

Thinking abilities



“It feels as if you’re wearing a cap on your head that’s made of fog. And it’s impossible to remove.”

Anjali
Diagnosed with lymphoma

How does this affect me?

Cancer and its treatment don’t just affect your body or emotions. If you’re like many people, you may also experience difficulties such as cloudy thinking, forgetfulness or poor concentration. The technical term for this phenomenon is “cancer-related cognitive impairment”, but people also use “chemo brain” or “brain fog” to describe the experience.

An important distinction exists; this brain fog is **not** Alzheimer’s disease or dementia. Rather, it may result from the cancer itself, from the associated medications or treatments, or from physical or emotional changes (such as tiredness or sleep problems) resulting from the cancer treatment. Regardless of its source, it can have a significant effect on your quality of life. Cognitive changes caused by chemo brain can be separated into two types according to when they appear and how long they will last:

- Sudden changes like difficulty concentrating, changes in sleep, feeling agitated or memory loss may happen for only a short time for most people.
- Gradual changes like difficulties multi-tasking, problem solving, making decisions, or trouble with organization, develop slowly over time and can last longer. These problems may not appear until after treatment and are not always reversible. However, there are techniques you can use to decrease their effect on your daily life.

Here are just a few of the cognitive challenges you may experience:

- You may take longer to complete tasks.
- You may have trouble learning new things (e.g. how a new appliance works).
- You may have trouble solving problems or following directions.
- You may get distracted easily.
- Your judgment and decision-making ability may be less reliable than usual.
- You may struggle to recall names and dates or to find the right words in conversations.
- You may find it difficult to work with numbers.

- Even if you're normally a multitasker, you may struggle to concentrate on two things at the same time (for example, carrying on a conversation while preparing a recipe).



What can I do to manage my cognitive difficulties?

You may find it stressful to deal with cognitive issues but try to be as relaxed as possible and stay optimistic. Talking to people you trust, like loved ones or a professional about what you are experiencing could help. Try the strategies listed here, which can help you manage cognitive difficulties effectively.



Get organized

Preparing for your day ahead of time can help you organize what you need to do. The following tips may help:

- If you know an activity requires concentration, schedule it for a time of day when you feel most rested.
- Keep a daily checklist of tasks and reminders. You can put sticky notes in strategic places to remind you of daily activities like taking out the trash or emailing an important document.
- Forget about multitasking: do one task at a time, at your own pace.
- Minimize distractions by gathering your materials ahead of time and working in a quiet area.
- Take note of things like appointments in an agenda, calendar, or on your smart-phone.
- Use an alarm clock or telephone app to help keep you on schedule.
- Use appliances with built-in timers (e.g. cooking timers) and automatic shut-off features.
- Take smart-phone pictures of things you need to remember, like cues to find your parked car.
- Get rid of clutter and keep personal items in a designated spot, so you can find them easily.



Focus your mind

Cognitive exercises like those listed below can help you improve thinking ability.

- Work on some puzzles or brain-training apps to retrain your brain to focus.
- Try memory tricks such as rhyming, visualization or singing the thing you need to remember.
- Become an active listener: when you meet someone new, repeat his or her name to yourself five times, and use it when you say goodbye.
- When listening to other people talk, take written notes.
- Become an active reader by reflecting on the material and asking yourself questions while reading.

 **Try new things**

Diversity and novelty are like exercise for the brain and they can help with improving cognitive function.

- Learn a new board or card game.
- Take a class in something you haven't tried before to discover a new hobby (e.g. pottery, music appreciation, language).



What help do I need?



Keep a diary

Keep a journal (pen & paper or electronic) to write down the specific thinking problems you encounter and the type of support you may need. This will make it easier for you to ask people for help—or to accept help when it's offered. Your list could include:

- Difficulty remembering appointments
- Difficulty associated with taking your medication (e.g., forgetting to take a dose of medication or no longer remembering what a medication is for)
- Difficulty explaining symptoms and concerns to health professionals
- Difficulty interpreting and following instructions from health professionals
- Difficulty interpreting and managing documentation required for insurance or banking



Act early

Don't wait until the time you need help to ask for it. Most things take time to organize, so you—and your support team—will feel more relaxed if you request help as soon as you identify the need.



