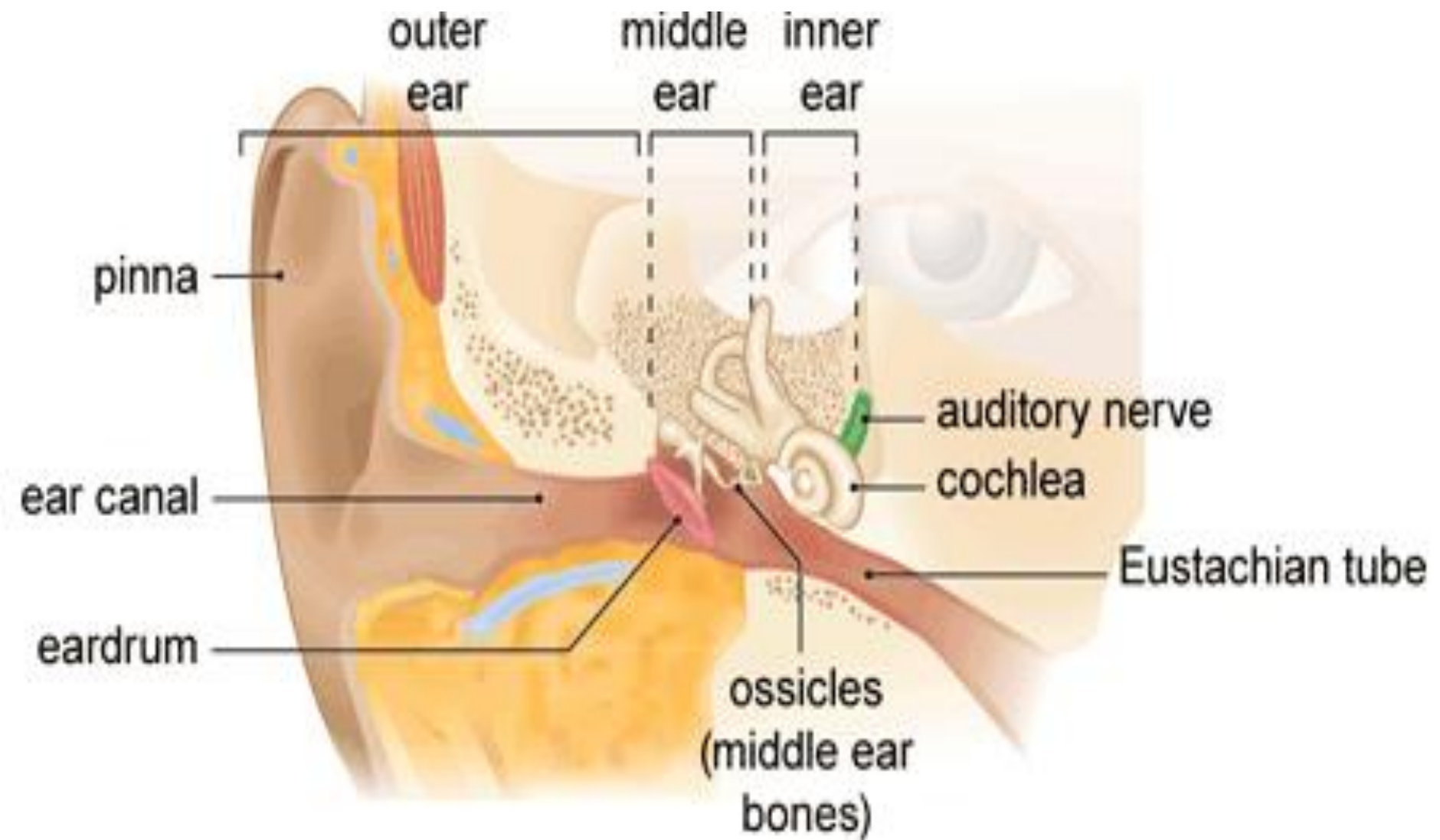
Who gets it?

10% of adults in the UK experience tinnitus frequently.

