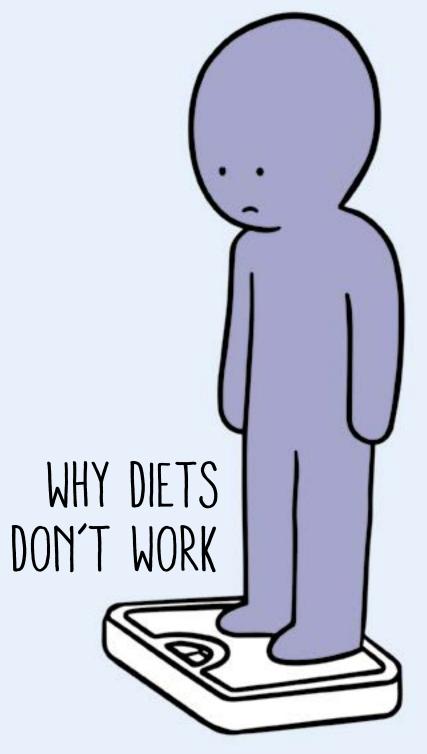
# AGINGNATTERS MAGAZINE



<sup>#</sup>5, 2016

US \$8.00/ EU €6.00/ GB £5.00 WHERE SOLD

00

HORMONE FOR A THINNER BODY

**HCG: A REMARKABLE** 

ACARBOSE: AN ANTI-DIABETIC & WEIGHT LOSS AGENT

FEATURED PRODUCTS & OFFERS INSIDE





#### AminoPro<sup>™</sup> Offer Price:\$14.99 (Usual Price: \$19.99)

ONLINE CODE: AMINOPRO-5-OFF-AMM5



Restrictions may apply please see IAS terms and conditions for full details.

#### TOMORROW'S TREATMENTS TODAY $^{ imes}$

IAS is dedicated to helping you access the world's latest commercially available supplements to give you and your family real choices in health and wellness. IAS promises you:

Quality: We stock the best quality products because the right materials and formulas give you the best possible results.

Brands: We carry original brands - i.e. the same ones used by top health professionals. Choice: We have the largest range of medicines, hormones and supplements. If you are looking for things that use words like bioidentical, efficacy and synergy then you've come to the right place.

**Pricing:** Our prices are competitive and we regularly have special offers to help you save money on the things that are important to you and your family.

**Support:** Our friendly and professional customer care team are on-hand to help you. We can be bothered!

**Professional:** We work alongside the leaders in the field and we review the latest research to ensure that everything is upto-date. After all, if we are informed then so

**Sponsorship:** All over the world you will find IAS supporting, sponsoring, exhibiting and lecturing at key venues. You can meet us in person and see what we believe in.

#### WELCOME

his issue of the Aging Matters magazine is dedicated to weight loss; a perennial problem that effects millions.

We're delighted to have Dr. Sergey Dzugan contribute his first article to the Aging Matters magazine. Dr. Dzugan has been involved in restorative medicine for many years and through his own clinics, has helped thousands of patients to feel and look their best. When you read his article titled; 'why diets don't work' it may explain why it is so hard to find any one that works well; however, here you can discover the supporting agents that can greatly assist and improve outcomes.

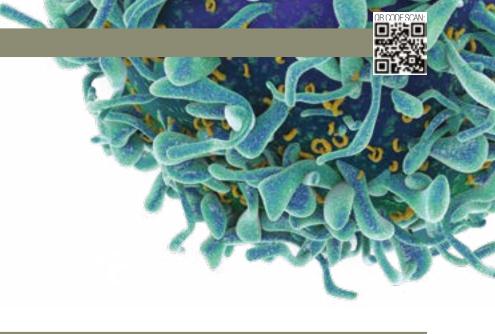
HCG or Human Chorionic Gonadotrophin is a well-known hormone that assists weight loss. Dr. Lippman explains its history and use and IAS are pleased to announce the availability of a genuine HCG nasal spray.

Dr. Dean also sees many patients at his Florida based clinic who want to lose weight. Two of his favorite agents are metformin and acarbose. Here he explains how chewing an acarbose tablet before a meal blocks and reduces the absorption of carbohydrates.

If weight matters are a bane of your life, we hope you find something here that is of use and help to you.

PHIL MICANS, MS, PHARMB Editor, Aging Matters™ Magazine

WARD DEAN, M.D. Medical Director



#### CONTENTS

WELCOME Thanks for finding the time	
FOREFRONT Interesting items in the news	
WHY DIETS DON'T WORK Dr. Sergey Dzugan explains	
HCG: A REMARKABLE HORMONE FOR A THINNER YOU  Dr. Richard Lippman is on the case	1
ACARBOSE: A USEFUL WEIGHT-LOSS AGENT One of Dr. Ward Dean's favorites	2
A-Z PRODUCT LISTING AND PRICES Find everything in-stock here Cer	ntre Page
FEATURED PRODUCTS Best sellers and new items	3
CROSS-REFERENCE LISTS Find what you need here	4
TESTIMONIALS & EXPLANATIONS Nice comments from nice people	5
CONTACT DETAILS Get in touch with IAS today	5

## ARTIFICIAL SWEETENERS: DO THEY REALLY HELP YOU TO LOSE WEIGHT?

knowingly in their morning coffee and, maybe less aware, when they consume any one of an enormous range of foods and drinks containing them (including ice cream, cakes, yoghurt and, especially, soft drinks).

Discovered more than a century ago, these lowcalorie (and no-calorie) products are supposedly very useful when used to replace sugar in weight loss diets. But do they really help you to lose weight?

Some studies show that drinks containing artificial sweeteners may alter the perception of hunger in your brain and might even lead to your eating more

illions of people use artificial sweeteners, both As dieticians suggest, whether or not you lose weight by replacing your sugar intake with an artificial sweetener depends partly on what else you eat, how much you eat in total, and your lifestyle in general. Like most things, moderation appears to be the key.

> Got an opinion on this article? Share your views with us: feedback@antiaging-systems.com

#### **FOREFRONT**

## WHAT CAUSES OVEREATING?

besity is a health risk in many parts of the world and one third of Americans are considered obese. Medical researchers affirm that one of the causes of obesity is overeating...so what might be causing that?

It appears that obese individuals may be especially vulnerable, both psychologically and neuro-biologically, to social signals that encourage eating (such as advertising or the smell of food).

Research indicates that obese mice are more likely than lean mice to overeat in specific experimental situations. One particular study involved two groups of mice. One group received a high calorie diet and became obese; the other group received their usual diet and stayed lean. The mice were then trained to respond to sounds. On hearing a particular tone, they received a sugar solution as a "reward": but the absence of this tone

(just white noise) brought no reward. Both groups of mice then ate their normal diet for three days.

On the following days, both groups of mice – when exposed to white noise only -ate normally. However, when the "reward tone" sounded, the obese mice ate more than the lean mice.

Further research revealed that neurons releasing MCH (melanin-concentrating hormone) were most abundant in the obese mice, and that these neurons respond to the "reward" tone. This suggests that certain signals in an individual's external environment may lead to an increase in MCH in the brain. which could lead to overeating.

Got an opinion on this article? Share your views with us: feedback@antiaging-systems.com



## DOES EXERCISE HELP TO IMPROVE YOUR MEMORY?

esearch suggests that exercise can boost cognitive function. This may be because exercise (such as running) leads to an increase in blood levels of cathepsin B, a protein that spurs the growth of brain cells.

To find out more, researchers looked at a number of different proteins secreted by muscle tissue. In the laboratory, they exposed muscle cells to compounds that produce the same effects as exercise and found that the cells responded by excreting cathepsin B. The investigators also noted high levels of cathepsin B in mice that had been using an exercise wheel every day for several weeks.

The researchers then used two groups of mice to find out how increased levels of cathepsin B might affect memory. The mice in one group were unable to produce cathepsin B, whereas the other group produced the protein normally. Both

groups of mice did "water maze" tests for one week. Results showed that the mice unable to produce cathepsin B could

not remember the route successfully, something that the mice in the other group were able to do. This implies that levels of cathepsin B may be important to memory.

Test results suggest that exercise is important in producing cathepsin B in humans as well as in mice. A comparison between people with high and low levels of cathepsin B shows that those with high levels tend to perform best in memory tasks.

Got an opinion on this article? Share your views with us: feedback@antiaging-systems.com



By Dr. Sergey A. Dzugan MD, PhD

Millions of people seek diets and treatments for being overweight and obese. For most people, weight management is not effective. since the majority of them lose the struggle to reduce weight and blame themselves for the relapse.1

erhaps the most frequent question that I have been asked over the last 20 years is "How can I lose weight?" In Latin diet (dieta) is a manner of living, not just an arbitrary system of what to eat and not to eat. This is why when people ask me how much and how often to eat or drink; I explain to them the meaning of the word. Though extra weight is an excellent marker of sub-optimal or poor health, just losing it in any way possible is not the proper path to follow. In fact, your entire lifestyle is the most important principle for weight maintenance and loss; any way of losing weight contrary to this is destined to failure and is quite possibly dangerous to the body in the long run. To put it bluntly, diet in the modern sense of the word is a complete disregard concerning the wisdom of how our body works.

We look at weight loss as a complex program which is supposed to support all the physiological aspects of body function. An individual will always pay the "price" if he or she tries to "cheat" the body. In this article we will talk about the dangers of diets and possible physiological approaches to the correction of weight problem.

#### **DEPRIVING THE BODY**

Our body is a very smart self-regulating mechanism. It knows how much we need to eat or drink and when we need to do it. We need oxygen, nutrients, and water for cell growth, maintenance, and renewal. When we consume less food than we need. the body will do everything in its power to preserve itself. Regulatory mechanisms will be turned on and the first vital signal will be sent to the brain - that of hunger.

A car will not run on an empty tank, and likewise our body needs a constant supply of "fuel" in order to achieve constant performance. Consequently, a highly tuned and active body will not settle on "regular" and a slower and more out of shape body certainly does need "premium" to run; the intake must be in accordance to the need.

#### WHAT HAPPENS WHEN WE DIET?

The body will slow down metabolism and will burn fewer calories for standard need until normal caloric income is restored. In other words, the body will adjust performance to conform to the shortage of calories. In this way, dieting is simply unnatural and even dangerous.

Furthermore, calories are not the only pieces of the puzzle to a normal "diet."

Popular low carbohydrate diets deprive our brain of the necessary glucose to operate efficiently and rationally. Also, those who are on such a low carbohydrate diet have increased hunger because of an insufficient brain glucose level. High protein diets overtax our kidneys, which can result in kidney disease and cancer. As stated before, diet is the entire "manner of living". None of the diets today actually present a way of life, but rather are an attempt to quickly lose weight, which will ultimately reappear.

#### **MECHANISMS OF DIET: PHYSICAL** AND PSYCHOLOGICAL ASPECTS

One of the most important points to be considered about a diet is if the individual undergoing said diet is male or female. Normally, a female's body has more percent of fat to muscle than a male's body. More fat means a slower metabolism.

Men usually have a high percentage of muscles. More muscle in turn means a faster metabolism. Essentially, since men have a higher muscle mass they can burn calories faster and easier than women can.

#### WHAT HAPPENS WHEN WE START TO DIET?

First of all our body loses water, after which metabolism slows down. Next our body starts to lose muscle, another step of a decreasing metabolism. The last thing that the body loses is fat storage. After loosing weight and resuming a normal eating regimen, we regain fat at a very fast rate, not the muscle that was lost during dieting. In this manner we lose our natural fatburning component: muscle. In response the body tries to create a "reserve" for a possible future low calorie intake.

Our body cannot see the difference between starvation and diet (artificial starvation) and reacts in a similar fashion - by slowing down metabolism (during dieting) and restoring weight by fat storage (after cessation of the diet). In this case, the so called phenomenon of accelerated fat recovery occurs.<sup>2</sup> People who participated in the Arizona biosphere experiment for two years who lost 15% of body weight discovered that their weight gain was almost exclusively fat.<sup>2</sup> Basically, when we diet (especially restrictively), we upset out normal metabolism. A diet without exercise is extremely harmful because of the loss of muscle and the consequent regain of fat. Metabolism fluctuations aside, it is not unusual to overeat after a diet. At this time your metabolism is compensating and is in a slowed form because of the diet and low calorie intake. You will have an "excellent

opportunity" to regain weight in a speedy manner because of the extremely efficient fat-storing mechanism that will be in effect.

Depression is one of the most vicious side effects of hormonal imbalances. Too often obesity and depression go hand in hand, each reinforcing the other. Depression robs any motivation someone might have to lose weight. Depressed individuals lack the energy to exercise or eat properly. Simply swallowing Prozac<sup>™</sup> is not going to solve the problem of depression because of the underlying cause that still exists, largely caused by deficient hormonal levels. Once the dieter has scientifically rebalanced their hormones their feelings of anxiety, hopelessness and depression will largely disappear.

Some diets (a low-carbohydrate high-protein diet, a low-protein highcarbohydrate diet, an energy-restriction low-carbohydrate diet) showed that they could affect synthesis and metabolism of tryptophan, serotonin, noradrenaline, dopamine and its metabolite.<sup>3,4</sup> Abnormality in neurotransmitters relating to metabolism can lead to psychological disorders. Irritability, anger, anxiety, mood swings etc., are typical for dieters. Also, abnormalities in brain serotonin can put people at risk of bulimia nervosa and anorexia nervosa.<sup>5</sup>

Most studies relating to food deprivation ultimately include any or all of the mental disorders listed above. In one extreme case. an individual performed self mutilation, chopping off 3 of his own fingers because he became so disturbed from food restriction.<sup>6</sup> Losing digits on your hand is no price to play for simply going on a diet!

Why have I explained all of this?



## "DIETERS NEED TO UNDERSTAND THE TRUE NATURE OF BEING OVERWEIGHT.."

Because it all comes down to that if we try to play any kind of "tricks" on our body, it will not appreciate this and will attempt to change the overall regulatory "program" accordingly. The goal of our body is survival and any threat to this will be evaluated solely from this viewpoint.

#### **OUR APPROACH TO THE DIET PROGRAM**

A "diet" program must be configured to one's particular needs. Dieters need to understand the true nature of being overweight, and what they need to do for solving their own weight problem. No two people are alike and no two people have the same personal biochemistry. Our program manages people and their weight problems as individuals.

The goal of the program is to permanently reconfigure the body's weight in way that is beneficial and not harmful to the overall system.

The only way to achieve this is via gradual (gradual being the key word) loss of unwanted weight. Dropping 15 pounds in two weeks is too sudden and too dangerous. Though it may make an overweight person suddenly feel and look better, it does great harm to the body and reduces the chance of the individual achieving permanent weight loss. Slow and steady wins the race, as the saying goes, and there are steps to follow just as with any program.

The program is unique just as the people that it manages, which require it to have many different parts that work in unison to achieve a positive effect. When speaking of the program in general, there are several facets and goals to consider:

- The restoration of an optimal metabolism (whereas more calories are burned than stored, achieving a healthy equilibrium).
- The use of supplements which show positive results in weight loss and are backed up by studies, not just what we see on TV in the form of "miracle weight loss drugs."

- Following the physiology-based eating regimens (what your body needs, not a program set in stone in accordance with generalized plans).
- Keeping your mind at peace, not to expect fast weight loss and not becoming paranoid with weighing in.
- Exercise, especially exercise that should be enjoyable and in moderation according to your body's needs.

When speaking of the eating regimen in specificity, there are certain rules to consider:

- Don't under eat or over eat, though they are different in concept, one is as dangerous to the body as the other.
- Eat often enough and do not force the body to comply with a strict timed schedule: the body knows when it requires more energy to function properly.
- Do not skip meals, especially breakfast.
- The largest meal should be at lunch, not in the evening. The body's metabolism is strongest in the morning and weakest towards night, also the reason why you can safely not skimp out on a good breakfast. Furthermore, the last meal of the day should be at least 4 hours before sleep.
- Also to remember is the fact that skipping meals can provoke the storage of fat because the body will try to accumulate fat in response to such a tactic. If the body realizes that it has to undergo long periods of time without food due to fasting, it will naturally build up fat to have adequate energy in the future.

