Some people with cancer notice changes in how they think before, during, or after cancer treatment. These are symptoms of cognitive impairment, often called “chemo brain” or “brain fog.”

What do changes in thinking feel like?
Many people report that they have trouble remembering things, finishing tasks, focusing, or learning new things.

If you have changes in thinking, you might have trouble:
- Remembering things that you can usually recall
- Focusing on what you’re doing and taking longer to finish things
- Remembering details like names, dates, and events
- Finding common words
- Doing more than one thing at a time without losing track of one of them

These changes can happen at any time when you have cancer. For some people, changes in thinking only last a short time. Other people may have long-term changes.

Changes in thinking may not be easy to notice, and people around you may not even notice them. Still, if you have these changes, you will most likely know it.

What causes changes in thinking?
It is not clear what causes changes in memory, thinking, and focus. Studies show that some cancer treatments can cause brain changes. But these types of changes can happen in some people with cancer before they start getting treated. And changes in thinking can remain after treatment has been completed.

Can thinking changes be prevented?
There is no known way to prevent thinking changes. They seem to happen more often with high doses of chemotherapy and radiation treatment to the brain. These changes are usually mild and go away over time, so treatment plans are not usually changed.

Things you can do to deal with thinking changes
- **Use a daily planner, notebooks, reminder notes, or your smart phone.**
  Keep everything in one place to make it easier to find the reminders you may need. Keep track of appointments, to-do lists, important dates, phone numbers and addresses, meeting notes, and even movies you’d like to see or books you’d like to read.
- **Do your hardest tasks** when you have the most energy.
- **Exercise your brain.** Take a class, do word puzzles, or learn to do something new.
- **Try to get enough rest and sleep.**
- **Be as active as you can.** Regular physical activity is good for your brain. It can improve your mood and help you be more alert and less tired. Other exercise, such as tai chi and yoga, may also help your focus.
• **Set up and follow routines.** Try to keep the same daily schedule.

• **Try to focus on one thing at a time.**

• **Track your memory, thinking, and focus problems.** Keep a diary of when you notice problems and what’s going on at the time. Keeping track of medicines taken, time of day, and where you are may help you figure out what affects your memory. This can also help you plan important tasks or appointments when you are most able to think clearly and focus.

• **Try not to focus on how much changes in thinking are bothering you.** Accepting the problem may help you deal with it. People with cancer say that being able to laugh about things you can’t control can help you cope.

• And remember, you likely notice your problems much more than other people do.

**Telling others**
Telling family, friends, and your cancer care team about your thinking problems may help you feel better about them. Let them know what you’re going through.

Changes in thinking are a side effect you can learn to manage. Even though they might be changes that aren’t easy to see, your loved ones may have noticed things and may even be able to help you. For example, they may notice that when you’re rushed, you have more trouble finding things.

Tell your friends or loved ones what they can do to help. Their support and understanding can help you cope better.

**Talk to your cancer care team.**

Ask your cancer care team if your treatment is likely to cause changes in thinking. Ask what kind of changes to watch for and how to manage them.

Let your cancer care team know if you have any changes, what you have trouble with, or things that make the changes worse or better. Don’t wait until it affects your everyday life to tell your cancer care team. They may suggest you see a specialist who can work with you on ways to manage memory or thinking problems.

For cancer information and answers, visit the American Cancer Society website at cancer.org or call us at 1-800-227-2345. We’re here when you need us.