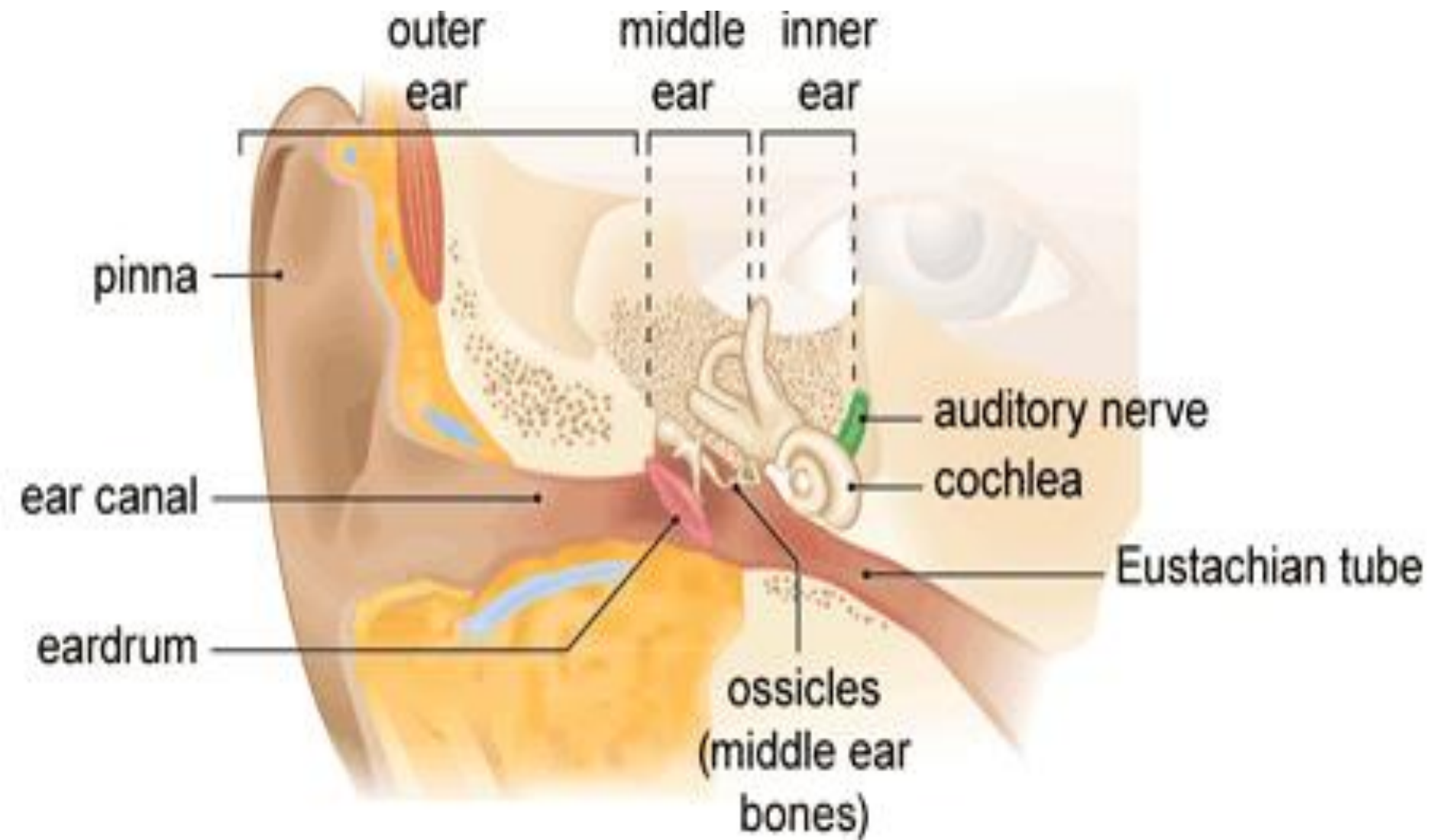
5% find the tinnitus troublesome.

