

# Neurotransmitters / Acetylcholine



## Acetylcholine: The Memory Prescription

Acetylcholine is like your car's accelerator. By providing the insulating layer around brain cells it prevents short-circuits and ensures rapid transmission of nerve signals. Idealists are the 17% of the population who are defined by the neurotransmitter responsible for brain speed. They are quick thinkers, open to new ideas, and thrive on impulsivity, flexibility and creativity. Idealists take pleasure in anything involving words, concepts and communication with others. They always take other into consideration while they try to make everything as best as it can be.

When the latency, or delay, increases between a brain stimulus, such as a flash of light or a beep, and your reaction to it, that is a sign that you are losing brain speed and acetylcholine. For most people, the brain slows by 7 milliseconds, or 7 thousandths of a second, after age 40, and we typically lose 7-10 milliseconds each decade thereafter.

A human being reacts to light in about 50 milliseconds; to sound in about 100 milliseconds. When thinking slows 400 milliseconds, a person is totally senile, so the difference between a healthy person and an Alzheimer's patient is only 1 tenth of a second. There is an abundance of signals of an acetylcholine loss well before senility sets in, and a host of ways to keep the pedal to the metal.

## Conditions/Diseases of Acetylcholine Deficiency

- Dyslexia, learning disorders, arthritis, osteoporosis, glaucoma, diabetes, hypoarousal, stroke, senility, Alzheimer's, Multiple Sclerosis

## Symptoms of Acetylcholine Deficiency

- Physical: fat cravings, dry mouth, slowed reflexes, sexual dysfunction, speech problems, vision problems, problems with urination, involuntary movements.
- Psychological: confused thinking, indecisiveness, personality changes, mood swings, rebelliousness.
- Memory Function: memory lapses, loss of visual and verbal memory, memory disturbances.
- Attention Issues: difficulty concentrating, diminished comprehension, impaired creativity, reading/writing difficulties.

## Multi-Modal Treatments for Acetylcholine Deficiency

- Diet – grape juice, eggs, blueberries, wheat germ, peanut butter, cheese, fish, chicken, broccoli, cabbage, iceberg lettuce, celery, fava beans, caviar, fish roe, cauliflower, soy beans, tofu, oranges, almonds, hazelnuts.
- Vitamins/Supplements (ask your practitioner if any of the following are good choices for you): choline, glycerophosphocholine, phosphatidylcholine, phosphatidylserine, vinpocetine, lipoic acid, hupzerine-A, N-acetyl L-carnitine, conjugated linoleic acid, fish oil.
- Lifestyle Recommendations – scheduled quiet time, occasional solitude, meditation, aerobic exercise.

### NOTES

---

---

---

---

---

---

---

---