#### MAINTENANCE RECOMMENDATIONS

- Focus on general health restoration plus weight loss rather then only diet and weight loss. The losing of weight can lead to losing of health.
- You do not need expensive drugs for weight loss. Any intervention which will disrespect physiology can be extremely dangerous.
- Don't try any diet because it is popular. Try to understand how and why it can help you.
- Eat when you are slightly hungry. Don't wait when you will be excessively hungry because you will over-eat. Also, don't eat

when your body does not

- ask for it (when you have no hunger feeling). In both cases you will not use extra calories you will store them! In other words, eat when your body requires it (hunger feeling or craving to specific food will help you). Otherwise your body will slow down metabolism.
- Exercise and take supplements which can prevent muscle loss, support and/or rebuild your muscles. It will help maintain normal metabolism and burn fat instead of muscle. Exercise can be hard work or duty. Find an enjoyable way for moving your body.

Exercise can not be seen just as a time for weight loss – it needs to be your daily routine just like brushing your teeth, drinking water and eating food.

The key idea of any weight loss program is to restore internal control necessary to achieve permanent weight loss. When we try to treat only the symptoms (being overweight and obese in this case), we put our body under severe stress and risk. Our body will try to survive in any way because dieting is a threat to life. There is also the old saying to consider, "We eat to live, but we don't live to eat". Food is an integral part of life, limiting or taking in excess will only lead to problems.

Until health (your foundation) is restored, there is no sense in trying to focus on weight loss. The simple fact of the matter is that you will fail. You can certainly lose some weight on any diet program, but after resuming your normal lifestyle, (the true "diet") you will regain much more as your body tries to cope with getting back into normal working level. In fact, in a study conducted on 36 adult males, all of them had regained their lost weight after 5 months of food restrictions and gained on average 10% more weight than what they had originally.6 This seems to be not an exception but a rule when it comes to improper diets.

If your foundation is in order, you can loose weight on any program. Life needs to be enjoyable. There is no real reason to undergo a permanent struggle with weight control and to suffer from major health problems related to it (diabetes type 2, depression, arthritis, etc.). Only the restoration of optimal health can help you achieve a permanent weight change. Once this vital step is out of the way, all that is left to do is spend more calories than those consumed while maintaining a healthy lifestyle.

In fact, hormonal imbalances in the body are the leading causes of obesity. With low levels of pregnenolone, DHEA, testosterone, progesterone, estrogens, thyroid or serotonin, low or high cortisol we will gain weight in specific areas of

# "FOOD IS AN INTEGRAL PART OF LIFE, LIMITING OR TAKING IN EXCESS WILL ONLY IFAD TO PROBLEMS."

# "FOR OPTIMAL HEALTH, WE MUST CLEANSE, RESTORE AND MAINTAIN PEAK DIGESTION."

the body no matter what we eat or don't eat. With hormones completely balanced, physical and emotional fatigue fade away and peak energy levels can once again be experienced. Unfortunately, few doctors are aware of the onslaught that our hormonal system goes through on a daily basis. Stress from obesity lowers healthy levels of DHEA and pregnenolone while increasing unhealthy levels of cortisol, sometimes dubbed the "death hormone".

Unlike other diets that trick the body into temporarily dropping excess weight, our program actually reprograms the cells in your body as well as your brain. The result is that the body will function at its youthful hormonal levels. Your brain and cells will respond to food differently and allocate the nutrients for energy and not for fat storage. Usually, weight gain occurs after the age of 35 when our hormones undergo an aging change. At this time, the frustrating battle with stubborn weight gain begins.

Gaining weight in specific areas of the body (a common cause for guick diets) is caused by specific hormonal deficiencies. In women with estrogen dominance, fat will collect around the buttocks and thighs; in men who are deficient in testosterone, fat will accumulate in the belly even if you work out three times a day and eat little to no carbohydrates. In essence, the reasons for most of the diets today can only be optimally fixed by hormonal restoration, because hormones are the essential chemical messengers that control our body to keep us young and healthy. As we age, hormones begin to decline. The result is that we feel tired, we lose interest and we gain weight, causing us to age guicker than we should. Consequently, age is not a 100% marker for hormonal imbalance. Individuals, as young as 18, with excessive levels of body fat can have dangerously low levels of hormones. Once corrected, their optimal weight returned and they experienced increased energy and permanent weight loss.

Restoration of hormonal balance can help with not only weight loss but also with

longevity. Aside from reducing the obvious risks of diabetes, heart disease and cancer which are often caused by excess weight, hormonal restoration quickly leads to a healthy cholesterol profile, reduced blood sugar levels, higher levels of energy and a reduction of depression and emotional stress. Our program is based on scientific research and years of medical knowledge. This is more than just a weight loss program. This is a program for the entire rejuvenation of the body, a chance to turn back the clock and reduce the risk of degenerative diseases.

#### **OUR PROGRAM FOR DIETING**

The first step to changing your life and your health is a simple blood test, which includes a lipid profile; pregnenolone, DHEA sulfate, total and free testosterone, total estrogen, progesterone, cortisol, serotonin and a thyroid panel.

This needs to be done to determine the overall picture of all of your hormones. This process can be performed at your doctor's office or in numerous locations in the country where you simply walk in, get your blood drawn and have the results mailed back to you. From this point, dieters can see what hormones need to be supplemented. The amount and timing of specific vitamins and minerals is critical to a successful lifelong program of optimal health and optimal weight. Scientific information on supplementation can be discussed by dieters with our health advisor. An important fact to remember is that hormonal supplementation is greatly aided by following the eating habits outlined earlier. With this in mind, you can start hormonorestorative therapy to restore your hormones to a healthy, youthful level.

The body's chemistry must also be refined by concentrating on restoring digestive integrity. Without proper digestion, the body will be unable to absorb life-sustaining nutrients essential for a proper metabolism. It is unacceptable for dieters to have constipation because it

can be a reflection that the person has poor health and that something is wrong with the digestive system. For optimal health, we must cleanse, restore and maintain peak digestion. Supplements for the restoration of natural intestinal flora and the removal of parasites are helpful to combat this.

The following supplements can be used in addition to hormones, eating regimens and exercise:

- Super CLA (conjugated linoleic acid) blended with Guarana and Sesame Lignans can reduce fat deposits and increase lypolysis in adipocytes, possibly with enhanced fatty-acid oxidation in both muscle cells and adipocytes (because of CLA).7
- **Chromium** has the ability to increase the sensitivity of insulin, which is vital since many overweight people experience a "numbing" effect on their insulin which impedes the metabolism of sugars. Without being metabolized, these sugars simply turn to fat. A 200 mcg capsule of chromium with each meal will help sugars be absorbed and utilized in a metabolic process instead of being turned straight into fat.
- Magnesium is a substance that, like chromium, is responsible for a balanced level of insulin sensitivity. Magnesium citrate in dose 400-800 mg (at bedtime 400 mg, or 200/400 mg in AM and 400 mg at bedtime) is usually sufficient.
- HCA (hydroxycitric acid) is recommended one 1000 mg capsule taken three times daily before meals because it may be helpful in weight loss in accordance with its effects on metabolism.
- A good probiotic formula which includes: Lactobacillus group (L.rhamnosus A., L.rhamnosus B., L.acidophilus, L.casei,

- L.bulgaricus) 3.5 Billion, Bifidobacterium group (B.longum, B.breve) - 1.0 Billion, Streptococcus thermophilus – 0.5 Billion (in the morning on an empty stomach) helps restore intestinal flora and improves absorption.
- 7-Keto DHEA, taken at 100-200 mg one capsule daily, has been shown to be effective in inducing fat loss.9

#### THE FINAL PARTS OF THE PROGRAM ARE **EXERCISE AND EATING HABITS**

Exercise should be done for 30-60 minutes 5 days a week; when weight is lost this can be moved down to 3 times a week to keep the weight at its new point. Eating habits are simple to remember because there are 3 main parts to keep in mind: eat a good breakfast, the largest amount of food should be consumed during lunch and food should be eaten about 4 hours before going to sleep.

Remember, when you use diets, you "rape" your brain; you are trying to change your body's program by trying to "install" unnatural and restrictive eating rules. A normal eating regimen is a way to gain power and protection against any malfunctions or illnesses which could afflict the body. We can over-eat if we are not feeling strong enough for the management of daily tasks. That is why it is extremely important to find another way for dealing with daily problems. "Restoring the foundation", whereas the body's hormonal levels are optimized and overall health is good, is the primary method of healthy weight loss. If the level of hormones is optimal, the body will not have to deal with other factors and will not require something such as eating more to cope with stress or other issues.

Got an opinion on this article? Send us your views to: feedback@antiaging-systems.com



#### REFERENCES

1. Wooley SC, Garner DM. Obesity treatment: the high cost of false hope. J Am Diet Assoc. 1991 Oct;91(10):1248-51.

2. Dulloo AG, Jacquet J, Montani JP. Pathways from weight fluctuations to metabolic diseases: focus on maladaptive thermogenesis during catch-up fat. Int J Obes Relat Metab Disord. 2002 Sep;26 Suppl 2:S46-57.

3. Hirose T. Effects of nutritional status on contents of tryptophan, serotonin and 5-hydroxyindoleacetic acid in rat brain. Nippon Eiseigaku Zasshi. 1992

4. Hirose T. Effects of ethanol and low-carbohydrate diet on contents of noradrenaline, dopamine, serotonin and their metabolites in rat brain. Nippon Eiseigaku Zasshi. 1991 Aug;46(3):755-61.

5. Kaye WH, Bailer UF, Frank GK, Wagner A, Henry SE. Brain imaging of serotonin after recovery from anorexia and bulimia nervosa. Physiol Behav.

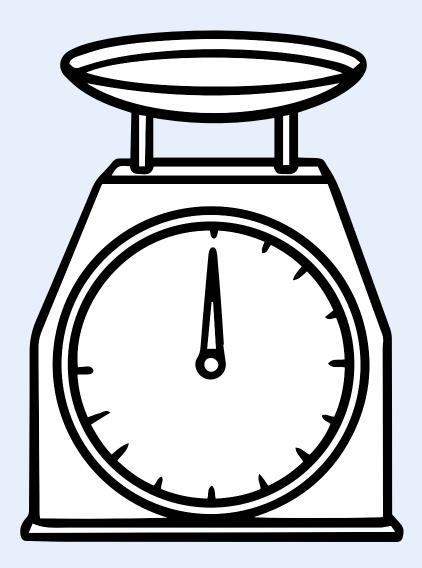
6. Keys A. The Biology of Human Starvation. Minneapolic, MN: University of

7. Park Y, Albright KJ, Liu W, Storkson JM, Cook ME, Pariza MW. Effect of conjugated linoleic acid on body composition in mice. Lipids. 1997

8. Thom E. Hydroxycitrate (HCA) in the treatment of obesity. Int J Obes

Relat Metab Dsiord. 1996;20(Suppl 4):75. 9. Kalman DS, Colker CM, Swain MA, Torina GC, Shi Q. A randomized,

double-blind, placebo-controlled study of 3-acetyl-7-oxodehydroepiandrosterone in healthy overweight adults. Curr Therap Res. 2000;61(7):435-42.



# Help your diet with 7-Keto-DHEA

AS RECOMMENDED BY DR. SERGEY A. DZUGAN MD, PHD

7-KETO-DHEA (60X 100MG) OFFER PRICE: \$29.99 (NORMAL PRICE \$34.99)

ONLINE CODE: 7KETO-5-OFF-AMM5

Restrictions may apply please see IAS terms and conditions for full details. Offer valid until 2nd November 2016.

# Bringing medicine back to its core: physiology.

Restoring the body's physiology is at the root of what we do at Dzugan PhysioLogic

Dr. Dzugan

DzLogic is a personalized Restorative Medicine program that seeks to optimize your health through the natural balancing and restoration of your body's physiology. Based on many years of Dr. Dzugan's research and experience, we have changed thousands of lives by helping them overcome painful conditions, attain personal health goals, and aiding them in feeling younger, more vibrant, and more energetic.

Dr. Dzugan MD, PhD is one of the world's foremost experts on Restorative Medicine.

- Top Heart Surgeon / University Professor
- Internationally Awarded Scientist
- Published Cancer Center Researcher
- · President of Life Extension Scientific, Inc.
- Author of 6 books; 153 published studies/articles
- · Trainer/Mentor to Physicians World-Wide

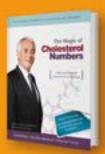
Dr. Dzugan's research and findings have inspired thousands to take a more serious look at their health as it is now, and more importantly, how to make it better moving forward.

#### Read more from Dr. Dzugan

Dr. Dzugan has written prolifically about his research and our approach to Restorative Medicine. We recommend:



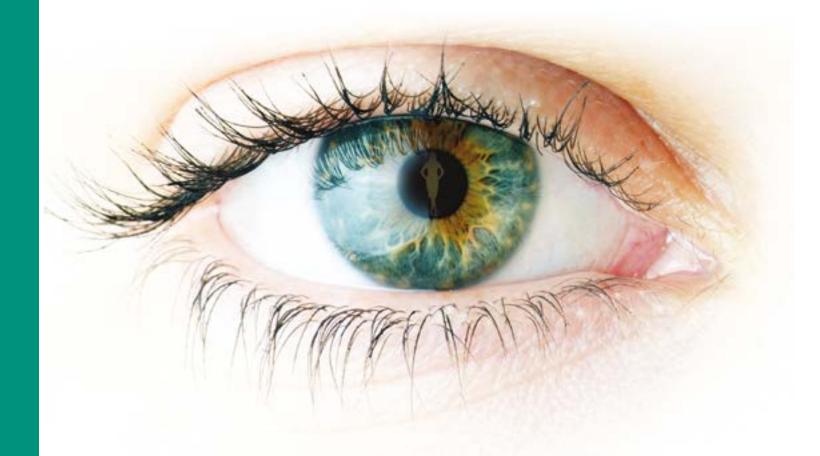




Visit dzlogic.com/books to learn more

Visit us online: www.dzlogic.com, or give us a call: 1.866.225.4877

# Aremarkable hormone for a thinner firmer booly



n a dark and wintry evening in far away Sweden, a former Parisian fashion model stumbled in the doorway of a fashionable hotel. The doorman repeatedly asked her several simple questions, but received no response. Lethargy and mental fog had descended upon her like a shroud upon a corpse.

Gallantly, I stepped forward to help this pretty woman who was so obviously in distress. She was confused and somewhat panicky. I grabbed her white-knuckled hands to steady her, and they felt like icicles. Gazing at her angelic face, I noticed that she had gained weight since her modeling days. Her hair was thin, dull and flat on the top of her

head. Her eyebrows were missing their outer third and her arms and face were swollen. All of these were clear signs of obesity and untreated hypothyroidism.

Finally, I recognized a sign of alertness in her blue eyes as she started to warm up inside the hotel. She spoke haltingly and from her garbled speech I gathered that she had just completed a two-hour winter promenade through the chilling fall winds of Stockholm, Sweden.

A flicker of light in her soft blue eyes told me that she was sufficiently cognizant to hold a conversation. I again steadied her arm and asked in my best Swedish how long she had suffered from weight gain and hypothyroidism. She confessed to a

five-year struggle with multiple signs and symptoms of low thyroid and weight gain. This reminded me of an often-cited article from a 1957 issue of the, Journal of the American Medical Association (1), that reported weight gain and untreated hypothyroidism in 40% of Mid-western women; and to the present day, physicians are not treating it as a hormone problem!

I introduced myself as Dr. Lippman, noted inventor of the nicotine patch that has saved millions of lives. I politely inquired if I could briefly examine her, given her symptoms. She agreed. So in a private room adjacent to the hotel lobby, I asked her to remove her shoes and socks and kneel on an armchair while holding the back of the chair. She complied,

and I proceeded to gently tap the backs of her dangling ankles with a butter knife. I tapped her Achilles tendons several times, but she lacked a normal jerking reflex. Her calves and ankles were clearly swollen (Figure 1) and her feet were flat and yellowing on their bottoms.

These signs were further confirmation of her untreated hypothyroidism and accompanying weight gain. Biochemically, she was overeating and not clearing cellular waste products, especially in her jowls (Figure 2).

