

Is there really a Chemo Brain?



*Approximately 25% – 40% of women treated for breast cancer with chemotherapy have complained of mental impairment with memory, concentration, difficulty processing information, language and motor skills after treatment. The condition is known as **Chemo Brain** and women with characteristic complaints describe it as a brain fog that can last up to two to four years after their final treatment. Here is a brief summary of some recent studies that appear to support these claims yet also suggest there may be other contributing factors.*

A [study](#) by James Abraham, M.D. used a special MRI to scan and measure changes in the brains of women with breast cancer receiving chemotherapy. Changes occurred in the brain's white matter (tissue that transfers neural messages to other parts of the nervous system). The **smaller white matter in the frontal region of the brain correlated to an impaired ability to process information.** Other factors of medical, neurologic and psychiatric conditions including anxiety and depression were ruled out by other means of testing.

By comparison, a [study](#) by David G. Darby, M.D. used cognitive measurement tests. He concluded that women with breast cancer already were experiencing cognitive problems prior to treatment and that treatment itself was a small contributor. Even women who complained of chemo brain characteristics were not the ones who had a measurable problem when tested. The conclusion was that **stress and trauma** related to the initial diagnosis along with **other quality of life issues** led to mental difficulties rather than chemotherapy and radiation

alone.

When Gregory Konat, Ph.D. conducted a [study](#) in mice treated with chemotherapy drugs, the mice displayed similar symptoms of memory loss and quality of attention. However, their **symptoms were reversed when treated with a modified antioxidant, cysteine**. It was concluded that chemotherapy affected brain function and that cancer itself was ruled out as a factor.

Additional [research](#) by Dr. Gordon Winocur with chemo treated female mice indicated a direct relationship with only mild to moderate mental impairment. The research further suggested that **chemotherapy affects the mental skills areas** of spatial memory tasks (hippocampus area) and strategic and working memory tasks of the frontal lobes and not the entire brain.

In Japan, a [study](#) led by Masatoshi Inagaki, M.D., Ph.D. concluded that chemotherapy previously not thought to affect brain cells, does indeed cause a decline in cognitive functioning. However, **three years after treatment cancer survivors no longer showed any discernable problems with their mental skills** .

FYI: Susan Hardwicke, Ph.D., chief executive and chief scientist of VABION, LLC, has just released an eBook *Chemo Brain and Recovery: A Guide to Survival* (\$17.95) . The [VABION LLC press release](#) describes "Dr. Hardwicke [as] ... a specialist in cognitive skills and neuro-nutrition whose experience in recovering from chemo brain inspired the creation of a program designed to help consumers and professionals. Click here for [further details](#) .

If you are being treated or considering chemotherapy treatment, please discuss your concerns with your health care professionals and family members so that issues and characteristics of chemo brain can be properly understood and attended to.

These reported studies and additional resources mentioned are for informational purposes only and should not be used as the basis for decisions related to personal treatment. Please consult your health care providers for the best course of treatment when considering chemotherapy.