

WHAT DOES “GO FOR GOLD” MEAN?

The cochlear implant is amazing technology. However, even though it is brilliant at helping you to hear, it is **still** not exactly the **same** as hearing normally.

Instead, there are some **missing** pieces in the sound information when you listen through your cochlear implant. To **fill in** these gaps, your brain has to **work harder** (this is called “**listening effort**”), so that you can make sense of what you are hearing.

Everyone has to use some listening effort to understand speech. This makes us all **mental athletes**. It takes lots of training (especially in the early years of childhood) to work out what the sounds mean and how to put them together into words.

But your brain will be **working harder** than a hearing person, because it **also** has to **fill in** the gaps in your sound information (before you can even begin to understand the words). This means that you have to be a **mental athlete** at **Olympic gold medal standard**.

Like any Olympian athlete, your brain needs specialist **training** and **support**. Your brain also needs the right amount of **rest**, so that you can **recover** from all the listening effort. With the right combination of all of this, you can successfully “**Go for Gold**” and improve the quality of your life.

This leaflet will explain how you can help yourself achieve your full potential by using the **Go for Gold strategy**.



WHY IS IT IMPORTANT TO UNDERSTAND AND MANAGE LISTENING EFFORT?

It is normal, natural and healthy to experience listening effort. However, if listening effort becomes **too high** for **too long**, this can cause “**cognitive overload**”. This is where the brain becomes **overwhelmed** and will start to struggle to process any new information. The brain then becomes **stressed**.

Normally, stress is not damaging to your health as long as it is not constant. So, a healthy pattern of stress is where stress levels go up and down over time (like a wave).



However, if the stress levels stay **high** for **most** of the time, health problems begin to happen. These can be physical problems (e.g. **allergies, gut problems, bloating or fluid retention, muscle aches, poor blood circulation, infections, sleeping badly, feeling tired** all the time, having **cravings or not feeling hungry**). The health problems can also be mental (e.g. feeling **very emotional, panicky, anxious, depressed**, or having **problems with eating** or even **eating disorders**).

People with cochlear implants are **more likely** to reach **cognitive overload** more quickly than hearing people. This is because you need to use **more listening effort** than hearing people to understand what is being said.

Reducing listening effort helps to produce a healthy and more “wave-like” stress pattern. A healthy stress pattern also means a healthy brain. So, **reducing listening effort** is really important for your **health**.

To find ideas for how you can **manage** and also **reduce listening effort**, look inside this leaflet for the **Go for Gold strategy**.



Go for Gold!



For **ADULTS** with **COCHLEAR IMPLANTS**

Helping you to get the **most out of your cochlear implant**:

Understanding and managing **Listening Effort**

By

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THE "GO FOR GOLD" STRATEGY.....

1. GOLDEN SILENCES

The key to getting a **healthy pattern of stress** for your brain is to occasionally **reduce** listening effort during the day. This can be done simply: you can just create a **"golden silence"** in a quiet environment, with **no** background noise (**no** music and, very importantly, **no** conversation). During this time, do any activity that is **calming** for you, and involves **"mindfulness"** (this is where you focus on being "in the present").

HERE ARE SOME IDEAS.....**Art and crafts** (such as **painting**, **"mindful" colouring books**, **drawing**, **knitting**, **crochet**, or **sewing**). **Reading books** and **magazines** may be more your thing (but make sure that the book or magazine is an **"easy read"**, like a silly romance or comedy, and **not** intense complex stories like psychological thrillers). **Hugs** are also really good for a **"golden silence"**, as they help release all kinds of "feel-good" **hormones** in the body (e.g. oxytocin). So, cuddling up with a special person in your life on the sofa is another possible activity (just make sure you do this in **silence**, without any conversation). **Stroking your pet** (in **silence**) also has a very similar calming effect to **hugs**.

Playing **computer games**, watching **television**, or using **social media** and **apps** on your phone **will not** create the **"golden silences"** you need (even if the sound is turned off). This is because research shows that a lot of **brain work** is used in these electronic activities, so they are not relaxing for your brain. The **same problem** happens with listening to music too (even soothing music), because it needs too much **brain work**.

Creating **"golden silences"** is very important at the end of the **working day**. Also, at **weekends**, or during **holidays**, it is **still** important to try to create **"golden silences"**. This is because your brain is more likely to experience **cognitive overload**, so even fun activities (like watching a film at the cinema, eating out at restaurants, going to the pub, a day out at the beach or a theme park, or playing board games and joining in the family banter at the dinner table) will be quite hard work for your brain. This is because of the **extra listening effort** involved.

So, try to let your brain have at least **one golden silence** every day.

PRESS THE "RESET" BUTTON: In addition to having **"golden silences"**, it also really helps your brain if you can occasionally press the **"reset" button**. This is where you encourage your brain to **"reboot"** itself and empty yourself of any stress and worries that are bothering you. So, pressing the **"reset" button** helps you to make a **healthy pattern of stress** for yourself.

HERE ARE SOME IDEAS.....The best way of pressing the **"reset" button** is to **find your "happy place"**. A **"happy place"** means different things to different people. For some, it is a **special place** that they find **calming** and **peaceful** (e.g. a particular park). For other people, it is doing an activity they **really love** (e.g. cooking). **Exercise** (e.g. **dancing**, **running**, **cycling**, **tennis**, **football**, etc.) can also really help you to press your **"reset" button** as well as keep you fitter and healthier. This is because, when you exercise, you produce all sorts of "feel-good" **hormones**, like endorphin.

