New Research Update

University Studies Reveal Biotech Breakthrough

Orally Delivered Recombinant Growth Hormone (rgh)

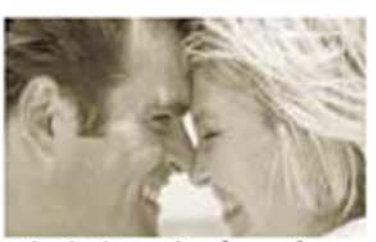
A quest for Youth and Vitality

Do you have a problem losing weight? Are you gaining more body fat and cellulite each year? Are you looking older than your mate? Does your skin hang and appear overly wrinkled, thin and dry? Are you forgetful? Do you experience depression or mood swings? Do your joints ache with pain and stiffness? Are you aging faster than normal?

Some people age more rapidly than others because of a rapid decline in hormone and growth factor levels. This decline leads to slow deterioration of the body. Symptoms of premature aging associated with hormone and growth factor decline include: feeling tired most of the time with difficulty in keeping up with your career or family, poor recovery after exercise, and waning interest and performance in sex.

Our cells dehydrate as we age from nearly 90% at birth, dehydrating down to 60% as adults and 40% when we die. The brain and all the organs (spleen, liver, adrenals, skin) shrink by 30% of their original size by the age of 70.

Vivid dreams, sound sleep



Optimistic attitude, enhanced sexual function

Increased energy, exercise tolerance, improved mental process

Why do we Age?

There are many theories as to why we age such as shrinking of the genetic material with each replication of our cells, free radical damage and hormone decline. The areas over which we have the most control, involve our lifestyle, diet, exercise and supplementation. In this special report, we are going to share with you the latest breakthrough in anti-aging supplementation - human growth hormone (hGH).

How did we discover Growth hormone?

Danish researcher, Professor Jens Sandahl Christiansen stated that the name "growth hormone" is a misnomer (not just for growth in children as first described by Dr Harvey Cushing in a book published in 1912) and that it really should be considered a youth preserving substance necessary during every stage of life.

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Later, Dr. Raven published his own findings about hGH as therapy, in the New England Journal Medicine in 1962.

HGH injections initially were prescribed for short stature children and adults diagnosed with an underactive pituitary. Although recent research has focused on hGH anti-aging benefits., the FDA has not officially endorsed the prescription of hGH for general anti-aging benefits. Despite this, anti-aging and sports medicine specialists continue to prescribe hGH to patients for "off-label" use to enhance lean muscle, reduce body fat, improve sleep, and enhance sex drive - to name but a few.

Although hGH injections have been prescribed for nearly 20 years, a microdilution GH supplement became available in 1992. The Dietary supplement, Health, and Education Act (DSEA) of 1994, Grandfathered in the use of oral hGH as a dietary supplement.

Oral hGH is a micro-dilution supplement that mimics the body's natural production and release of hGH. The body releases as little as 500 ng of hGH at a time

Then in 1996, the microdilution spray was invented. It featured an advanced delivery system capable of facilitating the absorption of the hGH molecule into the body. The early supplement marketed at that time, contained approximately 100 ng/ml of hGH. More recently, the formulation has been improved to contain 2000ng/ml (6 sprays) of hGH. This new formulation also includes growth hormone releasing factors that target the body's production and release of hGH.

The fact is that the body needs a minimum of about 2,000 ng/ml a day to be on the threshold of generating both a physiological and an energetic response. Daily supplementation with hGH and growth factors gives the needed chemical instruction to the aging hypothalamic messenger to tell the pituitary to release more youth restoring growth hormone.

Many doctors have found with the support of other hormones such as melatonin, testosterone, cortisol, DHEA, and thyroid, we can reduce the required dosages of growth hormone that are used on a daily basis.

An injection of hGH typically delivers between 0.25 I.U. (82,500ng) with many people using 500,000ng to 2 million nanograms a day! However, we believe the ideal physiological dosage is somewhere between 2,000 and 50,000 ng per day since this is closer to what a youthful body naturally produces.

People familiar with the amazing discovery of growth hormone

Doctor Jane Battenburg, certified hypnotherapist practicing in Costa Mesa California, wrote to Grow Young and Slim staff after following a personalized program, which included having all of her key hormones tested by her doctor. She writes:

"I came to the people at Grow Young and Slim with no health problems, just wanting to look and feel even better. After six months on their diet, eating right according to their test for delayed allergies, and taking the oral GH MMC spray, my sense of smell is more acute, I dropped 1/2 a shoe size (from slight edema) and 3 dress sizes, my strength and endurance has increased dramatically, friends say my skin and face look years younger, I dropped 14 pounds and felt encredible! After only a month on the program I climbed Mt. Rose 12 miles, 4,000 vertical feet not having acclimatized or trained, keeping up with veteran hikers, no muscle soreness. This is a way of life, not a diet. Many of my friends who say "I'll have what she's having" have been turned on to their program, also!".

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(hGH), with nearly 30 benefits, will immediately recognize the rich benefits obtained with hGH supplementation.

Growth Hormone along with synergistic Growth factors, instructs all the cells to reawaken and function at a youthful level. The combination encourages our cells to rehydrate. This swells the cells, stretching the skin and making you look and feel younger. HGH also encourages protein synthesis, necessary for cell renewal throughout the body.

HGH is a large molecule - a sequence of 191 amino acids (22,000 molecular weight).

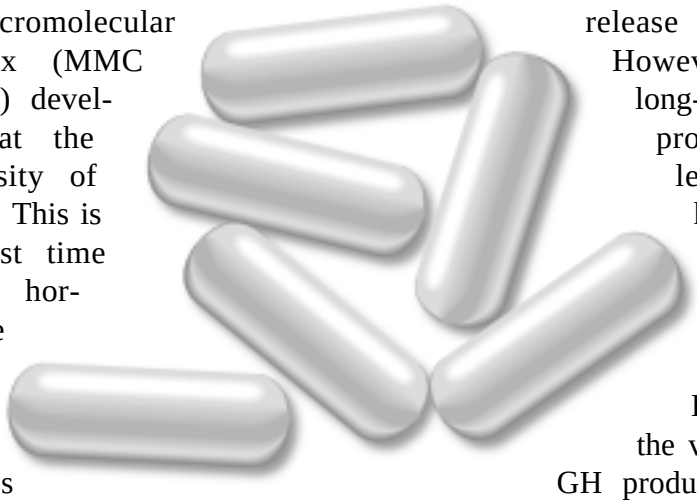
Products formulated with hGH can then be combined with two naturally derived growth factors made from naturally derived hypothalamic and thymus extract sources. These are bio-identical in structure and function to those produced by the body's own glands. These purified extracts when combined, are more potent and work in synergy with hGH. These active peptides are small to large in size and would ordinarily need to be injected.

The oral spray hGH formula contains hGH and growth factors protected by a macromolecular complex (polymers found in nature). Like a key perfectly matched to its lock, acting as a gateway to the cell membrane receptor sites, the MMC-2000™ delivery system facilitates the body's absorption of these critical growth factors. The proprietary combination of targeted growth factors directs the pituitary gland to *make* and release more of *your* body's own growth hormone.

The most important addition to a proper diet and exercise is the daily use of natural youth enhancing products. We know that world class senior athletes have experienced the tremendous power of hGH injections to enhance their performance, which typically declines with age. This may be why many athletes past the age of 35 are still able to compete with younger athletes because they have learned the secret to strength, speed and endurance.

Which is the best Growth Hormone product?

Oral hGH is bound to a macromolecular complex (MMC 2000™) developed at the University of Illinois. This is the first time growth hormone (hGH) and growth factors have been combined together with a verifiable delivery system.



Over 100,000 people around the world have been using this oral hGH formula safely. After several months of consistent use, benefits reported to their doctors include: improved bone density, albumin production, white blood cell activity, muscle density, skin elasticity and reduced body fat. This formula was presented to doctors last year at the American Academy of Anti Aging Medicine Conference in Las Vegas December 16, 2000.