Also, lack of exercise and slow metabolism were causing waste accumulation between her cells and thus, her puffy appearance. In addition, she had acquired visceral fat on her stomach and subcutaneous fat on other body parts, especially on her triceps and biceps.

These changes were certainly caused by biochemical imbalances involving several hormones, but the question remained: How could she lose those unwanted pounds and become healthy again?

#### THE HCG DIET AND THE REMARKABLE DR. ALBERT SIMEONS

I explained to her that other hormones besides those in her thyroid were involved in weight gain and weight loss. Using the hormone HCG in his clinic in the United Kingdom, Dr. Simeons developed a remarkable weight-loss program during the '50s and '60s (2) (Figure 3).

He reasoned that pregnant women developed healthy babies even when deprived of food because they easily burned their own body fat. They burned this visceral and subcutaneous fat with the help of the all-natural hormone HCG, or human chorionic gonadotropin.

Pregnant women naturally release HCG and it directs the body to metabolize stored fat. With this idea in mind, Dr. Simeons developed a weight-loss program combing HCG with a lowcalorie diet. This diet even worked for men. His clinical double-blind studies in England showed that during a 30 to 40-day period, women lost on average 25 to 40 pounds (11-18 Kg.), and men lost on average 35 to 47 pounds (19-21 Kg.)! (2)

Dr. Simeons created his research manual, entitled Pounds and Inches (2), which focused on the use of HCG as a weight-loss solution. He discovered that HCG alone did not cause weight loss. On the other hand, if used in combination with a low-calorie diet and mild exercise. significant weight loss would occur. What could be simpler, I thought.

He also found his diet lacked side-effects such as starvation symptoms, headaches, weakness, irritability and hunger pains as long as patients combined HCG with a low-calorie diet of approximately 500 calories daily. Later researchers found that increasing the daily calorie intake to about 1.000 calories also worked well (3).

Other clinical double-blind studies with HCG have supported Dr. Simeons with impressive results. Under the care of Dr. Frank, the U.S. Army tested HCG in 27 men and 21 women using a 1,030-calorie diet. The mean weight loss of the group was 12.3 pounds (6 Kg.) during a one-month period (3).

In an extensive and detailed weight-loss study in 1973, Doctors Asher and Harper conducted a six-week clinical double-blind study with 40 patients on a 500-550 calorie diet during a sixweek period <sup>(4)</sup>. Results showed that the mean

"...patients said that they had little or no hunger and more than 86 percent felt 'good' or 'excellent' about the outcome of the diet."











FIGURE 1: SWOLLEN CALVES AND ANKLES, A SIGN OF HYPOTHYROIDISM.

FIGURE 2: LEFT SIDE SHOWS SAGGING JOWLS CAUSED BY AGING AND HYPOTHYROIDISM. RIGHT SIDE IS IMPROVEMENT AFTER TREATMENT WITH HCG AND THYROID.

FIGURE 3: ALBERT SIMEONS, M.D., FROM THE UNITED KINGDOM WHO DEVELOPED A WEIGHT LOSS PROGRAM WITH HCG. IT WAS DESIGNED TO LOSE SIGNIFICANT VISCERAL AND SUBCUTANEOUS FAT WITHIN A 40-DAY PERIOD.

FIGURE 4: THE RIORDAN WEIGHT-LOSS CLINIC IN WICHITA, KANSAS.

weight loss was just under 20 pounds. Of this group, 15 HCG patients lost 15 pounds (6.8 Kg.) or more. Furthermore, just over three-quarters of all HCG patients said that they had little or no hunger and more than 86 percent felt 'good' or 'excellent' about the outcome of the diet. Lastly, another positive effect was that the HCG patients' systolic and diastolic blood pressures decreased by an average of about 5mm.

In 1987 in Germany, Dr. Rabe and colleagues conducted a clinical double-blind study of 82 volunteers using a 500-calorie daily diet for 28 days. They found that all groups studied showed weight loss. Especially interesting was the fact that all groups experienced hunger sensations during the first week, but these sensations subsided during subsequent weeks (5). Only two volunteers experienced side-effects such as severe headaches. The success of the diet was also based on good information and the motivation of the volunteers.

In 1990 in South Africa, Dr. Bosch and coworkers found significant weight loss during a 30-day trial in a double-blind, placebo-controlled experiment (6).

#### **HCG ADMINISTERED BY NASAL SPRAY** AND NOT BY INJECTION

In all of the above clinical trials, HCG was administered by injection. Later, researchers at the Riordan Clinic used a nasal spray and achieved the same results without the pain of injection (7). The Riordan Clinic in Wichita, Kansas is an excellent weight-loss clinic that has been using nasal-spray HCG since 1975 (Figure 4). Those patients with the time and money to travel to Kansas might want to try the Riordan Clinic's health and weight-loss program.

Fortunately for most of us, however, we don't have to travel to Kansas to obtain the benefits of the Riordan Clinic and Dr. Simeons. We merely need to obtain a HCG nasal spray (HCG-Pro™) and a little thyroid (Nature® or ERFA® ½-grain dose) from the good folks at International Antiaging Systems (IAS).

#### **MY SWEDISH STORY CONTINUES:** SEVERAL VITAL HORMONES LOST TO AGING ARE RESPONSIBLE FOR WEIGHT GAIN

Eventually, my patient in Sweden regained the color in her cheeks within the warm and cheery atmosphere of the hotel. With a weak and rasping Piaf-like voice, she asked me for my diagnosis. I kindly responded that she would need to correct several vital hormones, namely HCG (with HCG-Pro<sup>™</sup>) and a natural thyroid (Nature® or ERFA® ½-grain doses). She would also need to switch to a diet with more protein and less carbs and combine these sensible remedies with a minimum of three-time weekly exercise.

I waited a bit to allow her to regain her composure. Then, she warmly smiled at me. Finally, she asked me why her local doctor hadn't recognized her signs and symptoms. I responded that, unfortunately, identifying hormone deficiencies requires special knowledge not taught in today's medical schools. For many years, Dr. Thierry Hertoghe of the Hertoghe School of Medicine in Brussels, Belgium mentored me and many other American and Swedish physicians. Indeed, many Swedish and American doctors know of his methods and his

"I explained that, ironically, conventional medical doctors always dogmatically... assert that their patients only require Synthroid®"

books (8), but it takes years of personal training to implement them. And then, of course, some of the special medications he uses are not easily available in Europe or the USA. Thus, patients and even practicing physicians utilise the services of IAS.

I also told her that obesity is now considered to be a disease and it should be taken seriously and treated. Hypothyroidism is also serious: If left untreated, it could shorten a person's life by approximately 43%! (8)

Her jaw dropped in disbelief. She defensively told me that her doctor in Sweden, a professor of endocrinology, had had her on Synthroid® (levothyroxine) for three years. I observed that she was flustered but now mentally unfogged and fully alert. I explained that, ironically, conventional medical doctors always dogmatically and emphatically assert that their patients only require Synthroid® and they do not mention other completely natural hormones such as Nature® or ERFA®, and my personal favorite for weight loss, HCG-Pro™ spray.

"It's a shame," I said, "since low thyroid and overeating mean a lower quality of life. It's an annihilating condition that transforms patients' mental and physical shapes in undesirable ways. Lack of vital hormones also lowers a patient's life expectancy. According to Dr. Hertoghe (8),

we must use multiple hormones to correct the problems of aging and weight gain. Using only one hormone can often make matters worse."

She thanked me for my help and promised to book an appointment at my clinic in Sweden. I was glad to put her on the road to good health.

Got an opinion on this article? Send us your views to: feedback@antiaging-systems.com

#### REFERENCES

- 1. Jackson, J.H. Sept. 1957. Hypothyroidism, J. Amer. Med. Assc.,165, pp. 121-124.
- 2. Simeons, A.T.W. Dec. 2010, Pounds & Inches: A New Approach to Obesity,
- 3. Popular Publishing, George Johnson Co., Michigan USA
- 4. Frank, B. W. March 1964. The Use of Chorionic Gonadotropin Hormone in the Treatment of Obesity, A Double-Blind Study. Am. J. Clin. Nutrition, vol. 14(3), pp. 133-136.
- 5. Asher, W. L. and Harper, H. W. Feb. 1973. Effect of human chorionic gonadotropin on weight loss, hunger, weight loss, and feeling of wellbeing. Am. J. Clin. Nutrition, vol. 26(2), pp. 211-218.
- 6. Rabe T. et. al. Jul. 1987. Influence of Human Chorionic Gonadotropin (hCG) in Combination with a 500 calorie Diet on Clinical and Laboratory Parameters in Premenopausal women with and without Hormonal Contraception, Aktuelle Endokrinologie und Stoffwechsel, 8(3), pp. 142-149.
- 7. Bosche, B. et. al. 1990, Human Chorionic Gonadotropin and Weight Loss, S. Afr. Med. J., 77(4), pp. 185-189
- 8. https://riordanclinic.org/what-we-do/weight-loss-program
- 9. Hertoghe, T. May, 2010. The Hormone Handbook, 1st & 2nd editions, International Medical Books/Archimedial, Luxemburg



# HCG:

A remarkable hormone for a thinner body

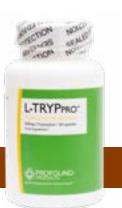


ONLINE CODE: HCGPRO-10-OFF-AMM5

# UNEOFTH

Lifts your mood, aids sleep and dieting

L-Tryptophan (L-TrypPro™)



50x500mg capsules
Price \$14.99 (save \$5 was \$19.99)



ONLINE CODE: LTRYP-5-OFF-AMM5

# An anti-diabetic and potential weight loss agent

By Ward Dean, M.D.

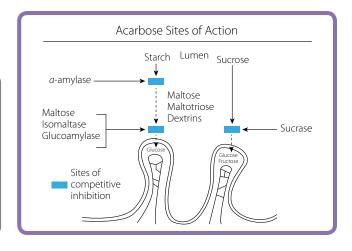
carbose (Glucobay®, Precose®) is a drug approved for use in (1) insulin-dependent diabetes mellitus (Type I), (2) adult-onset diabetes mellitus (AODM, or Type II), and (3) those who suffer from "impaired glucose tolerance." As I've previously pointed out, virtually everyone over the age of 35 is probably functionally glucose intolerant to some degree (Fig. 1). Using even the strictest orthodox criteria, it is estimated that up to 20% of Caucasians between the ages of 65 and 75 years have Type II Diabetes-and an additional 23% have "impaired glucose tolerance" (2).

To understand how acarbose works, a review of a few basics of carbohydrate metabolism is in order. Starches and complex sugars are broken down in the digestive

110 100 80 10 80 70 80 50 50 41-50 **—** 31-40 40 30 20 Minutes 120 180

tract into simple sugars, which are then absorbed by the body (in the lower small intestine and colon). These simple sugars are used for energy, or stored (as glycogen or fat).

Enzymes are essential to break down the complex carbohydrates into sugars. Certain groups of enzymes are critical to the final steps in the digestion of carbohydrates. One of these groups is the alpha-glucosidases. Alpha glucosidases enhance the breakdown of maltose, isomaltose, glucoamylose and sucrose (table sugar). Acarbose acts as a potent competitive inhibitor of intestinal brush border alpha glucosidases that are essential for the



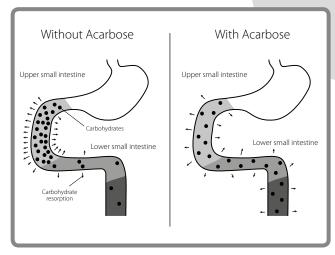


Figure 3. Acarbose is poorly absorbed, and is excreted predominately in the feces. This illustrates how Acarbose acts non-systemically to delay carbohydrate absorption (4).

breakdown of starches, dextrins, maltose, and sucrose to absorbable monosaccharides (Fig. 2). Because of its specificity for alpha glucosidases, beta glucosidases such as lactases are not affected by acarbose. Glucose is also not affected by acarbose. Consequently, glucose and lactose are absorbed normally when acarbose is taken.

#### **EFFECTS OF ACARBOSE**

Acarbose delays carbohydrate digestion and absorption (Fig. 3). Consequently, it delays and flattens post-meal rises in glucose and insulin (5, 6) (Fig. 4). Fasting and post-meal triglyceride levels are decreased (7,8) (probably due to the reduced insulin response) (3), and reductions in low-density lipoproteins (LDL) and increases in highdensity lipoproteins (HDL) have been reported (9).

Glycosylated haemoglobin (hemoglobin A1c [HbA1c]) is a screening and diagnostic test for diabetes, as well as a biomarker of aging (indicator of biological age). HbA1c tends to increase progressively with age in non-diabetic subjects (Fig. 5) (10). Acarbose has been demonstrated in numerous studies to significantly reduce HbA1c (3, 11, 12) (Fig. 6). The reduction in HbA1c has a number of other beneficial effects, including decreased glycation

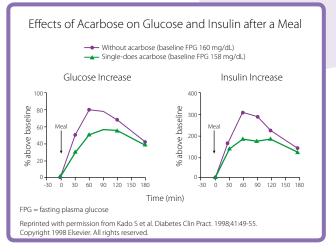


Figure 4. Effect of Acarbose vs placebo on post-prandial (after a meal) levels of glucose and insulin in diabetics treated with a sulfonylurea (6).

of glomerular basement membranes, decreased advanced glycosylation end product (AGE) formation in connective tissue, decreased cataract formation, and prevention of neuropathy and retinopathy (13).

In addition, of particular significance with respect to the mechanism of aging proposed by Dilman's neuroendocrine theory of aging, Balfour and McTavish (14) speculated that Acarbose might improve insulin sensitivity (as indicated by decreasing fasting blood glucose). Chiasson, et al (5) also believed Acarbose improved insulin sensitivity, based on their finding that patients taking acarbose experienced an upward trend in post-meal C-peptide levels. Furthermore, acarbose appears to prevent or delay the progressive deterioration in pancreatic beta cells that routinely occurs in patients with Type 2 DM<sup>(2)</sup>.

Other benefits of alpha glucosidase inhibitors are their ability to prevent or attenuate diabetic nephropathic lesions<sup>(15)</sup>, and one study even reported an improvement in cognitive function in both animals and elderly patients

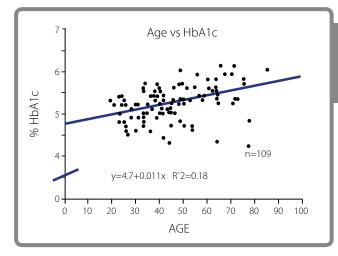


Figure 5. Age-related rise of HbA1c, indicating loss of glucose tolerance with increasing age (10).

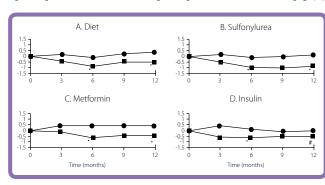


Figure 6. Effect of Acarbose and placebo on HbA1c in diabetic patients treated with diet alone and diet + metformin, sulfonylurea or insulin (as indicated). The circle indicates placebo, and the square indicates the effects of acarbose (titrated to maximum 600 mg/ day) added to each regimen for 12 months (5).

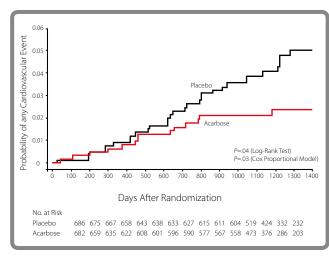


Figure 7. Effect of Acarbose on the probability of remaining free of cardiovascular disease (17).

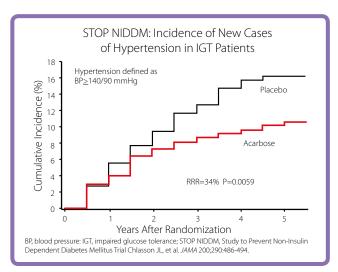


Figure 8. Effect of Acarbose on the probability of remaining free of hypertension (17)

given Acarbose<sup>(16)</sup>. Because acarbose does not result in hypoglycemia, it can be safely used by those who suffer from reactive hypoglycemia—and will probably benefit the condition due to its insulin-modulating properties.

