

5-HTP: Take it Right!

to overcome pain, insomnia, weight loss & more

by Margy Squires



5-HTP. A simple nutrient with wide reaching benefits – if you know how to take it right. You may think this nutrient is new if you've never heard of it before but 5-HTP has over 40 years of research. And although pharmaceutical drugs knocked 5-HTP off the shelf for a while, its effectiveness for targeting the same symptoms and conditions with fewer side effects has consumers like you wondering if maybe 5-HTP is worth a look. If you've tried 5-HTP and thought it didn't "work", maybe you need to take a *second* look.

The problem with supplements is that people assume the label tells you everything. Nope. Sometimes you have to do a little investigating on *how* the benefits are delivered. If you think of your body as one amazing chemistry experiment, it makes sense that supplements need "help" being absorbed or utilized. What element added to another will get the expected reaction or result? Even if you're not a chemistry buff, basic scientific laws hold true every time. Vitamins, minerals, cofactors, enzymes, all play an individual and collective part to keep your body operational or the expected result we call "life" does not happen. Every aspect of your life – appetite, sleep, brain function, movement, and so on, also require specific nutrients to happen in an intricate interplay of chemistry, biology and physiology.

So what do you need to take 5-HTP "right"? First, a little investigative background. 5-HTP is short for 5-hydroxytryptophan because your body synthesizes it from L-tryptophan, an amino acid found in foods you eat such as milk, eggs, red meat and poultry. So it's a natural part of you. But it's after the *conversion* of 5-HTP to 5-hydroxytryptamine or *serotonin* that its many benefits happen. Serotonin is a neurochemical with much to do in the brain, GI system and even in your blood! Keeping your brain alert. Modifying pain signals (such as in fibromyalgia). Curbing appetite and food cravings. Pre-cursor to a hormone that helps with sleep (melatonin). Lifting mood. Reducing anxiety. Halting a headache (including migraines). Prompting the flow of digestive juices and GI tract motility. You *need* serotonin. But the question is, why might you be low if your body makes it?

Times have changed. Diets have changed. We skip meals, especially breakfast. We're stressed out and sleepless. Our body clocks are messed up by computers with blue light that reduce melatonin production, the hormone that "sets" the clock. We don't exercise enough or exercise too much. Caffeine fixes and social hour alcohol interfere with the brain's ability to make serotonin. According to naturopath Michael Murray, this all leads up to *serotonin deficiency syndrome*, a disorder that cause insomnia, anxiety, inability to think or regulate pain and a host of other health issues. In fact, Murray considers it "one of the most widespread and debilitating medical problems of our time". And the answer

is supplementing 5-HTP, the nutrient that your body uses to make enough serotonin to overcome these issues. A natural source of 5-HTP is from the seeds of an African plant, *Griffonia simplicifolia*.

Why can't I get 5-HTP from tryptophan in foods?

Sounds good, assuming an adequate protein intake and efficient digestive process to get tryptophan efficiently from food. Then a healthy liver to metabolize tryptophan to 5-HTP. In times of stress, the liver may convert tryptophan to *kynurenine* to control the stress hormone *cortisol*. Too much kynurenine causes muscle problems. The liver may use tryptophan for other body needs. Since 5-HTP is already converted, it goes directly to where you need it most and more quickly.

What's another 5-HTP advantage?

Well, it's a little more complex but has to do with the brain "security system". You see, such an important organ cannot allow just any substance to "enter". Since the blood stream is what carries substances to the brain, you may have heard of the *blood brain barrier*. L-tryptophan needs a special "escort" to enter; 5-HTP has free access, thus enabling the brain the raw material to make serotonin on demand.



Is 5-HTP converted faster then? Nearly 70% of 5-HTP you take orally is delivered to the bloodstream but only 3% of L-tryptophan. That's a big advantage!

How does 5-HTP help regulate pain & mood?

By easily converting to serotonin, 5-HTP sets up the production line for endorphins, specific neurochemicals that dampen pain, improve mood and produce a state of calmness. Prolonged states of pain and stress can deplete serotonin levels. That's why people with fibromyalgia, sustained exertion immune disorder (formerly ME/chronic fatigue syndrome) and those with depression are often low in serotonin. Serotonin is also the master molecule for other neurochemicals: feel good *dopamine* and the stress fight or flight response *norepinepharine*. These two have a much wider influence than what has been



Continued

5-HTP... continued

simplified here involving the heart, blood pressure, smooth muscle contractions and addictive behavior.

