

LE Magazine January 2001 Q & A

The link between homocysteine levels and SAMe, plus...

Q I'm a little confused on the issue of elevated homocysteine levels and the use of SAMe. Does SAMe cause the levels to go up? Or does it help to bring them down? Also, I read that it was advisable to take vitamin B6, B12 and folic acid along with SAMe to make it effective or to help to bring homocysteine levels down, and that without the aforementioned vitamins homocysteine levels could be toxic. Is this true?

A Homocysteine is a naturally synthesized by-product of methionine metabolism. If the right cofactors are present, it will eventually convert to cysteine and other beneficial compounds. If the cofactors are lacking, it will build up to toxic levels. SAMe will lower homocysteine levels provided that your body has enough methylating cofactors such as vitamin B12, B6 and folic acid. Without these cofactors, SAMe will eventually breakdown into homocysteine. That why it is imperative to take vitamin B12, B6 and folic acid when taking SAMe.

Q I'd really appreciate any information you can provide about the use of methylcobalamin for nerve damage and healing. Methylcobalamin was recommended to me due to the problem I have with my ulnar nerve. Can you shed some light?

A Methylcobalamin is the neurological active form of vitamin B12. The liver does not convert cyanocobalamin, the commonly available form of vitamin B12, into adequate amounts of methylcobalamin, which the body uses to treat or correct neurological defects. Animal studies have shown that high doses of methylcobalamin are effective in neuron regeneration and that there is no known toxicity at these doses. Research shows that this active form of B12 has the unique ability to provoke the regeneration of nerves without adverse side effects. This is because B12 facilitates methylation, the process that creates and maintains nerves and brain chemicals. Research shows that a lack of methylcobalamin causes degeneration of the brain and spinal cord—a condition known as subacute combined degeneration. In this disease, nerves lose their insulation and begin to deteriorate. This process, known as demyelination, occurs in other neurological diseases such as multiple sclerosis and chronic inflammatory demyelinating polyneuropathy.

High doses of methylcobalamin have been used to treat degenerative neurological diseases in rodents and humans. In this disease, the neurons that control muscle movements deteriorate. People with amyotrophic lateral sclerosis (Lou Gehrig's disease) took 25 mg a day of methylcobalamin for a month. The double-blind, controlled study showed that methylcobalamin improved muscle response after one month of treatment. Methylcobalamin was given to mice with the mouse version of muscular dystrophy. A remarkable reversal of degenerating nerves occurred. Methylcobalamin did not stop the disease, but it slowed it down.

Q The subject is digestion. I'm a 53-year-old female with no gall bladder as of about three to four years ago. It seems that I go from hungry to uncomfortable with little or no time to enjoy the food. I've tried animal based digestive enzymes that cause a great deal of salivation, which is really unpleasant. I've also used the vegetarian chewable minty variety, which is pleasant, but I am not really sure if it works. I end up drinking lots of warm water or tea, and hope for the best.

I am now considering Digest RC versus taking enzymes. Is there any more global health reason to supplement with actual enzymes rather than taking a supplement that encourages your body to do what it's supposed to do? Am I running out of my own enzymes or can I stimulate my body to produce more?

A Enzymes do not encourage your body to produce more enzymes. By taking digestive enzymes you are adding to the enzymes that your body is releasing in response to digestion and preserving certain enzymes that would otherwise be used for digestion. Digest RC is an herbal formula that promotes healthy digestion and normal elimination. It is mostly used for digestive distress such as bloating. However, Digest RC will stimulate bile flow from your liver. Since you do not have a gall bladder to control bile secretion, we suggest you avoid Digest RC until more data comes in about its use in people who have had their gall bladder removed. Super Digestive Enzymes contains a complete balanced digestive formulation that aids in the breakdown of the basic food groups. It contains amylase for carbohydrates, protease for protein and lipase for fat. The two products could be used together if necessary.

Whether or not you have enough digestive enzymes is not something we can address. If you feel digestive distress or feel



uncomfortable after eating, you might want to try a product or two and see how you feel. That will be the best way to determine if that is what you need. It is assumed that most people as they age do not have a strong and health digestive system.

Q My physician asked me about the source of Life Extension's chondroitin sulfate and glucosamine sulfate because of his concern about bovine spongiform encephalopathy (BSE). Could you please advise?

A Glucosamine is made out of chitin, which in turn is made from crab, shrimp and lobster shells. Glucosamine is extracted using hydrochloric acid, and then buffered later in the manufacturing process with calcium carbonate. The chondroitin sulfate Life Extension uses comes from certified healthy bovine or porcine and does not come from any European sources. The manufacturing process guarantees that there is no bacteria present.

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