In 2003, results from the STOP-NIDDM trial were reported<sup>(17)</sup>. The trial was an international, multicentre double blind trial involving patients from Canada, Germany, Austria, Norway, Denmark, Sweden, Finland, Israel and Spain, from 1998-2001, involving nearly 1,500 patients with impaired glucose tolerance (IGT). The patients were randomized to receive placebo or 100 mg Acarbose, three times daily. The scientists wanted to evaluate whether Acarbose could prevent coronary artery disease, hypertension, congestive heart failure, or peripheral vascular disease.

The results of the study were dramatic. During the slightly more than three years of the study, 19 subjects taking placebo suffered heart attacks, compared to only 2 in the group taking Acarbose (Fig. 7). Acarbose treatment also had a significant effect on the risk of developing hypertension. Of 682 patients in the Acarbose group, only 78 developed hypertension (11%) vs 115 (17%) of those (682) in the placebo group (Fig. 8). The authors added that Acarbose treatment was associated with a significant reduction in body weight, BMI (Body Mass Index), waist circumference, blood pressure, 2-hour glucose concentrations, and triglyceride levels. They concluded that Acarbose treatment was associated with a significant reduction in the incidence of cardiovascular disease and hypertension.

"19 subjects taking placebo suffered heart attacks, compared to only 2 in the group taking Acarbose."

#### "In fact, Acarbose and Metformin can be taken together, potentiating each other's beneficial effects."

In 2011, scientists presented a comprehensive schematic to connect the plethora of benefits that have been attributed to this remarkable medication (Fig. 9)

#### **ACARBOSE FOR WEIGHT LOSS**

Animal studies with acarbose have consistently shown that Acarbose has a body fat-lowering action. Balfour and McTavish (14) reported that Acarbose caused a dosedependent reduction in body weight gain of genetically obese and hyperinsulinemic rats. In higher doses, acarbose even caused a dramatic loss in weight (Fig 10).

Many studies have reported a beneficial effect of alpha glucosidase inhibitors on bodyweight in humans (9, 11, 20-22), although the effect was usually reported as "moderate." Acarbose also demonstrated the ability to retard "relapse weight gain" in overweight patients who had lost weight before beginning treatment with Acarbose (23, 24).

In view of the salutary effect that Acarbose has on blood sugar, insulin, lipids and HbA1c, I was at first surprised at the modest weight loss reported by participants in the studies (especially compared to the significant benefit I routinely observe in my patients). However, upon reflection the modest effects of Acarbose as a weight loss agent in the above studies can be understood. As noted, weight loss was a usual finding in the animal studies. Most animal studies were done on normal (non-diabetic) or obese animals. However, the human studies were quite different, as the overwhelming majority of subjects were diabetic (or had impaired glucose tolerance)—and were often simultaneously treated with sulfonylureas and/or insulin. Diabetics characteristically gain weight, due to insulin resistance and hyperinsulinemia. Sulfonylurea drugs or insulin are notorious for causing additional weight gain (Metformin, which usually results in loss of body fat, was not commonly used in most of the earlier studies cited above).

More recent studies, however, have shown much more positive results—since the drugs used were Acarbose alone, or Acarbose combined with Metformin, In a

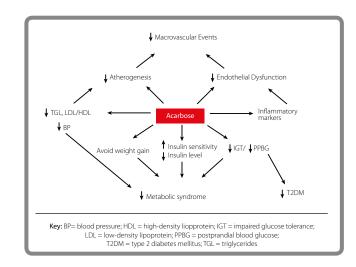


Figure 9. Proposed cardiovascular benefits of Acarbose. (18)

large-scale observational study of some 15,000 patients in China, Taiwan, the Middle-East, Morocco, Poland, Indonesia, Pakistan and the Philippines, with a follow-up of three years, a notable weight decrease was seen in all treatment groups (Acarbose alone, or Acarbose combined with Metformin and sulfonylureas or insulin) (25). In an even more recent study in China, 784 newly-diagnosed diabetics were placed on Acarbose or Metformin. After 48 weeks, the scientists determined that Acarbose had similar efficacy to Metformin (in terms of glycemic control), but that more bodyweight was lost in the Acarbose-treated group (26).

#### **ADVERSE EFFECTS AND SAFETY**

Acarbose is a very safe drug; only about 1-2% is absorbed systemically. The most frequent side effects are all due to the unabsorbed carbohydrates, which ferment in the colon and can cause sometimes uncomfortable or embarrassing increased gas production, abdominal cramps, bloating and even diarrhea (Fig. 11). These effects can be minimized by taking the lowest effective dose—i.e., below that which causes the gastrointestinal distress. Continued use usually results in a reduction or resolution of these symptoms. As some tolerance seems to develop, dosages can be increased to the maximum recommended dosage of 300 mg daily.

In 1988, Clissold and Edwards (6) reported that "from the large clinical studies reported to date, acarboseeven after treatment for up to 5 years-does not produce any clinically significant adverse effects

#### on biochemical and hematological parameters".

In another large placebo controlled study, doses of acarbose as large as 200 mg three times daily had no toxic effect according to the results of hematologic and biochemical profiles, including liver function tests (5) (although these high doses did cause a higher incidence of abdominal side effects, as indicated in Fig. 11).

Acarbose is contraindicated in people with inflammatory bowel disease, colonic ulceration or partial intestinal obstruction, predisposition to intestinal obstruction, chronic intestinal disease associated with marked disorders of absorption or digestion, conditions which might be exacerbated by increased intestinal gas formation (like hernias), or impaired hepatic function.

#### DOSAGE

Acarbose works best when it is combined with food. When taken as a tablet, it is only 1/4 as effective as when consumed in powdered form (Fig. 12). O'dea and Turton (28) recommended that Acarbose be marketed as a powder rather than a tablet, so it could be mixed into the carbohydrate components of a meal.

Since Acarbose is not available as a powder, and is actually pleasant-tasting, I suggest that it be chewed with food at the beginning of meal or when consuming a starchy snack. I recommend that Acarbose be started at as little as 25 mg daily, to minimize side effects, and gradually advance the dosage and frequency as tolerance develops, up to a maximum dosage of 100 mg three times daily, chewed with meals. Of course, if one is on a strict high protein/"Atkins Diet," Acarbose is not necessary.

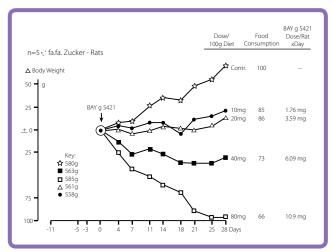


Figure 10. Effect of acarbose on body weight gain and food intake of genetically obese "Zucker" rats(19)

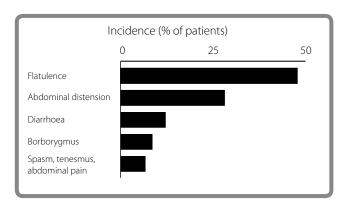
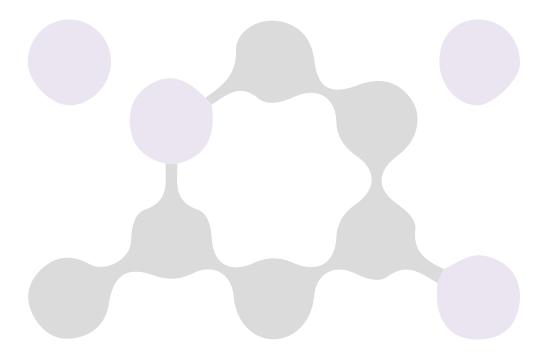


Figure 11. Incidence of adverse effects with Acarbose (usually 300-600 mg/day) in 962 diabetic patients for periods up to two years<sup>(27)</sup>. The high incidence of side effects was due to the excessive doses (up to 600 mg/day) of Acarbose



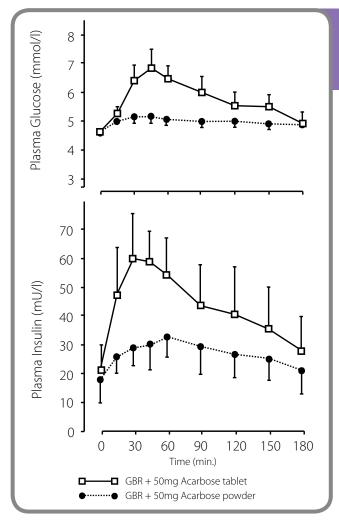


Figure 12. Comparison of Acarbose powder and tablets on post-meal glucose and insulin concentrations. After ingestion of 75 gram starch (ground brown rice-GBR) with 50 mg Acarbose--either mixed in the meal as a powder (- - -) or eaten with the first mouthful as a tablet ( ----- ), clearly shows that Acarbose powder mixed with the food is much more effective than when consumed as a tablet (28)

#### CONCLUSION

I believe that acarbose, like metformin; will become increasingly recognized for its potential caloric-restrictionmimicking/anti-aging, cardio-protective and anti-obesity effects. In fact, Acarbose and Metformin can be taken together, potentiating each other's beneficial effects. Curiously, despite the well-documented safety and efficacy of Acarbose, it is not well known in the west — and many pharmacies have to "special order" it for my patients. Consequently, I was surprised to learn recently that alpha glucosidase inhibitors like Acarbose are the most popularly prescribed glucose-lowering agents in China. (29).

Got an opinion on this article? Share your views with us: feedback@antiaging-systems.com

#### **REFERENCES**

- 1. Dilman V, and Dean W. The Neuroendocrine Theory of Aging and Degenerative Diseases, Center for Bio-Gerontology, Pensacola, Florida, 1992.
- 2. Rabasa-Lhoret, R, and Chiasson, J-L. Potential of alpha-glucosidase inhibitors in elderly patients with diabetes nellitus and impaired glucose tolerance. Drugs and Aging, 1998, 13(2): 131-143.
- 3. Clissold SP, and Edwards C. Acarbose—A preliminary review of its pharmacodynamic properties, and therapeutic potential. Drugs, 1988:35; 214-243,.
- 4. Standl, E, and Schnell, O. Alpha-Glucosidase Inhibitors 2012—cardiovascular considerations and trial evaluation. Diabetes & Vascular Disease Research, 2012;9(3):163-169.
- 5. Chiasson, J.L., Josse, R.G., Hunt, J.A., Palmason, C., Rodger, N.W., et al. The effectiveness of Acarbose in the treatment of patients with NIDDM. A multi-centre controlled clinical trial. Ann Intern Med, 1994, 121: 928-935. 6. Kado S. Murakami T. Aoki A. et al. Effect of Acarbose on postprandial lipid metabolism in type 2 diabetes mellitus. Diabetes Res Clin Pract. 1998;41:49-55.
- 7. Lardinois CK, Greenfield MS, Schwartz HC, et al. Acarbose treatment of non-insulin dependent diabetes mellitus Arch Intern Med, 1984, 144; 345-7.
- 8. Akazawa, Y., Koide, M., Oishi, M., Azuma, T., and Tashiro, S. Clinical usefulness of acarbose and fiber in the treatment of diabetes mellitus. Therapeutics, 1982: 36: 848-9, 870-5.
- 9. Hoffman, J., and Spengler, M. Efficacy of a 24 week monotherapy with Acarbose, metformin or placebo in dietary treated NIDDM patients: The Essen-II study, Am J Med. 1997, 103: 483.
- 10. Nuttall FQ. Effect of age on the percentage of hemoglobin A1c and the percentage of total glycohemoglobin in non-diabetic persons. J Lab Clin Med, 1999, 134: 5, 451-453.
- 11. Coniff. R.F., Shapiro, J.A., Robbins, D., et al. Reduction of glycosylated hemoglobin and postprandial hyperglycemia by Acarbose in patients with NIDDM. Diabetes Care, 1995, 18: 817-24.
- 12. Philip E, Sundaram ML, Das R, et al. Acarbose improves glycemic control as add-on or monotherapy in Indian type-2 diabetes: Findings from the GlucoVIP multinational observational study. Indian J Endocrinol Metab. 2013.
- 13. Magner JM, and Amatruda JM. Alpha glucosidase inhibitors in the treatment of diabetes, in: Diabetes Mellitus: A Fundamental and Clinical Text, by: LeRoith D, Taylor SI, and Olefsky JM (eds), 2d ed, Lippincott, Williams & Wilkins, 2000.
- 14. Balfour JA, and McTavish D. Acarbose—An update of its pharmacology and therapeutic use in diabetes mellitus. Drugs, 1993, 46 (6): 1025-1054.
- 15. Bischoff, H. The mechanism of alpha glucosidase inhibition in the management of diabetes. Clin Invest Med.
- 16. Stolk, R.P., Breteler, M.M.B., Ott, A., et al. Insulin and cognitive function in an elderly population. Diabetes Care, 1997, 20: 792-5.
- 17. Chiasson JL, Josse RG, Gomis R, et al. Acarbose treatment and the risk of cardiovascular disease and hypertension in patients with impaired glucose tolerance—The STOP-NIDDM trial. JAMA, 2003:290;486-494.
- 18. Arungarinathan G. McKay GA, and Fisher M. Drugs for diabetes; part 4 Acarbose, Br J Cardiol 2011;18:78-81. 19. Puls W, and Krause HP. Delay of carbohydrate absorption by inhibitors of intestinal alpha-glucosidases. Advances in Experimental Medicine and Biology, 1979, 119: 341-346.
- 20. Calle-Pascual, A., Garcia-Honduvilla, J., Amrtin-Alvarez, P.J., et al. Influence of 16-week monotherapy with acarbose on cardiovascular risk factors in obese subjects with non-insulin-dependent diabetes mellitus: a controlled, double blind comparison study with placebo. Diabete Metab, 1996, 22: 201-2.
- 21. Johnston, P.S., Lebovitz, H.E., Coniff, R. Advantages of monotherapy with alpha-glucosidase inhibitors in elderly NIDDM patients. Diabetes, 1997, 46 Suppl 1: 158A.
- 22. Goto, Y., Nakagawa, S., Goto, Y., et al. Clinical utility of BAY g 5421 (acarbose) on NIDDM. Multicentre double blind comparative study, loaku no Avumi, 1989, 149; 591-618.
- 23. Williams-Olsson T. Alpha-glucosidase inhibition in obesity. Acta Medica Scandinavica, 1985, 706 (Suppl 1)
- 24. Williams-Olsson T., Krotkiewski, M., Sjostrom, L. Relapse-reducing effects of acarbose after weight reduction in severely obese subjects, J Obesity and Weight Regulation, 1985, 4: 20-32.
- 25. Li C, Hung YJ, Qamruddin K, et al. International noninterventional study of Acarbose treatment in patients with type 2 diabetes mellitus. Diabetes Res Clin Pract. 2011. Apr;92(1):57-64.
- 26, Yang W. Liu J. Shan Z. et al. Acarbose compared with metformin as initial therapy in patients with newly diagnosed type 2 diabetes: an open-label, non-inferiority randomised trial. Lancet Diabetes Endocrinol. 2014;2(1):46-55
- 27. Hillebrand, I., Boehme, K., Frank, G., Fink, H., Berchtold, P. The effects of the alpha glucosidase inhibitor BAY g 5421 (acarbose) on meal-stimulated elevations of circulating glucose, insulin, and triglyceride levels in man. search in Experimental Medicine, 1979, 175: 81-86.
- 28. O'Dea, Kerin, and Turton, Janice. Optimum effectiveness of intestinal alpha-glucosidase inhibitors: Importance of uniform distribution through a meal. American J Clin Nutr. 41: March. 1985. 511-516.
- 29. Standl E and Schnell O. Alpha-glucosidase inhibitors 2012—Cardiovascular considerations and trial evaluation Diabetes & Vascular Disease Research 2012:9(3);163-169.

# Acarbose



#### Acarbose fights diabetes, weight gain and aging!

- Acarbose helps to prevent the breakdown of carbohydrates in the stomach into sugars.
- Acarbose is used to help diabetics by preventing 'sugar spikes' and it can also be a useful adjunct for weight loss too, since slowing and preventing carbohydrate absorption aids dieting.

# Acarbose (Glucobay®

30 x 100mg Chewable Tablets - \$14.99

(Usually \$19.99 - Aging Matters Special\*: Save \$5.00 per pack!)

