

Leeds Long Covid Community Rehabilitation Service

# Brain fog

Information for patients





# Contents

	Page
What is brain fog?	4
General tips and lifestyle	6
Information processing	9
Attention	12
Memory	15
Communication	22
Summary	25

## What is brain fog?

Brain fog is a term used to explain a number of symptoms that affect someone's ability to think. This involves feeling confused, disorganised, having memory problems, finding it hard to focus and having slower processing of information.

Brain fog is a very common symptom for people living with Long COVID. The exact cause of this is unknown, but it is often linked to fatigue; increased fatigue can make it more likely you experience brain fog and to what extent.

Some further examples of brain fog are listed below:

- Reduced attention or concentration
- Reduced short-term memory
- Problems with multi-tasking
- Word finding problems
- Keeping on topic during conversation
- Taking longer to do things
- Slower information processing
- Difficulty recalling names and dates
- Decision making
- Planning and organising

Brain fog can be very frustrating and can impact your mood. Some people report that changes of brain fog can leave them not feeling like themselves. Therefore we hope that you can use this guide to help you manage some of the challenges that you might experience should you have brain fog.

In this workbook we will explain about information processing, the differences between attention and memory and provide strategies to support any problems in this area. The final sections will review spoken communication and how we can manage the common concerns people describe when speaking to others.

Each section we will ask you to set a goal and then review if that strategy helped and if you can think of any other strategies to support the area discussed.

Remember with all strategies they get easier with practice. The more you practice the more routine they become and easier for you to implement. So, if something does not work once that does not mean it won't work a second time so persevere with these strategies and practice them to give yourself the best chance of success!

## General tips and lifestyle

When people experience brain fog it can be easy to forget the basics of looking after yourself but by keeping yourself well you should hopefully help with your overall wellbeing and improve your brain fog.

### Breaks

Remember to take breaks and not push through mental fatigue and brain fog. Little and often works best. Trying to push though can make your brain fog symptoms worse, which in turn leads to more mistakes and anxiety about your brain fog. Rest your brain just like you would your body.



### Eating well

Not skipping meals and ensuring you get a good variety in your diet is really important in your recovery. Eating fruit and vegetables and avoiding foods with lots of fat, sugar or salt.



## *Keeping hydrated*

Ensuring you keep hydrated by drinking plenty of fluids is vital in our overall wellbeing.

## *Activities*

Ensuing we are completing activities we enjoy not only the activities we have to, even if it is only for a short period pick up a hobby. Or even listening to a song that reminds you of good times.

## *Social*

Keeping in contact with family and friends is really important and helps with our mood. This does not need to be face to face if you do not feel up to it but can be text messages, video calls or even letters.



## *Sleep*

Ensuring you are getting a good nights sleep is important. Further information about sleep hygiene can be found online or speak to your therapist who will be able to give you further information.

## *Relaxation*

The use of relaxation can really support brain fog as the more frustrated we are the more mistakes we are likely to make. Relaxation can take shape in many formats, trying to find one that works for you will be worth the effort. Allowing you to use it to support the management of your fatigue and any frustrations.



Are there any other areas of your lifestyle you think you could make improvements? Write them here:

.....

.....

.....

.....

Pick one of the general tips or lifestyle areas, either your own suggestion or one of the ones listed above. Think about how you can make a small change to incorporate that into your day or week. Write it here:

.....

.....

.....

.....



## Information processing

Information processing is how our brains make sense of the information it receives, this can be visual, auditory, or sensory.

People with brain fog often describe slowed information processing, people have described feeling like their brain is having to process things through treacle.

Given time and allowing your brain to rest it this slow information processing often improves, however, please consider the tip below if you feel you have slowed information processing.

### Tips for slow information processing:

***Be assertive:*** if you are in conversation or on the telephone politely ask someone to slow down to allow you time to process what is being said. Think of a polite way to ask this so you can think of what you wish to say quickly, and it is rehearsed.

***Time when you complete demanding tasks:*** if you know you have a demanding task that will require your information processing skills try to do this when you are less fatigued, this could be in a morning or following some relaxation.

***Little and often:*** you will see this advice a lot throughout this workbook but to support your thinking skills complete complex tasks little and often. This gives your brain a break and allows for a better performance.

***Write things down or ask others to do this:*** if you are struggling to take all the information that you need to on board write it down or ask someone to do this for you so you can look back on this information at a later date. Other options to this include recording the information on your mobile phone.

**Be kind to yourself:** if you find that your information processing is slower do not be too hard on yourself. This added pressure often only reduces performance and adds anxiety and worry.

Set a goal here to try one of these techniques:

.....  
.....  
.....

Did that technique work for you? If not, what could you try instead?

