Opinion Article

Nutritional Psychology in Practice: Dietary Strategies for Anxiety and Cognitive Performance

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DESCRIPTION

This article examines practical applications of nutritional psychology for managing anxiety and enhancing cognitive performance. It outlines how dietary patterns influence stress physiology, attention, memory and executive functioning and offers evidence-supported nutritional recommendations for clinicians, educators and individuals seeking mental-health improvement through dietary change. Anxiety disorders are among the most common mental-health challenges worldwide, affecting cognitive clarity, decision-making and quality of life. While psychological therapies and medications remain key treatment options, nutritional psychology provides complementary framework for understanding how diet influences stress responses and cognitive functioning. By integrating nutritional insights into mental-health practices, individuals can adopt dietary habits that help regulate anxiety and support brain performance.

This article reviews how specific nutrients and eating patterns interact with stress hormones, neurocognitive processes and emotional regulation. It also presents practical dietary strategies that have demonstrated benefits in both clinical and real-world settings.

Blood-glucose fluctuations have a strong influence on emotional states. Rapid spikes and drops in glucose often caused by excessive sugar intake or irregular eating can exacerbate anxiety, irritability and difficulty concentrating. Stable glucose levels support steady energy supply to the brain, reducing physiological stress responses.

Complex carbohydrates, high-quality proteins and healthy fats slow digestion, preventing glucose volatility. Diets emphasizing oats, legumes, nuts, whole grains and protein-rich foods promote sustained attention and reduced anxiety symptoms. Consistent meal timing further stabilizes mood by synchronizing metabolic and circadian processes.

Micronutrients play critical roles in the body's stress response. Magnesium regulates the Hypothalamic-Pituitary-Adrenal (HPA) axis, reducing cortisol reactivity. Magnesium deficiency has been

linked to increased anxiety, sleep disturbances and impaired concentration. Zinc supports neuroplasticity and modulates glutamate activity, protecting against excitatory stress responses. B-vitamins including B6, B12 and folate facilitate neurotransmitter synthesis and energy metabolism, helping maintain cognitive performance during stressful periods.

Dietary sources such as leafy greens, seeds, legumes, poultry and whole grains provide essential levels of these micronutrients. In some cases, supplementation under professional supervision may be beneficial. Healthy fats are important for brain structure and function. Omega-3 fatty acids promote neuronal fluidity, reduce neuro-inflammation and support cognitive resilience. Diets rich in Eicosapentaenoic Acid (EPA) and Docosahexaenoic Acid (DHA) are associated with improved attention, memory and emotional balance.

Monounsaturated fats, found in avocados, olive oil and nuts, support cardiovascular health and maintain consistent blood flow to the brain. Reducing saturated and trans fats helps prevent vascular and metabolic dysfunction that can impair cognition and exacerbate anxiety. Functional foods and herbs play a growing role in nutritional psychology. Chamomile, green tea (rich in L-theanine), turmeric (curcumin) and adaptogenic herbs such as ashwagandha have demonstrated stress-reducing and cognition-enhancing properties. While not replacements for clinical treatments, these food-based interventions offer accessible ways to support mental well-being.

Even mild dehydration impairs attention, memory and processing speed. Adequate water intake supports optimal neurotransmission and prevents fatigue-related anxiety. Incorporating hydrating foods such as fruits, vegetables and herbal teas further supports cognitive performance.

Emphasizing diverse plant-based foods, lean proteins and healthy fats supports micronutrient sufficiency and gut health. Routine meal schedules prevent glucose instability and reduce physiological stress responses. Slowing down during meals supports better digestion and increases awareness of hunger and satiety cues. Limiting highly processed foods minimizes inflammation and cognitive fatigue. Collaboration with

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nutritionists or mental-health professionals ensures individualized dietary strategies based on metabolic, psychological and environmental factors.

CONCLUSION

Nutritional psychology offers valuable insights into the relationship between diet, anxiety and cognitive performance. By understanding how nutrients shape brain function and stress physiology, individuals can adopt dietary practices that promote

emotional balance and mental clarity. As research expands, nutrition-centered interventions will become increasingly integrated into clinical mental-health care, supporting holistic well-being across the lifespan. Nutritional psychology demonstrates that diet plays a central role in managing anxiety and supporting cognitive function. Balanced nutrient intake, stable blood glucose and gut-friendly foods help regulate stress responses and enhance mental clarity.