Fred Pescatore, MD

logical health ALTERNATIVES

February 2013 Vol. 3, Issue 2

From fringe to familiar: Two critical hormone therapies you can't feel good without

In November, it was all about testosterone. In January, it was estrogen. This month, I'd like to spend some time talking about two forms of HRT that can help *everyone*—man *or* woman—look and feel a whole lot younger.

One of these is about as commonplace as they come. The other? Well…not so much.

Since I love a good controversy, let's start with that one.

Human growth hullabaloo

In case you're not familiar with the human growth hormone (HGH) debate, let me sum it up for you. HGH originates in your pituitary gland, and is responsible for—as the name suggests—growth.

Of course, that includes repair and maintenance of your organs and tissues. In short, HGH is the antidote to the physical wear and tear that comes from living.

Like so many other hormones, your body's production of HGH decreases with every year past adolescence. And as such, most of the telltale signs of aging—wrinkly skin, increased body fat, muscle wasting—trace right back to this steep decline.

So really, it was no surprise when HGH replacement took the anti-aging industry by storm.

Today, a growing number of people have decided not to take old age lying down. And HGH injections—this hormone can't stand up to the stomach's harsh environment in pill form—are now available to anyone with the resources to get them.

But growth hormone therapy isn't for the faint of heart. There's some concern that replacing your body's lost supplies of HGH comes at a high cost. And I'm not just talking financial.

Double-edged sword or age-defying dynamo?

As a hormone responsible for growth in all its forms, mainstream critics argue that HGH is a double-edged sword—and that it contributes to malignant growth, too. Namely, cancer development.

Personally, though, I'm not convinced. The research just isn't conclusive.

(continued on next page...)

Fact is, we don't know whether HGH contributes to cancer. And it's probably something we'll *never* know. There's simply no way to design a reliable study on this type of thing. And any details we have about the dangers of HGH replacement are almost entirely anecdotal.

Not that anecdotal evidence isn't relevant… it's just not conclusive. And skeptics have used it to overshadow the facts. So ultimately, you need to know both sides of the story. So you can weigh the potential risks and benefits for yourself…then make your own informed choice based on your comfort level.

So here are a few things we do know:

- HGH will help your body heal from any injuries.
- HGH will increase your lean muscle mass.
- HGH will help you sleep better.

Published research illustrates the truth behind these benefits. And I can vouch for them…because I recently started to use HGH myself.

Within just a few months, my body fat percentage went from 17.5 to 14.5. I also sleep like a baby now. And I must admit, even my side burns have gotten noticeably less gray.

Not too shabby, as anti-aging therapies go.

That said, due to the controversy, if you have had cancer or any other sort of growths (like a goiter or cysts) I would forgo HGH. But if not, and want to give it serious consideration, let's move on to the details…

The pursuit of youth doesn't come cheap

If HGH replacement is something that you're comfortable pursuing, you should know that it is expensive. The monthly cost ranges anywhere from $800 to $2,000 per month depending on the dose and on the supplier.

Like most forms of hormone replacement, HGH therapy is ongoing by necessity. And of course, for most, it's not covered by insurance. So yes, it's a considerable cost. But in my opinion, it's also really worth it if you can afford it.

There's no ideal age to start. But men usually like to begin in their mid-40s and women after menopause.

Once you've decided to take the plunge, you'll need to get some blood tests. Specifically, your doctor needs to look at your HGH levels, as well as another indicator of GH deficiency, insulin-like growth factor 1 (IGF-1). Ranges will vary depending on the patient.

As with any hormone replacement protocol, I usually err on the side of safety. That means using the lowest dose possible and waiting to see how the patient responds.

In the case of HGH, I have my patients inject only three or four times per week. (Some practitioners will recommend daily injections. I think that's a bit aggressive.)

While you're taking HGH, your growth hormone levels need to be checked regularly. This ensures that you're not taking too much, and minimizes any potential risks of the therapy.

I check levels monthly at the beginning and then every three months once the dose is stabilized and the patient is feeling better. If it's an athlete using it to just treat an injury, I won't test again until the injury has healed.

Injections can cause some side effects like joint

Fred Pescatore, M.D. is a traditionally trained physician practicing nutritional medicine in Manhattan and the Hamptons. He is the President of the International and American Association of Clinical Nutritionists and is internationally recognized as a health, nutrition, and weight loss expert. He is the author of six books, including the New York Times best-seller, *The Hamptons Diet* and the No. 1 best-selling children's health book, *Feed Your Kids Well*. Major network television shows like The View, Rachael Ray, and Today have sought Dr. Pescatore out for his expert health advice. And his practice has become a haven for the rich and famous, drawing a roster of clientele that reads like a "Who's Who" of Hollywood's elite.