ONLINE CODE



\*Offer valid until 2nd November 2016

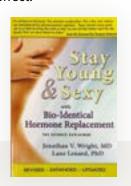
#### SPOTLIGHT: BIOIDENTICAL HORMONES

#### NATURAL ESTROGENS AND PROGESTERONE FOR WOMEN

IAS carries a wide range of bioidentical hormones - a term that means 'natural to and in the body'. In this featured section we are focusing on the use of natural estrogens and progesterone for women, which of course are normally utilised to aid the menopause.

When hormone replacement therapy (HRT) was developed in the 1920s, estrogens had to be derived from horse urine because a laboratory solution was too difficult/ expensive to synthesize. But today everything has changed, yet this ancient practice continues- these facts have been pointed out by Dr. Wright in his best-selling book 'Stay Young & Sexy'

Horse estrogens are, as you might expect, not identical to human; after all humans don't have manes nor do they have hooves! Yet the industry is stuck in this old loop, despite the fact that natural (bioidentical) estrogens can be easily produced now. Some people believe that the known side-effects from 'traditional HRT' are due to the fact that the hormones given are not correct.



Above: Stay Young & Sexy By Dr. Wright

### Esnatri™, a unique tri-estrogen

Esnatri™ is our bioidentical

triple estrogen cream, which many women use, confident they have chosen the best bioidentical estrogen cream available. It comes directly from the work of Dr. Wright who has shown that the majority of women produce estrogens in the ratios of 90% estriol, 7% estrone and 3% estrone.



Above: As Dr. Wright himself has said many times; "we only have to copy nature, the right molecules at the right times and doses."

Most tri-estrogen preparations attempt to replicate the human hormones estriol, estradiol and estrone, apply them in the ratio of 80:10:10, while some even entirely over-look estriol, claiming it is a weak estrogen. But, women naturally produce high levels of estriol and it is considered to have anticarcinogenic effects.

#### Esnatri™ use

The Esnatri™ cream can be applied by daily rotation to your neck, upper chest, breasts and behind the knees, or inner thighs. A typical starting dose is 2 mg, start from day one (of what would have been the start of your menstrual cycle) and continue until day 25. Then you should stop for five days, before repeating the application at the start of the next menstrual cycle. During these last few days, the estrogen receptors are being allowed to 'rest' as they have been accustomed.

#### Progesterone

Progesterone is the counterbalance to estrogens. Indeed, whilst women can significantly decline in estrogen levels during menopausethey rarely reach zero production levels, whereas progesterone

ce l it ti-

can sometimes not be measured at all in elderly women.

It is also the low of progesterone that most significantly impacts bone strength, leading onto osteoporosis, so there are numerous reasons to ensure that progesterone is also taken alongside an estrogen therapy.

IAS provides a 5% strength natural progesterone cream. Typical doses are 25 mg to 30 mg of progesterone applied on day 10 and continuing to 25. The start date varies according to the usual timing of your ovulation. Note: As with the Esnatri™ cream, stop for the last five days of your cycle so that the estrogen receptors have their accustomed 'rest' period.

Remember, your hormone replacement therapy should be overseen by a physician and should not be undertaken if you have undergone cancer treatment.

"Esnatri™ is our bioidentical triple estrogen cream, which many women use, confident they have chosen the best..."

#### SPOTLIGHT: BIOIDENTICAL HORMONES

#### OXYTOCIN FOR PASSION AND SEX

IAS carries a wide range of bioidentical hormones - a term that means 'natural to and in the body'. In this featured section we are focusing on oxytocin.



#### What is oxytocin?

Oxytocin is a hormone produced by the hypothalamus, but excreted via the pituitary gland. Its orthodox medicine role is to help women give birth, since the large dose that's injected helps relaxes the uterus and alleviates the passage of the child into the world for the mother.



Above: Dr. Thierry Hertoghe

However, as we will discover and has been highlighted by Dr. Thierry Hertoghe's book; 'passion, sex and longevity, the oxytocin adventure' -it has many other roles to play too.

#### The love hormone

Oxytocin has been dubbed 'the love hormone', why would this be? Principally because oxytocin can induce feelings of bonding and care and not just

between individuals, but even with animals too! Oxytocin measurements have been taken between lovers, friends, relatives, parents and their children etc. From those results, it has been noted that oxytocin levels are higher when they are in their presence. Mothers naturally bond with their children, but even men, (especially those who experience the live birth), express their emotions as wanting to care and protect their offspring, these effects may be attributable to the release of oxytocin hence triggering the bond. On the other side of the coin, psychopaths are notoriously low in their oxytocin levels, which may be a cause of their uncaring feelings towards other humans.

#### The pain and orgasm connection

Fibromyalgia can be a very debilitating disorder with a lot of pain, sometimes constant for those who suffer with it. In women it was noted that when they were experiencing an orgasm they felt no pain at all. Later, it transpired that women undergo a burst of oxytocin during orgasm. Trials were undertaken to see if oxytocin supplementation could alleviate the pain of fibromyalgia, there was some success, but the side-effect noted was that those women now enjoyed multiple orgasms! This was a fact picked up on by the popular press and is probably singularly the action most responsible for bringing oxytocin into the public gaze.

#### Synergy

Dr. Hertoghe has explained that some folks will not feel the effects of oxytocin. This is principally because of two reasons, (if we consider that the dose is correct for that individual). Firstly, that some people are 'low' in their own principal sexhormone, so if a man is low testosterone, or if a woman is low estrogen, it is possible that oxytocin will not elicit its full potential in those persons.

The other issue could be low vasopressin; vasopressin is a counterpart

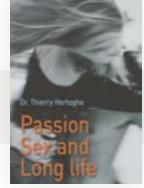


to oxytocin, produced and released via the same glands. In cases of vasopressin deficiency, the patient may enhance the oxytocin experience by adding one or two sprays (10 IU each) of vasopressin via the Vaso-Pro™ nasal spray.

#### Dosing

As might be expected doses are very dependent upon its use. However for social or sexual enhancement, one can consider 5 IU to 10 IU a 'typical' dose. In fact, Dr. Hertoghe has somewhat reduced the doses that he recommends in his book, (transmitted via personal conversation to me).

Currently IAS is providing Oxy-Sub™ in 20 IU trouches (a soft sublingual tablet), these can therefore be cut into half or quarter for a dose of 5 or 10 IU and should be placed under the tongue and allowed to melt. The other option is Oxy-Pro™ which is applied intranasally delivering 10 IU per spray.



"...oxytocin can induce feelings of bonding and care and not just between individuals, but even with animals too!"

#### SPOTLIGHT: CAN-C

#### A BREAKTHROUGH FOR CATARACT

Can-C<sup>™</sup> eye-drops are the original<sup>™</sup> brand- developed by Innovative Vision Products (IVP). This group were the first to research, publish and prove how eye-drops can reduce and even eradicate cataract. Accordingly there are active US and EU patents (and others pending) on this unique and special product.

#### **Unique formula:**

Can-C<sup>™</sup> eye-drops are the formula from the original published human trials. They contain a purified and racemized form of n-acetylcarnosine (made in Japan); this natural di-peptide has potent anti-glycating and antioxidant properties that prevents lipid peroxidation. Note that the formula is important- it's not all about the n-acetylcarnosine; the specific carrier agents and their purity are also important. If you look at the Can-C<sup>™</sup> formula you will see differences to the copycats, (remember it is only Can-C<sup>™</sup> that is patented in recognition of the original work). If you want the best possible results in the fastest possible time, then choose Can-C™ to deliver them according to the

#### **Clinical trial:**

clinical trials.

Patients placed two-drops of Can-C™ into their eyes twice daily for a 6-month

period, the outcome was:

- 90% saw an improvement in their visual acuity.
- 88.9% of patients showed improvement in the clarity of their lens.

There have been numerous reports of cataract shrinkage and even disappearance with documented evidence that Can-C<sup>™</sup> eye-drops remain effective (and safe) more than 24-months later. The most commonly expressed initial reports are that glare is significantly improved, (for example night driving is much safer) and color perception is enhanced.

#### Improving eye-sight:

More evidence is mounting that Can-C™ is efficacious for many conditions including:

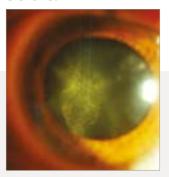
- Cataracts (particularly the senile version)
- Glaucoma
- Presbyopia
- Corneal disorders
- Eye strain
- Ocular inflammation
- Blurred vision

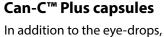
- Vitreous opacities and lesions
- Diabetes mellitus complications
- Contact lens users
- Dry eye syndrome Of special interest may be to persons who wear contact lenses. This is because Can-C<sup>™</sup> inhibits the accumulation of lactic acid and therefore contacts can be worn for longer periods without pain.

We have also received reports that Can-C™ not only aids dry-eye syndrome with its lubricants, but that Can-C<sup>™</sup> helps to unclog proteins from the lacrimal ducts, thus releasing more natural tears onto the eye.

In a similar way, it is also believed that the unclogging of proteins in the eye's drain, (the Schlemm valve), helps to reduce intraocular pressure and thus aids glaucoma.

#### **Before:**





Can-C<sup>™</sup> Plus capsules are also available. They are strongly recommended to be used in combination with the eye-drops- if you have ripe (long existing) cataracts.



Dr. Kyriazis book, 'The Cataract Cure', details the usefulness and evidence of Can-C™eyedrops.

It is now available as a FREE e-book at:

www.antiaging-systems.com/ can-c-ebook

#### **After:**



#### SPOTLIGHT: MZS

#### BECAUSE NOT ALL MELATONINS ARE CREATED EQUAL

Melatonin is produced by the pineal gland at night to regulate our circadian rhythm, (sometimes called the sleep wake cycle). As we age the amount of melatonin we produce reduces resulting in many older people sleeping less and having a lower quality of sleep.

Our melatonin has been formulated by the world's foremost melatonin expert Dr. Walter Pierpaoli, his Melatonin Zn Se, or MZS™, is totally unique since it is designed to mimic the natural night peak of melatonin- to leave you feeling refreshed and alert the following day.

#### **What does Melatonin** do?

Melatonin is vital to protect our hormonal system, regulate immunity and repair our body's cells. It is commonly used by shift workers and also to treat jet lag and age related sleep disorders, but its abilities go far beyond simply its sleep inducing properties.

#### The antioxidant effects of melatonin

Melatonin is an extremely effective antioxidant; in fact on a molecule to molecule basis: melatonin has proved to be significantly more efficient in neutralizing toxic hydroxyl-

Circadian Rhythm of Melatonin

radicals than the two wellknown free radical scavengers, glutathione and mannitol.

#### Melatonin's effects on longevity

Melatonin's effect on longevity is well documented; in fact laboratory tests on rats and mice have demonstrated that melatonin increased their lifespans by 20%. Experts believe melatonin is a vital antiaging product because of its positive effect on aging.

MZS™ and age-related macular degeneration

Age related macular degeneration (ARMD) comes in two forms, wet and dry and is a notoriously difficult disorder to treat and is linked to blindness. A 24-month study, (published in NY Academy of Science, 2005, 1057:384-392) on 100 patients showed that after 3 months, the majority of patients taking 3 mg of Melatonin Zn Se nightly had halted the progression of their age

> related macular degeneration and at 6 months many showed reversal of their

ARMD. Remarkably this was true for both the wet and dry forms!

#### Why is Dr. Pierpaoli's MZS™ more effective than other melatonin supplements?

There are three principal reasons, firstly it is of pharmaceutical quality at a dose of 3 mg, secondly it contains the synergistic ingredients of selenium and zinc, but thirdly and most importantly- it is designed to release at a very specific time. Dr. Pierpaoli's research led him to perfect a formula that exactly mimics the pineal gland's release of melatonin. Thus means that MZS™ is the only melatonin supplement to follow nature's own night peak.

#### How much should I take?

Take half to one 3 mg tablet at bedtime only; do not take more than two tablets. By taking MZS™ between 9pm and 11pm you will create a night peak between 1am and 3am, this is the most natural and normal time to have the highest melatonin levels.

#### Left: Melatonin levels in blood over 24-hours

This graph compares Dr Pierpaoli's melatonin formula (red line) to the natural release of melatonin (dark blue). Two other common types of melatonin supplements (light blue and green lines) demonstrate that sublingual melatonin peaks too soon and that time released formulas peak too late.

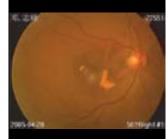


#### MZS™ is so much more than a sleep aid

Melatonin has had so many published benefits it is impossible to list them all here. From jet lag and shift work to well-being and antiaging, no other melatonin supplement offers the endorsement of Dr. Pierpaoli, or the exact formula used in all of his renowned clinical trials. If you've tried other melatonin and didn't notice any significant effect, then we highly recommend you try Dr Pierpaoli's MZS™ for a superior experience.

Dr. Pierpaoli's free ebook 'The key of Life' can be read here: http://bit.ly/1vdB31y





Above: Here are some before and after Fundus photos showing the benefit of Melatonin Zn Se. (Top before, below: after treatment).

Far Right: 5-months later after use of Can-C eye-drops (two drops twice daily), there is no longer a visible cataract and eyesight has improved.

Right: A woman's eye shows the cataract before treatment.



#### SPOTLIGHT: PEOS

#### SUPPLYING AND BALANCING OMEGAS NATURALLY

Most people are familiar with the benefits of omega oils for their health and in particular to reduce inflammation. Indeed cod-liver oil supplements are the world's most popular supplement, but recently Professor Brian Peskin's research which is all contained in his new book – the PEO solution - is causing guite a stir and may make many folks to rethink and change their stance.





Professor Brian Peskin and the cover of his latest book - the PEO solution

We are referring to his discovery that the body naturally uses plant oils to make its own omega 3 and 6, thereby satisfying a precise balance according to need-providing the 'raw materials' are available. Professor Peskin has termed the phrase PEO as the acronym for 'parent essential oils.'

**Professor Peskin states** openly that he has found this information hidden in the scientific literature and never once found it referred to in the medical literature. Why does it matter? Because as he says, it means that physicians are unaware of these facts and therefore they continue to advocate super-physiological doses of omegas from fish oil, which may be actually doing more harm than good!

It's a lot to swallow, (no pun

HOW DO YOU

JUICE A FISH?

You start with rejected fish

and then you process them

FISH OIL CAPSULES:

mpossible to get sufficient PEOs.

Figure: How is fish oil made? It often does not start as the

intended) and we can't do his research justice on a single page, which is why we recommend his book, or take a look at the Aging Matters<sup>™</sup> magazine No1, 2015 in which Professor Peskin's article is the lead story. Let's summarise the advantages of the PEOs:

- The plant oils live in our environment, (typically around 50-60°F); hence they do not go rancid at room temperature. Cold water fish live in a cold environment (typically around 30-40°F), therefore PEOs represent a much more stable product.
- The PEOs are obviously a nonanimal source and therefore can be considered more suitable for those wanting to avoid animal based products.
- The PEOs represent a sustainable source, since there is already too much 'pressure' on the seas to provide both fish and even krill stocks.
- The PEOs enable the body to produce its own internal essential fatty acids (EFAs) and correct its own balance. This has not been shown to be the case with fish oil supplements.

# Why not fish

oil? **Professor Peskin** maintains that the super-high doses in fish oils are extreme when compared to those manufactured within the body. Furthermore, even the omega 3 to

omega 6 balance they provide could be wrong and that the body may actually require more omega 6 than is currently being advocated today. Did you know that when a bear eats a fish he throws away the body? Could it be that the bear

wants the omega 6 provided by the fish brain and not the omega 3 that is within its body? (The fish uses omega 3 as an anti-freeze due to its cold water environment).

#### PEO-Pro™

IAS has always been 'on the cutting-edge.' It may remain controversial, however we have taken the decision to remove fish and krill based oils from our range and replace them with PEOs that are contained in PEO-Pro™.

The PEO-Pro<sup>™</sup> supplement

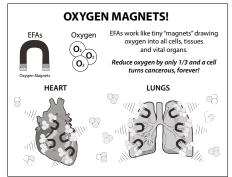


Figure: Essential fatty acids provided via PEOs work like magnets, drawing oxygen into cells and tissues. Reduce oxygen content in cells by one third and they can become cancerous.

contains organically produced, cold-pressed seed oils, these include high linoleic safflower oil, sunflower oil, evening primrose oil and flax oil, all in the proportions derived from Professor Peskin's research.

