

# The Subtle Early Signals of Dementia in Someone You Love

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## STORY AT-A-GLANCE

- › Before memory and thinking problems become obvious, people with dementia may display changes in mood and behavior
- › In the early stages of the disease, irritability, anxiety or depression may occur
- › Apathy is another common sign, although some people may display more blatant changes like suddenly becoming sexually promiscuous or developing the habit of snatching food off other people's plates
- › Alzheimer's disease is the result of poor mitochondrial function; to optimize your mitochondrial function, you need to limit your intake linoleic acid (LA) to 5 grams a day or less
- › To achieve this, you'll need to eliminate all processed foods, fast foods and the majority of restaurant meals, which are frequently loaded with or prepared using seed oils high in LA

Worldwide, more than 55 million people are living with dementia, and each year nearly 10 million new cases occur.<sup>1</sup> Dementia is not a disease in itself but rather a term used to describe a number of different brain illnesses that may affect your memory, thinking, behavior and ability to perform everyday activities. The most common type of dementia is Alzheimer's disease, which accounts for up to 70% of cases.<sup>2</sup>

Many people associate dementia with memory loss – and this is a red flag – however, not all memory problems are due to Alzheimer's (and some causes of dementia-like

symptoms, including memory loss, can be reversed, such as those related to thyroid problems and vitamin deficiencies).<sup>3</sup>

If you've noticed yourself or a loved one becoming increasingly forgetful or experiencing changes in thinking abilities, you should see a health care provider right away.

Oftentimes, however, the first symptoms are so subtle they may be easily missed – and they may manifest as changes in behavior and mood long before memory problems become apparent.

Fortunately, there are two crucial prevention strategies that remain largely underdiscussed yet are relatively simple to implement – reducing linoleic acid (LA) intake and limiting exposure to estrogen.

## **Pay Attention to Personality Changes – An Early Sign of Dementia**

Before memory and thinking problems become obvious, people with dementia may display changes in mood and behavior, according to a team of neuropsychiatrists and Alzheimer's experts, who say the latter symptoms may be among the earliest signs of dementia.

The team released a 34-question checklist they believe could help diagnosis a new condition called mild behavioral impairment (MBI).<sup>4</sup> Similar to mild cognitive impairment (MCI), which is defined by a noticeable decline in cognitive abilities that does not yet interfere with most daily functions, MBI describes changes in behavior and mood that may occur prior to MCI and the cognitive changes associated with dementia.

The checklist is intended to identify patients at risk of dementia earlier, as according study author Dr. Zahinoor Ismail, a neuropsychiatrist at the University of Calgary, among people with MCI, those with mood and behavior changes will progress to full-blown dementia faster.<sup>5</sup> Some have expressed concern that the checklist may lead to overdiagnosis or false diagnosis, putting some people through increased medical testing and worry unnecessarily.

In the case of MCI, for instance, not everyone diagnosed will go on to develop Alzheimer's or other types of dementia. In fact, The New York Times reported, up to 20% of those with MCI later turn out to be cognitively normal.<sup>6</sup>

Still, others say keeping an eye out for unusual behavioral or personality changes can help people get help, at least symptom relief, faster. Sadly, there is currently no cure for Alzheimer's disease and, as it progresses, the disease is devastating not only for those diagnosed but also their friends and family. Prevention remains the best option, and I detail steps that can help below.

## **Behavioral and Mood Changes to Watch Out For**

Dementia manifests differently in everyone, which is why the most important changes to watch out for are those that are unusual for your loved one. A person may, for instance, stop doing something they've always loved to do, be it cooking a certain dish for your birthday or watching the evening news.

