



Tinnitus

What causes it?

How does it become a problem?

What can be done about it?

Purpose of today session:

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

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's in your pack?

- Hearing Test results
- Product Catalogues
- Tinnitus leaflets
- Self-help for tinnitus
- Copy of today's presentation
- Further appointment request form



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.

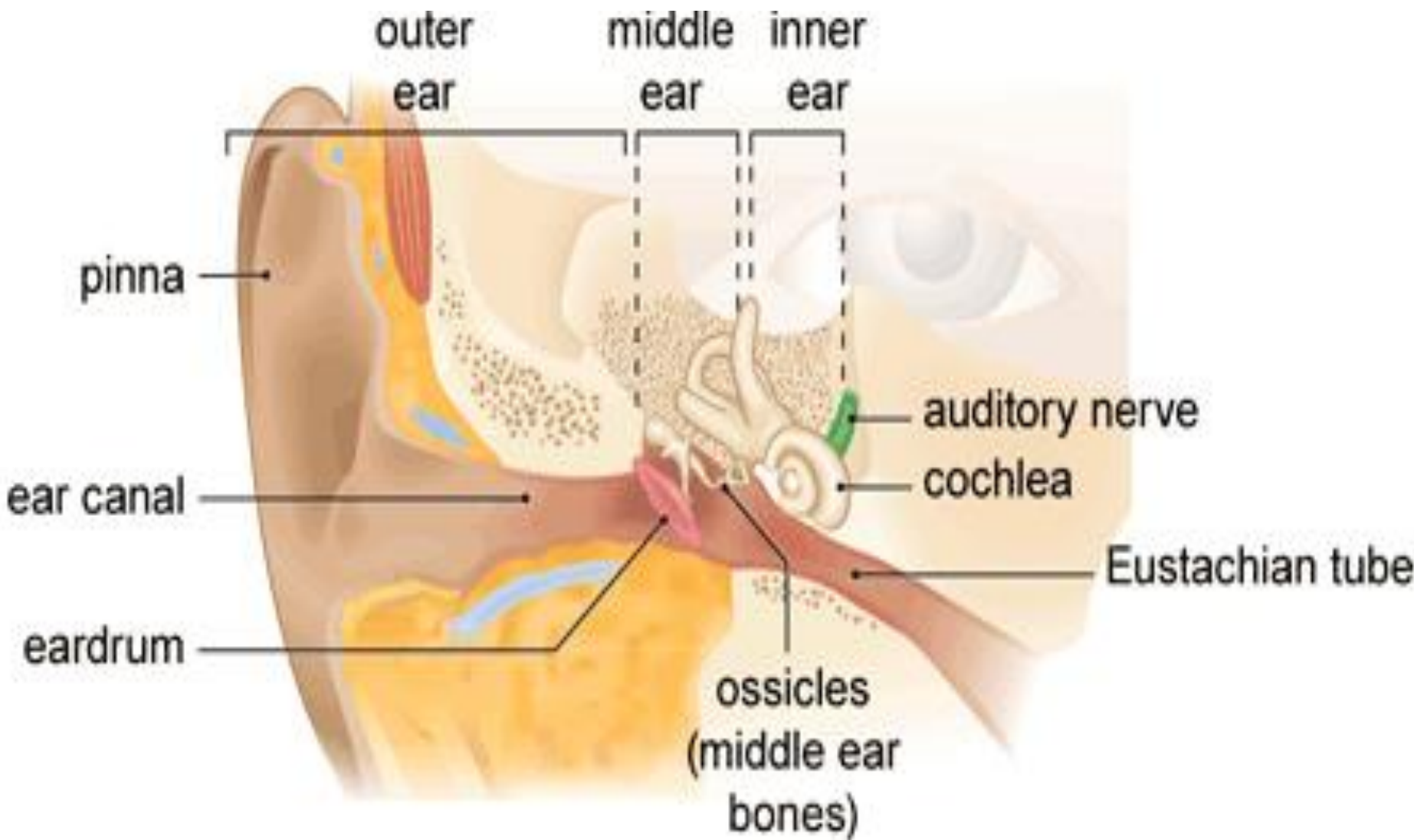
5% find the tinnitus troublesome.