Dr. Fred Pescatore's *Logical Health Alternatives* is published monthly by OmniVista Health Media, L.L.C., 702 Cathedral St., Baltimore, MD 21201 for $74 per year ($6.16 an issue).

POSTMASTER: Send address changes to Logical Health Alternatives, 702 Cathedral St., Baltimore, MD 21201.

Author: Fred Pescatore, M.D.
President: Karen Reddel
Executive Editor: Amanda Angelini

pain or fluid retention, which would indicate you are taking too much. A skilled practitioner will know what to watch out for and work with you closely to make adjustments.

Now that I've covered the growth hormone controversy, let's jump to the other side of the spectrum to a form of HRT that's anything but fringe. In fact, it's actually quite common.

Unfortunately, though, it may not be common enough.

The other essential "T"

In case you haven't guessed, I'm talking about thyroid hormone replacement.

When investigating for imbalances in this department, most conventional doctors will usually just check your thyroid stimulating hormone (TSH) level. If it's in the normal range—usually 5 or lower—they'll tell you there's nothing wrong and call it a day.

That's just bad medicine, in my opinion. And not just because this so-called "normal" range is *far* too wide to adequately pinpoint thyroid issues. (In my practice, I treat any patient with a TSH over 2.)

So much can go wrong with your thyroid. And these problems come with serious consequences to your health, because this gland regulates most of your body's main functions.

It plays a role in weight management, hair loss, metabolic rate, memory, bowel regularity, and skin and hair texture. And that's just for starters.

Basically, if your body was a car, your thyroid would be the engine. If it isn't running properly, everything will eventually break down. So you really need to know what your thyroid is doing—both before *and* during hormone therapy.

That involves not one, but five different blood tests: TSH, free T3, free T4, reverse T3, and thyroid auto-antibodies.

For best results, buy your thyroid farm-raised

Free T3 and free T4 tests will tell you how much available thyroid hormone is circulating in your body. A reverse T3 test, meanwhile, will tell you if your body is storing T3 or if it is using it properly.

(continued on next page...)

News Brief

The bone-building nutrient combo that cuts body fat, too

It's a well known fact that calcium and vitamin D are a winning combination in the quest for strong bones. But new research continues to shed light on a lesser known benefit of these two mainstay nutrients.

And if you've been stuck in your own personal battle of the bulge, you might want to pay attention.

As part of a recent clinical trial, researchers randomly assigned 53 subjects to stick to a reduced calorie diet for twelve weeks. Half of these subjects also supplemented with 600 mg of calcium and 125 IU of vitamin D3 daily.

The researchers evaluated each group, comparing changes in body weight and BMI, waist circumference, body composition, blood pressure, and lipid profile.

At the end of the trial, there was no remarkable difference in weight loss between either groups. But there was a significant difference in fat loss among the subjects who supplemented with both calcium and D3.

What's more, the supplements had a particularly powerful effect against visceral fat. (That's the dangerous belly fat that builds up around your internal organs and contributes to inflammation.)

This outcome is especially impressive when you consider how low the dosages of these nutrients were. I generally recommend supplementing with at least 500 mg of calcium per day—just 100 mg less than the dosage used here.

But I also recommend taking at least 2,000 IU of vitamin D3 every day. That's five times the grossly insufficient RDA of 400 IU. And the dosage used in this study is a mere third of that.

Sometimes I wonder if there's anything that vitamin D can't do.

So if you haven't already, pick up a D3 supplement and pair it with calcium today. Because lower body fat may be the smallest of the benefits these nutrients have to offer.

Citations are available online, at www.logicalhealthalternatives.com

This is a big issue for many people, because T3 is the active form of thyroid hormone in your body. T3 begins in the inert form of T4, however, which your body must then convert. And as we age, we lose our ability to convert T4 to T3.

Yet, what kind of thyroid replacement therapy do almost all conventional doctors recommend? Synthroid—a synthetic form of T4.

Needless to say, I do things differently. I use Nature-Thyroid, Armour Thyroid, or a compounded version of thyroid hormone almost exclusively. These contain a bioidentical mixture of T3 and T4.

Yes, these products are derived from the thyroid of animals—pigs, most commonly. So if you're squeamish about that sort of thing, then this type of hormone therapy isn't for you.

But it's the most natural, balanced, and effective form of thyroid replacement out there. (Remember, hormones are all about balance. If one is off, it can take the others with it—and that will have a serious impact on how you feel.)

