

The Connection Between Diet and Mental Health

Lucas Bassotto Silveira

ENC1102

Professor Melissa Hardwick

September 2025

When talking about mental health, nutrition is often a topic that is overlooked by many, even though diet directly influences mood and brain function. According to the World Health Organization (WHO), “Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community.” Mental health is crucial to someone’s development and therefore the development of the community they are inserted in. If people are in a good state of mind this will reflect in the way they perceive the world and execute their jobs, for example. On the other hand, nutrition is defined as the process of obtaining the food necessary for health and growth, besides that, nutrition is crucial for energy and improving focus and a healthy mood, it can also help preventing diseases because it reduces the risks for many conditions, including heart diseases, immune system and mental health.

Although nutrition may not be the main reason for mental health issues, maintaining a good diet is a great first step for improving mental health, as it directly impacts mood and brain function. Our brain keeps working all the time, it is the reason why we think, we move and do things in our lives, therefore, our brain works just like a machine, it needs fuel to keep working the way it is supposed to, and the way our brain is fueled is through our food and the nutrients we consume. The way to nourish our brains is to maintain a nutritious and balanced diet, avoiding ultra processed food and low-quality ingredients will have a huge impact in other’s health.

While nutrition supports the brain at a biological level, food insecurity highlights how access to healthy options also shapes mental health outcomes. For someone that is going through mental health problems, they should pay attention to which fuel they are giving to their brains. Lacking key vitamins and nutrients can worsen the diagnosis and slow someone’s recovery.

Because of that, they will rely more on medication and other treatments, while still maintaining a poor diet. Combining treatments with a healthy diet is the key to a faster and smoother recovery, the body and the brain will function better and it will give the person more energy to combat mental health symptoms.

The quality of the food we consume directly impacts brain function, a well-balanced diet is crucial to support the brain functions and improve our cognition. According to Fernando Gomez-Pinilla, in the article "Brain foods: the effects of nutrients on brain function," quality of food and brain function are indeed related: "food has classically been perceived as a means to provide energy and building material to the body, its ability to prevent and protect against diseases is starting to be recognized" (Gomez-Pinilla, 2008). Diets rich in omega-3 fatty acids, for example, are increasingly appreciated for supporting cognitive processes in humans (Gomez-Pinilla, 2008).

Also, maintaining a good and balanced diet is not only about eating your greens and tracking your macros; it is much more than that. Combining it with physical exercise is crucial to achieve better results: "diet, in conjunction with other aspects of daily living such as exercise, has had a crucial role in shaping cognitive capacity and brain evolution" (Gomez-Pinilla, 2008). Understanding this topic is important to consider the effects on mental health and the outcomes. Improving your diet is not only about physical health but also about maintaining a good mental well-being.

Another important topic to highlight is food insecurity during early childhood and adolescence and why this increases the risk of both mental and physical health problems. "Research suggests that young people experiencing food insecurity during these life stages are more likely to experience health problems" (Larson et al., 2020). The health problems related to

this food insecurity phenomenon include elevated blood pressure, prediabetes, heart disease, infections, and many others.

According to the same study, "national cross-sectional survey data indicate that food-insecure adolescents are more likely to report skipping breakfast, inadequate sleep, smoking cigarettes, and consuming alcohol" (Larson et al., 2020). This shows that it is not only adults who can be harmed by this habit; eating good quality food is crucial to the development of children and adolescents. It is during this early phase in life that many start developing bad habits and dealing with food insecurity: "national data from 2018 indicate that 11% of US households were affected by food insecurity at some time during the previous year" (Larson et al., 2020).

What this study highlights is that poor nutrition can have serious consequences on mental health and physical development during early years in life. Addressing food insecurity and guaranteeing access to better nutrition is crucial for supporting good brain function and making sure that fewer children and adolescents develop mental health issues later in their lives.

Maintaining a poor diet over time can have life lasting effects on other's health, both physical and mental, early intervention and sustained healthy habits are important to address these issues. Michael Hoffmann, in his book "Executive Brain Vitality," outlines five brain fitness rules that we must follow to maintain good brain health and function: physical exercise, cognitive exercises, brain food components, sleep hygiene, and socialization. The author also states, "Eating your food as medicine helps to avoid eating your medicines as food" (Hoffmann, 2024). More than ever, we need to raise awareness and educate ourselves on this matter. Eating ultra processed foods and low-quality ingredients may be more convenient and cheaper, but the long-term consequences are serious.

According to the book, the "healthy lifespan expectancy formula for the United States is lifespan 79.3 years and the health-span 63.1 years. On average, we live in an unhealthy state of mind and body for about 20% of our lives" (Hoffmann, 2024). This number is alarming, many people lack curiosity about this topic and are not conscious that having a bad diet directly impacts their mood and mental health. As exposed, maintaining a nutritious diet, combined with healthy lifestyle habits, is essential not only for physical health but also for supporting mental well-being and cognitive development throughout your entire life.

These consequences emphasizes that with nutrition, and adopting a balanced diet improves cognitive function and mood, while also reducing risks of chronic conditions, like heart diseases, that might also impact mental health over time. Raising awareness about the relation between nutrition and mental health is essential.

Research on mental health and dietary habits has become essential to establishing methods that may improve wellbeing and reduce dependency on medication. Studies have shown that combining a healthy diet with therapy or medication can enhance treatment outcomes, as proper nutrients support brain function, mood regulation, and energy levels (Gomez-Pinilla, 2008; Hoffmann, 2024).

In summary, nutrition is more important to support mental health issues than people know. It directly influences brain function, mood and overall well-being. Although is not a single factor that contributes to mental health issues, it is an accessible and simple resource that can be used as an ally when going through these problems. To maintain a diet rich in nutrients and balanced is to take care not only of your body or appearance, but also your brain. Evidence from Gomez-Pinilla (2008), Larson et al. (2020), and Hoffmann (2024) demonstrates that diet affects mental health at both the individual and population levels, it helps everyone's development to

reduce long-term risks that are associated with a poor-quality diet and low nutritious ingredients. Besides that, raising awareness to healthy dietary habits is essential to inform about the consequences of food insecurity and poor choices in nutrition. Conducting research in this connection between food and mental health is necessary to understand more and inform interventions to develop strategies. Prioritizing nutrition when treating mental health issues may even weaken the necessity of strong medication and radical treatments, to promote a better and more productive life to the ones suffering from mental health problems.

Works Cited

- Gomez-Pinilla, F. (2008). Brain foods: The effects of nutrients on brain function. *Nature Reviews Neuroscience*, 9(7), 568–578.
<https://go.gale.com/ps/i.do?p=AONE&u=orla57816&id=GALE%7CA193446790&v=2.1&it=r>
- Harvard Health Publishing. (2015). Nutritional psychiatry: Your brain on food. *Harvard Health Blog*. <https://www.health.harvard.edu/blog/nutritional-psychiatry-your-brain-on-food-201511168626>
- Hoffmann, M. (2024). Executive brain vitality. *Academic Press*.
<https://www.sciencedirect.com/science/article/pii/B9780443298394000019>
- Larson, N.,PhD.M.P.H.R.D.N., Laska, M. N.,PhD.R.D., & Neumark-Sztainer, D. (2020). Food Insecurity, Diet Quality, Home Food Availability, and Health Risk Behaviors Among Emerging Adults: Findings From the EAT 2010–2018 Study. *American Journal of Public Health*, 110(9), 1422-1428. <https://doi.org/10.2105/AJPH.2020.305783>