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



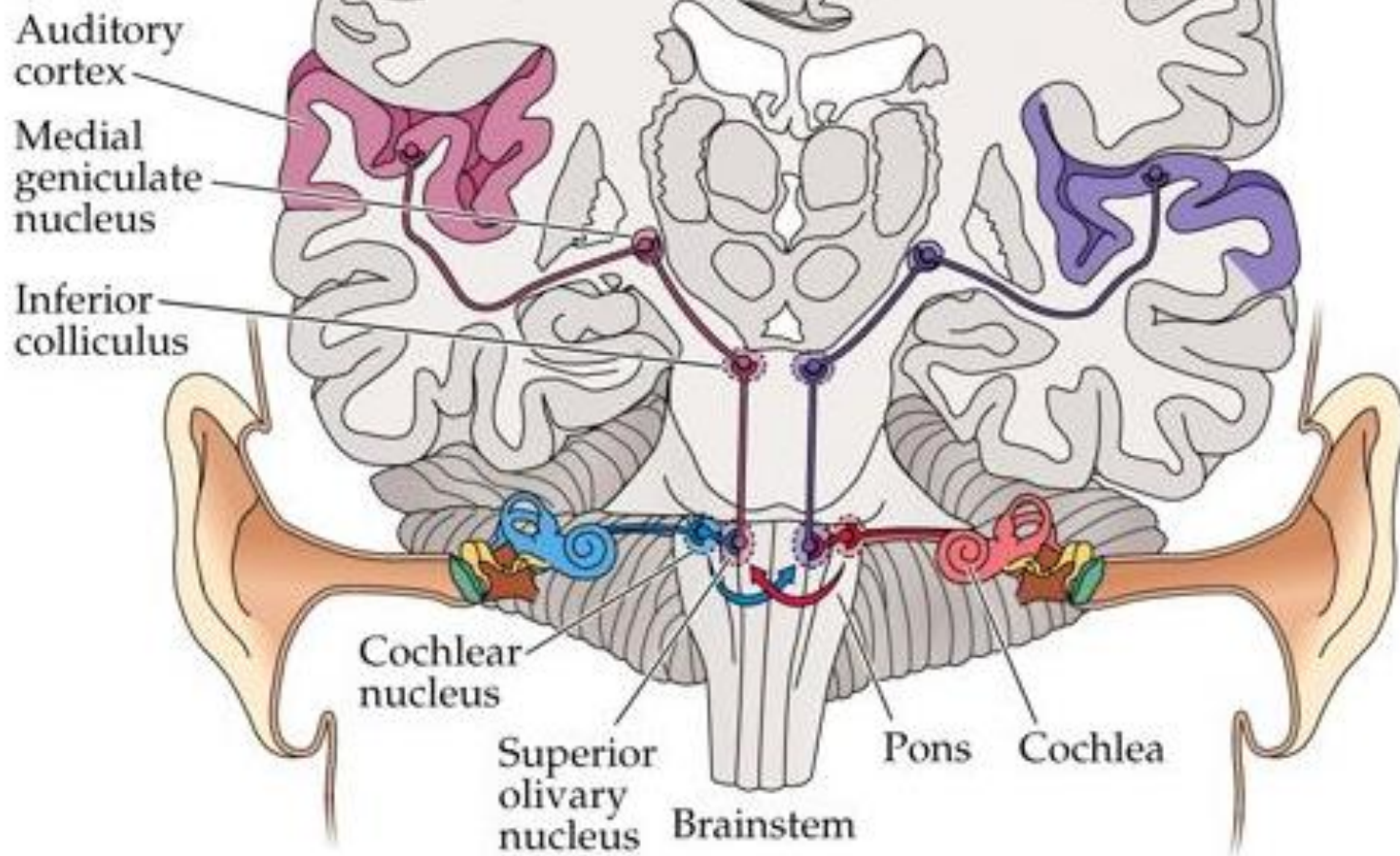
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Medial Reticular Formation

Limbic System





Why do I have Tinnitus?



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

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Causes of Tinnitus



- Hearing loss
- Noise exposure
- Inner ear infection
- Ear conditions
- Stress
- Trauma
- Medication
- No known cause

Referral to ENT or GP or for and MRI scan?

Ear, Nose and Throat

- Pulsatile tinnitus
- Clicking tinnitus
- Conductive hearing loss (hearing loss from the outer or middle ear)
- Fluctuating hearing
- Sudden or rapid hearing loss

GP

- Significant dizziness
- Abnormal eardrums
- Pain in ears
- Ear infections
- Ear drums are not moving (glue ear)

MRI Scan

- Asymmetric hearing loss
- Tinnitus in only one ear

Referral to ENT or GP?