Tinnitus is not confined to the Elderly – it can occur at **any age!**

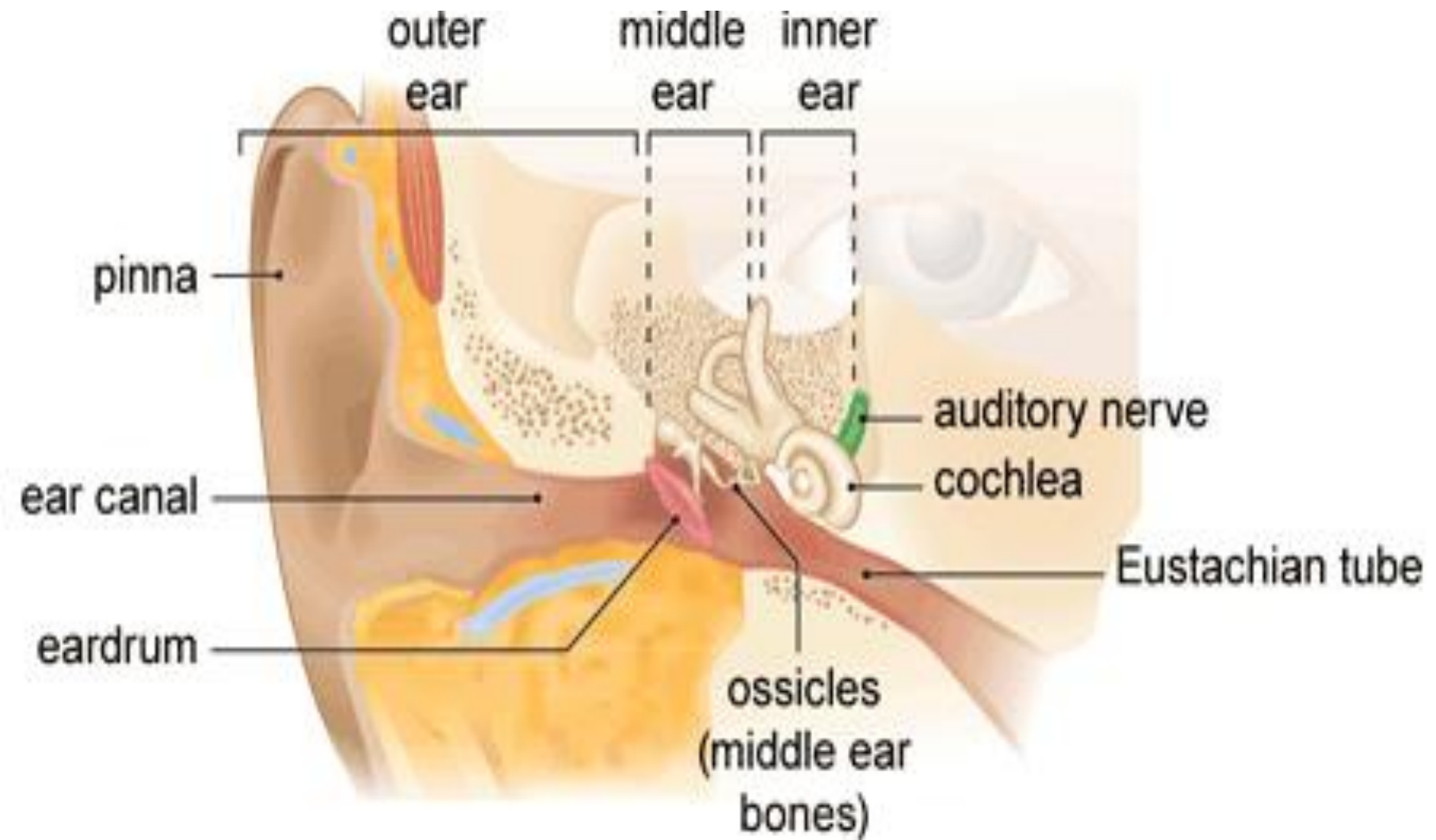




1. Outer ear collects and funnels sound waves



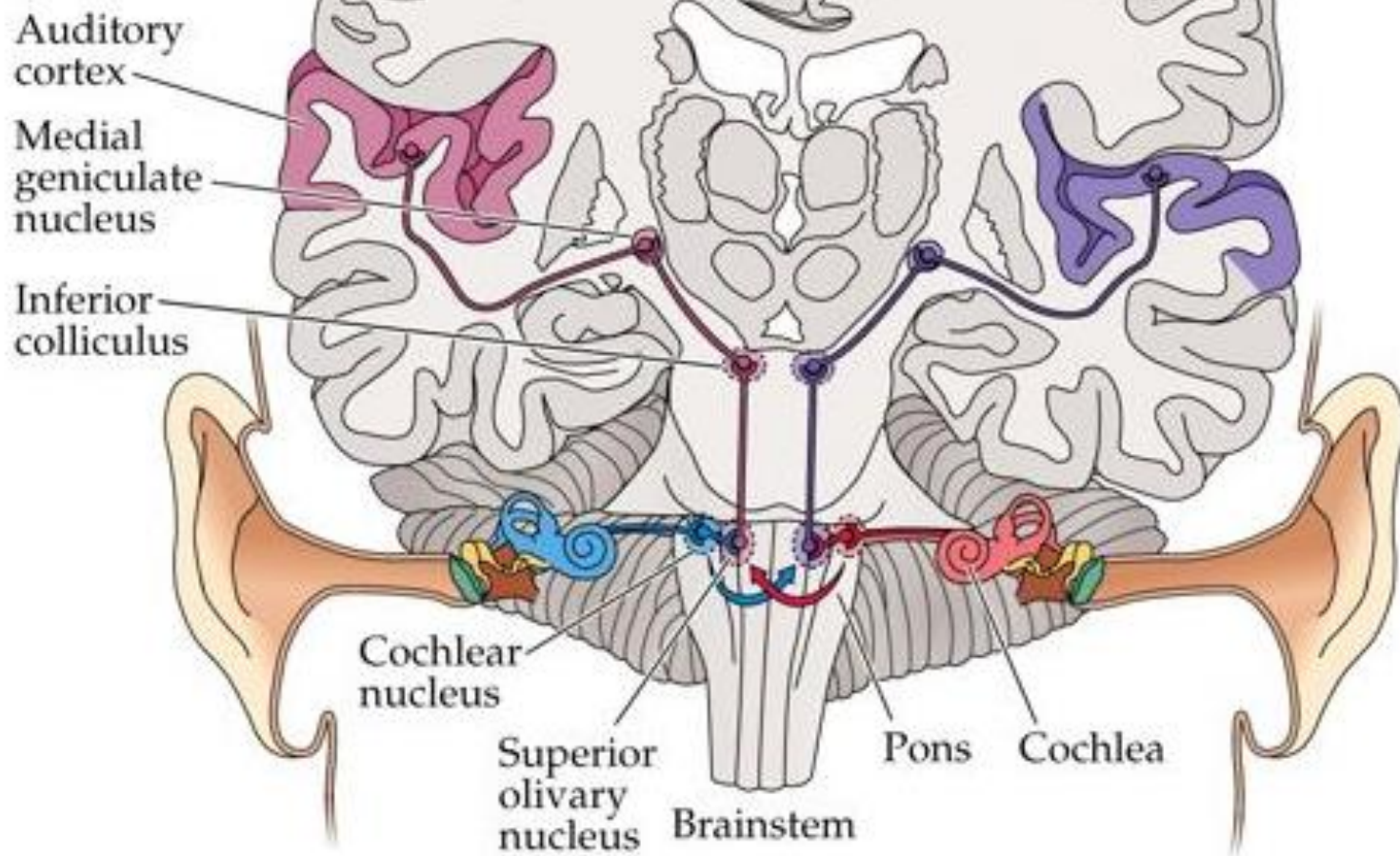
2. Middle ear converts sound into mechanical energy.



3. Converts sounds to electrical impulses and sends signals down the auditory nerve.

Medial Reticular Formation

Limbic System





Why do I have Tinnitus?



The brain is actively filtering in information that it previously ignored.

Referral to ENT?

