

Thyroid Disorders, Depression and Food: What Psychologists Should Know
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Thyroid deficiencies have long been implicated in depressive disorders. Israeli experts have found that as many as half of all patients experiencing unipolar and non-psychotic major depression do not respond to initial selective serotonin reuptake inhibitor (SSRI) antidepressant treatment. These researchers then developed a formula of progressively increasing doses of a prescribed antidepressant drug, usually Prozac (fluoxetine). Those who were unresponsive also received triiodothyronine (T3), from 25 to 50 micrograms per day (Agid and Lerer, 2003).

Ultimately, Agid and Lerer stated that,

"Our experience with algorithm-based treatment of unipolar, non-psychotic major depression in outpatients suggests that more than 40% of patients will not respond to initial treatment with an SSRI even when the dose is increased to 40 mg/d; that severity of depression may be an important predictor of response and that T3 may be useful as an augmenter of response in SSRI non-responders but may be less effective in men than in women. The effect of T3 may be related to thyroid function even within the normal range."

Other studies, before and after, have supported Agid and Lerer's findings. Consequently, it is not unusual for psychologists to see patients, primarily women, who may be on T3/T4 replacement therapy (synthroid, etc). Psychologists should be aware that some foods regularly consumed by these patients contain natural goitrogens. Goitrogens cause the thyroid gland to enlarge by interfering with thyroid hormone synthesis. Common sources for goitrogens include cruciferous vegetables such as: cabbage, kale, Brussels sprouts, broccoli, cauliflower, corn, sweet potatoes and lima beans.

Interestingly, soy can also be a vector for this problem as well. Researchers have identified that the isoflavones act as potent anti-thyroid agents, are capable of suppressing thyroid function, and can cause an ever-worsening hypothyroidism. Soy is a phytoestrogen and, therefore, acts in the body much like a hormone. Consequently, it can disrupt the delicate balance of the thyroid's hormonal systems. High consumption of soy products are also proven to cause goiter, (Divi RL; Chang HC; Doerge DR, 1997).

Therefore, excess consumption of soy (soy milk, soy beans, tofu, etc) can affect thyroid function, although this is generally only a problem if the patient is also taking synthroid or other thyroid replacement medication. If your patient is taking these medications, it is important to assess how much soy they consume as well as other goitrogens. Your patient should be counseled about this interaction, their physician informed so that they can adjust the patient's dosage (if necessary). Finally, the patient should be counseled that eating soy-based foods at the same time that they take thyroid hormones might interfere with absorption. A rule of thumb is to avoid the consumption of

soy within three hours of taking thyroid replacement medication. With the above caveats in mind, one serving a day of whole soy products, such as one cup of soy milk or a half cup of tofu, soy protein, or crispy soy nuts should not interfere with thyroid hormone.

References:

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