Ear, Nose and Throat

**About a five
month wait –
they will contact
you to arrange an
appointment**

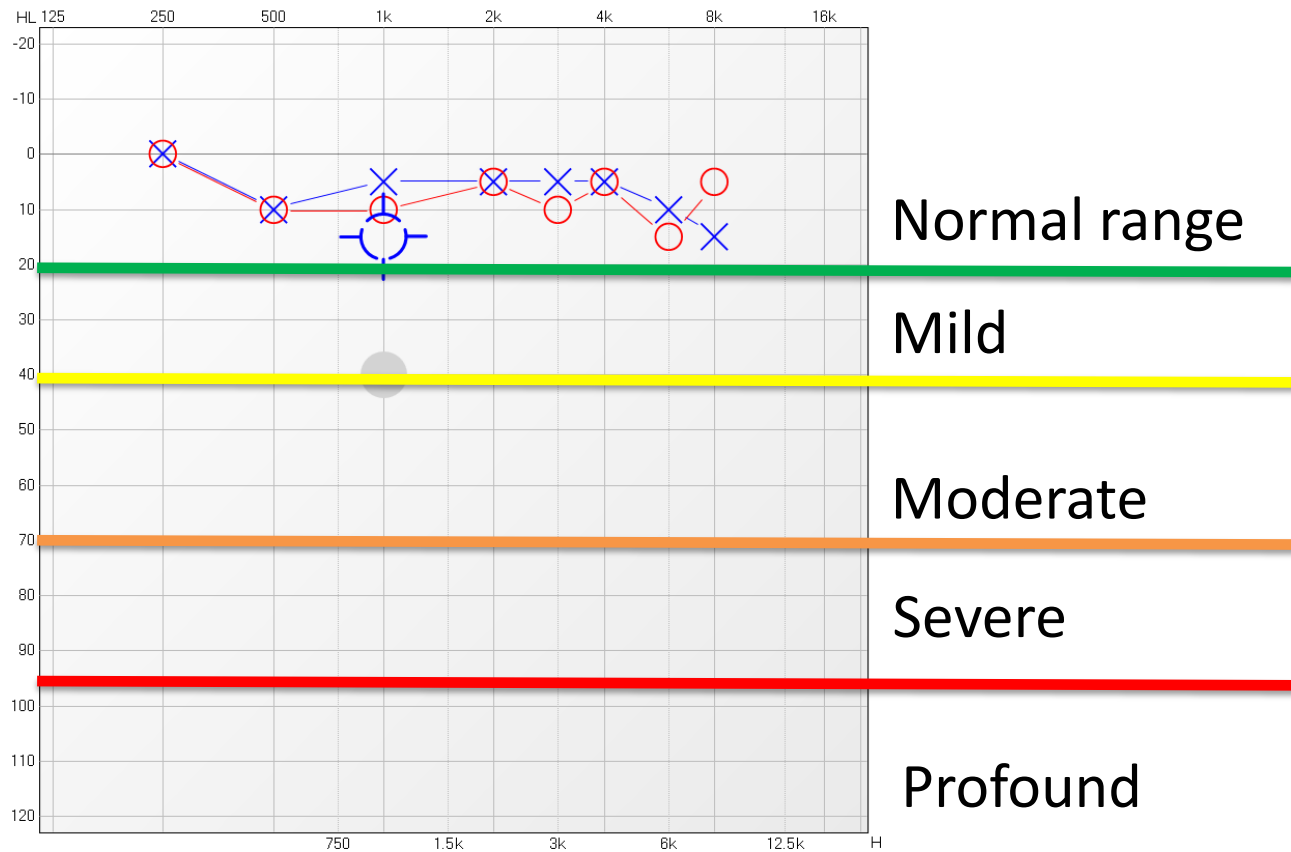
GP

**We will write a
referral letter you your
GP – please book an
appointment with
them as soon as
possible.**

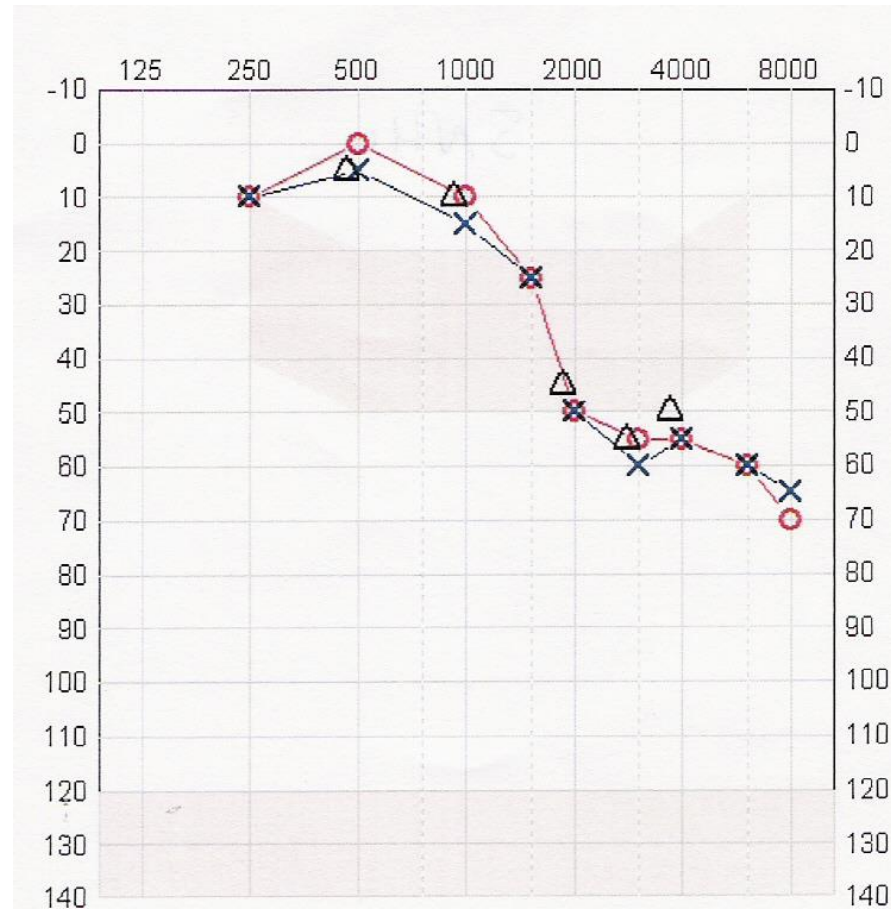