Misleading products and testing methods

There are three groups of GH supplements: homeopathic, GH secretagogues (amino acids), and micro-dilution GH sprays. Most homeopathic products are too dilute (over 10x) to contain any meaningful amount of active growth hormone.

Secretagogues are composed of grams of amino acids that are supposed to release growth hormone. They have been used for over 40 years. They contain high dosages of amino acids that provide for the temporary release of hGH. However in the long-term, these products can lead to health complications.

Looking at the various oral GH products on the market, there are a few oral products that actually have growth hormone in them. The manufacturers put hGH in the bottle and test it immediately to show there was hGH present, however within a few weeks the hGH may degrade and quickly disappear.

1 Whereas, the spray GH that features MMC-2000™ preserves the growth hormone and protects it from degrading so that it can be

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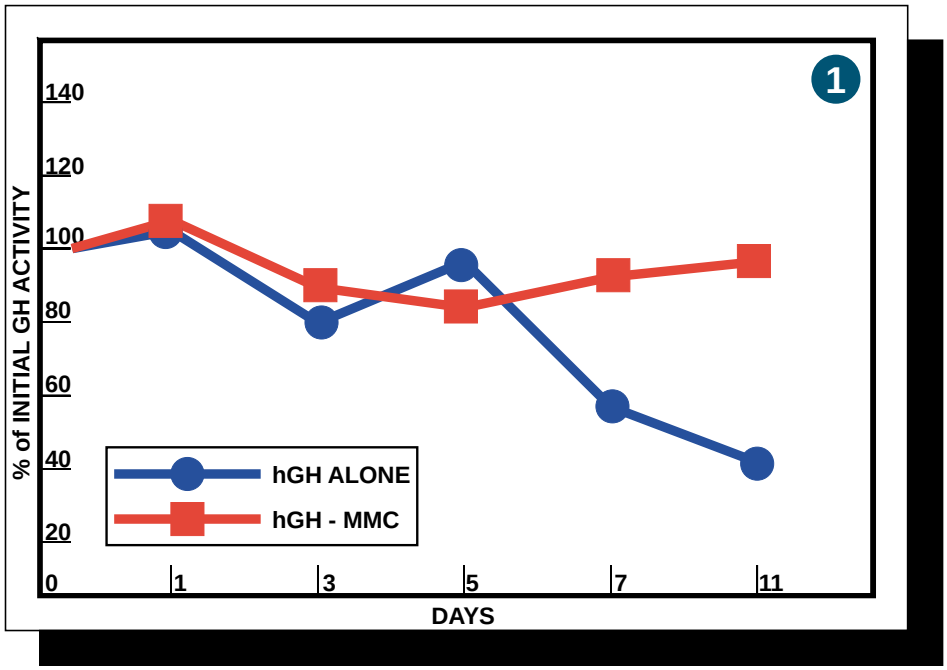


tested 6 months later and still retain over 98% of it's original potency in the bottle.

The oral hGH and MMC-2000™ formula is the only one tested to date that has been verified by sophisticated laboratory analysis involving several parameters established at the University of Illinois - including verification of the stated potency of hGH contained in each product. (see graph 1)

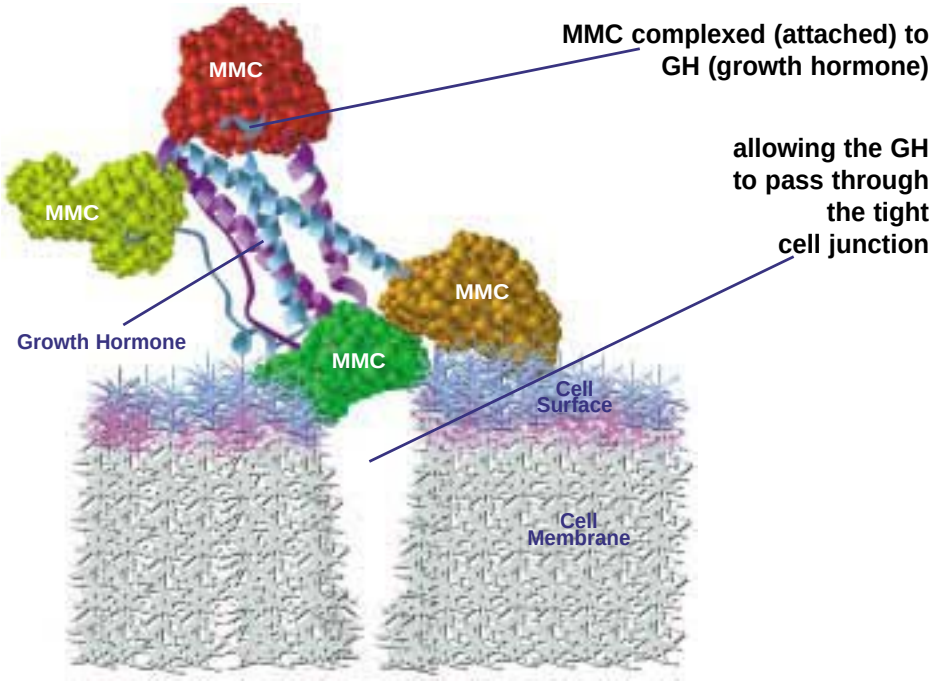
Doctors frequently assume they can test the product using HPLC lab methods along with Chemiluminescence. These are fine tests for detecting large quantities of hGH. However a whole different set of new methods perfected by university research is necessary to verify the presence of growth hormone in nanogram amounts. In addition, the MMC delivery system encloses the growth hormone molecule and prevents certain standard testing procedures from detecting the growth hormone while it's protected by the MMC. With the correct testing methods it reveals hGH within 30 nanograms.

Health Practitioners need to decide correct therapy based on the facts:

1. Animal studies on the oral GH+MMC formula definitely confirm absorption.

2. Over 28,000 studies on hGH already confirm its beneficial effects.

MMC 2000™ *solves the problem of the large growth hormone being unable to pass through the cell's membrane by passing between the cells in what are called "tight junctions." The MMC carries the growth hormone into the space between the cell where it can desolve GH over a long period of time. MMC can carry GH into the tight junctions without causing damage to the cell membrane.*



Growth Factors + MMC absorbing into cell membrane

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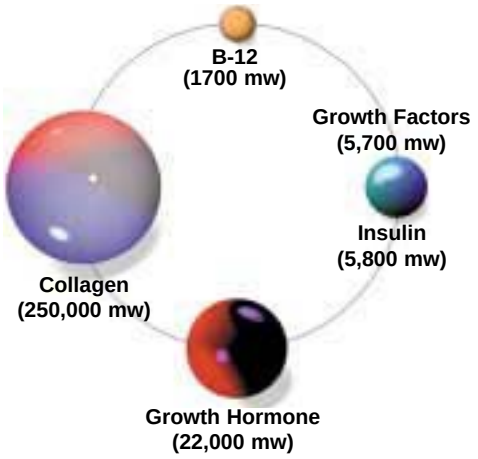
3. The correct dosage and method of delivery (oral vs. inject) must be left up to the practitioner and individual client to determine. A growing number of scientists and doctors believe worldwide, based on the research, the intelligent way to administer hGH is to mimic what the body is already accustomed to - 500 to 25,000 ng per day of hGH. The spray hGH+MMC formula delivers hGH within this range. Injections deliver up to 660,000 ng of GH at one time, creating a hGH "flood".

A new biotech discovery of the first oral growth hormone that really works:

Doctors have been led to believe that the only way to introduce human growth hormone (hGH) into the body is by using injectable human growth hormone. Their argument is that hGH is to large to be absorbed orally.

For example, Vitamin B-12 is on the threshold of being too large to be absorbed orally and is considered to be a "large molecular weight substance" (1,700 nw). Any large molecule such as Growth Hormone (22,000 mw), Insulin (5,800 mw) or Collagen (50,000 to 250,000 mw) needs a "special code" which the body recognizes as "self" to be let in by the cells.