Maintenance doses are 1 or 2 capsules daily; for those with greater need, 1 capsule per 40 lbs (18 Kg) bodyweight per day may be more suitable.

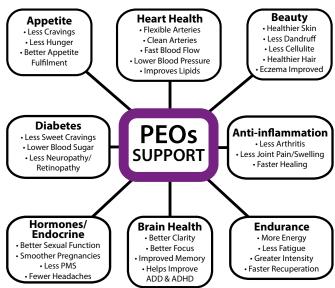


Figure: This diagram highlights the benefits of EFAs (essential fatty acids) that PEOs can deliver.

#### SPOTLIGHT: PEPTIDE BIOREGULATORS

#### THE DISCOVERY OF GENE SWITCHES IN FOOD

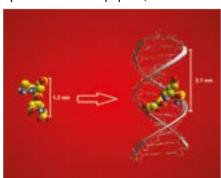


Today Professor Vladimir Khavinson is the President of the European Academy of Gerontology and Geriatrics, but in the 1980's he was a Colonel in the Soviet Union military medical corps. At the time, he and his team were approached by Kremlin officials, they wanted them to

find a way to protect their troops from a myriad of problems; issues such as radiation for submariners in nuclear submarines to troops that may be blinded from known, (but thankfully unused) new weapons such as battlefield lasers.

#### **A former Soviet** military secret!

What their research uncovered - that was used for two decades on many thousands of men and women - was a remarkable link between short chain peptides and DNA This former military secret is now available to the public as peptide bioregulators. Their published research has identified that each organ / gland / tissue uses a highly specific short chain peptide,



Above: A short-chain peptide bioregulator interacting with DNA

obtained from food, to act as a 'short-cut' to initiate protein synthesis. These peptides, unlike proteins, can enter the blood through the stomach. Through a comprehensive list of patents and even copyrighted PowerPoint slides, the Russian research group have shown that each of the concentrated peptide bioregulators so far examined, interact with particular strands of DNA - effectively and very specifically activating repair

and regenerative processes.

This is a remarkable story since what we are describing here are peptides that act as individualised gene switches. To date, they have been tested for many years on thousands

of individuals, without report of any serious side effects or contraindications. We believe that they could be set to 'out do' stem cells. Why? Because this peptide therapy is relatively cheap, highly specific, can be taken orally and doesn't require any suppression of the immune system to operate fully (as stem cells do).

#### **Original material from** the trials

The peptide bioregulators available via IAS are the bovine originals; sourced from carefully chosen Danish calves and processed through pharmaceutical processes and filters. They are not the synthetic versions which have not been studied/ proven.

Peptide bioregulators act as they sound- to regulate; for example, Thyreogen®

the thyroid peptide would increase thyroid activity if it were too low, but decrease it if it were too high!

#### Dosing

chelohart\*

Doses are very dependent upon the need and unlike hormones these peptides do not have to be taken every day, hence making them a cost effective regime. A typical/ average use could be considered as follows:

- · Start with an intensive course: 2 capsules once a day for 30-days.
- Thereafter use 2 capsules once a day for 10-days, repeat every 2, 3, 4 or even as little as 6-months.

The story of the peptide bioregulators is a remarkable one and we recommend that you to read the articles and interviews and see the video on the IAS website.

#### PEPTIDES CURRENTLY AVAILABLE:

Bone Marrow bioregulator: Parathyroid bioregulator: Brain peptide bioregulator: Heart peptide bioregulator: Bladder peptide bioregulator: Pineal peptide bioregulator: Adrenal peptide bioregulator: Muscle peptide bioregulator: Prostate gland peptide bioregulator: Kidney peptide bioregulator: Cartilage peptide bioregulator:

Bonomarlot® Bonotirk® Cerluten® Chelohart® Chitomur® Endoluten<sup>®</sup> Glandokort<sup>e</sup> Gotratix<sup>®</sup> Libidon® Pielotax<sup>®</sup> Sigumir<sup>®</sup>

Pancreas peptide bioregulator: Stomach mucus peptide bioregulator: Liver peptide bioregulator: Lung peptide bioregulator: Testes peptide bioregulator: Thyroid peptide bioregulator: Blood vessel peptide bioregulator: Retina peptide bioregulator: Thymus peptide bioregulator: Ovary peptide bioregulator:

Suprefort® Stamakort® Svetinorm<sup>®</sup> Taxorest® Testoluten® Thyreogen® Ventfort® Visoluten® Vladonix® Zhenoluten®

#### SPOTLIGHT: SMART DRUGS AND NUTRIENTS

#### DEPRENYL FOR FOCUS AND CONCENTRATION

Deprenyl is also known as selegiline, it was created in the 1960s by Professor Joseph Knoll from Hungary, principally as an aid to Parkinson's patients - because deprenyl has a significant benefit to improve dopamine levels in the brain. Dopamine is the neurotransmitter most affected in Parkinson's disease, in fact, deprenyl still remains a front line treatment for that disease.

#### Significant longevity studies



Professor Joseph Knoll; now aged in his 90s but still active in pharmacological research.

**Professor Knoll's experiments** with rats produced some of the most incredible longevity benefits that have ever been seen. When they were fed deprenyl in their food, they lived so much longer than those that were not, so much so, that even after the last non-treated rat died, the first of the deprenyl treated rats was yet to die! These results are shown in figure one: Note; interestingly and importantly, these results were verified independently in another study not conducted by Professor Knoll. Based on this research, Dean, Fowkes and

Morgenthaler, (as published in the book, Smart Drugs and Nutrients I), produced figure 2. It highlights that the loss of dopamine in humans with age, can be mapped against both the development of Parkinson's and even death.

#### Mode of action

For a long time deprenyl

has been expressed as a MAO-b inhibitor, that it to say that is prevents the enzyme monoamine-oxidase type-b from destroying dopamine, ergo leading to its greater availability in the brain. The inhibition of the more common MAO-a can be problematic, leading to something called 'the cheese effect,' therefore this is not a side effect of deprenyl, although it should be noted that dopamine can inhibit type-a, but usually only at very high doses of 20mg.

In more recent times, Professor Knoll has noted that there is another significant action of deprenyl and this is the raising, (albeit briefly) of PEA levels. PEA is a catecholamine activity enhancer that raises

norepinephrine levels; this is a significant attention agent that is behind the primary mechanism of the famous Eugeroic drug-modafinil (Provigil®).

To learn a great deal more about dopamine and deprenyl, we would recommend Professor Knoll's books; 'the brain and its self', or 'how selegiline/ deprenyl slows brain aging.'

#### Typical patient responses

In patients who have mild cognitive impairment, or age related minor cognitive dysfunction, the most common report is of a significant improvement in their focus and concentration. Persons with higher dopamine levels often appear more 'driven' and 'dedicated.' Avoid overuse since it can lead to what may appear to be an oppressive behavior, as others around you are not so focused and 'on the ball' as you! This is why we recommend occasional breaks from deprenyl use, some advocate one week off in the month and others use it during the

weekdays but not at the weekends.

#### Dosing

Doses are as normal, based upon need and age. Whilst Parkinson's patient will require large doses, a person wanting to improve their cognitive performance may want to typically consider 1mg to 3mg per day, with occasional breaks. Note: These doses do not take into account synergy with other dopamine enhancing agents and persons using anti-depressants should consult with their physician beforehand.

Deprenyl tablets are typically provided in 5mg form (Jumex®); some persons like to take ½ to 1 of these tablets 3-times a week: however the use of the deprenyl liquid (Dep-Pro™) is particularly attractive for those using deprenyl to generally support, protect and improve neurological function, since 1 drop = 1mg. Therefore the liquid can be dosed very precisely by simply placing those drops into a cold drink. Avoid use in the late evening to prevent any sleep disruption.

#### Slow Aging Rapid Parkinson's PARKINSON'S SYMPTOMS DĒATH 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

Figure 2: For humans, the normal loss of dopamine past the age of 40 is 13% per decade. As the lines suggest, if we all live long enough we all become senile!

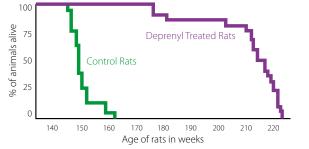


Figure 1: Professor Knoll's experiment showed that when deprenyl is given to animals it significantly extends their lifespan and their latter life activity.

#### SPOTLIGHT: SMART DRUGS AND NUTRIENTS

#### PIRACETAM. THE ORIGINAL NOOTROPIC

Smart drugs and nutrients, or to give them their correct medical terminologynootropics, are agents that can not only improve conditions of senile dementias, but in recent times have become popular for older individuals to improve their mental and cognitive processes. It was Ward Dean, M.D. who highlighted these facts through his very popular 'Smart Drug' series of books in the 1980s, since then the term 'smart drugs' has become mainstream.



#### Piracetam, the original nootropic

The smart-drug we focus on here was in fact the first, developed as it was by Dr. Giurgea for UCB laboratories in Belgium in the 1960s. Originally it was designed to assist with travel and altitude sickness, but shortly afterward individuals realised that piracetam had positive cognitive enhancement effects.

#### What can piracetam do for me?

Piracetam is a cognition agent that has been used successfully to treat a

wide range of conditions, for example it has been shown to increase a person's attention levels and improve memory and intelligence. Piracetam can help to slow down 'senile involution', dementia and Alzheimer's disease. In tests and trials, piracetam induces significant improvement to memory consolidation and recall in those suffering from 'age-associated memory impairment'.

Piracetam has also been used to improve patient's recovery from strokes, particularly improving post stroke speech impairment (aphasia). Another use has been in cases of acute and chronic cerebral ischaemia, (decreased blood flow to the brain). Using piracetam has restored speech and the use of limbs in these patients; it has also increased neuronal activity in the brain when measured with EEG.

For regular individuals, piracetam has been shown to enhance idea creation and the ability to 'see things through,' in other words to have ideas and bring them to fruition. The level of clarity piracetam creates is often described/ perceived as; "the fog has lifted."

#### **How does piracetam** work?

Piracetam's key and unique method of action is upon the Corpus Callosum, the region of the brain that links the two hemispheres. It is this that most experts believe is the key that gives piracetam users the ability to channel greater brain potential by connecting the logical side of the brain with the creative side more effectively, Yin and Yang if you will.



#### What are the doses of piracetam?

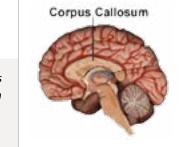
A common dose is 800mg tablets three times a day, then lowering to 800 mg twice a day after the first month. Note: The effects of piracetam can be enhanced if taken concurrently with centrophenoxine or Hydergine®.

Side effects are minimal and seldom experienced, but should you experience nausea or headache then it is usually caused by an overdose, so in which case reduce the dose and build necessary).

Note: There are many articles and videos on the IAS website

# up more slowly, (if it is

about smart drugs and nutrients.



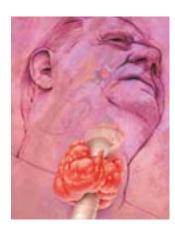
"Piracetam can help to slow down 'senile involution', dementia and Alzheimer's disease." Right: The Corpus Callosum

#### SPOTLIGHT: THYROID SUPPORT

#### FOR THE HYPOTHYROID EPIDEMIC

Dr. Broda Barnes in the 1970s estimated that 40% of the adult population was deficient in thyroid hormones; he published this statement in his excellent book-'hypothyroidism, the unsuspected epidemic.' Since then, pupils of Dr. Barnes, such as Dr. Richard Wilkinson, have suggested that this figure could be even greater now!

This is important because the thyroid gland is of pivotal importance to our overall health, but like the majority of hormones as we age the production of thyroid hormones decline. This lack of thyroid function is the root cause of a wide variety of agerelated health disorders. Ergo, supplementation with a synthetic or a natural thyroid can have a significant positive effect on a wide range of agerelated problems.



Above: The position of the thyroid gland

#### The importance of the thyroid gland

The hormones produced by the thyroid control the body's metabolism- the rate at which it burns calories for energy. It also controls the body's utilization of fat, so a decline in the secretion of hormones from the thyroid gland, (known as hypothyroidism) can result in wide range of symptoms such as poor concentration, confusion, memory problems, cold hands and feet and weight gain. Another serious condition which can be caused by and result from an underactive thyroid are painful musculoskeletal issues that affect tendons, muscles and ligaments.

#### How can I be sure if I need a thyroid supplement?

Apart from recognising the types of effects listed above, your doctor can of course get your blood

levels of thyroid checked, but another, simpler method is to take your body temperature when you wake in the morning. It should be in the range of 97.8 to 98.2 degrees Fahrenheit, if it is regularly lower you could be hypothyroid and if higher then hyper-thyroid.

#### Choosing between synthetic and natural thyroid supplements

IAS stocks a comprehensive range of both synthetic and natural thyroids, although we advocate the use of a natural supplement over a synthetic, this is because products such as Armour® are of a porcine origin, so they naturally contain the full spectrum of T1, T2, T3 and T4 thyroid hormones, (note the bottles only list the amounts of T3 and T4 because very few physicians are familiar with T1 and T2).



#### Thyroid doses

Natural desiccated thyroids are measured in grains; with one grain being equivalent to approximately 60 mg. IAS carries doses from 1/4 grain to 2 grains, with brands including Armour®, ERFA® and Nature®. IAS also provides synthetic T3 in 20 mcg and T4 in 100 mcg tablets.

#### Thyroid supplements provide potent antiaging protection

Many aging individuals can benefit from taking a thyroid supplement because this remarkable hormone has such a profound affect across so many different conditions. Many antiaging physicians consider thyroid support an essential part of any serious attempt to improve a person's health-span and longevity.

4 e) (μg)
774

## SPOTLIGHT: STEM CELL WORX

Stem Cell Worx® is an intraoral spray that contains a very high-grade bovine colostrum, (with over 30% of the antibody IgG and over 54% protein) along with a 98% pure trans-resveratrol and 95% fucoidan (a seaweed extract).

This natural health supplement is designed to activate the body's own adult stem-cells in order to provide a robust immunity. With 50 to 70 trillion cells in the body, cellular health is clearly crucial to overall well-being and good health. Hence, adult stem cells working at optimal levels provide the platform for many cumulative health benefits.

Unfortunately, as we age, our own adult stem cells decline rapidly, along with their release rates from the bone marrow, and our immune system weakens. Whilst stem cell clinics are at the forefront of antiaging medicine today, the process of full adult stem cell therapy is very expensive and has many regulatory restrictions.

Adult stem cells are the master cells of the body that have the ability to maintain, selfrenew and repair cells, tissue and muscle throughout an entire life-time. These cells are referred to as autologous, haematopoietic (blood), mesenchymal or stromal stem cells. Adult stem cells

Mesenchymal Stem Cells

Newborn

/10,000

should not be confused with embryonic stem cells that come from an embryo.

ENHANCING AND IMPROVING STEM-CELL ACTIVITY

The Stem Cell Worx® supplement is designed specifically to enhance one's own adult stem cells naturally. Stem Cell Worx® is an intraoral spray providing an absorption rate of up to 95% of its nutrients. This is important because in order for adult stem cells to be stimulated, it is the blood that is the principal carrier of nutrients and oxygen to our cells. In order to enhance cell activation you need three key factors, which are:

- Growth factors
- Immune factors and
- Cytokines

Stem Cell Worx® has all three of these factors in abundance and it is scientifically proven they are most effective when administered by intraoral spray delivery.

Time takes its toll on adult stem cells. At 65 years of age, the release rate of adult stem cells entering the bloodstream has dropped

Mesenchymal stem cells

shown as a proportion of total

MSCs rapidly decline with age

1/2,000,000

times. More prone to aging

and disease

1/400,000

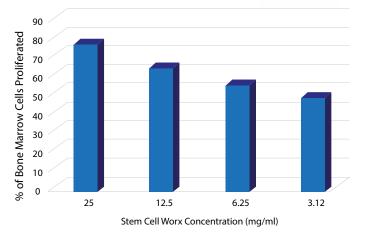


Figure 2: This study used blood samples from healthy humans. The adult stem cell proliferation percentages were determined by flow cytometry, measured in mgs of the Stem Cell Worx formulation. As this graph demonstrates the Stem Cell Worx formulation produces steady percentages of bone marrow stem cell proliferation being dose dependant, but still active at a relatively low dosage of mgs.

by 80% compared to youth. It is important to keep them activated. The good news is it is now possible to reverse this statistic.