How does weight loss happen? Serotonin helps to regulate appetite by curbing carbohydrate cravings and newer findings suggest it affects the hormone that tells you when you are hungry, *ghrelin*. Ghrelin is released by special cells in the stomach and intestines. Since serotonin controls ghrelin levels, when your serotonin levels fall, so do ghrelin levels, signaling the brain that you need to eat. A poor night's sleep also decreases ghrelin levels, driving you to eat more when you're tired. Serotonin facilitates restful sleep. 5-HTP helps healthy weight loss by increasing serotonin levels in combination with a good diet and exercise.

What are some 5-HTP cofactors? As stated above, 5-HTP does not perform solo. Specifically, magnesium is required for proper 5-HTP conversion to serotonin, and helps regulate 5-HTP receptors. Given that more than 76% of Americans are magnesium deficient, conversion and "receiving" may not happen. Studies on magnesium deficient animals with altered serotonin levels show normalizing magnesium normalized serotonin. Vitamin B6 and niacin are also cofactors. In doses above 300 mg/day, your body may benefit from the amino acid L-Tyrosine, according to Murray. The foundation nutrients can be nicely supplied with Multi-Gold™ and Fibro-Care™, then add L-Tyrosine later if needed. To enhance mood or sleep, try 5-HTP with St. John's Wort, Valerian Rest ES™ and/or Fibro-GABA™.

Summary. 5-HTP helps restore serotonin, a master neuro-chemical in the brain and GI system. The quick guide on the right will help you and your health professional determine whether to try 5-HTP alone or in combination with other cofactors. Remember supplements take time, which is what your body needs to bring about the desired results for you.

This is just a sampling of 5-HTP's serotonin boosting benefits. You can read more in the TyH Online Health Library.

- ◆ 5-HTP, Control Those Carbs
- ◆ 5-HTP Works for Me!
- ◆ 5-HTP, Serotonin, Happiness, the Brain & the Gut
- ◆ 5-HTP, The Serotonin Solution

Caution: **Depression is a condition that requires direct medical supervision. People on MAO inhibitors or an anti-depressant should not take 5-HTP without consulting their prescribing doctor. Too high serotonin levels may result in serotonin syndrome, although rare. Oral 5-HTP intake may raise 5-HIAA levels and cause a "false-positive" lab result so keep your doctor in the know about supplements.*

©TyH Publications (M. Squires). References omitted for space considerations and available upon request to editor@e-tyh.com

For informational purposes only and not intended to diagnose, cure, treat or prevent any medical condition.

Originally published in *Health Points*. For a free newsletter, email customerservice@e-tyh.com. For more information on TyH products, visit TyH Online at www.e-tyh.com or call 800-801-1406.

5-HTP Guide : Take it Right	
CONDITION/GOAL	DAILY DIVIDED DOSE
Better Sleep	100-300 mg 30 minutes before bed (single dose)
Fibromyalgia & SEID (ME/CFS) Pain, Sleep, Anxiety	50-300 mg 3x/day
Depression*	100-200 mg 3x/day (max 600 mg/day)
Headaches	50 mg 3x/day If needed, increases can be made: After 2 weeks, 100 mg 3x/day After 2 months, 150 mg 3x/day
Weight Appetite & Cravings	100 mg before meals 3x/day, (max 600 mg a day)
Helpful Combinations with 5-HTP	
SUPPLEMENT	REASON
Fibro-Care™ Magnesium & B6	Proper conversion of 5-HTP to serotonin & regulation of 5-HTP receptors, take per label
Ginger Root	Natural anti-nausea for higher doses for those with sensitive tummies, take per label
Ginkgo Biloba 24% Ginkgo Flavonglycosides	Depression; 60 mg 3x/day for those over 50 years of age
L-Tyrosine	Sustains effectiveness of 5-HTP for long term use. 500 mg 3x/day
Multi-Gold™ Multi-Vitamin Complex	A good foundation for 5-HTP to build upon, take per label
Omega-3 Oil Fish or Flax	EFA's ensure proper function of brain cells responsible for production & release of serotonin. 1000 mg/day, take per label
St. John's Wort 0.3% Hypericin	Depression; 300 mg 3x/day for under 50 years of age
Valerian Rest ES™ or Fibro-GABA™	Enhances 5-HTP for pain, sleep & anxiety, take per label
Take it Right: Timing is Everything	
When you take 5-HTP, it can make you drowsy or more alert. To see how 5-HTP affects you, we suggest you take your first dose after dinner. If you feel sleepy, take 5-HTP at night. Otherwise you can take it during the day; it will still help sleep at night by converting to melatonin.	