Apathy is another common sign, although some people may display more blatant changes like suddenly becoming sexually promiscuous or developing the habit of snatching food off other people's plates.<sup>7</sup> The Alzheimer's Association noted:<sup>8</sup>

*"Individuals living with Alzheimer's or other dementia may experience mood and personality changes. They can become confused, suspicious, depressed, fearful or anxious. They may be easily upset at home, with friends or when out of their comfort zone."*

In the early stages of the disease, irritability, anxiety or depression may occur. In fact, a study published in the journal *Neurology* not only found that people who eventually developed dementia were twice as likely to develop depression earlier on in their lives, but they also tended to display mood changes in a consistent pattern.<sup>9</sup> Time reported:<sup>10</sup>

*"The symptoms appeared in consistent phases: first, irritability, depression and nighttime behavior changes; followed by anxiety, appetite changes, agitation*

*and apathy. The final phase was elation, motor disturbances, hallucinations, delusions and disinhibition."*

In order for early mood and/or behavioral changes to be considered MBI, the change in behavior must persist for at least six months.

## **Signs of Mild Cognitive Impairment**

In some people, MCI may follow the earliest changes in mood and behavior. MCI is a slight decline in cognitive abilities that increases your risk of developing more serious dementia, including Alzheimer's disease, although it is by no means a guarantee. It's estimated that up to 18% of people aged 60 and older are living with MCI.<sup>11</sup>

Simply misplacing your keys on occasion is not cause for alarm, however forgetting important information that you would have normally recalled, such as appointments, conversations or recent events, may be a sign. You may also have a harder time making sound decisions, figuring out the sequence of steps needed to complete a task or judging the time needed to do so.

If you've been diagnosed with MCI, be aware that some cases do not progress and may even improve. Regular exercise, proper diet — including reducing your intake of LA — and engaging in mentally and socially stimulating activities may help to boost your brainpower.

## **Dementia: When to Worry?**

It can be difficult to gauge if a loved one is declining mentally. If you have suspicions but aren't sure, try keeping a notebook to jot down instances that concern you. You may be able to identify a pattern of events that makes the picture clearer.

Agnes B. Juhasz, nurse, dementia care specialist and author of 'The Dementia Whisperer: Scenes From the Frontline of Caring,' suggested making note of anything out of ordinary for that particular person. She wrote in the [U.K.]'s Mirror news:<sup>12</sup>

*"Naturally, there are a few typical signs and possible changes that are worth watching out for more closely. These include the level of forgetfulness; acute or permanent confusion about certain things; disorientation in time and place; significant changes in behavior and personality; decreased judgment; changes in speech or writing; and withdrawal from social interactions and activities.*

*But all these suggested signs ultimately lead us back to the essential, magical question we always have to ask before we can arrive at any further conclusions: 'Is this abnormal for this individual, or is it part of who they have always been?' When we notice that something is new and odd, that has never occurred in a person's life before, as far as we have observed, that is the point when further help may be needed."*

## **Early Warning Signs of Alzheimer's**

While an absent-minded mistake, like putting a mug in the wrong cabinet, is not cause for alarm, feeling confused about day-to-day tasks is.

Losing interest in hobbies, repetitive behaviors (phrases, gestures or questions), mispronouncing words or stuttering can also be signs. And while occasional forgetfulness, like forgetting why you were walking into a room, is not typically reason to worry, more profound confusion, like the room itself feeling unfamiliar, may signal a problem.<sup>13</sup>

The Alzheimer's Association also compiled differences between symptoms of dementia, including Alzheimer's, and typical age-related changes:<sup>14</sup>

### **Signs of Alzheimer's/dementia**

### **Typical age-related changes**

Poor judgment and decision-making

Making a bad decision once in a while

Inability to manage a budget

Missing a monthly payment

## Signs of Alzheimer's/dementia

## Typical age-related changes

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Losing track of the date or the season

Forgetting which day it is and remembering it later

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Difficulty having a conversation

Sometimes forgetting which word to use

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Misplacing things and being unable to retrace steps to find them

Losing things from time to time

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## Why Addressing Mitochondrial Dysfunction by Reducing LA Is Key

Work by the late Ray Peat, a biologist and "father" of bioenergetic medicine, suggests Alzheimer's disease is the result of poor mitochondrial function, which results in reduced energy production.<sup>15,16</sup>

To optimize your mitochondrial function, you need to address your diet, as the foods you eat are the substrate from which cellular energy is produced. **LA wreaks havoc** with your cellular machinery, which is why it should be limited to 5 grams or less per day.