.....  
.....  
.....  
.....

Can you think of any other strategies that could help you manage your information processing?

.....  
.....  
.....  
.....

Repeat this process with different strategies to see which strategies best help your information processing.

List the other strategies here:

- 1.
- 2.
- 3.
- 4.
- 5.

## Attention

Attention is a key cognitive (thinking) skill. It is the foundation of all new learning and memory. It is important for us to improve our attention in order to improve our memory.

People with attention problems often say that they can no longer concentrate on reading books, or having multiple conversations; or they might say that they have difficulty studying for any length of time.

### There are different types of attention:

***Sustained attention:*** refers to concentrating for prolonged periods of time on the same thing, such as studying, watching television or reading. If you have problems with sustaining attention then you may feel your 'mind drifts off' or you get distracted and end up thinking of something else.

***Selective attention:*** involves selecting one aspect of our environment and ignoring or filtering out all the background noise or other distractions. You may have difficulty filtering out irrelevant distractions if you have problems with selective attention.

***Divided attention:*** is the ability to pay attention to two or more things at the same time. If you have problems with dividing attention you will have difficulty with switching your attention very rapidly from one source to another. For example listening to what a teacher is saying and taking notes at the same time.

## How to support attention

There are lots of ways that you can begin to improve your ability to attend to things. Remember: by improving your attention you will also be improving your ability to remember.

- Focus on tasks for a short time. Don't over-do it.
- Have a balance of activity in the day - work, rest and enjoyable activities.
- Take regular breaks - fresh air, change of position, drink, snack.
- Try to decrease stress/worry/tension through relaxation techniques. Try to empty your mind to give the task your full attention.
- Shut out distractions - turn off phone, TV, radio.
- Take time out from others if overwhelming.
- Start small and for a short time e.g. reading again.
- Prep and plan - organise your environment.



Set a goal here to try one of these techniques:

.....

.....

.....

Did that technique work for you? If not, what could you try instead?

.....

.....

.....

.....

Can you think of any other strategies that could help you manage your attention?

.....

.....

.....

.....

Repeat this process with different strategies to see which strategies best help your attention.

List the other strategies here:

- 1.
- 2.
- 3.
- 4.
- 5.

## What is memory?

Our memory is a bit like a filing cabinet, or a computer file, that works in 3 stages:

1. **Attention:** With all new information, we have to attend to it and learn it - it may be easier to remember if we repeat it or make it more meaningful to us in some way
2. **Storage:** We need to keep that information in our memory, like a filing cabinet or file on our computers. It is split into sections, new information needs to be stored in the correct area to be accessed later.
3. **Recall:** We then need to find and recall it later- choosing the right drawer of the filing cabinet, or folder on the computer, to retrieve the information.

## How to support memory

There are a number of ways to support your memory problems. These are called **memory strategies**. They are either **internal or external**.

### Internal strategies

Internal strategies are things that you can do inside your own head to help with your memory. Internal strategies include the following:

**Making associations:** e.g. Remembering the name of a new colleague called Catherine by linking the name to a friend of yours at school also called Catherine.

**Chunking (group like items together):** e.g. Remembering items on a shopping list by sorting them into categories.

**Making mental pictures:** e.g. Remembering the name Thomas Barlow by making an image in your head of Thomas the Tank Engine with the face of Garry Barlow.

**Repetition:** e.g. After you hang up the phone, repeat the message to yourself. And then repeat, repeat, and repeat some more!

**Spaced retrieval** (similar to repetition): It is helpful to work with a friend, family member or App. They will ask you a question (e.g. what is your PIN?) which you will answer. Initially leave only a short gap (5-10mins) before asking again, but eventually the time between questioning/repeating will increase (to days or weeks).

**'Memory Palace':** This is a technique practiced by Sherlock Holmes! Make a mental image of a familiar building in your mind in which you 'store' things you need to remember (e.g. storing an appointment card in the filing cabinet in your childhood home's office).

**Mnemonics** (using the first letter of each word in a sentence): E.g. '**R**ichard **O**f **Y**ork **G**ave **B**attle **I**n **V**ain' is commonly used to remember the order of the colours of the rainbow (**R**ed, **O**range, **Y**ellow, **G**reen, **B**lue, **I**ndigo, **V**iolet).

**Rhymes:** e.g. we all know the common rhyme to remember the number of days in each month ('30 days has September....').

**Acronyms:** e.g. The acronym BBC to remember "'British Broadcasting Company'.

**Create stories:** e.g. To remember the door access code 'C5128C' you could tell yourself this story 'Carlos, a 51year old man, has got 28 pet Cats'.



**Top Tip**

For these strategies to work at their best, make them meaningful to you. If things are personal to us, or a bit bizarre or funny, then we are much more likely to remember the imagery, story or rhyme.

