



SAMethylate Plus: Methylation Support

THIS WEEK'S TOPIC

"If someone could synthesize SAMe, depression, anxiety, allergies, ADD, irritability, insomnia, and autism can be supported naturally."

OK, here's a quick quiz! What is the major substrate that feeds the pathways to support RNA and DNA repair as well as over 200 enzymes, including many of our neurotransmitters? If you said SAMe, you're correct.

SAMe is the universal methyl donor, and if present in sufficient amounts, donates or feeds the cycles that support DNA repair and over 200 enzymes including many of our neurotransmitters. It's kind of a big deal, because if someone could synthesize SAMe, depression, anxiety, allergies, ADD, irritability, insomnia, autism, etc. could be supported naturally.

Ten years ago, I sat in a conference room in Houston, Texas with the principles at Biotics Research. They shared with me that even though there were some very exciting claims about SAMe, Biotics wouldn't make it due to stability issues. "What issues?" I asked. Daryl DeLuca, the vice-president, shared, "We may get a batch, and it would work great and have a shelf life of 6 months, and then we



may get a batch that may have a shelf life of a few weeks. Raw material suppliers won't give us any stability data that we can use to document the product at our end. And if they won't give it out, that means the raw material is not stable. We wouldn't know. The doctor wouldn't know, and certainly, the patient would not know if the product was bogus."

"But other people are selling it," I protested. "That's true," he said, "but if it has our name on it, and we put an expiration date on it, we have to stand behind it. People are depending on us for quality consistent products."

That was another one of those ah-ha moments for me that I was proud to be using Biotics Research products. They could have made a tremendous amount of money selling what everyone else was selling, but chose to do the right thing.

A decade later and finally a stable form of SAMe is available. Biotics has combined it with the other cofactors necessary to facilitate the methylation process. You see, if given the correct cofactors, the body can make lots of SAMe naturally. But when cofactors are short circuited by heavy metals or toxins or just

depleted by stress or a poor diet, the body can't make SAMe. However, by supplementing, we can activate and maximize methylation pathways.

Let's review the process. If the right cofactors are present, homocysteine is converted to methionine. The major cofactors are B12, folate, B6, choline, and betaine or trimethylglycine. Methionine is then converted to S-adenosyl-L-methionine or SAMe.

Some texts use the term SAM, others use SAMe. But the magic happens when SAMe donates a methyl group in a process called methyl-transferase. Methyl groups go to over 200 enzymes in the body. These 200 enzymes protect our DNA, produce a key component of our cell membranes called phosphatidylcholine, and make neurotransmitters. A low production of neurotransmitters can create conditions that result in: addictive behavior, anxiety, ADHD, mania, irritability, insomnia, or learning disabilities, to name just a few.

Another benefit of healthy methylation is the reduction of histamine. So when SAMe is depleted, histamine levels rise, which means greater sensitivities to foods and environmental factors. If the body can't convert homocysteine to SAMe, homocysteine increases. Homocysteine is a marker for inflammation, and as mentioned on other Tuesday Minutes, elevated levels of homocysteine are associated with Alzheimer's, cancer, cardiovascular disease, etc.

But is it the elevated homocysteine that is the problem or the lack of methyl groups and poor DNA repair from lowered SAMe? We don't know for sure. What we do know is that elevated homocysteine levels spell trouble on a number of fronts. You can start to see why Dr. Peterson calls methylation the "key to aging gracefully."

And now that stable material is available, Biotics Research Corporation created a product called SAMethylate Plus to support all facets of the methylation cycle. Each capsule of SAMethylate Plus contains 200 mg of SAMe and all the cofactors necessary to convert homocysteine to SAMe naturally. These include pyridoxal-5-phosphate, B12 as methylcobalamin, folate as 5-MTHF, L-Methionine, Choline bitartrate, trimethylglycine, and the antioxidants SOD and Catalase. Suggested dosage is 1 bid. You can see a link to the right for specific product information.

There's also a link about the Romberg test as a screen for methylation issues.

With the declining amount of nutrients in our diet and the use of more and more toxins in our food, the need to supply the cofactors needed to make SAMe and other important enzymes is increasing. And when you find the right fit for your patient, it seems like magic.

Thanks for reading this week's Tuesday Minute edition. I'll see you next Tuesday.