

# GABA supplementation improves planning for actions

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People show an enhanced ability of prioritizing planned actions after the ingestion of the food supplement GABA. Psychologists Laura Steenbergen and Lorenza Colzato, with their colleagues at the Leiden Institute of Brain and Cognition and fellow researchers from the Technical University of Dresden, published their findings in *Scientific Reports*.

Steenbergen and colleagues were the first to investigate whether and to what extent the [ingestion](#) of the food supplement GABA improves planning and controlling different actions, a crucial skill in real-life environments such as driving a car in stop and go traffic. "GABA is an amino-acid contained in food such as green tea, unpolished rice, and potatoes" says Steenbergen. "Substances that we ingest through our diet can determine our behavior and the way we experience our environment."

Thirty healthy participants received 800 mg of GABA or placebo powder mixed with orange juice. Steenbergen then required them to perform a stop-change paradigm, a task that measures how fast people are in inhibiting a response when another action has to be carried out almost simultaneously.

Compared to when participants received the placebo, the ingestion of the amino-acid GABA enhanced planning performance. Colzato: "Even if preliminary, these results show that [food](#) supplements that include GABA, and perhaps foods rich in GABA, are a healthy and cheap way

to increase our ability to prioritize planned actions. For instance, people driving a car may benefit from additional GABA."

**More information:** " $\gamma$ -Aminobutyric acid (GABA) administration improves action selection processes: a randomised controlled trial." *Scientific Reports*, 5, 12770; [DOI: 10.1038/srep12770](https://doi.org/10.1038/srep12770)

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