This special patented delivery system, (MMC2000™), which contains the "special code", envelopes the Growth Hormone. Scientist speculate that after it is sprayed into the mouth, it attaches to the outside of the cell membrane and dissolves while providing the correct code to "unlock the door" allowing the Growth Hormone to pass across the delicate mucous membrane.

How the GH+MMC formula was developed

Most doctors are aware that Growth Hormone normally degrades quickly after it has been mixed in solution. They are also aware that it has a short half-life in the body. However, the MMC+2000™ system uses a natural material that insulates and protects growth hormone from degrading. This was demonstrated in experiments completed at the University of Illinois showing that the MMC safely preserved the structural integrity of hGH in solution.

Scientist speculate that once the encapsulated hGH is sprayed into the mouth, it facilitates the absorption of hGH by moving between the tight junctions of the oral mucosa.

They theorized that the key to the success of the advanced patented delivery method is that it naturally mimics how the body absorbs large molecules such as

growth hormone.

The delivery system (MMC2000™) contains all natural ingredients regarded by the FDA (Generally Recognized as Safe or GRAS).

The MMC2000™ works as follows: The exciting discovery that a large molecule like growth hormone (22,000 mw) could be absorbed orally into the body was demonstrated in studies at the University of Illinois. They conducted pharmacodynamic and pharmacological studies on rabbits on the oral absorption of large proteins using insulin and hGH. They demonstrated that oral absorption was nearly as efficient as injections. In fact, the oral insulin-MMC complex obtained better blood sugar control than did the injection method.

Skeptical doctors said that if you can get growth hormone to absorb orally, then surely one should be able to use the delivery system to get the smaller molecule such as insulin (5,800 mw) to absorb orally.

Studies at the University of Illinois on rabbits being given insulin with the MMC delivery

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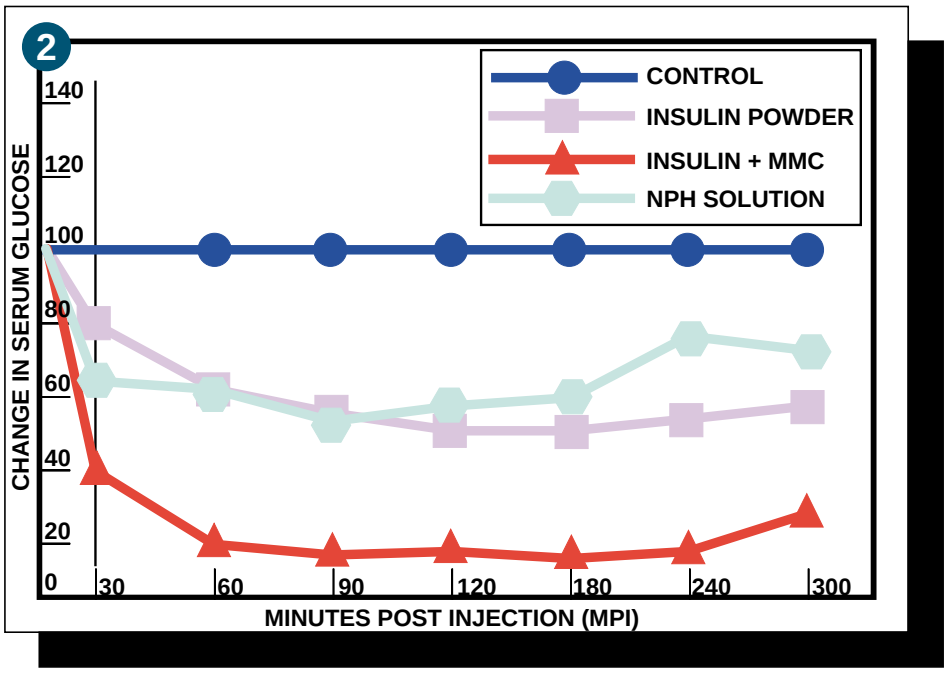


system by oral drip directed to the back of the mouth showed equal or better success as compared to injecting insulin.

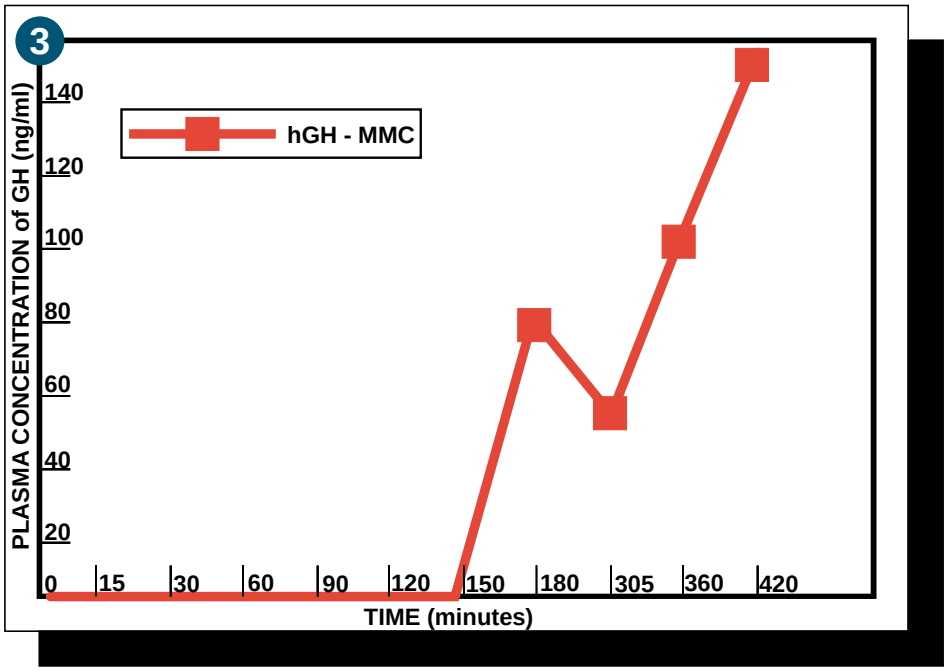
How the actual study was performed

In animal studies designed to investigate this delivery system's efficacy, male white New Zealand rabbits were chosen because their glucose physiology is similar to that of humans. Placed under anesthesia, the rabbits would enter a natural hyperglycemic or diabetic state. When insulin and/or hGH was administered to these diabetic rabbits, the rabbits' blood glucose levels responded in a manner similar to human glucose regulation.

2 In one such study, six (6) rabbits with artificially induced diabetes were administered a solution of insulin complexed with the MMC delivery system, one small drop was placed into the back of their throat and upper trachea (this is a crude method, yet rabbits won't sit still to have a liquid sprayed into their mouth, although a spray would allow better dispersion and surface area to absorb as in the case with human applications). Two control groups were used: 1) MMC alone, and 2) insulin alone. This was compared to MMC complexed to insulin. Glucose levels were monitored and graphed. The results clearly show the success of the MMC at delivering insulin to the rabbit transmucosally. In the control group (MMC by itself) the glucose levels were unresponsive. Insulin given orally had a substantial effect on blood glucose when it was attached to the MMC.

Researchers then set out to definitively show absorption of hGH using the MMC in humans. In one individual tested for actual Growth Hormone in the blood after only 180 minutes, his serum levels increased from typically low levels (in individuals past the age of 40) of 0.1 ng/ml to nearly 7 ng/ml. Research studies confirm these findings on several other individuals using placebo control, provided they measured serum hGH at least 4 to 6 hours (oral hGH MMC has a longer delayed release than injection) after introducing oral hGH, along with a 5 day frequent use build up prior to the day of testing.

After getting proof of dramatic increases of hGH in humans, opponents might say it may have



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been a coincidence. Therefore to prove that absorption of growth hormone was taking place, rabbits were given oral human growth hormone with MMC complex.