Meditation may also suit you and help create a **"happy place"** for you. There are many different types of meditation. For example, you could simply focus on your **breathing** and try to **empty your mind** for a few minutes. Or there is **visual meditation**, where you can look at a calming picture and use it to help empty your mind. There is also **moving meditation**, such as **Tai Chi**, where you have to completely concentrate on a sequence of movement and breathing. **Yoga** and **Pilates** are a type of **moving meditation** too, because you have to really focus on doing each movement correctly.

2. GOLDEN OPPORTUNITIES

Because your brain has to **work harder** to understand what is being said, there is a risk that your brain now thinks of **listening** as a **negative experience**. This then makes it more likely that your stress levels will **increase**. So, you need to do some **training** to make sure that your brain feels that any type of **listening** is a **positive experience**. This is important because, if you can help your brain think of listening as a **good thing** (and **not** as a **threat**), this will help to make a **healthy pattern of stress** for you.

To do this, you need to create **"golden opportunities"**. These are times when you create a **positive listening experience**. Examples of **"golden opportunities"** are anything **social** that you enjoy doing with the **special people** in your life, such as going out for dinner, going to the cinema or theatre. This will help you to **make the most** out of your cochlear implant.

GO FOR QUALITY, NOT QUANTITY.....What makes your **listening experience** a **"golden opportunity"** is that you go for **quality**, and not **quantity**. This is because all these social activities, no matter how fun they are, will require **listening effort** and you need to find a balance between having a **positive experience** and **not** stressing out your brain. So, think of ways to improve the **quality** of your **listening experience**.

HERE ARE SOME IDEAS..... **Think about explaining** to other people how **listening effort affects** you (you could even show them this leaflet). **Thinking about the venue** (where you are meeting) will help too. If it is going to be really noisy and crowded, maybe think of a different place to meet (like a calm café, or even your place if you are able to control the noise level and number of people better that way). Also, **thinking about the time you spend** doing this activity is important. Any **listening experience** will need **listening effort**, and this **listening effort** will **increase** over time. It is better to have **short** and really **positive** experiences than stay for **too long** and getting **stressed**. You could even introduce little rest breaks if this would work better for you, to stop the listening from becoming too intense.

These **"golden opportunities"** will also help to balance out the time you will need to spend in **"golden silence"**, so that you can make sure you are spending enough time with your friends and family and being out and about.

TAKE CHARGE OF YOUR LISTENING: To ensure that you can create a **healthy pattern of stress**, you need to do a **"cost-benefit"** analysis every time you are asked to listen. This is where you think about the "pros" and "cons" of listening, and ask yourself this.....



3. GOLD STAR SUPPORT

Because your brain will be using **extra listening effort** to understand what you are hearing through the cochlear implant, you will have **less space** in your head for any other types of **thinking** and **information processing**. So, any way of **reducing** listening effort will **help** reduce the chance your brain becomes **overloaded**. The **more effective** the support is, the **more chance** your brain has of achieving your goals. So, this is why support should not just be **gold**, it should be **"Gold Star"**.

EMPOWER YOURSELF.....Do **not** be afraid to **ask for support**. You are **legally entitled** to it. If you are a student, you have **DSA** (Disabled Students Allowance). If you are working, there is **Access to Work** to support you. Asking for support is **not** a sign of weakness. Actually, asking for support will help everyone (e.g. your colleagues or your family) as well as you. This is because, if you are able to **reduce listening effort**, you will be able to **communicate better** (and become more involved). This then means that you can **contribute** and **work with others better**. You will be happier and healthier too.

DO WHAT WORKS FOR YOU.....**Don't** feel that you have to use certain types of support because you are **told to**, or that is what **other people use**. You know your deafness **better** than anyone else. Have a go with the different options and then make an informed decision. If you need one type of support for one situation and another type of support for a different situation, **ask for that**. If you need to combine more than one type of support for the same situation, **ask for that**. There is **nothing wrong** with doing what works for you. Everyone's brains are **unique** to the person, so you need to **personalise** to achieve your **"Gold Star"** support. The **important thing** is to provide your brain with **more clues** about what is being said, so that your brain does **not** have to **work so hard** to fill in the gaps in your sound information.

HERE ARE SOME IDEAS.....**Speech-to-text technology** and **relay assistants** (e.g. for telephone calls) may help you. Or you may prefer **electronic notetakers** and **palantypists**. There is also support in the form of **BSL**, **Cued Speech** and **lipspeaking**. Use whatever **works for you**.

TAKE CARE OF YOURSELF: It is important that you always do **"self-monitoring"**. This is where you watch out for **signs** in yourself that you are about to go into **cognitive overload** (meaning that **listening effort** has become **too much**). Examples of these **signs** include becoming **irritable**, **impatient**, **grumpy** or **short-tempered**. Also, you may be having **problems** with **taking in new information**, **remembering what has just been said**, or **concentrating**. You may be feeling **unwilling** or **no longer bothered** to go out, or get involved. You may also be wanting to **withdraw** so that you can **spend time alone**. If you are beginning to feel these things, give yourself a **"golden silence"**. This will help you to create a **healthy pattern of stress**.

Also, think about **how much sleep** you are getting. Your brain **cannot work** as well (or cope with your **listening effort**) if you are **not** getting enough **sleep**. Think about **what you eat** too. Research has shown how the **health** of your **gut** can really affect the health of your **brain**. The food you choose to **eat** can change your **mental state** and **mood**.

And finally, **BE KIND TO YOURSELF**.....You are an **Olympian mental athlete**. If you do find yourself feeling more tired and more stressed than other people, do **not** be surprised and do **not** give yourself a **hard time**. Your brain is having to work that bit **harder** all the time, even in quiet listening conditions. So, give yourself a break! For your happiness and wellbeing, you need to **take care of yourself**.