Set a goal here to try one of these techniques:

.....  
.....  
.....

Did that technique work for you? If not, what could you try instead?

.....  
.....  
.....  
.....

Can you think of any other strategies that could help you manage your memory?

.....  
.....  
.....  
.....

Repeat this process with different strategies to see which strategies best help your memory.

List the other strategies here:

- 1.
- 2.
- 3.
- 4.
- 5.

## External strategies

External memory strategies are external tools used to help with your memory.

External strategies include the following:

**Diaries:** Great for appointments and reminders. They are portable, so you can take them with you and check whenever / wherever you are.

**Journals:** If you struggle with longer term memory then a journal could help, where you write down things that have happened that day, or conversations you have had.

**Calendars:** Put in a prominent place, so that you look at it regularly throughout the day. You could use colours to categorise activities.

**Whiteboards / blackboards:** These are great for upcoming appointments or 'to do' lists. Put it in a prominent place to ensure you check it regularly throughout the day.

**Phone alarms / Alexa device:** Set regular, daily alarms (e.g. check calendar, clean teeth, take bins out, etc.) Set alarms for appointments – remind you to get ready and leave in time, bring homework, etc.

**Labels / post-it notes:** Label cupboards, drawers to show where items are kept. Leave post-its on mirrors or on the kettle as reminders. You can use pictures or words.

**Organisational systems:** Folder with dividers; or email / computer folders. Store letters, bills, important documents; all organised into sections. This keeps all essential paperwork in one place.

**Organise your home:** If you often misplace or lose things, try organising your home in order to support your memory. E.g. keep your morning medication by the kettle so you see it when you make your morning cuppa; always put your keys on the hook; put your shopping list next to your wallet.

Set a goal here to try one of these techniques:

.....  
.....  
.....

Did that technique work for you? If not, what could you try instead?

.....  
.....  
.....  
.....

Can you think of any other strategies that could help you manage your memory?

.....  
.....  
.....  
.....

Repeat this process with different strategies to see which strategies best help your memory.

List the other strategies here:

- 1.
- 2.
- 3.
- 4.
- 5.

## Communication

Brain fog can impact someone's communication skills. Here we will focus on spoken communication, but you can have problems with reading and writing. Please discuss with your therapist if this is the case. Examples of areas difficulty for spoken communication can include word finding difficulties, slurred speech or losing tack in conversation. Attention can also impact how we communicate so please see the attention section of this workbook for more information. Should communication issues persist then please inform your therapist.

***Fatigue:*** Conversation and the skills needed to communicate effectively are often made worse by fatigue. For example, if your speech slurs this will likely be worse when fatigued or some people will only get this symptom when fatigued

***Word finding problems:*** If you have problems finding the correct word when speaking it can be useful to speak around the word. The idea is that this helps your brain get to the correct word. For example, if you cannot remember the word Dog, saying it is an animal, with four legs and likes walks can help you recall the word dog.

***Repeat back:*** If you find you lose track in a conversation then throughout speaking repeat back to the person you are speaking to ensure that you are following what has been said. For example – if someone is telling you about what they had to eat last night, repeat back – 'so you had curry for tea, sounds delicious'

***Slow down:*** Slowing down and asking the person who you are speaking with to down, can be really helpful in managing communication problems. This allows your brain time to take on board information and formulate your response.

**Little and often:** If communication is difficult for you consider limiting how long you do it for to shorter chunks. Picking the quality of conversation over the quantity. This is especially important for more challenging topics. If you have a medical appointment, then try not to book something in before or after that had high demands on your communication skills.

Set a goal here to try one of these techniques:

.....  
.....  
.....

Did that technique work for you? If not, what could you try instead?

.....  
.....  
.....  
.....

Can you think of any other strategies that could help you manage your communication?

.....  
.....  
.....  
.....

Repeat this process with different strategies to see which strategies best help your communication.

List the other strategies here:

- 1.
- 2.
- 3.
- 4.
- 5.



## Summary

This booklet aims to give you strategies to manage your brain fog symptoms. There is a range of strategies as what works for one person does not always work for another. Practice really helps with all these strategies so we advise that you continue to practice them until they become second nature. It is hoped that over time as your fatigue and other symptoms improve your brain fog will also improve.





**Contact:**

**Leeds Long Covid Community Rehabilitation Service**

Email: [licht.covid19rehabpathway@nhs.net](mailto:licht.covid19rehabpathway@nhs.net)

Phone: **0113 843 3496**

With thanks to the Community Neurological Rehabilitation Service at Leeds Community Healthcare NHS Trust for allowing us to adapt their booklet and information to support the recovery for people with Long Covid.