To achieve this, you'll need to eliminate all processed foods, fast foods and the majority of restaurant meals, which are frequently loaded with or prepared using seed oils high in LA. Instead, prioritize whole and minimally processed foods.

In addition to limiting LA in your diet, **carnosine**, a dipeptide composed of two amino acids — beta-alanine and histidine — is a crucial aid for LA detoxification, as it binds to advanced lipoxidation endproducts (ALEs) that form from oxidized seed oils in your diet.

While your body will slowly eliminate stored LA over time, provided you reduce your intake, carnosine can help reduce the oxidative damage caused by LA while your body is cleaning itself out. I take liposomal carnosine every day before meals to help detoxify LA.

LA is highly susceptible to oxidation, and as the fat oxidizes it breaks down into harmful sub-components such as ALEs and oxidized LA metabolites (OXLAMs). These ALEs and OXLAMs are what cause most of the damage.

Carnosine binds to ALEs like a magnet and acts as a sacrificial sink. It's basically a substitute target for these profoundly damaging molecules. In this way, carnosine allows your body to excrete the ALEs from your body before they damage your mitochondria, DNA or proteins.

As an added benefit, carnosine is protective against Alzheimer's,<sup>17</sup> due to its ability to scavenge 4-hydroxynonenal (4HNE), a biomarker of oxidative stress that may increase the harm caused by free radicals.

## **Elevated Serotonin Linked to Dementia**

**High serotonin levels** are also linked to dementia.<sup>18</sup> While often described as the "happy hormone," serotonin, a chemical messenger in the brain, acts as an antimetabolite, hindering energy production in your mitochondria. A September 2023 study found that having low levels of serotonin transporter (SERT) is linked to problems with memory and thinking skills, which can eventually lead to dementia or Alzheimer's disease.

SERT is like a "cleanup crew" in the brain, helping to remove excess serotonin. When there's not enough SERT around to do its job, serotonin levels outside of brain cells can rise too high. This excess serotonin floating around can cause trouble and contribute to problems with memory and thinking.

Considering that high extracellular serotonin can contribute to dementia, you'd be wise to keep your serotonin level as low as possible. One way to do that is by increasing **GABA**, which is available as a supplement.

## **The Estrogen Connection**

Alzheimer's disease (AD) is more common in women than men,<sup>19</sup> and prolonged estrogen exposure is also linked to Alzheimer's severity in women.<sup>20</sup> As bioenergetic researcher Georgi Dinkov explained, "The study can be summarized with the simple statement that estrogen is detrimental while progesterone and testosterone are protective against AD."<sup>21</sup>

Avoiding estrogen replacement therapy and minimizing your exposure to the estrogenic compounds found in hundreds of consumer products is therefore an important step to protecting your brain health.

Taking natural progesterone is also important, but be aware that most formulations are not effective as they are oral or transdermal. Ideally, pure progesterone powder should be dissolved in a high-quality vitamin E with MCT oil and rubbed on your gums. Typical doses are 25 to 50 milligrams once or twice a day.

In my view, what mature women really need are progesterone and pregnenolone, not estrogen. In practical terms, you'll want to make sure your levels of progesterone and pregnenolone are within healthy limits (the levels you'd have in your 20s), which is around 30 mg a day.

## More Tips to Prevent Alzheimer's Disease

In addition to optimizing your mitochondrial function, lowering your intake of LA and avoiding things that raise your serotonin and estrogen, other helpful Alzheimer's prevention strategies include:

**Avoid gluten and casein (primarily wheat and pasteurized dairy, but not dairy fat, such as butter)** — Research shows that your blood-brain barrier is negatively affected by gluten. Gluten also makes your gut more permeable, which allows proteins to get into your bloodstream, where they don't belong. That then sensitizes your immune system and promotes inflammation and autoimmunity, both of which play a role in the development of Alzheimer's.

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**Optimize your gut flora** by regularly eating fermented foods or taking a high potency and high-quality probiotic supplement.