3 Rabbits do not naturally have hGH in their system, therefore the appearance of hGH in their serum was conclusive evidence that the hGH was being absorbed across the mucus membrane of the mouth. 2 1/2 hours of oral delivery, scientists confirmed that full absorption was taking place in the serum (experiments were repeated successfully six times at the University).

This provides conclusive evidence that with the patented MMC2000™ delivery system, we can absorb large molecules like hGH into our bodies, providing people with a viable alternative to injections.

One patient was on injectable growth hormone therapy for six months. This made it easy for him to assess the benefits he experienced while taking the spray GH+MMC formula. Prior to the experiment, he stopped taking hGH for one year and all other supplements for a period of three months.

He started checking his serum human growth hormone level to get a base line. His levels were typically as low as .5 down to .02 ng/ml. These deficient or low levels are typical for a person past the age of 45.

He then used the oral spray product spraying every morning, mid-day, early evening prior to dinner and again just before bed. They then repeated the challenge test measuring his human growth hormone levels every half-hour, for two hours. He also had his IGF-1 level rechecked.

Smith Klein lab found that after five days of using the spray GH+MMC formula, his human growth hormone levels increased rather dramatically by 900% up to 4 ng/ml. A level that the endocrinologist would say is validation of human growth hormone absorption.

When clients go off of the hGH product for an extended period of a few months they begin noticing the change and decline.

This challenge test was performed using 2000 ng/ml averaging 4000 nanograms per day of GH.

Another client, had her levels checked in the morning and was measured to be non-detectable (under .02). After spraying the oral hGH with MMC product for five days and then drawing the blood again in the morning, we found that her serum growth hormone increased 11000% to 11 ng/ml, the level of a youngster!

We'd only seen children and a few bodybuilders (taking injectable hGH) with those levels. She dramatically improved, as we measured the good results, when she used this oral product. We had tried other hGH precursors, releasors, simulators, secretagogues and homeopathic formulas which turned out to be a complete waste of money because none performed as potent or as effective as the advanced product.

Since she has been back on the youth restoring product, she has seen a reduction in cellulite that she was never able to get rid of with exercise. Her mental clarity has improved. Her muscles have become toned and firm her body fat dropped from 28% down to 20% and she has increased endurance in the gym and in life in general.

We made certain that Oral hGH was the only product she took after we established her baseline with the best possible diet and exercise program. Once she obtained the benefits of growth hormone, we then encouraged her to replace her other deficient biochemical levels declining due to age and a partial hysterectomy she had undergone two years before.

She also obtained improved results in IGF-1 using oral hGH with MMC. Both showed a 100% improvement in IGF-1 using oral hGH. Her baseline IGF-1 level started at 221 ng/ml and after 8 weeks of consistent use of the oral hGH with MMC, her IGF-1 levels jumped to 424 ng/ml. That is the level of a 20-year-old!

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It is important to be aware of the fact that IGF-1(insulin like growth factor) is not a reliable way by itself to monitor the efficacy of a GH supplement. The reason is that IGF-1 is influenced by so many different factors and hGH does much more than just increase IGF-1 levels.

Even with injections of growth hormone a rather large percentage of people show no increase in IGF-1. Other tests should include IGFB-3 (insulin Like Growth factor Binding Protein), measurement of serum growth hormone, growth hormone binding protein, 24- hour urine test on growth hormone along with the subjective reports of actual clinical improvements such as improved sleep, bone density, skin thickness, sexual function and overall health and vitality.

The Best Results

People get the best results when they are consistent about using the oral hGH at least three to four times a day (morning, midday and twice in the evening) for at least 3 to 6 months.

When clients go off of the hGH product for an extended period of a few months they begin noticing the change and decline. Many clients do not fully realize how beneficial the product was for them until they are without it.

Subsequent measurements of these patients IGF-1 levels and Growth hormone levels showed a significant decline in their levels when going off the oral hGH spray for extended lengths of time. Also when trying inferior products their levels declined, until going back on the best quality hGH university patented product.

Research scientists studying how to reverse aging report hGH and Growth Factors increase bone density an average of 4.8 % in two years. Doctors believe that restoring bone density is one of the best biomarkers to measure the reversal of aging and the effectiveness of biochemical hormone therapy. Building bone density can stop the progressive bone loss that starts in most people by the age of 30 and it will help reverse the risk of fractures in seniors.

Hundreds of patients have been monitored using oral hGH with MMC. Kevin Lewis MD has reported up to a 10% increase in bone density with his patients.

Another patient had his bone density measured five years ago at USC and had evidence of decline, however this year after nearly four years of using oral hGH spray his bone density was measured by Cenegenics in Las Vegas to be that of a person 10 to 15 years younger.

His strength, reaction time and mental function all showed big improvements while being on complete hormone replacement, with sound diet and an exercise plan. He has been following the same composition of diet with consistent exercise for over 25 years, however the biggest single change in the last five years was the addition of growth hormone.

Growth hormone also helps the aging of skin because it restores calcium and magnesium, which helps reduce dry skin and wrinkles, associated with aging.

DONNA JACOBS AGE 36
Diagnosed with severe Eczema

04/02/2001

05/07/2001

35 DAYS USING ORAL SPRAY WITH MMC

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Growth hormone also helps the aging of skin because it restores calcium and magnesium, which helps reduce dry skin and wrinkles, associated with aging. Scientists say we are able to demonstrate that oral hGH product with MMC facilitates more than just IGF-1, because signs of aging

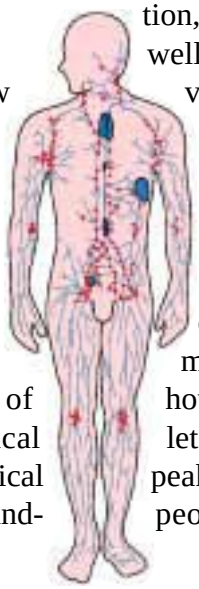
reverse such as improvements in bone density.

Some prominent researchers now believe we can even assist the body by replacing certain hormones along with growth hormone to build the immune system. It makes good sense that with a strong immune system and higher youthful levels of HGH, as well as DHEA, Melatonin, and testosterone your body has a better chance supporting the immune system.

Exciting research is now under way with these various hormones. As we restore or increase the levels of hGH to youthful levels we are supporting and assisting the immune system. Ron Rothenberg, MD, Clinical Professor at University of California San Diego Medical School has reviewed the medical literature and he reported his findings at the Las Vegas Anti Aging Conference, December 2000 and February 2001 in San Diego. He stated that giving hGH therapy can increase not only IGF-1, it also increases the IGFBP-3 which supports the immune system in relationship to cancer since it assists the IGF-1 from getting too high (21-29). The guilt by association of hGH to IGF-1 ignores the actual findings of patients given hGH therapy for years without increased rates of cancer (20).

Dr. Edmund Chein and Cass Terry MD, PhD, PharmD, researched over 800 people ranging in age from 40 to 74, who had their HGH levels restored to youthful levels. Even in these individuals at their advanced age, they discovered absolutely no evidence of cancer in all 800 people. Hundreds of studies continue every month with additional benefits of anti-aging therapy being documented.

Clinical pilot studies using the original formula of oral growth hormone with MMC complex, placebo controlled, demonstrated significant benefit in fat reduction, feeling of strength and well-being and was met with very strong patient satisfaction and compliance.



Your use of the product depends on your desired results. The frequency of sprays can be more often during each 24-hour period for senior athletes and those interested in peak performance. Almost all people simply prefer the spray to the injection method. The sprays mimic the tiny frequent bursts released by the body of a youthful person.

It was Roy Dittman, OMD who postulated in 1994 that using growth factors with a delivery system in a micro-dilution, more closely mimics the body's own secretion patterns. He further stated that one-day this methodology would be universally recognized as the most intelligent way to administer these potent metabolic proteins and hormones.

