

Managing Memory and Attention

Cancer and cancer treatment can cause problems with memory and attention including:

- Remembering names and faces of people
- Recalling things when focusing
- Remembering written facts
- Staying alert and paying attention to what is going on
- Making sense out of spoken explanations
- Recalling what happened a few minutes ago
- Following what people are saying

Impact of Stress or Worry

Research suggests that memory and attention problems may become more noticeable when you are worried or stressed.

When you are stressed or worried, major changes can happen in your body:

- Rapid breathing
- Increased blood flow to parts of your brain, organs and muscles
- Increased muscle tension

These changes happen because your brain is redirecting blood and oxygen to the important parts that need help. This decreases the blood flow in the "thinking" parts of your brain. These changes can get in the way of your brain storing and processing facts.

Strategies to Help with Memory and Attention

The methods below may help you learn the skills you need to handle and adapt to challenges with memory and attention. Different strategies work for different people. Try strategies from each category and practise them daily. If you need more support, talk to your cancer care team.

Try to be kind to yourself. Remember, you are dealing with a serious health issue. Your mind and body need time to adapt.



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Relaxation Methods

Managing worry and stress is an important first step. Here are some helpful handouts:

- Progressive Muscle Relaxation
- Deep Breathing
- Managing Stress

Organizational Methods

- Use one day-timer or calendar for all meetings and tasks. You can use a paper or electronic calendar.
 Having one calendar lowers the chances that you will miss a meeting or double-book an appointment.
- Schedule enough time for each task. This removes stress from rushing to meet deadlines.
- Pair each new task with a routine task. For example, if you need to take a drug before going to bed, pair this with an existing nighttime routine. You could put your drug right next to your toothbrush. This will help you remember to take your drug.
- Use sticky notes (post-its) where you will see them (such as the fridge or bathroom mirror).
- Remove distractions when you need to concentrate. For example, turn off the TV if you are writing an email.
- Do one thing at a time. Start one task and finish it before starting another task.
- Schedule and plan. This helps to "jump start" your brain. Even if you do not feel like doing something, you do it anyways because it is in your plan.
- Make things fun and recognize success. This increases good feelings that help your brain learn.

Verbal Practice Methods

- **Self-instructional training**: Use your inner voice to talk yourself through the steps of a task. This helps you focus on completing tasks and remembering the steps in tasks. When you do this, you will become more attuned to single steps and facts. This will make your inner voice stronger and helps keep you on-task. For example, if you are brushing your teeth, say to yourself: Take out toothbrush; put toothpaste on the bristles; wet the bristles, and so on.
- **Simple repetition**: Repeat facts over and over.

 For example, when you need to remember a phone number, speak it aloud or silently many times. Then, write it down or use it right away.



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- **Spaced repetition**: Same as simple repetition but there is a longer amount of time between saying it aloud and writing it down.
 - For example, say the phone number aloud or silently many times. Wait a few seconds before writing it down. Then, try it again adding more time in between.
- **Chunking (grouping):** Group things together in an order (such as relevance, priority or type). For example, when remembering to pick up groceries, split your list into groupings: fruit, veggies, paper products. By grouping, you can call to mind which aisle to go to in the store.
- Rhyming or melodies: Make up a rhyme or melody or use a melody from a song you know well.

 For example, when calling to mind a name, you might make a rhyme such as "Bill" has a "will". To call to mind the name "Lucy", sing the song "Lucy in the Sky with Diamonds" or make up a song.

Visual Imagery

Visual picture: Create a picture in your mind.

For example, create a picture of the person, item or event you want to remember. If it is a person, think of them walking somewhere of significance or saying something interesting.

• **Method of loci**: Picture a well-known space and variations of that space For example, walk into your bedroom and describe it step-by-step. Then put the objects you want to memorize into that room. Now go back in your mind and pick up those objects. Then make it harder by doing it backwards or out of order.

Adapted with permission from: Memory and Attention Adaptation Training Manual (2011) Ferguson, R.J. & Gillock, K.L