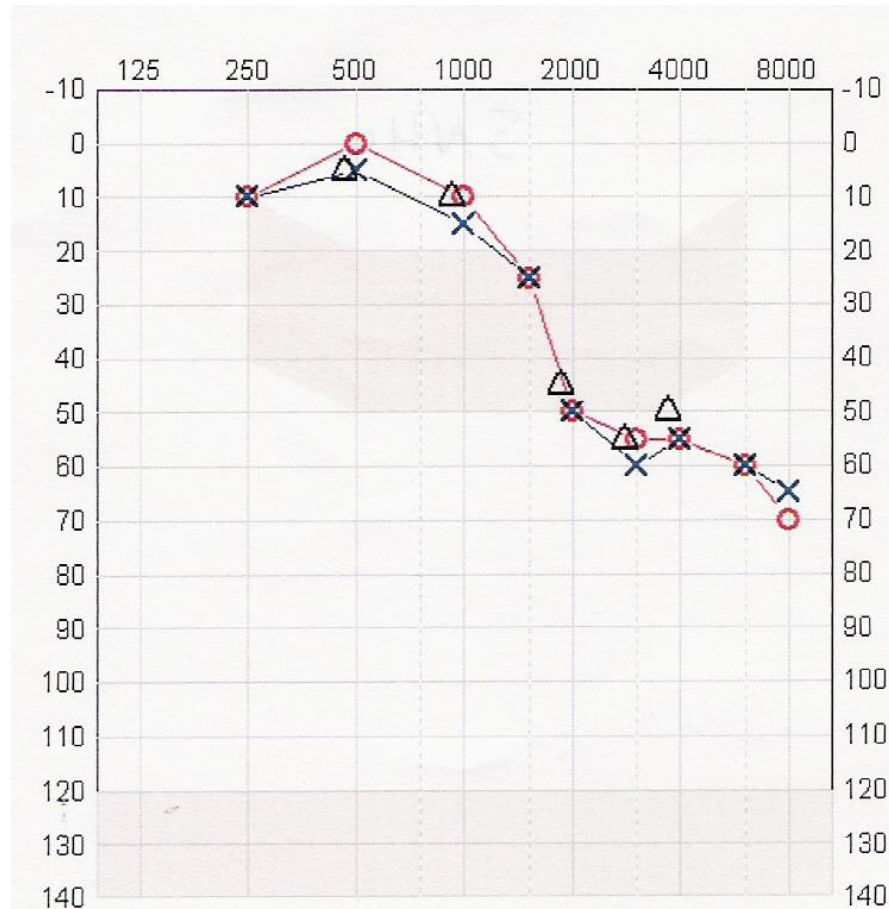
- Asymmetric Hearing Loss
- Asymmetric tinnitus or tinnitus on only one ear
- Pulsatile tinnitus
- Conductive hearing loss
- Significant dizziness
- Objective clicking tinnitus
- Abnormal eardrums

Causes of Tinnitus

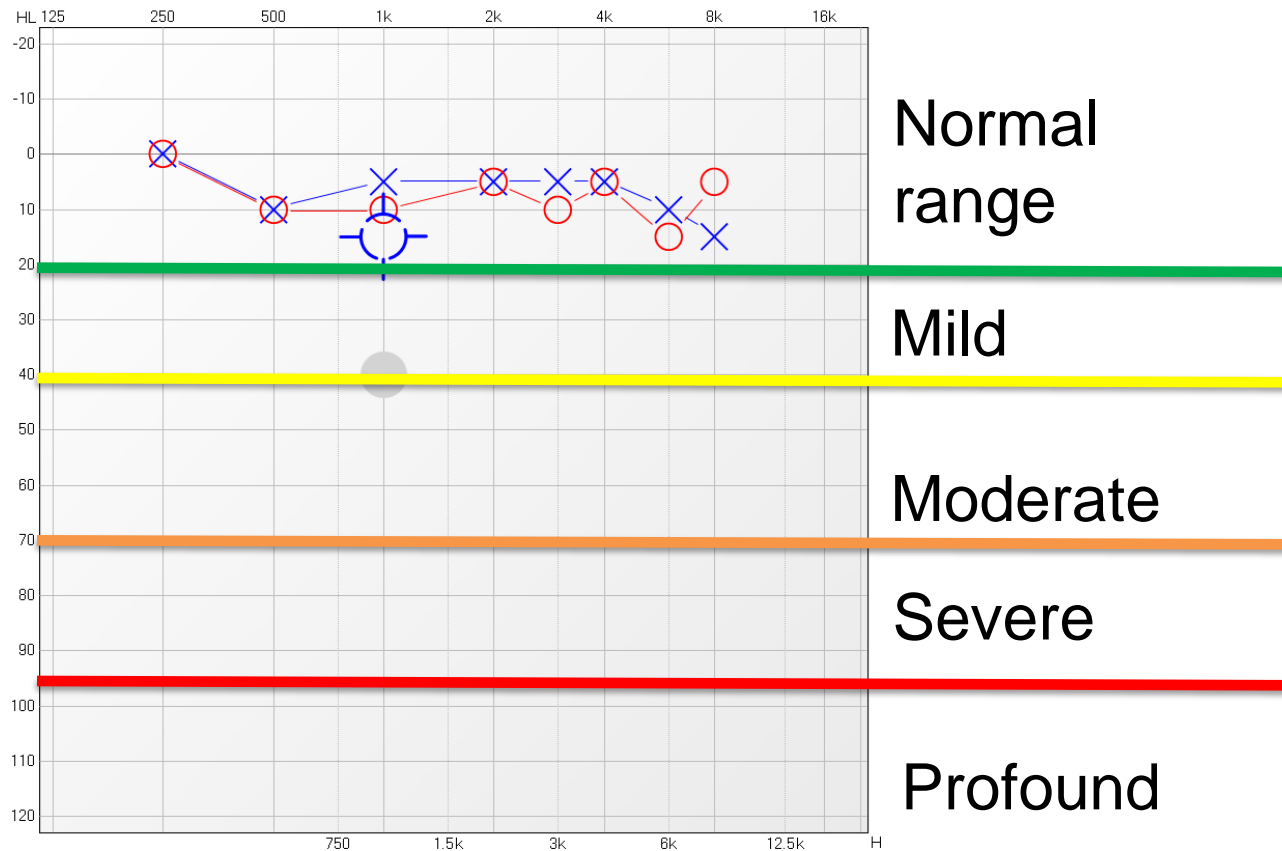


- Hearing loss
- Noise exposure
- Inner ear infection
- Ear conditions
- Stress
- Trauma
- Medication
- Idiopathic (i.e. no known cause)

