

# Decrease Muscle Constriction

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What is vitamin G and how is it related to gallbladder function? That's a question I often get when talking about optimizing digestion, particularly fat digestion. Sphincters are small ring like muscles that open and close as needed. The sphincter of Oddi controls the secretions from the liver, pancreas and gallbladder into the duodenum. So, if that sphincter is too tight, digestive juices are decreased, especially the enzymes that are needed for fat digestion.

Dr. George Goodheart described what he called "the law of the sphincters" in general, "dilation of one sphincter dilates all sphincters." Physicians that use manual manipulation know that sphincters can be manually opened or closed.

Dr. Mark Force in the book he edited with Dr. Harry Eidenier, "Clinical Insights on Structure and Nutrition" originally written by Dr. Dan Duffy, agreed with Dr.



Duffy's comment that he has found "the buccal reflex which appears to have a sphincter action in the cheek directly related to bowel function, especially in the constipated patient; and by manually opening one sphincter, the bowel sphincters relax." Some of the other causes of sphincter constriction are stress, injury, digestive problems and mineral deficiencies.

Actually there are over 50 sphincters in the body: anal sphincters, bladder sphincters, upper and lower esophageal sphincters,

urethral sphincters, pre- and post-capillary sphincters. The pyloric sphincter, at the lower end of the stomach is another. The ileocecal sphincter at the junction of the small intestine and the large intestine is another. But just as there are things that cause constriction, certain nutrients can cause relaxation of sphincters. One of them is vitamin G.

Years ago Dr. Royal Lee identified that members of the B complex had different, almost opposing properties. I think of them as yin/yang

properties. He broke them into a B fraction and a G fraction. The B fraction is more yang. Vitamin B is primarily thiamine (B1) and pantothenic acid (B5) but also contains B4 and B12. The B fraction causes vasoconstriction, increases muscle tone, improves low blood pressure, supports carbohydrate metabolism and is needed to make HCL. Also, vitamin B supports the sympathetic nervous system.

Biotics Research makes a product with three parts B and one part G appropriately called Bio-3B-G.

In contrast, vitamin G, the yin part of the B complex supports the parasympathetic nervous system. The G part of the B complex is primarily riboflavin (B2) and niacin (B3) but PABA, folate, choline, inositol and betaine are in this category as well. Vitamin G has an antispasmodic, tranquilizing, cholinergic effect. Vitamin G metabolizes lactic acid and increases manganese conductivity.

Vitamin G is recommended for people with low aldosterone because it contains niacin and riboflavin necessary for aldosterone production. Vitamin G aids stomach and pancreatic enzyme production by improving vagal tone and improves biliary delivery of bile and pancreatic chyme, and relaxes a spastic gallbladder.

Riboflavin is essential for MAO-A breakdown of the catecholamines which decreases adrenergic dominance and improves the sympathetic/parasympathetic ratio.

Biotics Research also makes a product that is three parts G and one part B called Bio-GGG-B. Bio-GGG-B contains 300

percent of the RDA "G" factors and 100 percent of the RDA "B" factors in a phosphorylated form, along with other components of the B complex: lamb brain, neonatal bovine liver and trimethylglycine. Suggested dosage is 2-4 tablets, three times a day just before meals.

By supplying three parts G, namely B2/B3, to one part B, B1/B5, the formula assures patients won't create an imbalance or deplete other important parts of the B complex. Sometimes supplementing one or two individual vitamins/minerals, or for that matter EFAs, can displace the substance not supplemented.

By the way, Dr. Mark Force was kind enough to share with us, a section of the book he edited pertaining to gallbladder function. A link is on this page. This book is a wealth of information geared to the clinician who is looking for underlying causes for ill health by understanding the physiology. You can contact him to purchase a copy; it's one of my "go to" references.

The chart, linked here, is based on Royal Lee's work which polarizes the differences between vitamins B and G. Sometimes it is easier to understand a physiological concept by seeing its opposing response.

So the next time you see increased muscle constriction of any kind, whether it be biliary, blood vessel as in hypertension, muscle spasms or restless leg, or fat digestive issues, migraine headaches, non-toxic goiter or a cellular resistance to T3, consider Bio-GGG-B.

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