#### Stem Cell Worx® benefits

Stem Cell Worx® contains the greatest number of natural growth and immune factors compared to any other health supplement currently on the market. This enables natural stem cell activation to be as much as 75% per 36mg of the formulation. This provides:

- Support to naturally increase adult stem cells, providing the platform for many cumulative health benefits including:
- Increased energy and endurance.
- · Boosting the immune system.
- Improved alertness and mental clarity.
- Faster recovery after your

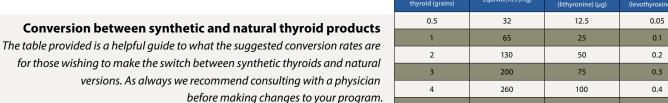
exercise regime and faster repair and recovery after surgery, injury or illness.

 Helping to build muscle, burn fat and maintain natural weight loss in conjunction with a healthy diet and exercise regime.

IAS choose Stem Cell Worx® over other purported stem-cell activators on the basis of evidence. Figure 2 demonstrates the benefits of supplementing daily with Stem Cell Worx.

#### Dosing

Six sprays into the mouth provide 36mgs of formulation. This can be performed once or twice daily as required. Spray under the tongue, hold for 10 seconds, then swallow the remainder. It's best taken on an empty stomach, at least 30-minutes before or after eating any food.



1/250,000

Lots of MSCs in our

younger years. MSCs

repair muscle, bone

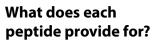
1/100,000

Teenage

#### SPOTLIGHT: YOUTH GEMS'

#### THE PEPTIDE BIOREGULATORS FOR SKIN

Four peptide bioregulators have now been combined into topical skin preparations so that their unique gene-switching performance can be bought to the field of aesthetic medicine.



The beauty product line Youth Gems® contains the following four peptides and a ginseng extract called Neovitin®. They represent the very latest developed program of complex skin care designed for the face, neck, hands and the body. The line includes four unique active ingredients of shortchain peptides that have a directed tissue-specific action to improve all basic skin structures:

- Thymus peptide: This stimulates tissue regeneration and the synthesis of tissue-specific proteins. Thus, cells proliferative and metabolic activity is enhancedaccelerating the renewal of various cell tissues. It also has an anti-inflammatory action, improving the healing time of wounds, as well as antioxidant, immune stimulating and anti-stress actions.
- Pineal peptide: This regulates metabolic processes and increases protein synthesis in skin cells. It also possesses potent antioxidant activity, normalizes the lipid peroxidation processes in skin cells that in turn

promotes the elimination of negative influences on the skin from external factors. Cartilaginous peptide. This stimulates regeneration of fibroblasts and keratinocytes and interferes with the destructive changes in collagen skin structure; it also strengthens collagen structure of elastic skin fibers and increases elasticity. Blood vessel peptide: This regulates metabolic processes in the vascular wall, normalizes vascular tone and restores disturbed skin microcirculation. It strengthens and regulates the permeability of the vascular walls of skin vessels and improves skin turgor.

#### What else is included in Youth Gems® in addition to the four peptides?

In addition to the four peptides, the Youth Gems® also contain an incredible array of beneficial natural agents- which just by themselves would make other antiaging creams jealous! The range includes: Neovitin® (a complex isolated from ginseng), olive oil, raisin-seed oil,

Argon oil, Soya oil, Jojoba oil, Bisabolol (extract from chamomile), Peony extract,

sodium hyaluronate (a derivative of hyaluronic acid), green tea extract, cocoa oil, carrageenan (from seaweed), winter bloom, almond extract and vitamin E.

#### What results have been seen?

Clinical trials and examinations have been conducted at the St. Petersburg Biogerontology Institute and they have concluded that these short chain peptides, when applied to skin cells, have many beneficial activities, shown below are some of those results. These include improved metabolism in vascular wall cells, the growth of new skin cells, enhanced antioxidant activity; increased blood flow circulation and greater moisturization.

The skin's appearance becomes smoother, with fewer wrinkles and with more elasticity, all of which helps to lift the face contours producing a more radiant, youthful appearance. These beneficial effects were noted in 100% of women who took part in the voluntary clinica trial.

Right: A 68 year old female before (top) and after (below) application of Youth Gems®

#### What's available?

- Body milk: The body milk is a very light cream that can be applied to most areas of the body.
- Day cream: The day cream is the core product designed to be applied to the face and hands.
- **Serum:** The serum is designed to be used sparingly against the most noticeable skin aging effects on the face and neck.
- Tonic: This cleanser can be used to help any area become more firm and taught and may be splashed on as required.

All of the Youth Gems® should be applied onto clean, dry skin- avoiding the eyes; makeup can be applied after absorption - if required.





#### CONDITION CROSS-REFERENCE LIST

This cross-reference list highlights individual products that have been used for these disorders. Note: It does not mean that all these products are synergistic together.

Addison's disease Aldosterone, peptide bioregulator (adrenal)

ADHD (ADD, attention deficit disorder, see mental stimulants)

Adrenal fatigue Aldosterone, hydrocortisone, peptide bioregulator (adrenal)

AGE (advanced glycated end-product inhibitors) ACF228™, aminoquanidine, Can-C™ Plus, carnosine, metformin

Age Related Macular Degeneration (see eyesight)

Age Related Mental Decline (see cognitive)

Aids (see HIV)

Alcoholism (also see compulsive disorders) 5HTP, L-tryptophan, memantine

Allergies Pregnenolone, thymus

ALS (amyotrophic lateral sclerosis, Lou Gehrig's disease) Naltrexone, TRH

Alzheimer's disease (see senile dementia)

Anabolic (see growth hormone & testosterone)

Anginas (see heart, arterial & blood)

Animal use Can-C™ eye-drops, deprenyl, L-tryptophan, peptide bioregulators (all)

Antiaging (as impacting on a particular theory of aging)

Calorie Restriction Carnosine, metformin, resveratrol

Free radical ACF228™

Glycation Aminoguanidine

Hayflick Carnosine, Peptide Bioregulator (pineal),

Membrane Centrophenoxine

Mitochondrial HyPro2™, PQQ

Neuroendocrine Metformin, TRH

**Rotational** Melatonin

Telomeres Peptide biomarker (pineal), TA65®

Anti-biotics Ciproflaxin, doxycycline, roxithromycin, tetracycline

Anti-depressants Lithium, milnacipran (Ixel®), reboxetine (Edronax®), Stablon®, Valdoxan®, venlafaxine (Efexor®)

Anti-oxidants (see free radical scavengers)

Anxiety (see stress)

ARMD (see eyesight)

Arterial (See heart, arterial & blood)

Arthritis (rheumatoid & osteo) Andro-Pro™, Gerovital-H3®, Novisyn®, PEO pregnenolone, SAMe, thymus,

Asthma (see Allergies)

Autism (also see chelation agents) Oxytocin, piracetam

Back problems (see spine)

Bell's palsy Vitamin B12

Blood disorders (see heart, arterial & blood)

Blood pressure Magnesium, Neo40®, oxytocin, potassium, propranolol, vinpocetine

Bone problems (also see joints & arthritis) Andro-Pro™, Bone-Pro2™, Esnatri™, peptide bioregulator (Bone), progesterone, SAMe, thyroid

Breathing (see lungs)

Cancer (also see anti-oxidants & radiation) 1st Line™, anastrozole, BEC5® Curaderm, bromocriptine, curcumin, DIM-Pro2™, laetrile, melatonin, metformin, naltrexone, oxaloacetate, progesterone, resveratrol, thymus, TRH

Cardiovascular (see heart & arterial disorders)

Cataplexy (sudden fatigue) Adrafinil, picamilone

Cataract (see eyesight)

Central Nervous System (CNS) Peptide bioregulator (brain)

Peptide bioregulator (Cerluten®)

Chelation agents Carnosine, centrophenoxine, DMSA, EDTA, zeolite

Cholesterol (see blood disorders)

Crohn's disease Naltrexone

Chronic fatigue syndrome (see mental stimulants & physical energy improvement)

Cognitive (also see memory & senile dementias)

Alertness Adrafinil, Xan-Pro™

Creativity Aniracetam, piracetam, pramiracetam

Focus/ concentration Deprenyl, desmopressin, vasopressin

Energy ATP-Boost™, centrophenoxine, Mito-Pro2™, NADH, picamilone

General support Gerovital-H3®, vinpocetine

Intelligence HyPro2™

Work load HyPro2™, thyroid

Compulsive disorder treatment (also see alcoholism) 5HTP, GABOB, L-tryptophan, picamilone

Cortisol alteration (also see stress) Aldosterone, DHEA, GABOB, Gerovital-H3®, hydrocortisone, peptide bioregulator (adrenal), phenytoin

Cross linking (see AGE)

Deep vein thrombosis (see frequent fliers)

Dental (see teeth & gums)

Depression (also see well-being & anti-depressants) 5HTP, aniracetam, ATP-Boost™, curcumin, deprenyl, Gerovital-H3®, lithium, L-tryptophan, milnacipran, picamilone, piracetam, pramiracetam, pregnenolone, SAMe, thymus, thyroid

DHT alternation (dihydrotestosterone) Dutasteride, finasteride, peptide bioregulator (prostate), progesterone

Diabetes Acarbose, aminoguanidine, ATP-Boost™, benfotiamine, L-carnosine, metformin, Mito-Pro2™, PEO, peptide bioregulator (pancreas), pyridoxamine, thyroid, TRH

Diabetes insipidus (see urination)

Dieting (see weight loss)

Digestive issues peptide bioregulator (Stomach), Symprove®

DNA support (also see telomeres) Carnosine, CoQ10, PEO, peptide bioregulator (pineal), PQQ, resveratrol, **TA65®** 

Down's syndrome Melatonin, piracetam

Energy improvement (see physical energy & mental stimulants)

Enzymes Boluoke®

Epilepsy GABOB, phenytoin

Erectile dysfunction (also see sex-libido & premature ejaculation) Andro-Pro™, cabergoline, deprenyl, Neo40®, oxytocin, sildenafil, Vielight®, VigorPro2™

Eyesight

ARMD MZS™

Cataracts Can-C™, Can-C™ Plus

Contact lenses Can-C™

Dry eyes Can-C™

General support Aminoquanidine, peptide bioregulator (retina), vinpocetine

Glaucoma Can-C™

Retinal MZS™, picamilone

Retinal pigmentosa Picamilone, peptide bioregulator (retina)

Excitotoxins (reduction) Carnosine, deprenyl, idebenone, lithium, memantine

Fertility Melatonin, metformin, peptide bioregulator (ovaries), TRH

Fibromyalgia (also see physical energy & mental stimulants & pain relief) 1st Line™, milnacipran, naltrexone, oxytocin

Free radical scavengers ACF228™, ATP-Boost™, BHT, glutathione, idebenone, melatonin, Mito-Pro2™

Gastrointestinal (see digestive)

Glaucoma (see eyesight)

Glucose control (see diabetes)

Glycation prevention (see AGE)

**Gout** Colchicine

Growth hormone (improvement) Bromocriptine. deprenyl, GABOB, GHRP2, GHRP6, HyPro2™, IGF-1 Neo40®, sermorelin, thymus, thyroid

Hashimoto's lodine, peptide bioregulator (Thyroid), thyroid

Hair improvement Dercos®, dutasteride, finasteride. Gerovital-H3®, MinMaxPro™, PEO

Headaches (see migraines)

Heath diagnostics (see at home test kits)

Hearing disorders Aldosterone, picamilone, vinpocetine

Heart, arterial & blood (includes blood markers)

Arteries (hard) Aminoguanidine, BioClip™-CUFF, carnosine, resveratrol

Blood pressure (high) Magnesium, Neo40®, potassium, propranolol, vinpocetine

**Calcium** Peptide bioregulator (parathyroid)

Cholesterol (high) CoQ10, Gerovital-H3®, MitoQ®, TRH. Xan-Pro™

Dilation (nitric-oxide) Deprenyl, Neo40®, Vielight®

Fibrinogen Curcumin, TRH

General support CoQ10, PEO, peptide bioregulators (heart and blood vessel), PQQ, vinpocetine

Glucose (high) Acarbose, metformin, TRH

Glycated end-products ACF228®, aminoquanidine, metformin

Heart pulse (irregular) ATP-Boost™, thyroid

Heavy metals (chelate) DMSA, EDTA, zeolite

Homocysteine TRH

Lipofuscin Centrophenoxine

Plaques (clots) Boluoke®

Triglycerides Curcumin, PEO, TRH

Hepatitis (see liver and infections)

Herpes (also see anti-biotics) 1st Line™, ACF228™, BHT. silver

HIV (also see immune system improvement) 1st Line™, melatonin, naltrexone, thymus

HCG (see HCG-Pro™)

HGH (see growth hormone)

Homocysteine (see heart, arterial and blood)

HRT (hormone replacement therapy for women) DHEA, Esnatri™, melatonin, progesterone

Human growth hormone (see growth hormone)

Hypertension (see blood pressure)

Hypothyroidism lodine, peptide bioregulator (thyroid),

IBS (irritable bowel syndrome) Symprove®

Immune system improvement (also see infections) 1st Line™, ATP-Boost™, beta-glucans, carnosine, melatonin, peptide bioregulator (thymua), peptide bioregulator (thyroid), resveratrol, thymus, thyroid

Infections (also see immune system improvement, anti-biotics & influenzas) 1st Line™, beta-glucans, fluconazole, silver

Inflammation (reduction) Boluoke®, curcumin, PEO, pregnenolone, thymus

Influenzas (also see anti-biotics, infections & immune system improvement) 1st Line™, beta-glucans, vitamin

Injectable products Gerovital®, IGF-1, vitamin B12

Insulin & glucose control (see diabetes)

Intestinal flora (see probiotics)

Intra-ear products Aldo-Spray™

Intra-nasal products Desmopressin, GHRP6, HCGPro™, vasopressin, Vielight®

Joints (also see bones & arthritis) Boluoke®, Novisyn®, PEO, peptide bioregulator (cartilage), pregnenolone, SAMe, thymus

Kidney disorders (also see infections) Aminoguanidine, peptide bioregulator (kidney) SAMe, TRH

Learning (also see memory & mental stimulants) Aniracetam, desmopressin, HyPro2™, piracetam, pramiracetam, vasopressin

Libido (see sex)

Lipids (see blood disorders)

Liver disorders (also see infections) CoQ10, idebenone, peptide bioregulator (liver), pregnenolone, SAMe, silver

Longevity enhancement (significant lifespan increases seen in animal studies) Centrophenoxine, deprenyl, melatonin, peptide bioregulator (pineal) vasopressin

Lou Gehrig's disease (see ALS)

Lungs ACF228™ Breathe-Easy, centrophenoxine, glutathione, peptide bioregulator (lungs)

Lupus Milnacipran, naltrexone

Lyme's 1st Line™, beta-glucans, silver

Macular degeneration (see eyesight)

Malaria (see anti-biotics)

Menopause (see HRT)

Mental stimulants (also see physical stimulants) Adrafinil, aniracetam, centrophenoxine, deprenyl, desmopressin, picamilone, piracetam, pramiracetam, vasopressin, Xan-Pro™

Memory (also see cognitive & senile dementia)

General support PEO, picamilone, vinpocetine Imprinting (for later recall) Desmopressin, vasopressin

Medium-long term HyPro2™

Short term Aniracetam, piracetam, pramiracetam

Speed of recall Centrophenoxine

Methylation (conversion of one chemical into another inside the body) ATP-Boost™, Boluoke®, Mito-Pro2™, SAMe, Xan-Pro™

Migraines (also see pain relief) Nicergoline, memantine, picamilone, vitamin B12

Mitochondrial support ATP-Boost™, CoQ10, deprenyl, glutathione, HyPro2™, idebenone, MitoQ™, NADH, oxaloacetate, PQQ, pregnenolone, SAMe

Mtor inhibitors Curcumin, oxaloacetate, resveratrol

Multiple Sclerosis (also see mitochondrial support) Melatonin, naltrexone, TRH

Muscles (see sarcopenia)