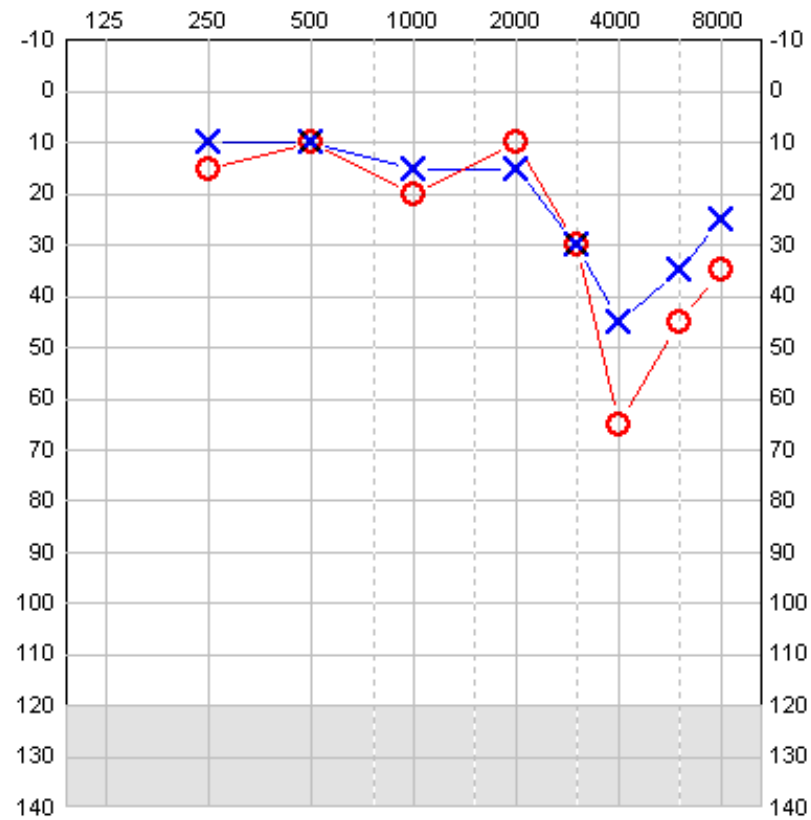
Age Related Hearing Loss



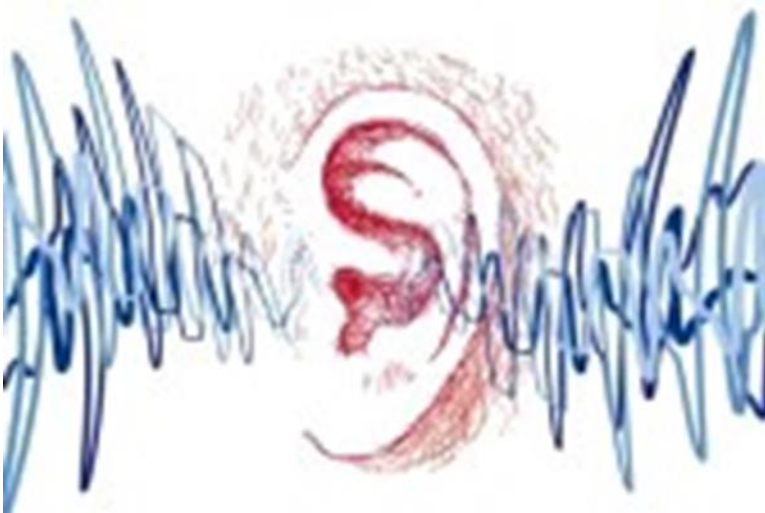
Your Hearing Test



Noise Exposure



How your Brain Reacts



- When you first hear tinnitus your mind doesn't know what to make of it!
- But as time goes on your mind may react in negative emotional ways.

How will I
cope?

Will it get
worse?

I want silence

I can't sleep

Why am I am
moody and
irritable?

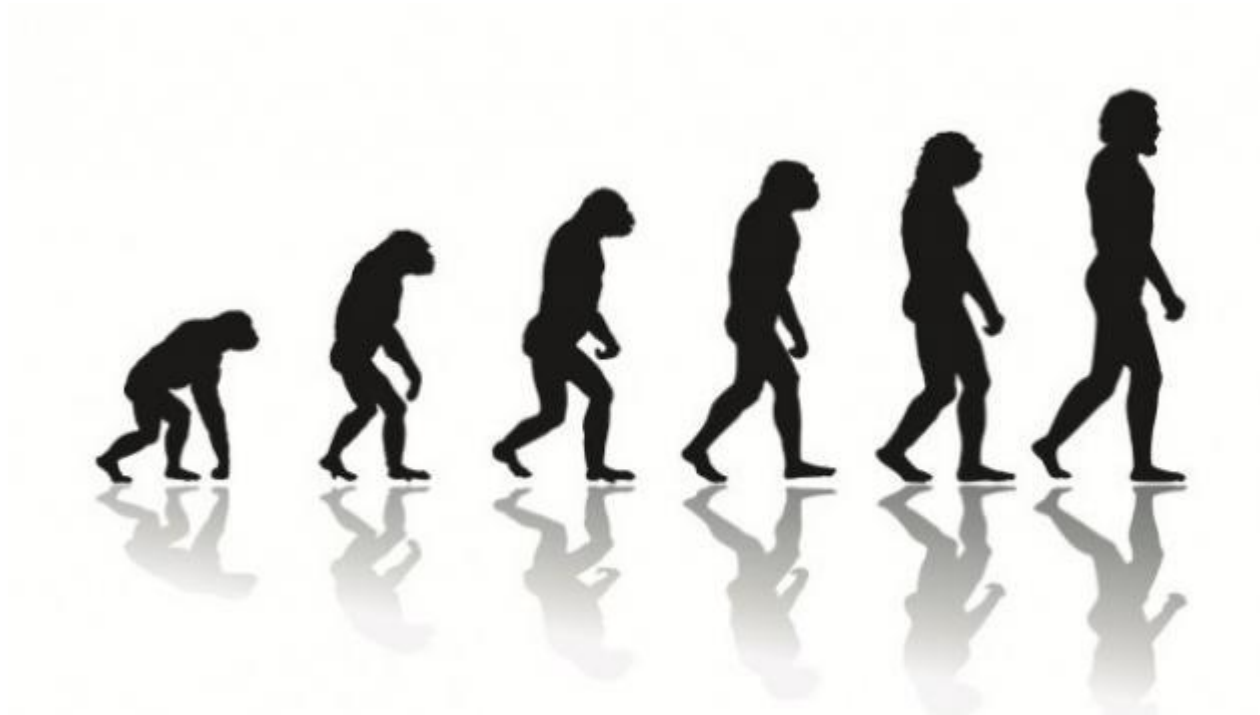
There is
something wrong

I can't concentrate



Why am I so troubled by the tinnitus?