He describes this unique class of products as "Nano-Bioceuticals™" Nano describes a technology that works in parts-per billion, which is the actual concentration in which many of these proteins function. The term Bioceutical™ is a combination of the words "biological" and "pharmaceutical".

Dr. Dittman believes that the nutraceuticals and cosmeceuticals of the future will be predominantly biologically based substances that incorporate advanced pharmaceutical technologies.

Dr. James Shortt MD., Medical Director of Health Directions in West Columbia, South Carolina was involved with the original landmark study on the reverse aging benefits of growth hormone reported by Dr. Rudman in 1986.

Dr. Shortt was in charge of supervision of the clinical trials on many of the participants seen by Dr. Rudman. Dr. Shortt knew that people needed hGH to slow and

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MICRO DILUTION 2 MCG OF GH AND 2 MCG GROWTH FACTORS

• IT'S BELIEVED THAT THIS SPECIAL COMBINATION OF PEPTIDES WORK **40 OR 50 TIMES MORE POWERFULLY** TOGET
WITHOUT NEED FOR INJECTIONS • PHYSIOLOGICAL DOSE • WATER BASE PREPARATION - COMPATIBLE WITH HGH / QUADRUPLE HELIX • GENTLY S
OWN RELEASE AND PRODUCTION OF HGH • UNDER THE THRESHOLD OF WHAT THE BODY NATURALLY PRODUCES AT ANY ONE TIME • HGH IS ADMI

HGH INJECTABLE - 330 MCG

• EXCESSIVE-PHYSIOLOGICAL DOSE (CREATES DRUG DEPENDENCE - MAY SHUT DOWN BODY'S OWN GH PRODUCTION) • INJECTIONS ARE BEING AD
PRODUCES IN AN ENTIRE DAY • HGH HAS A 1/2 LIFE OF 7-21 MINUTES, THE BENEFITS OF THE INJECTION ARE SHORT LIVED. • AVERAGE DAILY DO

ORAL GH WITHOUT MMC

• SMALL AMOUNT OF HGH • NOT BIO-AVAILABLE
• NO DELIVERY SYSTEM • NON-PHYSIOLOGICAL DOSE
• ALCOHOL PREPARATIONS- DENATURE HGH / GHRF
• AVERAGE DAILY DOSE OF 0.5 MCG
(ALTHOUGH RENDERED INACTIVE & UNSTABLE)

HOMEOPATHIC

• NO HGH OR GHRF
• NON-PHYSIOLOGICAL DOSE
• AVERAGE DAILY DOSE: 0
• MINIMAL CHANGE IN IGF OR GH

reverse the signs of aging, however he stated that injections removed its wide scale use because of cost and the discomfort of the needle.

Dr. Shortt was skeptical about the possibility that hGH could be absorbed orally because he had tested several of the oral hGH products provided by various companies that had failed his early clinical trials. In 1999, he devised his own "in office study" of the early version of oral hGH with MMC.

The study results, completed May 6, on six patients, monitored and tested each person for six weeks using the oral spray, three times a day. The oral spray was held under the tongue for two minutes. Dr. Shortt used a highly respected reference lab to test the blood before and after use of the oral hGH+MMC.

Dr. Shortt confirmed that the oral spray demonstrated a significant increase in IGF-1 levels according to before and after blood test results. Furthermore, he said the patients experienced an enhanced feeling of well-being, slept better, and achieved a reduction in body fat.

Researcher, Cyril Bower Ph.D., from Tulane Medical School and Michael Thorner, MD, chief of endocrinology at the University of Virginia Medical Center have been studying the benefits of using growth factors such as GHRH and GHRP. They are finding that when combined with hGH, they have a synergistic effect. This is critical to anti-aging specialist, because typically growth hormone injections fatigue the receptor sites, leading to long term dependence on hGH. In addition, as we age, not only do our hGH levels decline, the concentration of these critical growth factors also decline. Research is continuing to validate the need for the correct combinations of growth factors and the optimal frequency of their use to enhance absorption at the receptor sites.

Dr. Ronald Klatz, President of the American Academy of Anti Aging Medicine, holds conferences for doctors from all over the world and has over 8,500 members who are studying and learning about the aging process and how it can be reversed.

Doctor Klatz reserves his opinion about oral growth hormone until more clinical studies are completed, which are now in progress. However, Doctor Klatz and other doctors agree that monitoring and replacing deficient natural hormones can reverse the incidence of premature aging and restore youthful vitality.

The use of hGH as well as enhancing other natural hormone levels including Testosterone, Pregnenolone, Thyroid, Progesterone, DHEA, Cortisol, Melatonin, and Estrogen management can benefit you when combined with water rich whole foods, exercise and supplementation as described in the book Grow Young and Slim.

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ER THAN IF USED SEPARATELY._• MMC DELIVERY SYSTEM • SHOWN TO EFFECTIVELY DELIVER HGH
PLEMENTS A SMALL AMOUNT OF TARGET SPECIFIC GROWTH FACTORS DESIGNED TO FACILITATE THE BODY'S
TERED IN 6 DISCRETE SPRAYS SPREAD THROUGHOUT THE DAY • AVERAGE DAILY DOSE OF 1-2 MCG

ISTERED 1X PER DAY, FLOODING THE BODY WITH HGH • ONE INJECTION DELIVERS THE SAME AMOUNT OF HGH AS THE BODY NATURALLY
OF 330 MCG

QUESTIONS & ANSWERS:

What is Growth Hormone and why should we look to supplement our Growth Hormone levels as we age?

Growth Hormone (a complex 191 amino acid molecule) is a special messenger secreted by the brain (pituitary), which communicates instructions to restore and revitalize all the cells of the body. Unfortunately, growth hormone declines at the rate of about 10% per year that accounts for many of the signs of aging such as sagging skin, wrinkles, pot-belly, increased body fat, loss of muscle tone and a decline in sexual function. However the good news is that we can now restore and replace the loss of growth hormone with a natural spray product.

Are there any other hormones involved in aging?

There are 8 critical hormones that decline as we grow older, accelerating aging. Imagine walking into your house and switching off five of the lights in the house and although there is enough light to see it is dim and becoming dark in the house. Aging is like becoming dark, and now you have a choice to switch back on the lights with Oral hGH overcome the symptoms of old age.

What can patients expect with the Grow Young and Slim plan?

Richard Wallace from Canada, reduced from 271 down to 239 over 30 pounds lost, and reduced 4 inches off his waist after only 4 months on oral spray combined with the Grow Young and Slim plan. He was concerned about sagging and hanging skin while going on a low fat diet, however the oral spray has completely prevented aging and sagging of the skin.

Sheila Wallace, has reduced over 18 pounds and her skin has become thicker, and "more supple." Many people notice their fingernails grow faster, recover from stress quicker, improved metabolism, burns fat, more intense orgasm, prolonged sexual function, increased strength, and reduced cellulite.

David Shepard and Jim Marr from England have increased strength and reduced body fat. Some say they feel invincible even past the age of 50 while using oral spray.

What have your patients experienced while taking hGH?

Another patient that was obese and had high blood pressure leading to a small stroke (TIA). We changed his diet and exercise habits and began using injectable hGH and after 6 months he felt and looked young again. However very few of my clients wanted to inject hGH because the high cost and the hassle of injections.

Due to the invasive nature and associated cost of injecting hGH, he chose to try the oral spray. He was able to reduce his body fat to under 14%, lose over 50 pounds of fat, and increase his lean muscle mass. Now he has more strength in the gym, performs in the bedroom sexually better than with Viagra, his skin looks young and supple and his bone density has been restored after 5 years of using oral hGH. We have since added a host of necessary hormones, herbs, supplements and exercise for him to stay young.

Who should be using a Growth Hormone product and why?

Any man or woman past the age of 25 can look in the mirror and notice the signs of aging. The oral spray is necessary as part of a

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Can this help advanced age athletes?

Kelly Nelson is a grandmother and a competitive body builder that started training after the age of 68. She became the Grand National Champion at the age of 73 and routinely participates in 50 to 100 mile bike rides. She started oral GH a few years ago with results she could feel.

