THE BETTER COLLAGEN NUTRITION GUIDE

Wondering about collagen and its ability to help you keep or restore your healthy look? There's a lot of collagen talk, products and protocols today. This guide will help you sort what's better for you when it comes to this fibrous protein. Disclaimer: always check with your practitioner before adding a supplement especially if you take any medications or are working to address a health issue.

WHAT IS COLLAGEN?

Collagen is a protein made by our bodies. That is an important distinction because while we have lots of collagen in our body, taking it in from food is not essential as our bodies can make collagen from the amino acids and other nutrients as long as our body has enough of them. Collagen makes up the structure of our skin, cartilage, bone and muscle. This includes our hair and nails. It partners with elastin to create the elasticity and tightness we want from our skin; they form a matrix that helps keep other parts in place too. We have at least 16 types of collagen and perhaps as many as 28, with each type containing different end molecules (like flavors of an ice cream) but the base of collagen is the same.

Collagen is made of three non-essential amino acids: glycine, proline, and hydroxyproline.

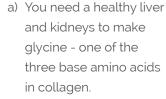
WHAT ARE SIGNS YOUR BODY COULD NEED MORE COLLAGEN?

- 1. Loss of skin elasticity
- 2. Wrinkles, crepe-like skin
- 3. Joint stiffness
- 4. Muscle aches
- 5. Digestive complaints

CAUTION: Don't guess or self-diagnose! These symptoms can indicate several other issues too. Ask your practitioner about The Better Nutrition Journal and The Better CheckUp Checklist, designed to help you take control of understanding your health. Review your total nutrition, your current health, and your personal health goal(s) with your practitioner regularly. Improving your collagen intake may help with your skin, aches and pains, and not be harmful when you use the guidelines shared here.

WHY DOESN'T YOUR BODY HAVE ENOUGH COLLAGEN?

- 1. Your body needs support from your diet to make collagen: even though collagen is made from nonessential amino acids (meaning the body make them vs we need to eat them), your body may not have enough of the ingredients or the right ones to make enough collagen
 - a) Glycine, for example, is a powerful neurotransmitter amino acid. Your body makes it from other nutrients like choline - but you can also get it from eating foods like eggs, meat, fish and some legumes.
 - b) Collagen relies on other nutrients like vitamin C, zinc, and copper so if you don't get in enough of these your body's collagen production and absorption will suffer.
- 2. Your body could have the ingredients but isn't able to make sufficient collagen or use it properly



run better for collagen to be made and used



HOW DO YOU CHOOSE BETTER SOURCES OF COLLAGEN?

- 1. Collagen vs collagen peptides: There is no question that we can take in collagen in its whole protein form (like from bone broth). Collagen peptides contain the same amino acids but are shorter chains of collagen. Supplements (including collagen powders) tend to use peptides and research supports their ability to work effectively and in some instances be better absorbed. This means there isn't a better form but there may be a better form for you. Based on your health status, your routine and preferences, you may benefit from a peptide supplement instead of a food source of collagen.
- 2. Plant vs animal collagen sources: The main difference between plant-based collagen and animal-based collagen is that plant-based helps boost the body's collagen receptors while animal collagen is the fully formed protein that may help stimulate cells in the skin, joints and bones to produce collagen. Depending on your dietary preferences and your body's needs you can promote healthy collagen with both options. In both cases your digestive, kidney and liver health are factors and your body needs the other nutrients to optimize collagen production and use.
- 3. Cow / Chicken vs Fish: We get collagen from soaking bones or crushing them up so the quality of the source directly impacts the quality of the collagen. When any animal experiences stress, is fed poorly, is exposed to environmental pollutants it will be a less healthy animal, including its collagen. Whether choosing broth or supplements, choose better quality (for what that means grab The Better Nutrition Plan to review definitions for better "quality"). The concern over bovine spongiform encephalopathy (BSE) from cows is real so manufacturers should get BSE-free product verified by a third party.

 Research shows fish collagen peptides can be effective, but again, you want to choose or make collagen from a better

- 4. Topical vs oral supplements: Studies suggest oral collagen supplementation results in an accumulation of collagen in the skin and helps support the body's natural collagen production. Topical collagen applications may be better for short term outcomes because they do not penetrate as deeply into the skin. For this reason, many practitioners including dermatologists look to other ingredients for topicals including the ingredients that support collagen production.
- 5. Broth vs Stock: Both. Bone broth is made using the bone of the animal, which is how stock can be made too, along with meat from the bone. However, a lot of stock today is made without the bone so that would mean that those stocks don't provide collagen. Vegetable stocks and broths can provide key nutrients that support collagen formation but will not provide the actual collagen.

HOW MUCH, HOW OFTEN - WHAT'S THE BETTER COLLAGEN PROTOCOL?

There is a lot of research for practitioners to consider; however, it is important to note that much collagen research includes funding by private companies thus challenging some of the recommendations on dose, form and ingredient selection.

- One 2014 study of 69 women ages 35 to 55 found that those who took 2.5 or 5 grams of collagen daily for 8 weeks showed improvement in skin elasticity, compared with those who didn't take it.
- 2. One study of women who took 1 gram per day of a chicken-derived collagen supplement for 12 weeks had 76% less dryness, 12% fewer visible wrinkles and better blood flow in the skin, and a 6% higher collagen content...





DON'T FALL FOR THESE COLLAGEN MYTH-TAKES!

- Don't think you can get any health result including healthy skin and joints - without better digestion. It's a bit of a catch-22 as we need collagen for better digestive health and we need better digestion to make and use collagen. Wondering if your digestion is keeping you from better collagen in your body and the better health results collagen can offer? Ask your practitioner about The Better Nutrition Digestive Evaluation and The Better Nutrition Digestive Tune-Up.
- Don't choose collagen as your protein source it could depress you! Collagen provides three amino acids but it can not replace your need for the essential amino acids that the body needs you to take in daily to promote many key tasks including muscle formation, enzyme reactions, and hormone health. Bone broth provides collagen along with other aminos like glutamine, vitamins and minerals but you still need other plants or animal sources of protein to meet your essential protein needs. Likewise supplements and powders should provide these additional amino acids if they claim they will help you meet your total protein needs daily. For example, a protein powder that combines yellow pea (pea protein) with quality rice protein or a hemp protein can provide you the aminos you need.
- Don't think collagen is the answer to your better beauty or skin goals... it takes a nutrient village! For hair, skin, and nails to be healthy the body needs other nutrients like GLA, silica, calcium, zinc, vitamins A+C, Coq10, medicinal mushrooms (like king trumpet, turkey tail, maitake, chaga, snow mushrooms), biotin, and iron. The body also needs enough of all the essential amino acids in better quality forms daily. Check out The Better Nutrition Menus for delicious ways to get these in like the Hemp Menu (GLA, protein), Trace Minerals Menu (zinc, copper).

- Don't count on collagen to protect you from the sun! Sun damage can accelerate skin aging by depleting collagen stores. Cover up and use quality sun protection throughout the year to help protect your skin and collagen.
- Too much sugar, stress and not enough sleep all contribute to unhealthy inflammation in the body, and, thus interfere with your body's natural production of collagen. Before, or when deciding to invest in collagen, work with your practitioner to nail these key health behaviors.

It's deliciously easy to get in more collagen with Better Nutrition Recipes that contain ingredients like bone broth, wild salmon, pumpkin and chia seeds, avocado, organic pasture-raised eggs (with yolk), chlorella, leafy greens, citrus, mango, berries, and even spices like garlic, turmeric, and cayenne. Head over to The Better Nutrition Program Recipes and search by ingredients for delicious better nutrition recipes.

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