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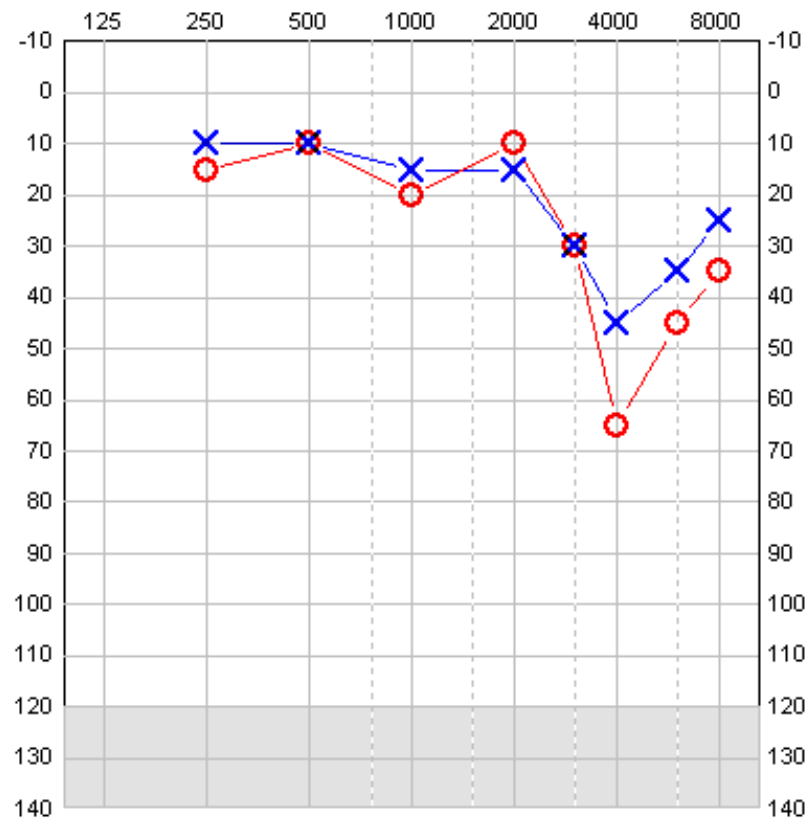
Your Hearing Test



Age Related Hearing Loss



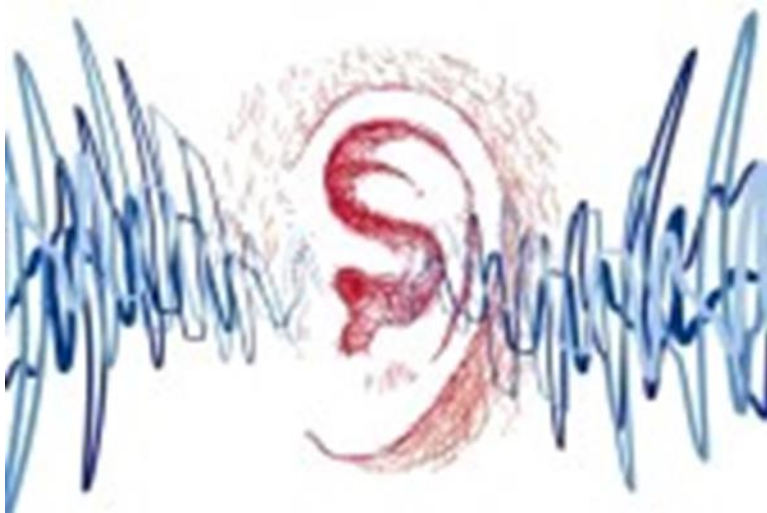
Noise Exposure



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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





The Heller and Bergman (1953) Experiment

Where's Wally?