Colleen Fisher - age 44, daughter *Kelly Nelson - age 73, mother*

good diet and exercise to reverse the premature signs of aging. Why not be proactive instead of waiting until you're so old that you allowed your body to age beyond repair. It's a product you can start at age 25 or at age 70 or 80. The sooner you start the better, and after only 6 months you can experience rather dramatic results.

Why is this product changing so many lives?

The product contains hGH, and growth factors and it is unique because it actually helps your aging body to make and release more of its own hGH. This will help to restore structure and function to all the cells of the body.

Hormones and herbs are the most powerful combination of substances to slow and reverse the aging process. Movie stars, actors (Nick Nolte, Goldie Hawn) and CEO's of large corporations currently take hGH and other natural hormones to stay young and fit and maintain an advantage over their counterparts.

How well researched are the ingredients in Oral hGH?

University and medical research has created over 20,000 published studies about hGH, GHRH, GHRP. It is one of the hottest areas of research because function becomes critical, as we age and growth factors are truly the sites of youth restoring activity.

Have these studies ever been published?

The published clinical work are reviewed in the best selling book Grow Young and Slim, by Nick Delgado, which is available at BookWorld.com or Amazon.com

TECHNOLOGY IS CRITICAL

The ingredients of growth hormone and releasing peptides will be worthless unless you have a special delivery system. The patented delivery was developed at the University of Illinois. The patents are on a special protein carrier molecule called MMC that envelopes the large protein molecules and sits between the cell junction and dissolves at the receptor site and like a key to open a door it lets in the revitalizing ingredients inside the cells.

Why have so many oral GH products failed to get results?

HGH supplements have been tested and none of them even got past the first three parameters of testing at the University of Illinois. Some companies mislead the public by adding growth hormone (listing hGH on the label) and had a clinical laboratory immediately test it to get a temporary detectable reading of growth hormone. Within three weeks these products had no growth hormone left because the hGH molecule is very unstable and will degenerate (if exposed to elements without protection). hGH must be stabilized in the laboratory before it is put in a product. To further worsen matters some of these companies actually used pig or sheep growth hormone to save money, ignoring the fact that hGH from other animals doesn't work according to Professor J. S. Christiansen.

What can be done to determine if you are getting a real hGH- product that works?

Be sure they use only the actual recombinant human growth hormone as used in the clinical stud-

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ies. Verification testing is being set up at an independent laboratory soon to post on the Internet and expose the many scam products on the market. The products associated with university research and patents listing MMC on their labels past all 12 parameters of testing including standards of absorption, stability and validation. It is not sufficient for companies to show increases in IGF-1, since this is not the gold standard for hGH response. Subjective and objective criteria will soon be published in peer review journals for all other products to measure up to the highest acceptable standards.

How are homeopathic products distinct from physiologic dosages of oral hGH , and secondly, do they work?

Homeopathic products only cost a couple dollars to make because the active ingredients are diluted over one million times to the point where there is almost nothing left and they sell for around $30 to $90 dollars. There isn't enough hGH to provide the necessary stimulus so you won't get any noticeable results to speak of. The homeopathic products we have tested are almost non- detectable when compared to the benefits of the correct microdilutions combined with MMC technology.

Is it safe or of any benefit to take amino acid products in mega dosages?

The studies reporting that amino acids secretagogues improved hGH levels by only 10% were done with IV infusion and when people have tried to ingest the amounts needed orally they became nauseated and had diarrhea. The risk of liver or kidney damage associated with ingesting excess amino acids and protein comes from the body's attempt to detoxify all the acids (ammonia, urea acid). Furthermore, using amino acids to do the job of actual hGH is like buying a box of car parts and expecting it to work like an assembled car. It may be the same parts but it has to be in a special and unique formula to work effectively.

My doctor says injectable growth hormone is better. Is this true?

I used to believe that using injectable hGH was best, however I stopped using the injectable form over 6 years ago because I became convinced of the benefits of hGH with MMC. An injection of hGH of .25 I.U. is equal to 82,500 ng (tolerated with the least side effects) with many people using 500,000 ng a day!

Some athletes have abused the use of hGH (using over 10 to 20 times the typical dosage) and developed enlarged heart, autoimmune disorder, carpal tunnel syndrome and signs of acromegaly-oversized jaw and forehead. More is not always better in the case with hormones. We believe the ideal physiological dosage is somewhere between 2,000 and 50,000 ng per day since this is closer to what a youthful body naturally produces and we can avoid most all side effects at these low dosages and maintain better levels for a life time.

Why do some oral hGH products contain TA-5 and do they work?

There are some smaller peptides that other companies use in there product such as TA-5 that have been found to absorb and work for a few weeks, however those smaller peptides ironically tend to deplete the body of its own growth hormone. The most exciting new products contain the medium and large chains of growth factors that require a delivery system just as in the case of hGH. These are a more potent and effective version of growth factors while helping your body restore growth hormone without depleting it.

What dietary factors can enhance my hGH production?

We tell our clients to get the best results spray it in your mouth frequently and consistently everyday and night. There are other things the help increase growth hormone and improve the benefits while using oral hGH. Be sure to drink more water during the day.

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Eat more cruciferous vegetables (Napa cabbage, bok Choy, broccoli, brussel sprouts) every day to reduce binding proteins which helps release growth hormone from its carrier proteins like IGFBP-3. A diet centered on low calorie vegetables and small amounts of fruit also reduces free fatty acids in the blood and visceral fat (internal fat around the organs) where numerous hGH receptor sites reside. A decrease in calories in your diet and increase in daily exercise clears free fatty acids and insulin from the bloodstream. This will increase IGFBP-3 that attaches to and decreases IGF-1. This drop in IGF-1 signals the pituitary gland to produce more hGH and burn more visceral fat. As you have less visceral fat, there will be less hGH receptors in unnecessary places (in the fat storage areas), allowing the hGH to go to other organs (the brain and skin have many hGH receptor sites) where it will do more good.

What else can I do to restore hGH as I grow old?

Intense emotions such as falling in love and being in a loving relationship increases hGH. Getting enough sleep starting at 10 pm until 4 am the key hormones are produced and restored during these peak hours. And if you take a short nap during the day it will increase hGH production. Intense exercise has been shown to increase hGH levels.

How long dose it take you to notice an increase in lean muscle mass?

One patient noticed an increase in strength in the gym where he could use the Hammer strength decline bench press and lift 250 lbs., however after only 8 weeks my lift increased to over 400 pounds and a leg press of over 1,000 pounds. After just six months his lean body mass increased by 8 pounds after being measured by submersion and body composition tests.

Do you have any other examples of improvements in competitive athletes?

Hence Singleton, a Nationally Qualified NPC Bodybuilder has been using the product for over two years and continues to notice changes such as increased lean muscle mass and greater energy while reducing over 50 pounds of body fat.

Is this oral hGH safe for senior citizens?

Mary is a great-grandmother and has lived on her own preparing her own healthy food and doing some daily exercises for most of her life. However, at the age of 89 she fell and hurt herself. At age 91 she started having difficulties walking and getting up from a chair.

She began using the oral hGH with rejuvenating effects. The first thing she experienced was improvement in her energy and mental attitude improved. Her personal trainer notices a big difference in her strength, alertness and skin. Mary was also found to be low in several other hormones and she now takes various natural hormone creams and herbs to maintain quality of life.

Can you use Growth Hormone for a prolonged period of time and what happens if I stop?

Studies have been monitoring people using hGH for over 20 years without side effects. Some have been using the oral hGH product oral spray for several years and when they have stopped to try other products their levels of growth hormone and IGF-1 have dropped back to aged levels of an older person year old and they started to feel like they were aging again. You can miss taking the product for a few weeks every three months, however people should take this product to stay young and fit.

Can I combine other supplements with oral hGH?