- Communication
- Background
- Warning
- Emotional



Tinnitus starts

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graph TD; A([Tinnitus starts]) --> B([Increased awareness of tinnitus]); B --> C([Negative associations develop]); C --> D([Increased attention to tinnitus]); D --> E([Chronic tinnitus]); E --> B
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The diagram illustrates a cyclical process of tinnitus progression. It begins with an orange oval at the top labeled 'Tinnitus starts'. A black arrow points down and to the right to a purple oval labeled 'Increased awareness of tinnitus'. From there, a black arrow points down to a blue oval labeled 'Negative associations develop'. A black arrow then points left to a light green oval labeled 'Increased attention to tinnitus'. A black arrow points up to a red oval labeled 'Chronic tinnitus'. Finally, a black arrow points right from the red oval back to the purple oval, completing the cycle.

Chronic tinnitus

**Increased awareness
of tinnitus**

**Increased attention
to tinnitus**

**Negative
associations develop**



The Heller and Bergman (1953) Experiment

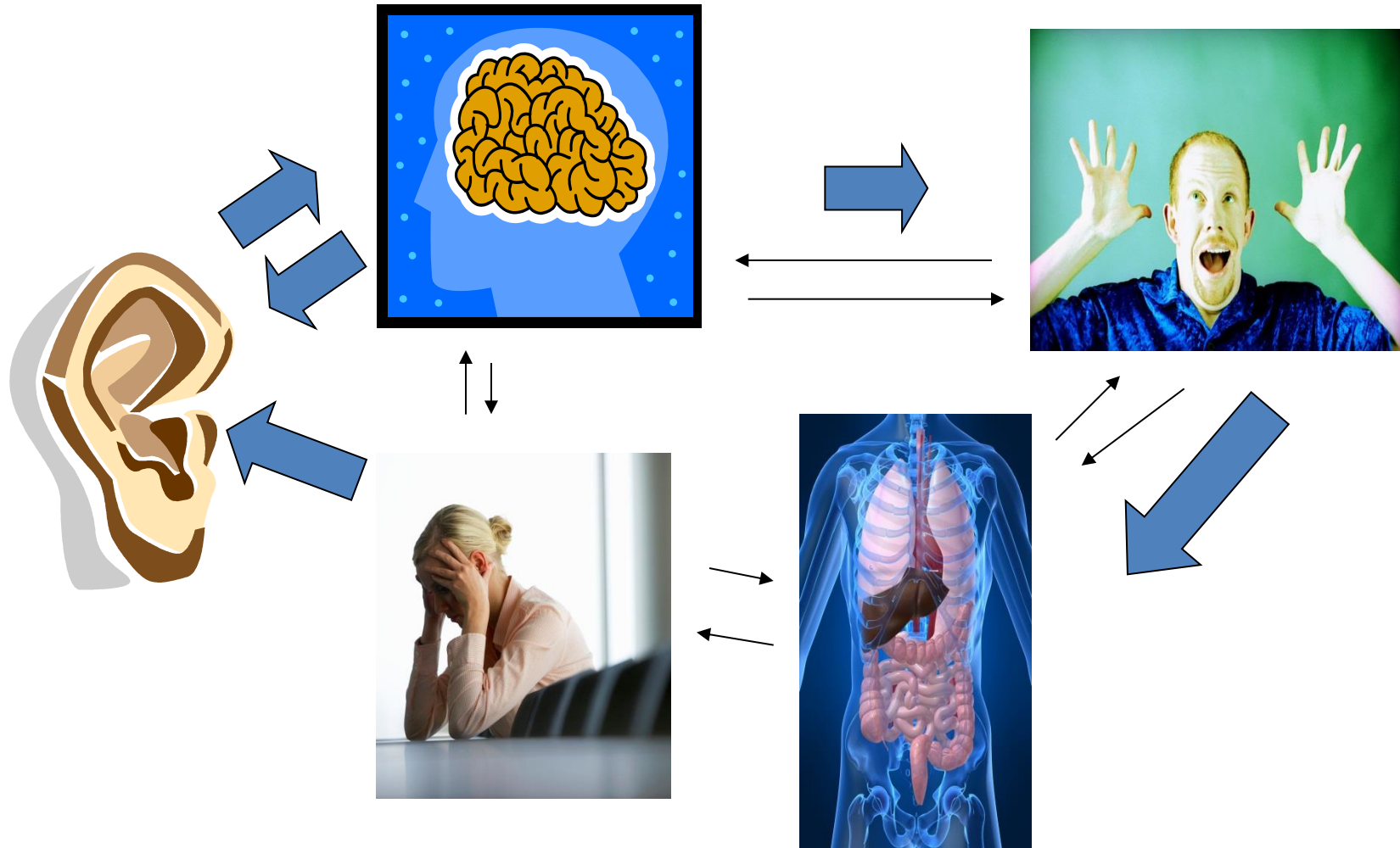
Where's Wally?