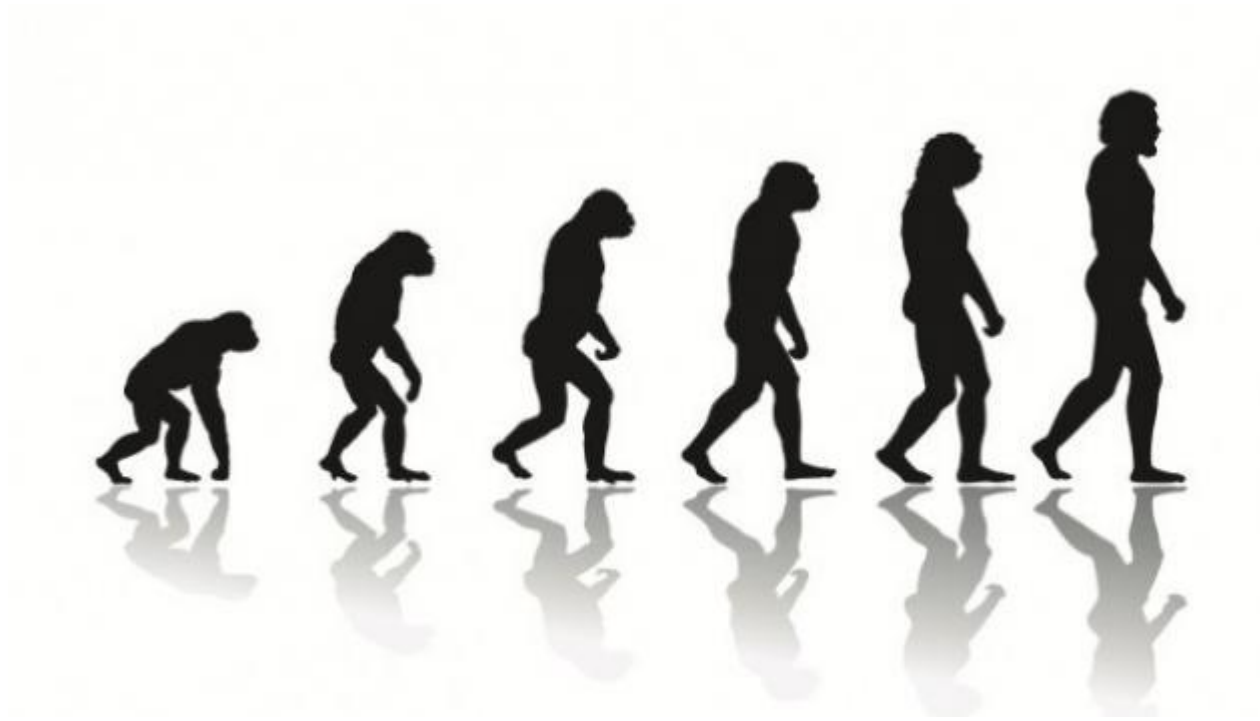






Why am I so troubled by the tinnitus?

- Communication
- Background
- Warning
- Emotional



Tinnitus starts



```
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
```

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.

