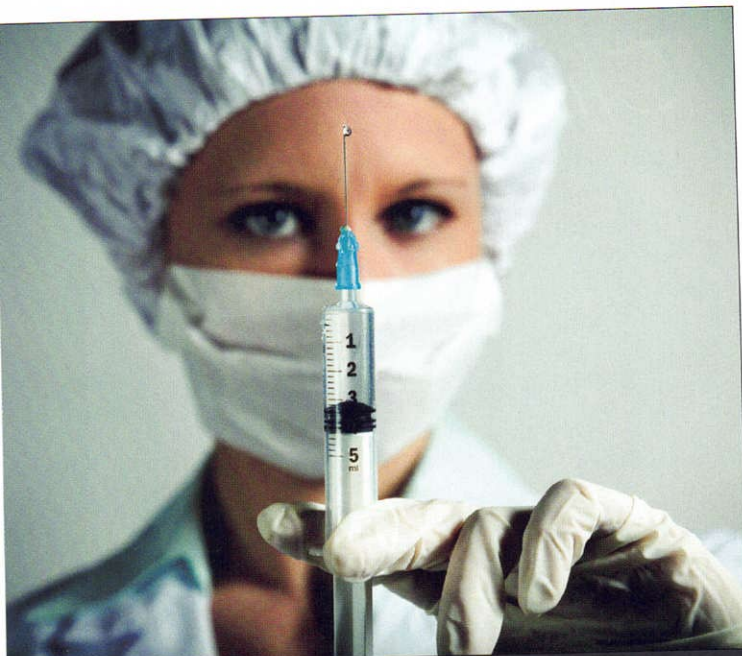


FOREVER YOUNG

Is Human Growth Hormone (HGH) the modern age's fountain of youth or danger in Rx disguise? The jury is still out



Friend Or Foe: Many swear by the fountain youth effects of HGH (Human Growth Hormone) — which include increased muscle mass, fat reduction and boosting of the immune system — but some health professionals are on the fence about the long-term effects of the substance.

The subject of Human Growth Hormone (HGH) has a giant buzz cloud over its head in which swarm equal parts allure and warning. Sylvester Stallone swears by it (and face it, Rocky's holding up better than ever). On the other hand, athletes like Barry Bonds are paying the price for "enhancements," including HGH (along with steroids) that likely contributed to their superhuman achievements. One of the substances the coroner found in Anna Nicole Smith's body when she died was HGH.

So what exactly is HGH? Simply put, it's a microscopic protein substance, chemically similar to insulin. It is produced by the pituitary gland in the lower region of the brain and secreted in bursts, normally during the first hours of sleep and after exercise, remaining in the circulation system only a few minutes (like adrenalin, it's there, and then it's not there). Despite it's fleeting and transient nature, HGH has nearly mythic effects on the human system, stimulating both growth and cell production. Its main function is to increase height (dwarves have too little; giants too much), but other benefits include increased muscle mass, calcium retention, bone health, fat reduction, sugar and insulin control, immunity boosting and metabolism building. Daily secretion of the substance decreases with age, and the peak of production is somewhere between the ages of 20 and 30.

But what if that peak could be revisited or regained? Loss of fat and increase in muscle mass result in a feeling of wellbeing, a stronger libido, increased energy

and, consequently, an improved self image. Some even say another side effect is a sharper memory. Who wouldn't sign up as soon as possible for any of the above? Legend has it that Ponce de Leon was searching for the fountain of youth when he bumped into Florida, but is it possible HGH is that fountain, finally discovered? It's peachy if HGH helps speed recovery after orthopedic injuries, but the real fascination lies in the prospect of an effective anti-aging method: plastic surgery in a bottle, some call it.

HGH can be administered into the body several different ways. One is through synthetic injections, but synthetics always carry the burden of unknown side effects. These injections are also expensive — as in, thousands of dollars per month. Another means is through oral sprays (like breath freshener, with a feel-younger-flavor), but there is no proof this method works, as the mouth doesn't usually offer the best form of absorption. What seems the best method, overall, are natural herbal releasers, taken as capsules at bedtime (remember: HGH is naturally released during the first hours of sleep).

The fact remains that the effects of HGH have yet to be tested long-term. And, like anything that sounds too good to be true, it may be just that.

Among the negative side effects of HGH known thus far are joint pain, fluid retention, arrhythmia, high blood pressure, possible increased risk of diabetes, and abnormal bone and cartilage growth. If those sound tolerable, how about the fact that growth hormones promote cell growth, and what else is cancer but unbridled cell growth? While a link between HGH and cancer has yet to be established in humans (only in mice), isn't the very possibility enough to give anyone pause? Especially when, as with any buzz, the Internet is pumped full of unaccredited, potentially dangerous, imposters. With the urgent demand for anti-aging methods and mechanisms, it's an open invitation for modern day charlatans and for products that could, potentially, contain anything under the sun. If, for example, the HGH is made from human tissue (most of these have been removed from the market but, again, the Internet is an unregulated venue) there is a possibility it can contain deadly diseases, such as the rare but fatal one called Creutzfeldt-Jacob.

With any substance purchased on the Internet there is no medical consultation, no monitoring of doses, no assessment of existing medical conditions and what effect HGH may have on them. Eager takers, eagerly consuming without the supervision of a medical professional creates a disturbing scenario. The high-profile professionals and celebrities who have been "caught" taking an excess of HGH, or who were unaware that what they were taking was actually a cocktail containing not only HGH but steroids, are but a sampling of what can go wrong, even when a person has the money to buy the "best." As an example, a high dose of HGH mimics levels found in the endocrine disease acromegaly (caused by too much HGH in the body), which can lead to severe muscle weakness and even heart disease.

Is it worth it? When looking for ways to look and feel more youthful, proceed with the wisdom of knowledge and experience. — *Margit Bisztray* □