Growth Factors can be used in conjunction with or in place of injections provided you correct and maintain a youthful balance of each of the other critical hormones including pregnenolone, DHEA, testosterone, melatonin, estrogen, progesterone and thyroid. By balancing all of the hormones according to Dr Thierry Hertoghe we can reduce our cost of using growth hormone from over $15,000 per year down to less than $1,500 per year.

What kind of results are being reported using oral hGH with combinations of other hormones and diet or exercise?

Dr. John Prentice, Kevin Lewis MD, Nick Delgado PhD, and John Riesenman MD have observed some of the following benefits in themselves and in their patients:

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• Most people report deeper sleep and more vivid dreams and increased energy.

• Optimistic attitude, increase muscle tone, strength, skin tone, nail growth, better digestion, reduced fat, enhanced sexual function.

• Reduced pain, recovery from muscle soreness, faster healing, flexibility and increased muscle mass, faster hair growth, productivity, improved mental processes, and increased libido.

• Reductions in inches, thickening of skin, greater elasticity, less wrinkles, improved fat reduction.

• Improved resistance to colds, flu, less pain and soreness, improved exercise tolerance, better emotional stability, improved body contour, less cellulite.

How do I know if I'm deficient in growth hormone?

You can look at a person and see the signs of premature aging, increased body fat, wrinkles, and gray, thinning hair. We can exam bone density, strength, reaction time, mental and cognitive function. Full-scale studies are now in progress to measure the significant difference when using Oral hGH as compared to other products against placebo.

What tests should I have to determine if hGH therapy is working for me?

The gold standard up until recent has been to do the Insulin Tolerance Test (ITT) blood test and measure the spike of Growth hormone that ensues during the test. This test is done fasting and then you a given a large amount of insulin and your blood is drawn several times during the next two to four hours in a hospital setting. This is impractical and uncomfortable for most people.

Another test for hGH requires the blood to be drawn during a 24-hour period to get all the peaks and valleys put out as growth hormone into the bloodstream. This also is too cumbersome unless in a hospital setting and impractical for most people.

Most doctors rely on the blood test for IGF-1 and IGFBP-3. However, in patients who have had a surgery to remove the pituitary gland due to a tumor, when they were tested for IGF-1 and IGFBP-3 in the blood there was almost no sign of the obvious deficiency detected using just the IGF-1 or IGFBP-3 tests. Even though these people were totally unable to produce any growth hormone unless they were given injection as compared to placebo! These tests are unreliable for people with thyroid disorders, diabetes, liver disease or malnutrition. Over 30% of patients given injectable hGH show no difference or they may decline in IGF-1 levels. The IGF-1 test can only be considered as a screening test for adults with hGH deficiency at best.

The 24-hour urine test for hGH may be the best solution. Although a question still remains if the receptor sites and binding proteins for hGH interfere with the total release into blood or urine. After nearly 20 years of research with growth hormone measured in the urine after a 24-hour collection, it has been considered the best test to do. A single catch for urine is inaccurate, it must be collected in a 4-liter container during

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the 24-hour period and then a small sample is transferred the next day to the lab for immediate testing (39-46).

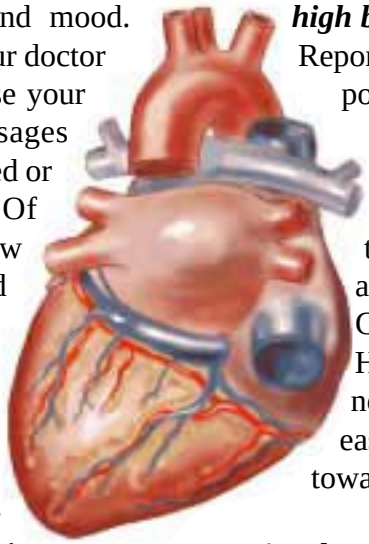
The use of oral growth hormone takes longer to show up in the system then when patients are using injectable hGH. So after you have collected a baseline test, it would be best to wait at least two to six months before a retest. Also, hGH production and output varies by at least 30% from day to day (difference is sleep, exercise diet etc), so you need to collect 2 consecutive days, wait 5 days and collect two more consecutive days. Take this average and recheck with the same procedure three months later after using the product. At this time it is best to test various parameters in the urine (24-hr urine hGH), blood (ITT, IGF-1, IGF-2, IGFBP-3, hGH) and saliva (IGF-1) to monitor your progress and be sure to monitor your physical improvements. The web site www.GrowYoungAndSlim.com lists test kits, fees and doctors that can assist you to be properly tested for hGH and any of the key hormones of youth.

Will this react negatively with other medications I am taking?

Oral hGH is not a drug it is simply a natural substance found to be deficient in most people past the age of 25. It is safe without serious contraindications, with the exception of some people having temporary headaches or a rash as they detoxify. You may find that when you combine the plan of diet and exercise, you can introduce the book Grow Young and Slim, by Nick Delgado PhD, CHT, and share it with your doctor so he can monitor any changes in medication.

I have a diabetic blood sugar problem can I take this product?

This product has been proven to enhance blood sugar utilization and thus reduce obesity, improve energy and mood. Be sure to have your doctor monitor you in case your medications dosages need to be decreased or discontinued. Of course follow a low fat, vegetable and water rich diet along with an exercise program.



What about cancer risk and the use of hGH, can it help?

Americans have an increasing risk for degenerative disease and evidence shows that those people deficient in biochemical hormones are at the greatest risk. Doctor Cass Terry MD, PhD, Pharm.D, Professor of Neurology at the Medical College of Wisconsin believes that growth hormone will build the immune system. No single product can prevent cancer, however, most respected researchers are working on enhancing multiply ways to build up the body. Over 20 years of research has demonstrated the safety of hGH therapy. AIDS patient are being given hGH to build the immune system. There are certain un-metabolized estrogens (Estradiol, estrone, 16-alpha hydroxyestrone), which are harmful substances that can be neutralized with certain herbs and a change in diet to reduce the risk of cancer. Check with a practitioner that is knowledgeable about the best types of therapies and whether this is right for you regarding any medical condition.

Is hGH safe for heart disease or high blood pressure?

Reports in the literature support the use of growth hormone to reduce cholesterol and blood pressure when used in conjunction with a healthy diet and exercise plan such as Grow Young and Slim. Here again, this product is not intended to treat a disease; it can only assist you toward better health.

I've been taking hGH everyday for three weeks, but I'm not experiencing any results. Why?

It took years for you to age and this product is not an herbal stimulant where you feel the false caffeine like effects so common in other products. It is real growth hormone and growth hormone releasing factors that take time to restore optimal function. Even doctors using injectable hGH educate their patients to expect results after at least 3 to 6 months of use with benefits continuing to improve even two or three years after starting on the product.

Do growth factors from deer antler and colostrums work as well as hGH?

Studies suggest some benefit for recovery after workouts with deer antler and improved immune system with colostrum, however

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there has been no evidence of changes in hGH, testosterone or other important biomarkers of age. Deer antler (New Zealand is safest source) has some large peptides that require the correct delivery system to get full benefit. It would be important to take hGH to get the full benefits and use deer antler or colostrums as an adjunct and not in place of pure bio-synthesized growth factors.

Where do bio-synthesized growth factors come from?

The best growth factors are derived naturally like hGH is from a bio blue print and cultured to ensure maximum purity. They use as the blue print (free of protein contaminates) the thymus, pituitary, hypothalamic and liver glands. They are the size range from small 500 to 1000 mw, medium 1000 to 5000 mw and large 5000 and up in mw. At one time we could only get the benefits of these growth factors by injection, however the same technology to delivery hGH is used to delivery these special growth factors.

Is this human growth hormone and how is it manufactured?

This is naturally derived human growth hormone in microdilution free of any contaminates. Human growth hormone is no longer obtained from the brain of cadavers. It is specially synthesized to be bio-identical to your bodies own hGH.

The product is manufactured in an ISO 9001 clean room according to GMP-Good Manufacturing Practices.