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**Make sure you're getting enough animal-based omega-3 fats**, such as krill oil. High intake of the omega-3 fats EPA and DHA help by preventing cell damage caused by Alzheimer's disease, thereby slowing down its progression and lowering your risk of developing the disorder.

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**Optimize your vitamin D level with safe sun exposure** – Strong links between low levels of vitamin D in Alzheimer's patients and poor outcomes on cognitive tests have been revealed. In one 2023 study, **vitamin D reduced dementia risk by 40%**.

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**Keep your fasting insulin levels below 3.**

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**Eat a nutritious diet, rich in folate** – Vegetables, without question, are your best form of folate, and we should all eat plenty of fresh raw veggies every day. Avoid supplements like folic acid, which is the inferior synthetic version of folate.

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**Avoid and eliminate mercury and aluminum from your body** – Dental amalgam fillings, which are 50% mercury by weight, are one of the major sources of heavy metal toxicity. Make sure you use a biological dentist to have your amalgams removed. Sources of aluminum include antiperspirants, nonstick cookware and vaccine adjuvants.

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**Make sure your iron isn't elevated and donate blood if it is** – Studies show that iron accumulations in the brain tend to **concentrate in areas most affected by Alzheimer's**, namely the frontal cortex and hippocampus. Magnetic resonance imaging tests have also revealed elevated iron in brains affected by Alzheimer's.

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**Exercise regularly** – It's been suggested that exercise can trigger a change in the way the amyloid precursor protein is metabolized,<sup>22</sup> thus slowing down the onset and progression of Alzheimer's. In one study, women with the highest cardiovascular fitness had an **88% lower risk of dementia** than those with moderate fitness.

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**Eat blueberries and other antioxidant-rich foods** – Wild blueberries, which have high anthocyanin and antioxidant content, are known to guard against neurological diseases.

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**Challenge your mind daily** – Mental stimulation, especially learning something new, such as how to play an instrument or speak a new language, is associated with a decreased risk of Alzheimer's.

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**Avoid anticholinergics and statin drugs** – Drugs that block acetylcholine, a nervous system neurotransmitter, have been shown to increase your risk of dementia. These drugs include certain nighttime pain relievers, antihistamines, sleep aids, certain antidepressants, medications to control incontinence and certain narcotic pain relievers.

Statin drugs are particularly problematic because they suppress the synthesis of cholesterol, deplete your brain of CoQ10 and neurotransmitter precursors, and prevent adequate delivery of essential fatty acids and fat-soluble antioxidants to your brain by inhibiting the production of the indispensable carrier biomolecule known as low-density lipoprotein.

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## Sources and References

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- <sup>1, 2</sup> World Health Organization, Dementia March 15, 2023
- <sup>3</sup> Alzheimer's Association, What Is Dementia?
- <sup>4</sup> J Alzheimers Dis. 2017; 56(3): 929–938
- <sup>5, 6, 7</sup> The New York Times July 26, 2016
- <sup>8, 14</sup> Alzheimer's Association, 10 Early Signs and Symptoms of Alzheimer's and Dementia
- <sup>9</sup> Neurology February 10, 2015, 84(6) 617-622
- <sup>10</sup> Time January 14, 2015
- <sup>11</sup> Alzheimer's Association, Mild Cognitive Impairment
- <sup>12</sup> Mirror November 9, 2016
- <sup>13</sup> Independent December 2015
- <sup>15</sup> Ray Peat Alzheimer's Part 1
- <sup>16</sup> Ray Peat Alzheimer's Part 2
- <sup>17</sup> Pharmaceuticals June 2023; 16(6): 778

- <sup>18</sup> [Journal of Alzheimer's Disease September 2023; 96\(1\): 215-227](#)
- <sup>19</sup> [ALZ.org AD Facts and Figures](#)
- <sup>20</sup> [Menopause October 2021; 28\(10\): 1099-1107](#)
- <sup>21</sup> [Haidut.me March 30, 2022 \(Archived\)](#)
- <sup>22</sup> [Journal of Neuroscience, April 27, 2005: 25\(17\); 4217-4221](#)