The killer condition most doctors don't check for

As for thyroid auto-antibodies, these are super important to have checked, since their presence will tell you whether you have a condition called Hashimoto's thyroiditis.

This is when your body attacks and destroys its own thyroid. It's an extremely common condition—and it's also one of the most under-diagnosed.

In fact, most physicians never even look for it. And that's simply shameful, because it's the leading cause of underactive thyroid (hypothyroidism).

Untreated hypothyroidism can lead to heart disease, high cholesterol, and an increase in all-cause mortality. Many studies have shown just how deadly this condition is. So you'd think that your doctor would be a little more diligent with their diagnoses.

Unfortunately, that's not the world we live in—and the only way to guarantee positive change is to take charge of your own health.

So, talk to your doctor about hormone replacement—and open up a dialogue about HGH and thyroid. Get all of those tests done and fix what needs fixing. And while you're at it, make sure you eat right and exercise, every single day.

Do all of these things and you *will* see a difference. Obviously, I can't promise you'll live forever. But you'll look a decade younger…and you'll feel better than you did at 30.

How's that for aging gracefully?

How much room should you make for legumes?

The short answer: It depends.

Which means the long answer is a little more complicated. Like all foods, beans have a bright side…and a dark side. And working them into your diet is largely a matter of balance.

First, the good news. Beans are rich in fiber and protein. They're packed with nutrients like B vitamins, iron, potassium, and magnesium. They're low on the glycemic index scale. And they're also very cheap.

But like I said, there's a downside. And it comes in the form of a relatively high carbohydrate count.

Luckily, legumes deliver complex carbohydrates. That means they take more time to digest, keep you full longer, and are easier on your blood sugar.

But at the end of the day, even "good" carbohydrates are a form of sugar. And that means you should eat them with caution. Especially if you've got a few pounds to shed.

Simply put, beans are a perfectly healthy food…in moderation.

If you want to lose weight, I advise eating no more than ¾ of a cup of legumes, three days per week.

People who are maintaining their weight can gradually work their way up to as much as 1¼ cups of legumes every day.

That's a fairly hefty allowance. But I'm not saying that you should eat that many legumes on a daily basis. I'm simply saying that you can.

Again, beans are a great source of nutrients and fiber. But my New Hamptons Health Miracle focuses on lean protein. And animal products—whether from meat, chicken, or fish or from cheese and eggs—are always the best sources.

Of course, it's not my job to convert vegetarians or vegans. I think that everyone should be able to enjoy the health benefits of a high protein diet. And this includes herbivores.

The rules are just a little bit different.

For strict vegetarians, I recommend up to 16 ounces of adzuki, mung beans, soybeans, tofu, chickpeas, and natto. (That's around two cups.)

For all the other legumes (which tend to have more carbs), I allow up to 4 ounces each day (around ¼ cup).

But bear in mind that these rules don't apply to meat eaters. Honestly, I think of beans as the lesser of two evils. (That's not to suggest that beans are evil. Of course, they're not. But like all carbohydrates, they can be fattening.)

No, beans aren't equal to chicken, fish, or steak in the protein stakes. But I think you'll agree that the average vegetarian diet in this country is simply abysmal.

Too often, vegetarians live on bread and pasta—with a few veggies and a little soy (which is actually lower in protein than a lot of other beans) here and there.

Replacing those empty carbs with nutrient- and fiber-rich legumes is one surefire way for any non-meat-eater to boost health and lose weight.

For the rest of us, beans still have a place in a well-rounded diet. That place just isn't at the center.

News Brief

WARNING—aspirin advocates are pulling more than wool over your eyes

New research has recently surfaced showing that long-term aspirin use might be linked to a form of vision loss called neovascular age-related macular degeneration (AMD).

In this form of the disease (also known as "late" or "wet" AMD), abnormal blood vessel growth takes place behind the retina. It leads to bleeding, protein leakage, and scarring, which can irreversibly damage photoreceptors without fast treatment.

Neovascular AMD only accounts for 10 percent of all cases of age-related macular degeneration. But if you've been popping aspirin every day for the last decade, your odds of facing down this relatively rare eye disease are significantly higher.

Researchers followed 4,926 participants in Wisconsin's Beaver Dam Eye Study for 20 years. All the subjects were between 43 and 86 years at the start of the study.

Each subject received an eye examination every five years. At this time, researchers quizzed them about their aspirin use. (Regular use here is defined as taking aspirin at least twice a week for more than three months.)

Results revealed no correlation between regular aspirin use and any form of AMD after five years. But 10 years down the road, the story was different. By this point, there was a clear association between regular aspirin use and neovascular AMD.