Is it FDA approved?

In 1991 the Food and Drug Act said that products like DHEA, melatonin and growth hormone were a drug and required prescription. The public was so upset that over 3 million letters were sent to Congress demanding a change in regulation.

HGH was consumed as an oral product (not to be injected) in small, safe dosages (microdilution) prior to the signing of DSHEA. In 1992 the first oral hGH was used making this product legal and grandfathered in, under the DSHEA act signed by congress and the President of the USA.

The FDA does not approve of or disapprove of a nutritional supplement. FDA has ruling over safety and this product has been used in its various forms without any reports of side effects besides an occasional headache or skin rash that clears up with a temporary reduction in sprays as one continues use.

I've tried other growth hormone products that don't work, which one does?

There are over 150 imitations of our product with claims based only on the use of injection of hGH. None of these other products have proven to help to the level necessary to get true reversal of aging. This product is clinically tested, patented, and contains a unique University approved delivery system.

Why is this product priced at such an affordable rate compared to other similar products?

The technology includes a royalty that must be paid for numerous research scientists involved at the university in the development of this product. This is the ultimate product at an affordable price.

For more information ask the doctor or health professional who referred you for this revolutionary product.

The published clinical works are reviewed in the best selling book Grow Young and Slim, by Nick Delgado, which is available at BookWorld.com or Amazon.com

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A word from Kevin Lewis, MD

I practice Functional and Anti Aging Medicine at the Swan Clinic of Natural Healing in Tucson, Arizona. Over the last two years I have been using oral human growth hormone (hGH) and Growth Hormone Releasing Factor Complex (GHRFC) with MMC in my practice. I estimate 90% of my patients report multiple benefits from using the oral spray.

The benefits that have been reported most common are an improvement in skin condition such as

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wrinkles, eczema, age spots, and acne, faster growing hair and nails, loss of inches, increased exercise tolerance and increased libido. Other reported benefits include weight loss, growth of new hair in about one-third of men with male pattern baldness, reduction in gray hair including beards and mustaches, greater mental and physical stamina, increase in memory and mood, more energy, faster recovery from injuries, fewer sick days and even an improved sense of smell.

I have seen increase in bone density in a high percentage of women over the age of 50 after as little as three months of the oral spray use. Many women are seeing 5-10% improvement in bone density after one year. Most of these women develop higher confidence in their ability to perform physical activities and they report feeling more independent.

One patient, a 46-year-old male, is a Respiratory Therapist and he reports his blood oxygen measurements have improved dramatically. After he quit smoking several years ago he routinely measured his oxygen saturation. After 2 years of not smoking he was never above 92% while breathing room air or 95% when breathing supplemental oxygen. After he began using the spray, he reports his oxygen saturation is a consistent 98-99% on room air and goes up to 100% when breathing supplemental oxygen.

My patients have not had any significant side effects from use of the product. There is the rare report of transient headache, rash or constipation in about 5% of the patients. I have never seen a cross reaction with other medicine in hGH+MMC users, but have had to lower thyroid and insulin doses in some patients using the product.

I have not seen any significant changes in blood pressure or lipid levels, although a few patients have had minor lowering of blood pressure and cholesterol. I do not use hGH+MMC spray in those who have a history of cancer unless they are at least 10 years since completion of their cancer therapy with no evidence of recurrence. I have had only one patient diagnosed with cancer while taking hormone replacement therapy and he had been on hormone therapy for less than two months at the time of his diagnosis.

I find the oral spray very effective in improving the quality of my patients' lives. The high rate of success and extremely low rate of side effects shows a high benefit to risk ratio of hormone replacement therapy with hGH+MMC oral spray.

Sincerely,
Kevin S. Lewis, MD

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SEE IF YOU ARE GROWTH HORMONE DEFICIENT

Answer all the questions below, by checking the box that closely reflects how you feel

Never/None	Sometimes/Slight	Often/Moderate	Always/Severe
❑ 0	❑ 1	❑ 2	❑ 3

Thinning hair
❑ 0 ❑ 1 ❑ 2 ❑ 3

Thin skin
❑ 0 ❑ 1 ❑ 2 ❑ 3

Deep wrinkled face
❑ 0 ❑ 1 ❑ 2 ❑ 3

Thin Lips
❑ 0 ❑ 1 ❑ 2 ❑ 3

Sagging cheeks
❑ 0 ❑ 1 ❑ 2 ❑ 3

Loose skin under chin (double chin)
❑ 0 ❑ 1 ❑ 2 ❑ 3

Bags under eyes
❑ 0 ❑ 1 ❑ 2 ❑ 3

Ridges in your nails
❑ 0 ❑ 1 ❑ 2 ❑ 3

Receding gums
❑ 0 ❑ 1 ❑ 2 ❑ 3

Sagging skin under arm
❑ 0 ❑ 1 ❑ 2 ❑ 3

Flabby drooping belly
❑ 0 ❑ 1 ❑ 2 ❑ 3

Sagging body
❑ 0 ❑ 1 ❑ 2 ❑ 3

Increased body fat
❑ 0 ❑ 1 ❑ 2 ❑ 3

Wrinkled hands
❑ 0 ❑ 1 ❑ 2 ❑ 3

Sagging buttocks
❑ 0 ❑ 1 ❑ 2 ❑ 3

Cellulite
❑ 0 ❑ 1 ❑ 2 ❑ 3

Flabby inside thighs
❑ 0 ❑ 1 ❑ 2 ❑ 3

Fat cushions above the knee
❑ 0 ❑ 1 ❑ 2 ❑ 3

Frequent infections
❑ 0 ❑ 1 ❑ 2 ❑ 3

Frequent colds or flu
❑ 0 ❑ 1 ❑ 2 ❑ 3

Decreased muscle strength
❑ 0 ❑ 1 ❑ 2 ❑ 3

Decreased muscle mass
❑ 0 ❑ 1 ❑ 2 ❑ 3

Tire easily
❑ 0 ❑ 1 ❑ 2 ❑ 3

Constantly tired
❑ 0 ❑ 1 ❑ 2 ❑ 3

Difficulty to recover after staying up late
❑ 0 ❑ 1 ❑ 2 ❑ 3

Difficulty staying up past midnight
❑ 0 ❑ 1 ❑ 2 ❑ 3

Need for a lot of sleep
❑ 0 ❑ 1 ❑ 2 ❑ 3

Low resistance to stress
❑ 0 ❑ 1 ❑ 2 ❑ 3

Feel unable to cope with stress
❑ 0 ❑ 1 ❑ 2 ❑ 3

Meek, unassertive
❑ 0 ❑ 1 ❑ 2 ❑ 3

Too emotional
❑ 0 ❑ 1 ❑ 2 ❑ 3

Loss of self control
❑ 0 ❑ 1 ❑ 2 ❑ 3

Mood swings
❑ 0 ❑ 1 ❑ 2 ❑ 3

Low self esteem
❑ 0 ❑ 1 ❑ 2 ❑ 3

Anxious
❑ 0 ❑ 1 ❑ 2 ❑ 3

Depression
❑ 0 ❑ 1 ❑ 2 ❑ 3

Intolerance to cold
❑ 0 ❑ 1 ❑ 2 ❑ 3

Feel isolated, prefer to stay at home
❑ 0 ❑ 1 ❑ 2 ❑ 3

Sharp voice
❑ 0 ❑ 1 ❑ 2 ❑ 3

Losing temper, screaming easily
❑ 0 ❑ 1 ❑ 2 ❑ 3

Decrease in sex drive and/or libido
❑ 0 ❑ 1 ❑ 2 ❑ 3

Weaker erections in men or decrease in vaginal lubrication for women
❑ 0 ❑ 1 ❑ 2 ❑ 3

Score
84 - 126 = Severe GH deficient
42 - 83 = Moderate GH deficient
12 - 41 = Mildly GH deficient
0 - 11 = To young to take this test or already on GH therapy