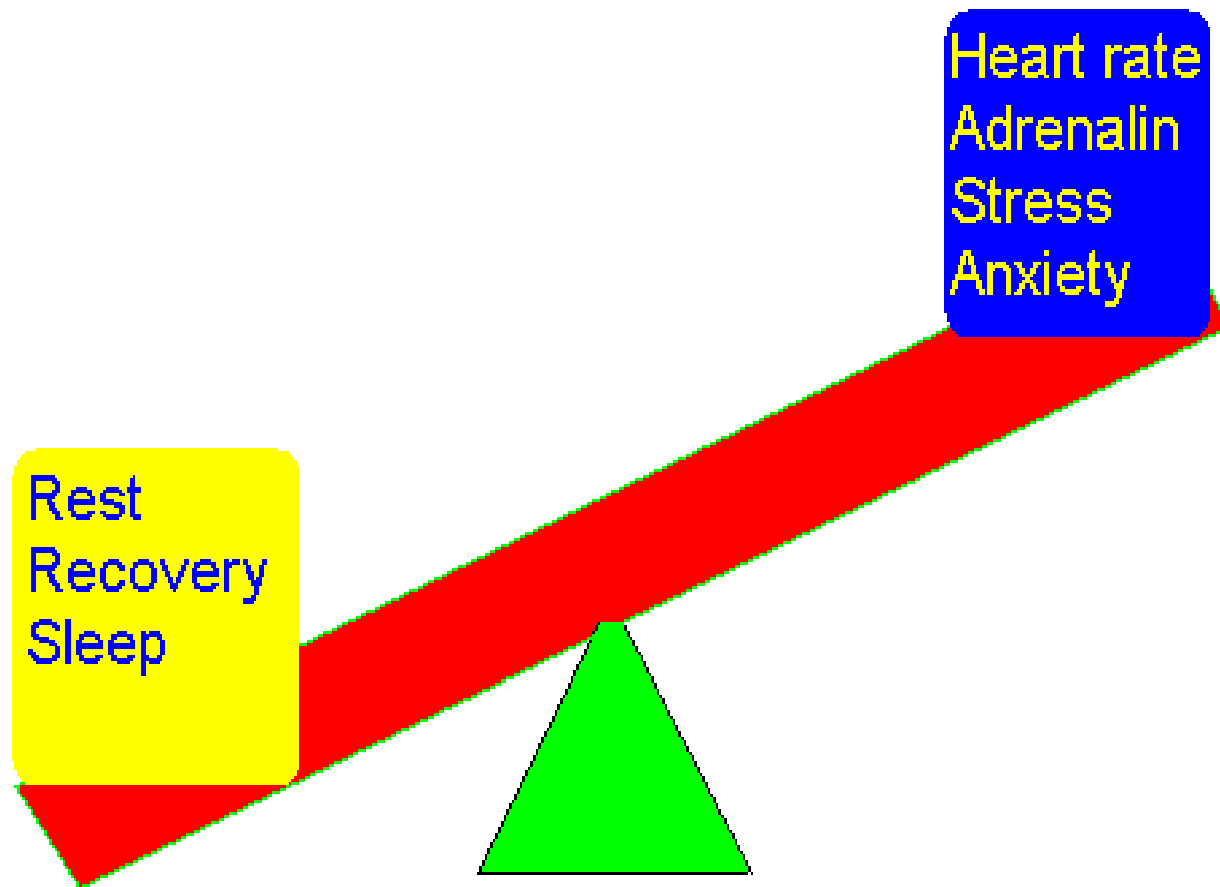
Chronic tinnitus

**Increased awareness
of tinnitus**

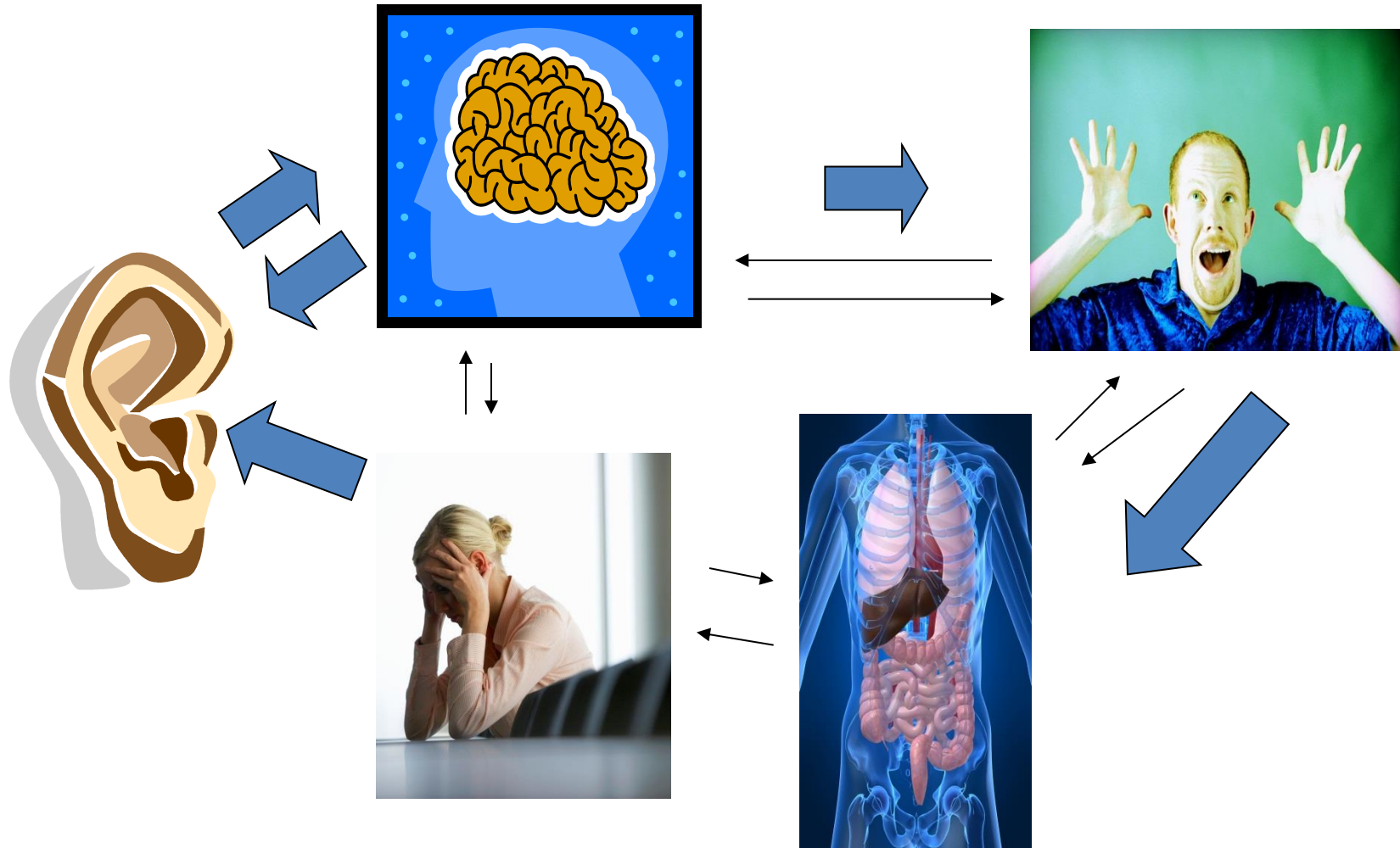
**Increased attention
to tinnitus**

**Negative
associations develop**

Autonomic Nervous System



Model of Tinnitus