Of course, the study authors were quick to point out that the absolute risk associated with aspirin in this case is small. And, they say, it's not as if AMD is fatal—you know, like a heart attack is.

This dismissive attitude is hardly surprising. But it is just a little infuriating.

Aspirin can be life-saving when you're in the throes of a heart attack. But regular use is absolutely not necessary to prevent one. There are other risk-free ways to do that. (Like getting more magnesium from leafy greens and nuts, for starters.)

I can't stress this enough. Don't let our country's dangerous devotion to aspirin therapy fool you. Your heart and your eyesight deserve better.

Citations are available online, at www.logicalhealthalternatives.com

Steel yourself against sugar cravings and critical illness with the same simple substance

Don't kid yourself—sugar is an addiction.

Those cravings aren't *all* in your mind. And when you start a diet, your body is still very much caught in the spider web that sweet stuff inevitably spins.

I know this song and dance all too well. I've devoted my life's work to helping people end it. And I'm happy to share my secrets whenever I can.

Secrets like l-glutamine.

It's my go-to rescue remedy for sugar addicts. (And a whole lot of other conditions, too—but more on that later.)

First, let's talk about what glutamine is and the many roles it plays in your body.

A "crash" course in craving control

Glutamine is an amino acid—the most abundant in your body, actually. It provides energy to your muscles and your brain. And it regulates a number of biological functions, including the synthesis of protein, vitamin B3, and the antioxidant glutathione.

It's also a world-class craving killer, for a few different reasons.

For starters, it's able to inhibit insulin release during times of hypoglycemia, which prevents hard blood-sugar crashes. (The same crashes that often trigger your intense cravings for sugar.)

It also stimulates your body to release stored glucose (called glycogen) in order to get low blood sugar back on track. And finally, glutamine is able to stand in for sugar itself when your body really needs the energy.

All three of these properties add up to the perfect foil for midnight cookie binges. In a nutshell, glutamine ensures that your blood sugar never gets low enough that your body hits the panic button.

That's why I recommend glutamine to *all* my dieting patients—500 mg, three times a day, and whenever one of those irresistible sugar cravings hits. I find that it takes the edge off just enough to help you say no when the dessert course rolls around.

And in the earlier stages of your weight loss journey, this can be a real lifesaver.

Research shows that glutamine is essential for reinforcing your GI tract, both repairing and guarding against gut damage.

Of course, once your body adjusts to its new life without sugar and your cravings disappear, you probably won't need to supplement with glutamine anymore.

But depending on your health situation, you may want to keep your glutamine handy. Because as I mentioned earlier, this amino acid has a long list of functions that go way beyond blood-sugar control.

The bigger story behind my favorite sugar-buster

Again, glutamine is abundant both in your body and from food sources—which means that most people have more than adequate stores to stay healthy.

But there are some factors that could make you an exception.

A battered digestive tract is one of them. Glutamine is a critical nutrient to the cells lining your gut, and acts as a primary source of fuel for them.

Research shows that glutamine is essential for reinforcing your GI tract, both repairing and guarding against gut damage. This is especially important for anyone with IBS, ulcerative colitis, celiac disease or any other irritating digestive condition that can erode the GI tract.

By combating conditions that lead to bowel permeability (more commonly known as "leaky gut"), glutamine can help to maximize nutrient absorption and minimize inflammation.

But the lining of your GI tract also hosts over half of your entire immune system. So keeping it in good shape is obviously much more than a matter of good digestion.

That's one reason why this amino acid has

emerged as an essential form of support for the critically ill. But it's not the only one.

Glutamine's role in maintaining muscle makes it popular with bodybuilders. But the same benefit also guards against muscle and organ wasting in patients battling severe trauma or infection.

Glutamine is an essential ingredient in your body's recovery process—whether it's from a wound, surgery, or disease. And research indicates that ample or depleted stores don't just dictate the speed with which your body rebounds. They could also mean the difference between life and death.[1]

Which brings me to an especially controversial application of this versatile amino acid…

Glutamine for human growth?

No surprise here: Glutamine may also help your body to release more human growth hormone (HGH).

As part of a 1995 study, researchers gave nine healthy subjects 2 grams of glutamine dissolved in a beverage to drink over a 20 minute period, 45 minutes after a light breakfast.

Compared with baselines collected a week earlier, eight out of nine subjects experienced plasma glutamine increases at 30 and 60 minutes. At 90 minutes, glutamine levels returned to control values—but plasma HGH levels had increased.[3]

These results appeared in the *American Journal of Clinical Nutrition*.

