

Diet and Schizophrenia

In this issue, we have an important contribution about diet from Holford and colleagues. Their study involved an astounding 55,570 UK residents and surveyed how these residents felt when eating certain foods and/or food groups. While Holford's paper did not correlate mental health diagnoses to their data, they did highlight the relationship between food and subjective feelings of wellbeing. I immediately thought of my many schizophrenic patients and how their dietary habits are usually abysmal and that they also feel lousy most of the time. This is an area where we as orthomolecular practitioners can thrive because psychiatrists seldom include effective dietary guidance when evaluating and managing their patients. While dietary changes are necessary to address the metabolic consequences of atypical antipsychotic medications, diet also plays a significant therapeutic role in its ability to reduce the positive and negative symptoms of the disease. The worst culprits that should be avoided or summarily restricted include dairy, refined sugars, and wheat.

When Hoffer subjected his patients who did not respond to orthomolecular treatment to a 4-day water fast, he discovered that 75% were allergic to dairy products.¹ Out of 60 patients that he treated over a 4 month period, over 40 were normal by the fifth morning of their fast. When the offending food was given, patients promptly relapsed. Hoffer reported that most of his patients did not require medication, including vitamins, as long as they avoided the offending food. A paper by Newbold et al reported that 50 percent of schizophrenic patients were allergic to milk when challenged after 4-day water fasts.² Water fasts should be supervised in an inpatient setting where there is immediate supervision if necessary. Patients can have significant adverse reactions when eliminating foods to which they were formally addicted, or to which they have had hidden allergic reactions. Thus, the use of

a 4-day water fast would be impractical for the majority of orthomolecular practitioners who see patients on an outpatient basis. The alternative is to have schizophrenic patients avoid dairy products and assess if their symptoms improve from strict avoidance. Even in the Holford study, consuming more than two portions of dairy per day markedly increased the likelihood of poor or very poor health among the respondents.

What about refined sugars? Many of our schizophrenic patients consume lots of nutrient devoid and rapidly absorbed sugary junk food. I have had patients tell me that they know they need to eliminate junk food, or at the very least cut down significantly, but they cannot stop. Refined sugars will adversely impact their mental states. Peet demonstrated that increased consumption of refined sugar resulted in a decreased state of mind for schizophrenic patients, as assessed by both the number of days spent in the hospital and poor social functioning.³ In the Holford study, there was a direct positive relationship between increased refined food consumption and increased poor health.

With respect to wheat, gluten (the major protein component in wheat) has been presented as a major pathogenic factor in the development of schizophrenia based on epidemiological, experimental, and clinical evidence.⁴ Newbold et al reported that 64.1 percent of schizophrenic patients were allergic to wheat following 4-day water fasts.² A recent case report highlighted unexpected resolution of longstanding schizophrenic symptoms in a 70-year-old Caucasian female patient after starting a low-carbohydrate, ketogenic diet.⁵ The authors of this case believed the reasons for this positive response was from the elimination of gluten and the modulation of the disease at a cellular level. They recommended that schizophrenic patients be screened for celiac disease, and/or that treatment be augmented with a gluten-free or low carbohydrate, ketogenic diet. Results from the Holford study also showed a correlation between poor health and consuming at least five portions of wheat daily. Increased wheat consumption was correlated

to symptoms of weight gain, difficulty losing weight, low energy, and feeling apathetic and unmotivated.

I recommend that schizophrenic patients be prescribed a diet that eliminates or restricts dairy, refined sugars and wheat. At one extreme there is research demonstrating the therapeutic value of a whole-food plant-based diet upon schizophrenia and a host of many other psychiatric disorders.⁵ This would be very difficult for the majority of schizophrenic patients to follow. A modified version of this diet would be more suitable. It would need to be devoid of all refined carbohydrate products, while abundant in fruits and vegetables, with the allowance of lesser portions of whole grains (if not gluten-sensitive or gluten-intolerant), eggs, fish, poultry, pork and beef. Such a diet would reduce oxidative stress (a cornerstone of most disease processes), allergies, and symptoms, while helping to offset the metabolic consequences of atypical antipsychotic medications (i.e., hypertension, elevated body mass index, and increased risk of diabetes and cardiovascular disease). In a sense, the diet that I propose for all schizophrenic patients is consistent with the dietary recommendations reported by Holford and colleagues in this issue. We need to give more than lip service to the diets of our schizophrenic patients and spend an appropriate amount of time doing so.

I congratulate Holford and colleagues on their exhaustive and important report, which has reacquainted me with the need to address diet more thoroughly, especially with my schizophrenic patients.



Jonathan E. Prousky, ND, MSc

References

1. Hoffer A: Treatment of schizophrenia. In eds. Williams RJ, Kalita DK. *A Physician's Handbook on Orthomolecular Medicine*. New Canaan, CT, Keats Publishing, Inc. 1977; 83-89.
2. Newbold HL, Philpott WH, Mandell M: Psychiatric syndromes produced by allergies: ecologic mental illness. *J Orthomol Psych*, 1973; 2: 84-92.
3. Peet M: International variations in the outcome of schizophrenia and the prevalence of depression in relation to national dietary practices: an ecological analysis. *Br J Psychiatry*, 2004; 184: 404-408.
4. Singh MM, Kay SR: Wheat gluten as a pathogenic factor in schizophrenia. *Science*, 1976; 191: 401-402.
5. Kraft BD, Westman EC: Schizophrenia, gluten, and low-carbohydrate, ketogenic diets: a case report and review of the literature. *Nutrition & Metabolism*, 2009; 6: 10.
6. Tsaluchido S, Massimo C, Tonello L, et al: Fatty acids and oxidative stress in psychiatric disorders. *BMC Psychiatry*, 2008; 8(Suppl 1): S5.