

Does diet impact mental health?

Patients often report feeling mentally and physically unwell after eating fat-, salt-, or sugar-laden foods. Though the precise mechanisms underlying these symptoms are unclear, extensive self-reports support the notion that diet impacts mental health. While correlational evidence suggests a bidirectional relationship between diet and mental health, attributing causality is much more challenging.¹ A recent meta-analysis revealed compelling evidence of the relationship between dietary patterns and depression risk, yet concluded that more randomized controlled trials and cohort studies are needed to confirm these findings.²

The emerging field of nutritional psychiatry takes a more detailed look at the bidirectional impact of food and nutrition on mental health. This includes a study of gut flora or microbiota and their influence on mood. The “gut-brain axis” is an extensive channel of direct and bidirectional biochemical communications between the GI tract and the central nervous system. Ninety percent of the body’s serotonin, an important neurotransmitter, is produced in the GI tract.³

If future research determines that probiotic changes to microbiota have significant influence on neurotransmitter levels, probiotics could become a major player in the management of mental health. Regularly recommending probiotics from dietary sources of live and active cultures or discussing how to choose probiotic

supplements may become common in clinical practice.

Patients also ask about the relationship between nutrients such as omega-3 fatty acids, B vitamins, zinc, and magnesium and mental health. While there are ongoing investigations regarding the impact of these nutrients on mental health, there are no definitive conclusions regarding

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specific nutrient supplementation for mental health. The benefits of omega-3 fatty acids have largely been reported based on their anti-inflammatory properties. They may also provide a range of neurochemical activities that impact the reuptake of the neurotransmitters dopamine, noradrenaline, and serotonin. Recommending omega-3 fatty acids from dietary sources such as cold-water fish (salmon, tuna, sardines, mackerel), chia or flax seeds, and walnuts is aligned with overall healthy-eating messaging. If patients wish to use a supplement, advise them to use one that has a natural product number (NPN). An NPN ensures that the product has been reviewed by Health Canada.⁴

Focusing on healthy eating patterns rather than individual foods and nutrients is the best dietary advice

for both mental and physical health. These patterns, such as the DASH, anticancer, or Mediterranean diets, recommend whole grains; plenty of fruits, vegetables, and legumes; fish; and a sprinkling of nuts, seeds, healthy fats, and nonsalt spices.⁵

To build greater awareness over food choices and the link to emotional well-being, physicians can recommend that patients keep a simple diary of their food, mood, and lifestyle choices, and monitor whether they crave high-sugar or high-fat foods when they are tired, sad, or stressed. Some experts attribute sugar and fat cravings to the addictive nature of humans, as sugar and fat impact dopamine and serotonin levels. Identifying the when, what, and why of cravings may help with successful behavior change. With increased awareness, patients can then switch from negative to healthy behaviors. These changes can also benefit body weight, an independent risk factor for mental ailments, providing even more rationale for using a diary to build awareness around diet and lifestyle choices.

Emerging alongside nutritional psychiatry is the advent of personalized medicine—a tailored, individualized approach to optimizing patient care. This could prove revolutionary over time. Until then, we can focus on some basics that even our grandmothers would agree on—eat mainly plant-based whole foods, make time for physical activity, eat treats in moderation, and get adequate sleep. These are the current gold standards and safest ways to sustain mental and physical health and well-being.

—Kathleen Cadenhead, MD

—Mary Hinchliffe, MD

—Tanis Mihalynuk, PhD, RD

References on page 269

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Continued from page 244

Prince George, Terrace, Vancouver, Vernon, and Williams Lake.

—**Peter Rothfels, MD**
Chief Medical Officer and Director
of Clinical Services, WorkSafeBC

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Continued from page 245

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Continued from page 243

stool, which can be an early sign of colon cancer.

- Screening is only recommended for people who are not experiencing symptoms of colon cancer. Symptoms can include blood in the stool, abdominal pain, change in bowel habits, or unexplained weight loss. Anyone experiencing these symptoms should talk to their doctor about diagnostic testing they may need.
- Factors that put people at greater risk include having a first-degree relative (parent, sibling, or child) diagnosed under the age of 60, two or more first-degree relatives diagnosed at any age, and a personal history of adenomas.

For more information on the colon screening program, visit BC Cancer's screening website at www.screeningbc.ca.

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