Yes, it's a small study. But it's got pretty big implications for anyone trying to stay younger and healthier the natural way. (For an in-depth look at the age-defying benefits of HGH, see my article on page 1.)

Glutamine won't pack the same punch as growth hormone injections. But pairing it with other secretagogues (specifically, the amino acid L-arginine) may enhance its effects…making it worth a try for anyone who's not quite ready or able to take advantage of HGH therapy.

Citations are available online, at www.logicalhealthalternatives.com

A split consensus in the fight against cancer

As usual, one of the main controversies behind glutamine lies with its potential benefit—or danger—to cancer patients.

The evidence really does seem to go both ways. So I'll give a brief account of both sides of the story and let you decide for yourself.

Let's start with the bad news—which is that glutamine's greatest strength might also be its weakness.

Part of glutamine's benefit is that it is the perfect "food" for rapidly dividing cells. In fact, cells can't reproduce without it, which is one reason why your body needs it to heal.

These same properties, however, also make glutamine the perfect fuel for cancer cells. (In fact, many cancer patients present as glutamine depleted, possibly for this very reason.) Because of this, some experts fear that this glutamine supplementation could actually accelerate tumor growth in cancer patients.

But then, there's the other side of the coin.

Chemotherapy specifically targets rapidly dividing cells. This means that glutamine's main drawback might actually be a blessing in disguise—potentially making treatment more effective.

And of course, all of the benefits of glutamine supplementation that I've described above are particularly essential for a cancer patient. Gut integrity, strong immunity, faster trauma recovery, and less muscle wasting—these are acute needs for anyone fighting disease. Especially with the aid of ravaging cancer drugs.

So it's not surprising that clinical research also supports the use of l-glutamine in this population—showing that it can reduce chemotherapy's notorious gastrointestinal side effects, bolster immunity, and improve surgical outcomes.[2]

Ultimately, your decision to supplement with glutamine as part of a larger integrative cancer protocol boils down to your own comfort level. There are no clear answers at this time. But given the research out there, it's definitely worth discussing with your doctor.

ASK DR. FRED

Q: "I read your recent Reality Health Check on the benefits of tea. Good info! Thanks so much for sharing! Would this also apply to all those 'Yogi' and 'Tazo' types of blends? Also, what about the standard types like Lipton and Tetley?"

Dr. Fred: The benefits of the particular tea you're drinking depend less on the brand and more on the type of tea used. Most teas feature a base of green tea, black tea, oolong tea, or white tea.

All of these come from the *Camellia sinensis* plant. The difference lies in the way they are processed.

More specifically, black tea is oxidized. This simply means the tea leaves are crushed to release their natural oils. These oils react to the oxygen in the air, which alters appearance and aroma. The leaves are dried when the process is complete.

Green tea, on the other hand, is entirely unoxidized. Oolong and white teas are both partially oxidized.

This difference in processing accounts for the variations in color and flavor from tea to tea. And it has some effect on the health benefits, too.

Most of the focus in health circles has been on green tea, which contains the highest amount of an antioxidant compound EGCG. This makes it a uniquely powerful anti-inflammatory. Studies show that green tea can help to fight everything from heart disease to cancer.

But black tea (which is your typical "standard" tea) is no slouch, either. In fact, one recent study out of Switzerland showed that black tea consumption is linked to lower diabetes rates. And oolong and white tea feature a similar profile of health-boosting polyphenols, as well.

Red tea is another popular option on the supermarket shelves—but it is more appropriately categorized as an herbal tea (usually derived from the rooibos plant). This type of tea is also high in antioxidants.

The array of herbal teas is vast—anywhere from basic chamomile to the fancier blends you mention. The benefits of these beverages really depend on the benefits of the herbs that they feature. (Chamomile is soothing, for example, while senna is used as a laxative. The list goes on.)

It would be impossible to detail the advantages of each unique type of herbal tea here—so I won't attempt to.

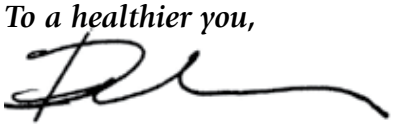
I can only say that most of the studies I've written about tend to focus on single types of tea—especially green tea. And while some of the blends you'll find at your local coffeehouse may use green tea as a base, their beneficial compounds may not be as concentrated as you'll find in straight green tea.

Same goes for black tea blends—or any other kind of blend, for that matter.

Of course, that's not to say that they're worthless. Any green tea (or black tea or white tea) is better than none. And any type of tea (assuming it's unsweetened) is a better choice than soda.

So really, it's a win-win no matter what brand you're drinking.

To a healthier you,



Fred Pescatore, M.D.