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Treatment

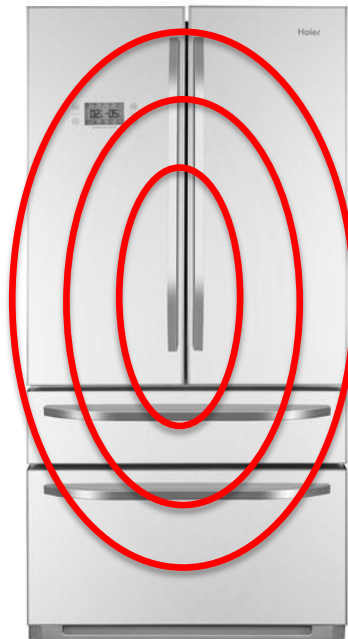
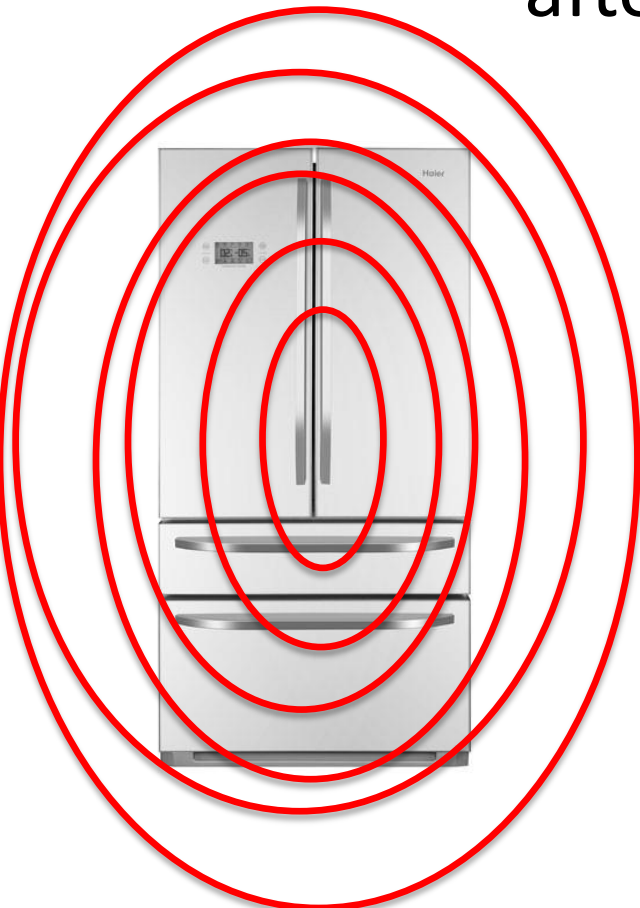


THERAPY
TOOLBOX

The goal is to
habituate to the
tinnitus.

Habituation

Decrease in the **response** to a stimulus after **repeated** exposure.