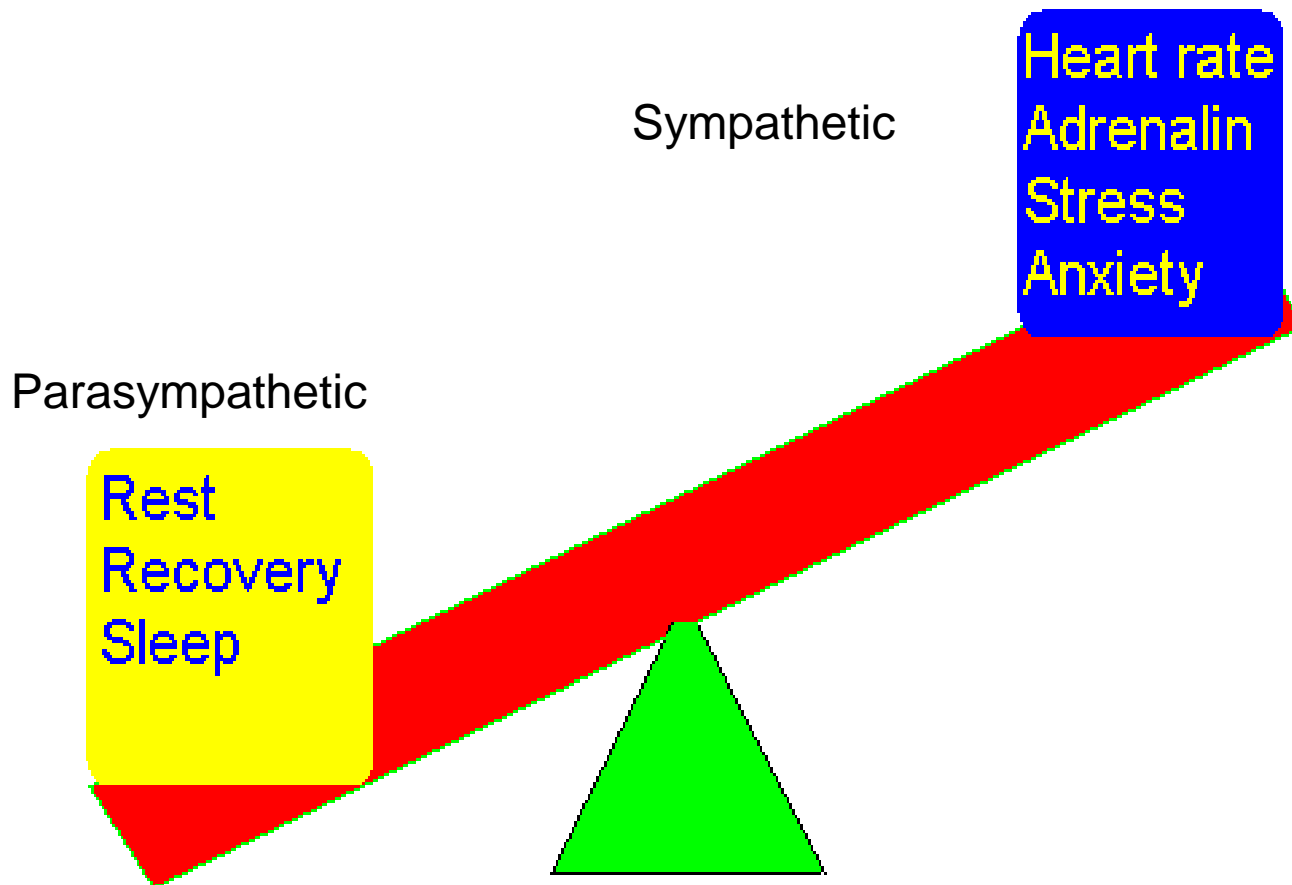




Model of Tinnitus



Autonomic Nervous System



Treatment



THERAPY
TOOLBOX

The goal is to
habituate to the
tinnitus.

Habituation or Adapting to Tinnitus

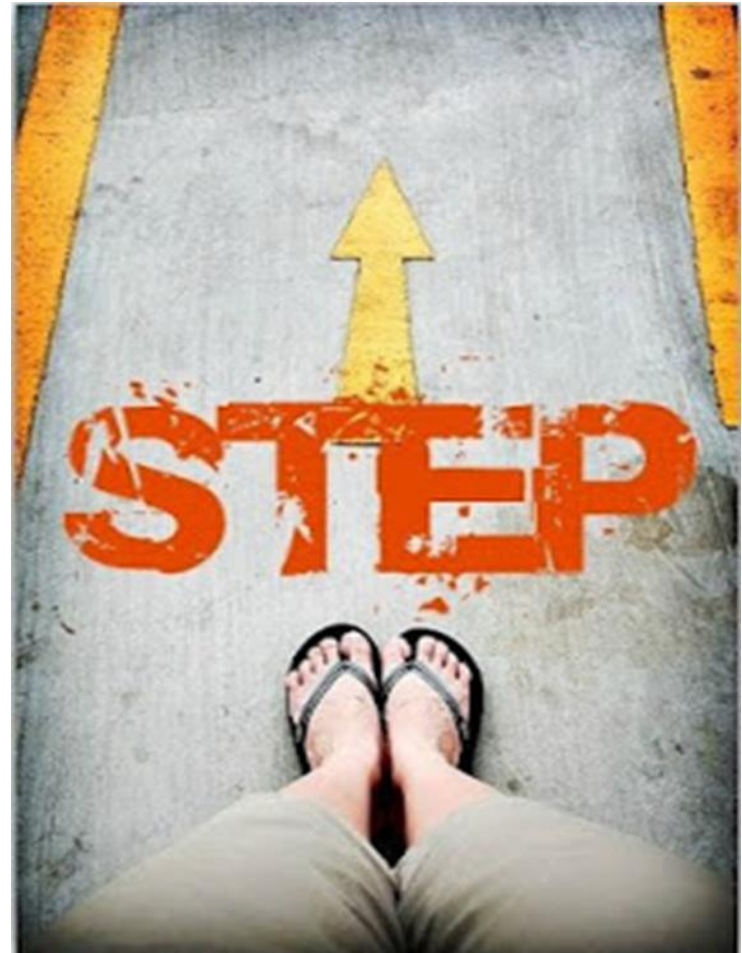


Like moving to a house on a busy road – at first all you notice is the traffic after a while you don't notice it.