Where can I find help?



Friends and family

- Tell friends and family about your cognitive difficulties; knowing they are aware of your difficulties will take some of the pressure off.
- People are often happy to help, but may not know where to start. Give yourself permission to ask for and accept help.
- Bring a “memory buddy” with you to medical appointments; this person can take notes that will help you remember instructions.
- Explore reputable online communities for people with cancer (e.g. Cancer Support Group on Facebook) and ask for feedback on your specific challenges.



Formal support and treatment

- Consider working with a neuro-psychologist on a program of mental exercises to improve thinking, memory and concentration.
- Occupational therapy can help you get around your thinking challenges so you can manage everyday tasks, while vocational therapy can help you with job-related skills. Don't hesitate to ask a member of your treatment team for a referral.
- If you have serious concerns about your thinking difficulties, you can get tested for changes in cognitive function. Ask a member of your healthcare team where to go for such tests.
- If the thinking problems persist, talk to your healthcare team or pharmacist to find out if certain medications (such as those used to treat attention deficit or Alzheimer's disease) may help.
- The [Quebec Cancer Foundation](#) provides a resource directory. You can search for the organizations near you offering a variety of services including home help, lodging, transportation, and other supportive resources.



What can I do to look after myself?

Looking after yourself will help you feel more alert and set you up for success in managing your thinking challenges. For more information see [Looking After Yourself](#).



Plan what you eat

Eating well helps you feel better, cope with side effects, and recover after treatment.

- A nutritious diet includes diversity and balance: eat a variety of healthy foods including fruits and vegetables, whole grains, and protein.
- Make vegetables a priority: research has found that eating vegetables can help preserve brain power as people age.
- Check with your healthcare team to find out if there any foods or beverages that you should not eat or drink because of your cancer or treatment.



Stay active

Exercise helps the body, mind, and brain. Both aerobic exercise and strength training can help improve symptoms caused by chemo brain.

- Gentle exercise such as yoga or Tai Chi can improve your mental function in as little as a month with consistent practice.
- It is generally fine to exercise during treatment, but check with your healthcare team before starting any physical activity.
- Choose an activity that you enjoy doing or would like to try, and that you can fit into your routine without too much difficulty.

Practice good sleep habits

Good sleep is directly related to memory and concentration, so make it a priority. People experiencing cognitive changes often find they have difficulties sleeping. The following strategies may help:

- When you feel 'sleepy' it is time to go to bed – trust your body to let you know when it's time for bed.
- If you can't fall asleep after 20 to 30 minutes, get up and do a relaxing activity before you try again.
- Take time to relax before bed by doing an activity you enjoy like reading, listening to music, or taking a warm bath. It is best to turn off the tv and any other screens at least 60 minutes before you go to bed as they can worsen the quality of your sleep.
- Get up at more or less the same time every morning and let natural light into your space.
- Avoid long daytime naps. If you nap for less than an hour in the afternoon, you may find you have more energy during the day. It is best to nap in a room other than your bedroom if you can.
- Avoid caffeine after lunch and alcohol after supper.
- Go to bed neither too hungry nor too full.

Resources

For more information on cancer related financial and bureaucratic challenges, check out the resources below.

[BC Cancer – Memory, thinking & attention](#)

[Canadian Breast Cancer Network – Tips for managing cancer-related brain fog](#)

[Canadian Cancer Society – Cognitive problems](#)

[Canadian Cancer Society – Coping when you have cancer](#)

[Cancer Council – Living well after cancer](#)

[Leukemia & Lymphoma Society of Canada – Coping with chemo brain](#)

[University Health Network – Cancer-related brain fog](#)

[Rosy Cancer Network – Looking Forward](#)

Acknowledgement of sources

The content of this document has been adapted from the following sources:

- BC Cancer. Memory, thinking and attention. 2014.
- Canadian Breast Cancer Network. Tips for managing cancer-related brain fog. 2018.
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- Canadian Cancer Society. Cognitive problems. 2020.
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- University Health Network. Cancer-related brain fog. 2017.

Healthcare professional endorsement

The content of this document has been reviewed and approved by a team of healthcare professionals and clinical experts.

Disclaimer

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