Dear Alice,

Ok, one of my friends is using Sytropin as a supplement for his workout program. He mentioned that Sytropin is not approved by the FDA; however, it is safe to use and helps build muscle. I did research about Sytropin on my own and found out that it actually boosts hormone production. I believe interfering with glands with drugs to produce more hormones is not normal and actually put glands under stress. However, sometimes his statement actually tempts me... So, Alice is it safe to use Sytropin? Thanks!

Da Windex guy

Answer

Dear Da Windex Guy,

Kudos to you for learning more about supplements before incorporating them into your workout program. To clarify, when you refer to safety, do you mean a muscle building strategy that allows for big gains but poses minimal to no health risks? If so, a low-risk strategy to build muscle may be to hit the gym sans the supplement. Sytropin and other products that contain human growth hormone (HGH) or claim to release HGH may seem to help boost muscle production in the short-term, but they may also have detrimental effects in the long-term. It's also key to be thoughtful of the supplements that are used in the body, as the Food and Drug Administration isn't authorized to review supplements for safety and effectiveness prior to marketing. Additionally, they're held to different regulatory standards than other foods and drugs.

Before getting into the supplements, it can be helpful to learn more about what the body does on its own. Growth hormone (GH), the kind that your body produces naturally, comes from the pituitary gland which is located at the base of the brain — the same gland that releases the hormones that signal the start of puberty. This hormone starts production before a person is even born and continues throughout their lifetime. It's found in higher concentrations in younger people, peaking during puberty and then decreasing by about 50 percent every seven years.

So, what's the appeal of synthetic or administered HGH? When HGH products were first developed, they were intended for children with growth disorders and adults with growth hormone
deficiencies. Typically, the pituitary gland regulates the natural release of HGH, but supplemental or prescription HGH can introduce additional HGH into the body, promoting cell growth, reproduction, and regeneration. This, in turn, reduces fat in the body and increases lean body mass and physical activity capacity. Despite the increase in people using the hormone for the purpose of anti-aging or to increase muscle mass, there's no solid proof that it increases strength or improves athletic ability, at least not in the long-term. It's also unclear what long-term health impacts may occur so experts recommend that HGH not be used to treat aging or age-related conditions.

However, health care providers may prescribe HGH for adults with certain health conditions. Medically necessary HGH is only legally available by prescription and through an injection. Many products are available on the market over-the-counter, being promoted as an HGH product. Additionally, many of these products will claim to release HGH in the body rather than containing HGH in the pill or spray itself. However, there is no evidence that these over-the-counter pills and sprays (such as Sytropin) are effective. Someone with typical growth may experience serious effects due to its use, such as increased blood pressure or atypical growth of bones and organs. According to Mayo Clinic, other possible side effects of HGH use include:

- Swelling in the limbs
- Pain in the joints and muscles
- Gynecomastia (swelling of the breast tissue in men)
- Higher risk for heart disease and diabetes due to increases in insulin and cortisol
- Potential insulin resistance

Those who reap the most benefits of using HGH are people who have problems naturally producing growth hormone. The average person looking to boost their muscle volume will likely have the same results (sans potential HGH side effects) if they stick to a balanced pattern of eating and physical activity regimen. Though it may seem tempting to take a shortcut to building muscle through the use of HGH, investing the extra time and effort into physical activity is the safest approach. For more information on proper exercise technique and use of supplements, speak with your health care provider or check out the Nutrition & Physical Activity section of the Go Ask Alice! archives.

Here's to getting results through your training!

Alice!

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