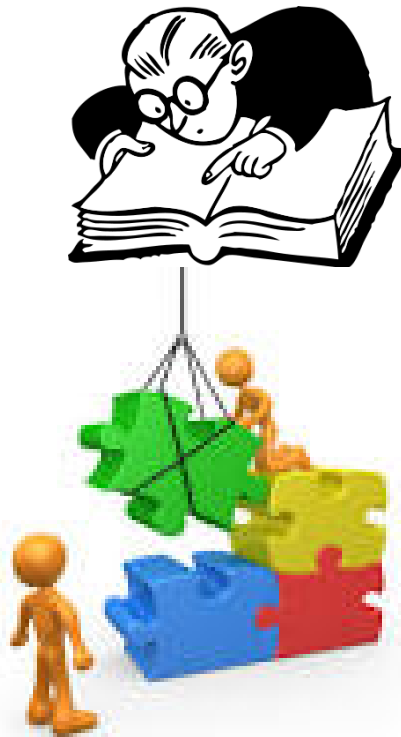
Understanding how our brain reacts to noise is the 1st step to being able to live without Tinnitus

Progressive Process

- The aim is to change how you react to the tinnitus.
- There may be days when you're overtired or stressed and Tinnitus is more troublesome
- Learning how to change your reaction means the bad days will be fewer and further apart.



How can we do that?



- Information and reassurance (today's session)
- Hearing aids
- Sound therapy
- Changing thoughts
- Sleep management
- Relaxation

Hearing aids



- Any degree of hearing loss should be addressed because straining to listen makes tinnitus worse.
- Brings up external noises – reducing internal.
- Takes attention from Tinnitus.
- 3 Months acclimatisation.

Sound Therapy

Now used to “mingle” with
Tinnitus

- Reduces perception of Tinnitus
- Allows habituation
- Useful for people with “normal” hearing



They produce quiet,
natural sounds,
such as a babbling
brook, leaves rustling
in the wind and waves
lapping on the shore.

Changing Thoughts

- Identifying and modifying unhelpful thoughts and behaviours with regard to tinnitus.
- Removing negative connotations.
- Accepting the tinnitus noise.



Sleep Management



- It's normal for everyone with tinnitus to experience a period of sleep disturbance.
- Learning to switch your focus away from the tinnitus.

Sleep and Relaxation Group

Sweet dreams

Zzzzz

Sleep Hygiene



Self help and Relaxation

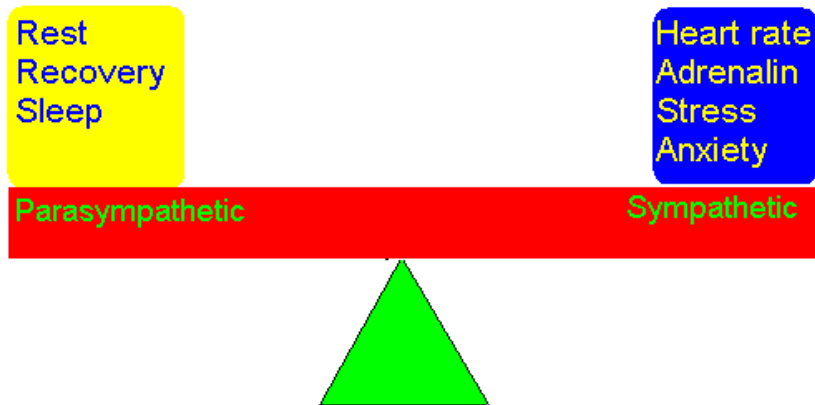
Relaxation techniques help to reduce stress.



Do the things that you enjoy!



Maintaining Balance



- Strike a balance
- Quiet/ background noise
- Active/ relaxed
- Your Autonomic Nervous System will be back in balance

Things to remember



- Tinnitus is a symptom of a problem with your hearing system
- There are a variety of treatments that can help relieve your symptoms
- The key is thinking differently about your Tinnitus

Chasing Cures



- Chasing cures for tinnitus is counter-productive as it encourages you to focus on your tinnitus.

**Tinnitus can be daunting, but you're not alone.
We have tips, training and advice to help you.**

This is general information on tinnitus and individual management can be accessed via your GP.

This website is designed to give you facts and ideas for things you can do to manage it.

View our [privacy policy](#).

You can try the taster to learn more.

[Try the taster](#)

[Register](#)

[Login](#)

www.tinnitus.org.uk/Tinnitus

Tinnitus First Aid kit



Tinnitus First Aid Kit

Help new tinnitus patients understand their condition with this online resource. The Tinnitus First Aid Kit explains tinnitus, its potential causes, and different treatment options. <http://www.tinnituskit.com/your-first-aid-kit>

Useful websites:

British Tinnitus Association:

<http://www.tinnitus.org.uk>

NHS Choices:

<http://www.nhs.uk/Pages/HomePage.aspx>

Hearing Link:

<http://www.hearinglink.org/tinnitus>

What happens next?

- If things change contact your GP
- If you would like a sound oasis see catalogue
- Email claire.gatenby@nnuh.nhs.uk
- NDA Tinnitus Support Group
Email: tinnitus@norfolkdeaf.org.uk

Fill in your form

Norfolk and Norwich University Hospital
NHS Foundation Trust

Group Information Session Outcome Form

First Name
Surname
Hospital Number
D.O.B

No Further Appointment

Tick Here for
No further
Appointments

Appointment To Discuss Hearing Aids

Tick Here To
discuss Hearing
Aid/s

Appointment with Hearing Therapy

Tick Here for an
appointment with
Hearing Therapy or
Sleep group

