

# Better Than Botox?

***“Collagen loss begins between 18 and 29 years of age; and by the time a person is 80 years old, collagen production has slowed by 75%.”***

Have you ever heard of Botox in a bottle? Well, that's what some people are calling hydrolyzed collagen protein. The key word is “hydrolyzed” because collagen is very difficult to digest. Most collagen supplements are made from the connective tissue of animals, which is tough to break down. In its natural state, collagen is composed of large molecules. “Hydrolyzed” collagen is broken down into smaller molecules, called peptides, for better absorption. Hydrolyzed or predigested collagen studies show it can pass through the intestine easily and be used as building blocks for repair and trigger our own internal collagen production.

Collagen loss begins between 18 and 29 years of age. By the time a person is 80 years old collagen production has slowed by 75% as compared to young people. Many signs of aging include loss of elasticity of the skin, stiff joints and muscle loss. Other signs of collagen deficiency may include excessive



skin wrinkles, blood pressure problems, achy muscles, cellulite, dental problems, thinning hair and brittle nails.

There is some debate over the absorption of powdered collagen; however, research is showing that hydrolyzed collagen peptides are well-absorbed and bioavailable. Studies show food-derived peptides were increased in the blood within an hour of ingestion so we know the peptides are available for repair.

Supplemental collagen works in at least 2 ways. As I mentioned collagen is document-

ed to cross the GI tract and feed repair mechanisms. But secondly, collagen peptides have unique signaling characteristics that tell the body to make more collagen.

Abundant research has demonstrated positive effects of collagen supplementation on skin, joint integrity and function, gut lining integrity, increased muscle mass and bone health.

When it comes to bone health numerous animal studies have shown increased bone density. A more recent human randomized, placebo-controlled trial demonstrated,

“that supplementation with 5g of specific collagen peptides significantly increases bone mineral density of the lumbar spine and the femoral neck as well as blood levels of the bone marker, P1NP, in postmenopausal women with age-related decline in Bone Mineral Density.”

The collagen family consists of 28 different proteins, which account for 25% -35% of the total protein mass in mammals. Type I collagen is the most abundant in human skin (80%). Type I collagen is also essential for bones, tendons, ligaments, vascular ligature and organs. Type II is predominately cartilage. Type III is also involved in skin and any tissues with elastic properties, fibrous protein, bone, cartilage, tendons and other connective tissues.

When I first learned about collagen supplementation I was honestly just concerned about skin, meaning Type I; but the more I studied and realized collagen is necessary for blood vessels, tendons, ligaments and organ support, I realized I want all three types.

Historically, Biotics was the first company to introduce Chondroitin Sulfate into the professional market almost 30 years ago. In the survey of the literature, they realized that digestion was a problem with straight collagen and found a source of pre-digested chondroitin sulfate. And knowing the benefits of collagen, Biotics Research has released a new predigested product, Hydrolyzed Collagen Protein.

Hydrolyzed Collagen Protein utilizes a cutting-edge infusion process to preserve critical nutrients, amino acids, peptides, nucleotide fractions, vitamins and minerals. Using this chemical-free process of hydrolysis and ultrafiltration, the protein is split down into an increased number of fragments, which results in increased absorption and assimilation of amino acids and protein. Packed with branched chain amino acids, Hydrolyzed Collagen Protein has a higher nitrogen score than whey (above 100)

and yields 21 grams of protein per serving. Hydrolyzed Collagen Protein comes in Chocolate and Vanilla Crème flavors.

As a side note, this is a protein product with high levels of collagen. Some collagen products have lower amounts of collagen and do not have protein and dissolve readily in water. Since this is a protein powder with concentrated collagen it will mix like a protein powder, which dissolves with shaking or blending. I use the vanilla flavored collagen in coffee with a blender and a little coconut or Bio-MCT oil. I also like to spoon it on steel cut oats with dried cranberries.

Many clinicians have asked for a protein source that is not whey or pea protein. Here it is. The main dietary sources of collagen are the connective tissues of most animal foods. Bone broth is a rich source. Biotics' Hydrolyzed Collagen Protein is made from a highly concentrated bone broth isolate. The protein is sourced from hormone-free, antibiotic-free, non-GMO cows in Sweden, and is ideal for dairy-sensitive patients or those who desire a collagen source of protein. Each serving contains over 17 grams of types I, II, and III collagen. As I mentioned earlier each serving contains 21 grams of protein that are high in BCAA as predigested protein peptides.

Dr. Arland Hill gave a stellar presentation on collagen and a new microbiome enhancing product called BioFiber Complete, see a link on this page.

So if your patients are looking for ways to push back the hands of time and they have issues with aging skin, wrinkles, cellulite, stiff joints, achy muscles, dental problems, thinning hair, brittle nails or muscle loss they will want to know about Hydrolyzed Collagen Protein.

Thanks for reading this week's edition. I look forward to being with you again next Tuesday.