Adapting to Tinnitus

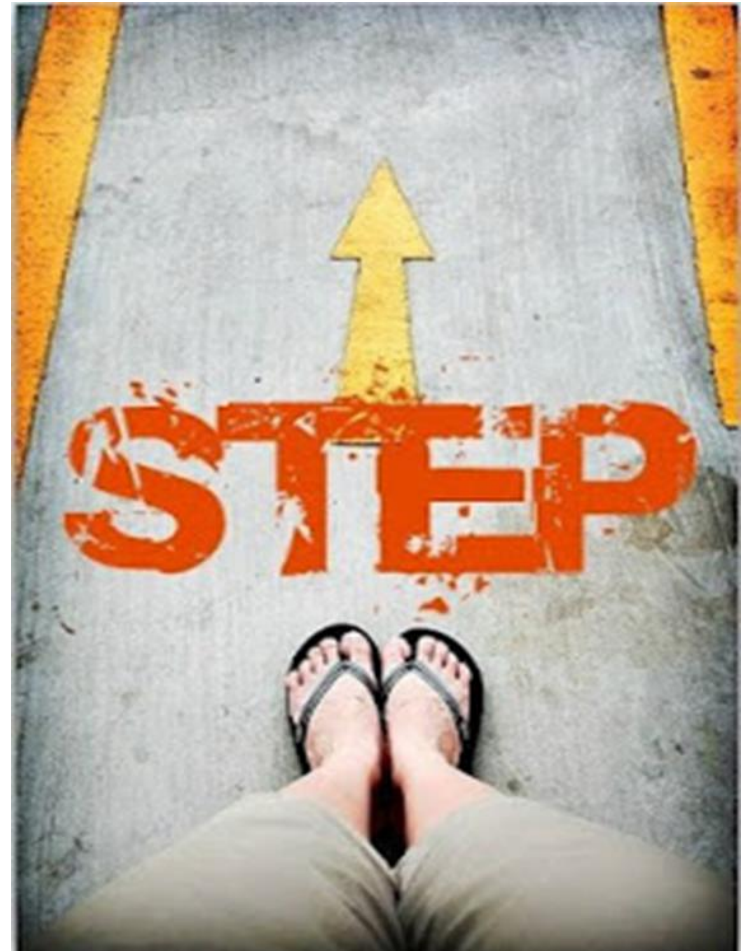


Like moving to a house on a busy road – at first all you notice is the traffic after a while you don't notice it.

Understanding how our brain reacts to noise is the 1st step to being able to live with 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.

Self help and Relaxation

Relaxation techniques help to reduce stress.



Do the things that you enjoy!



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 faster to learn more.

[Try the faster](#)

[Register](#)

[Login](#)

www.tinnitus.org.uk/Tinnitus

TINNITUS FIRST AID KIT

[HOME](#) [WHAT IS TINNITUS?](#) [YOUR FIRST AID KIT](#) [ABOUT US](#)



www.tinnituskit.com

Your First Aid Kit

It is natural to be concerned about what is happening, but there are lots of things you can do to help yourself and to reduce the impact of tinnitus. The Tinnitus First Aid Kit will help you take those first steps.

Sleep and Relaxation Group

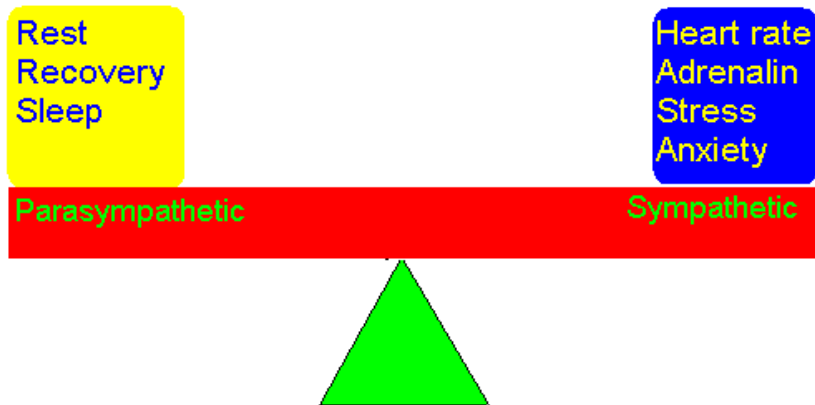
Sweet dreams

Zzzzz

Sleep Hygiene



Maintaining Balance



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

Things to remember

- 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.

What happens next?

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

What happens next?

- If you would like a sound oasis see catalogue.
- If things change contact us directly either by email or phone.
- Head of Hearing Therapy is Claire Gatenby:
email - claire.gatenby@nnuh.nhs.uk
- Department phone number is – 01603 287284

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>

Relaxation tutorial:

[http://www.uctv.tv/search-
details.aspx?showID=18750&subject=health](http://www.uctv.tv/search-details.aspx?showID=18750&subject=health)

