

Appendix

Nutritional Neurochemistry

—Jan Hanson, L.Ac.

The previous chapters have explored how to influence the brain through mental interventions. This appendix will summarize ways to support brain function through the *physical* intervention of skillful nutrition. Of course, none of these suggestions are a substitute for professional care, nor are they aimed at treating any medical condition.

As an acupuncturist who has focused on clinical nutrition for many years—and needed to apply some of its lessons to herself—I’ve repeatedly seen that small, thoughtful, sensible changes in what you put into your mouth each day can gradually produce significant benefits. And sometimes these steps—such as taking nutrients you’ve needed for a long time—can lead to rapid improvements in your well-being.

NUTRITIONAL SUPPORT FOR NEUROTRANSMITTERS

You can affect the levels of your neurotransmitters through targeted nutritional interventions. But be careful about it. Start with the smallest dosage and respect your own nature; individual responses vary significantly. Try one supplement at a time, making sure you feel good with the first one before adding another. Discontinue a supplement immediately if you experience any negative side effects. Don't use these supplements if you are taking an antidepressant or other psychotropic medication unless your doctor tells you otherwise.

Serotonin

Serotonin supports mood, digestion, and sleep. It's made from the amino acid tryptophan in essentially two steps: tryptophan is converted into 5-hydroxytryptophan (5-HTP), which is then turned into serotonin. Nutritional cofactors are required for these conver-

sions, notably iron and vitamin B-6 (as pyridoxal-5-phosphate or P5P) (Murray et al. 2000). Therefore, the following nutrients can help with serotonin production; you can use them in combination, if you wish.

IRON

If you feel fatigued or depressed, talk to your physician about the possibility that your iron level is low. Additionally, many menstruating women have low iron levels. A blood test is required to know if you're anemic; if you are, you can take an iron supplement, and the proper dosage will depend on your lab results.

VITAMIN B-6

Vitamin B-6 is a co-factor in dozens—perhaps hundreds—of important metabolic processes, including the production of several neurotransmitters (e.g., serotonin). Take 50 mg of vitamin B-6 (as P5P) on an empty stomach in the morning.

5-HYDROXYTRYPTOPHAN AND TRYPTOPHAN

Take 50–200 mg of 5-HTP in the morning or 500–1,500 mg of tryptophan before bed (Hyman 2009; Marz 1999). If you are primarily focused on lifting your mood, take 5-HTP in the morning. It is unlikely to make you sleepy, and it is the most direct route to serotonin. If insomnia is an issue, start with tryptophan just before bed, since it's more likely to enhance your sleep.