NAD+ activators NAD+Pro™

Nail condition Gerovital-H3®. PEO

Narcolepsy (sleeping in the daytime) Adrafinil, melatonin, picamilone

Nitric Oxide release Neo40®. Nitric Oxide saliva test strips, Vielight®

Oral health care (see teeth & gums)

Osteoporosis (see bone problems)

Pain relief (general) ATP-Boost™, Gerovital-H3®, memantine, milnacipran, oxytocin

Parasites (see infections)

Parkinson's disease (see senile dementia)

Pets (see animal use)

Photoaging (see skin problems)

Ph balance (rebalancing) Symprove®

Physical energy improvement (also see mental stimulants) ATP-Boost™, carnosine, CoQ10, idebenone, MitoQ™, NADH, oxaloacetate, PQQ, pregnenolone, SAMe

PMS (pre-menstrual syndrome) PEO, peptide bioregulator (ovaries), vinpocetine

Premature ejaculation/ ejaculate (also see erectile dysfunction & sex-libido) Oxytocin

**Probiotics** Symprove®

Prostate (also see cancer) DIM-Pro2™, dutasteride, finasteride, melatonin, peptide bioregulators (bladder and prostate), Prostate-Pro2™

Prolactin alteration Bromocriptine, cabergoline, **GABOB** 

PSA (prostate specific antigen- see prostate)

**Urination** (frequent) Peptide bioregulator (bladder), vasopressin

RNA (see DNA support)

Sarcopenia (muscle atrophy/ wastage) GHRP2, GHRP6, peptide bioregulator (muscle), sermorelin

Senile dementia (also see cognitive & memory)

Alzheimer's Centrophenoxine, curcumin, galantamine, HyPro2™, memantine, nicergoline

General support aniracetam, PEO, piracetam, pramiracetam, vinpocetine

Parkinson's Bromocriptine, cabergoline, deprenyl, NADH, memantine, rasagiline

#### Senility Gerovital-H3®

Sex (libido, also see erectile dysfunction & premature ejaculation) Andro-Pro™, deprenyl, MSH2, oxytocin, VigorPro2™

Skin problems (also see herpes and tanning)

Acne Beta-glucans

Age (liver) spots Centrophenoxine, Youth Gems® face mask

Anti-glycation Aminoguanidine, carnosine, Youth Gems® serum

Anti-oxidant Youth Gems® day cream and night

Cancer (non-melanoma) BEC5® Curaderm

Cellulite Youth Gems® body milk

Collagen Novisyn®

Environmental Youth Gems® serum and face mask

General support Gerovital-H3®, melatonin, PEO, thyroid

Infections Silver, thymus

Moisturizer Youth Gems® day cream and night

Psoriasis Beta-glucans

Scars RetinPro™

Sun spots (keratosis) BEC5® Curaderm

Wounds Silver

Wrinkles RetinPro™

#### Sleep disorders

For less sleep Adrafinil, ATP-Boost™

For more sleep 5HTP, gabapentin, L-tryptophan, melatonin

#### Smoking cessation 5HTP

Spine issues (also see growth hormone) Novisyn®, peptide bioregulator (cartilage)

Sports (see growth hormone, estrogen alteration, physical energy & testosterone)

Stem Cells Stem Cell Worx®

Stress (also see cortisol) 5HTP, GABA, Gerovital-H3®, L-tryptophan, melatonin, oxytocin, picamilone, phenytoin, pregnenolone, propranolol

Stroke Aniracetam, Boluoke®, HyPro2™, idebenone, PEO, picamilone, piracetam, PQQ, pramiracetam, pregnenolone, vinpocetine

Stomach (see digestive)

Sublingual products Oxytocin, sermorelin, TRH

Sunburn (see skin problems)

Syndrome X (metabolic syndrome) Aminoguanidine, ATP-Boost™, melatonin, metformin, Mito-Pro2™, PEO

Tanning (darkening the coloration of skin) MSH2

Teeth & gum disorders Doxycycline, Min-Mouth™ mouthwash, NeyDent® toothpaste, silver, zeolite

Telomeres (also see DNA support) Carnosine, PEO, peptide bioregulator (pineal), TA65®

**Testosterone & testes** (also see fertility and prostate) Anastrozole, Andro-Pro™, DIM-Pro2™, melatonin, oxytocin, peptide bioregulator (testes), TRH. VigorPro2™, zinc

Topical products BEC5®, beta-glucans, Can-C™ eyedrops, Esnatri™, progesterone, RetinPro™, silver, Youth

Triglycerides (see blood disorders)

Veterinarian (see animal use)

Weight gain (muscle mass) Andro-Pro™, GABOB, GHRP6, sermorelin

Weight loss (appetite suppressants and fat burners) 5HTP, acarbose, aminoguanidine, ATP-Boost™, DHEA, DIM-Pro2™, galantamine, GHRP2, HCG, L-tryptophan, metformin, Mito-Pro2™, MSH2, thyroid, TRH, Xan-Pro™

Well-being (also see depression) 5HTP, aniracetam, ATP-Boost™, deprenyl, GABA, Gerovital-H3®, L-tryptophan, melatonin, Mito-Pro2™, PEO, picamilone, piracetam, pramiracetam, SAMe, thymus, thyroid,

#### A-Z INGREDIENT LIST

The following list is intended to highlight the key ingredients in some products and cross reference them to the most relevant product brand names.

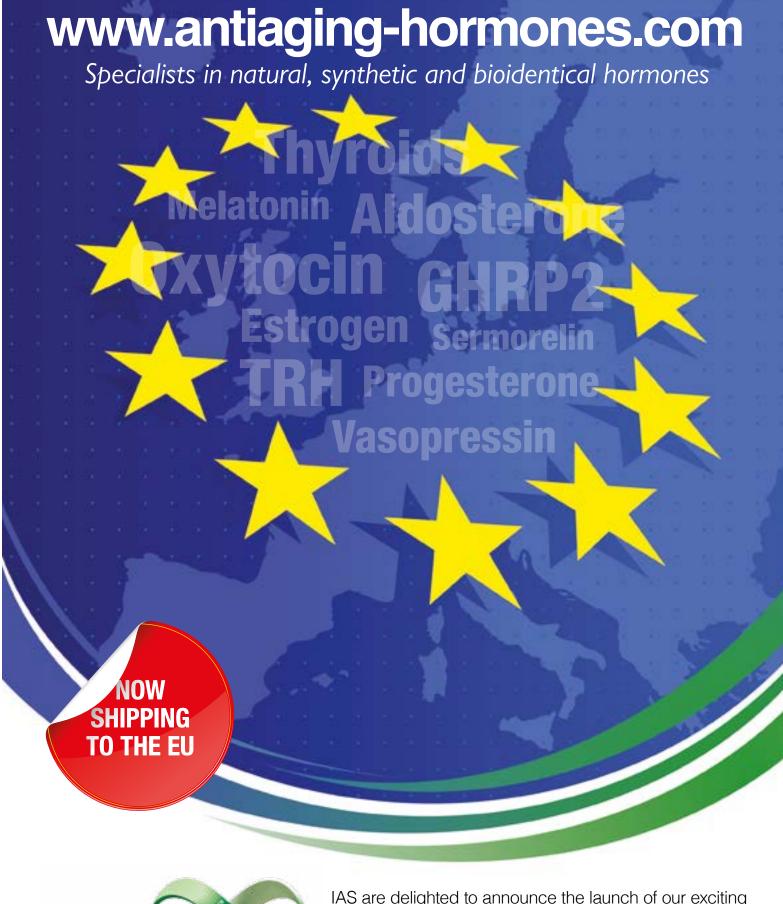
Note: Those products with the same name as the ingredients are not shown here as they are within the A-Z product list.

f you want this-	look for:	Blueberry extracts	Andro-Pro™
5-hydroxy-tryptophan	5HTP	Borate	Andro-Pro™, Can-C™
Acetyl-L-Carnitine (ALC)	ATP-Boost™, Vigor-Pro2™	Boron	Andro-Pro™
Adenosine triphosphate	ATP-Boost™	Buxamin (GABOB)	Gamibetal®
(ATP)	\/alda.ca@	Caffeine	Minox-Pro™
Aglomelatine	Valdoxan®	Calcium	Bone-Pro2™
Allicin (garlic)	EDTA-Pro™	Carboxymethylcellulose	Can-C™
Alpha lipoic acid (R-lipoic acid)	ATP-Boost™, Mito-Pro2™	Catalase	ACF228™
Aminexil	Dercos®	Chelation agents	Carnosine, centrophenox-
Amino acids (includes di-peptides)	5HTP, ACF228™, ATP- Boost™, carnosine, L-tryp-		ine, DMSA, EDTA-Pro™, zeolite
ai popilacs)	tophan, Mito-Pro2™	Choline	Centrophenoxine
Aminohydroxybutyric acid	Gamibetal®	Chromium polynicotinate	ACF228™
(GABOB)		Citrulline	Neo40®
Aminosyn	Hair-Pro™	Co-dergocrine mesilate	Hydergine®
Anti-biotics	Ciproxin, doxycycline, penicillin, roxithromycin, tetracycline	Coenzyme Q10	CoQ10, Mito-Pro2™
		Colloidal Silver	Silver
Anti-depressants L n S	Lithium, milnacipran, moclobemide, reboxetine, Stablon®, Valdoxan®, venlafaxine	Colostrum	Stem Cell Worx®
		Cortisol (cortisone)	Fludrocortisone, hydrocortisone
		Cranberry extracts	Andro-Pro™
Anti-oxidants	See free radical scaven-	Creatine	Mito-Pro2™
A	gers,	Cresote bush	ACF228®
Arginine	Mito-Pro2™	Cycloastragenol	TA65®
Arimidex® Astragalus extracts	Anastrozole TA65®	Cyclodextrin	CoQ10-SR™, Curcum- in-SR™, resveratrol
Azelaic acid	Minox-Pro™	Dehydroepiandrosterone	DHEA
Azilect®	Rasagiline	Detox	DIM-Pro2™, EDTA-Pro™,
Benzoic acid	Gerovital®		zeolite
Beta blocker	Propranolol	DHA (docosahexaenoic	PEO-Pro™
Beta alistine	Carnosine, ACF228®, Can-C™, Can-C Plus™	acid) Diapid®	Vasopressin
Beta glucan	BG-Cream™, BG-Pro™	Di-IndolylMethane (DIM)	ACF228™, DIM-Pro2™
bFGF	Hair-Pro™	Dilantin®	Phenytoin
BHT (butylhydroxytoluene)	ACF228™, BHT-Pro™	DMAE (dimethylaminoethanol)	Centrophenoxine

DMSA (dimercaptosuccinic acid)	ACF228™, DMSA-Pro™
D-pantethine	Can-C Plus™
Dr. Dean's recommendations	Acarbose, centrophe- noxine, CurcuminSR™, Hydergine®, metformin, piracetam, Xan-Pro™
Dr. Pierpaoli's recommendations	Melatonin, TRH
Dr. Wright's recommendations	DHEA, Esnatri™, progesterone
Ebixa®	Memantine
EDTA (ethylene diamine tetraacetic acid)	EDTA-Pro™
Eldepryl®	Deprenyl
Electrolytes	Volt-Pro™
Enzymes	Boluoke®
EPA (eicosapentaenoic acid)	PEO-Pro <sup>TM</sup>
Ergoloid mesylate	Hydergine®, nicergoline
Estrogens (estradiol, estriol, estrone)	Esnatri™
Finasteride	Hair-Pro™
Florinef®	Fludrocortisone
Folic acid (folate)	ACF228™, DIM-Pro2™§
Free radical scavengers	ACF228™, ATP-Boost™, BHT, glutathione, ide- benone, melatonin, Mi- to-Pro2™, pyritinol
Fructoborate	Andro-Pro™
Fucoidan	Stem Cell Worx®
GABA (gamma-aminohy- droxybutyric acid)	picamilone
GABOB	Gamibetal®
GHRP6	Release-Pro™
Ginseng	Youth Gems®
Glucophage®	Metformin
Glutathione	ACF228®, ACG
Glycerine (glycerin)	Can-C™
Glycosides	BEC5 Curaderm®
Hawthorne Berry (crataegus)	Neo40®
HGH (human growth hor- mone/ somatropin)	GABOB, GHRP2, GHRP6, sermorelin

Bio-identical: Aldosterone, DHEA, Esnatri™, melatonin, MSH, oxytocin, pregnenolone, progesterone, TRH
Natural (animal): Armour® thyroid, ERFA® thyroid, Nature® thyroid, thymus, vasopressin
Synthetic: Desmopressin, Eutirox® thyroid, fludro- cortisone, hydrocortisone, T3-Pro™
Supporting agents: DIM- Pro2 <sup>TM</sup> , GHRP2, GHRP6, peptide bioregulators, SAMe, sermorelin
DHEA, Esnatri™, melatonin, progesterone
Hair-Pro™, Novisyn®
Hy-Pro™
IGF-1 (LR3)
DIM
ACF228™, Iodine-Pro™
Milnacipran
Nizoral®
Mito-Pro2™
Mito-Pro2™
Carnosine, ACF228®, Can-C™, Can-C Plus™
Neo40®
Can-C Plus™
ATP-Boost™, Mito-Pro2™
ACF228™, Can-C Plus™
ACF228™, Can-C Plus™ Centrophenoxine
Centrophenoxine
Centrophenoxine Boluoke® Andro-Pro™, Bone-Pro2™, Magnesium-Pro™, Mi-
Centrophenoxine Boluoke® Andro-Pro™, Bone-Pro2™, Magnesium-Pro™, Mi- to-Pro2™
Centrophenoxine Boluoke® Andro-Pro™, Bone-Pro2™, Magnesium-Pro™, Mi- to-Pro2™ EDTA-Pro™
Centrophenoxine Boluoke® Andro-Pro™, Bone-Pro2™, Magnesium-Pro™, Mi- to-Pro2™ EDTA-Pro™ Mito-Pro2™

Milk protein	Bone-Pro2™	Salicylic acid	BEC5 Curaderm®, Sol Answer™
Minerals (general)	Min-Mouth™ (mouthwash), Volt-Pro™	S-Adenosyl-L-Methionine	SAMe
Minoxidil	Minox-Pro™	Saw palmetto (Serena	MinSaw™, Prostate-Pro2™
N-acetylcarnosine	Can-C™	Repens)	,
N-acetylcysteine	ACF228™, Can-C™ Plus	Selenium	ACF228 <sup>™</sup> , DIM-Pro2 <sup>™</sup> , MZS <sup>™</sup> , Prostate-Pro2 <sup>™</sup> ,
Namenda®	Memantine		
Neurontin®	Gabapentin		Selenium-Pro™, Thym-Uvocal®
Nettle root extract	Prostate-Pro2™	Seligiline	Deprenyl
Niacin (nicotinate, niacina- mide, vitamin B3)	Picamilone, Xan-Pro™	Silver	ACS®, Min-Mouth™
Nicotinamide adenine dinucleotide	NADH, PQQ	Solasodine glycosides	mouth rinse BEC5 Curaderm®, Sol-An-
Nootropil®/ Nootropyl®	Piracetam	This constant	swer <sup>TM</sup>
Nordihydroguaiaretic acid	ACF228™	Thiocynates	1 <sup>st</sup> Line <sup>TM</sup>
(NDGA)		Thyroids	Natural brands: Armour®, ERFA®, Nature®
Omega 3 (DHA)	PEO-Pro™		Synthetic brands: Eutirox®
Omega 6 (linoleic acid, GLA)	PEO-Pro™		(T4), T3-Pro® (T3)
Omega 9 (oleic acid)	PEO-Pro™		Supporting agents: Peptide bioregulator (Thyreo-
Oxythiocynate (OCSN)	1st Line™		gen®)
Parent Essential Oils (PEO)	PEO-Pro™	Thyrotropin releasing	TRH
PABA (para-aminobenzoic	Gerovital®	hormone	
acid)	A. W	Tribulus terrestris	Andro-Pro™
Panthenol (pantothenic acid)	Mito-Pro2™	TRX	Hair-Pro™
PCPA (paarachlorophe-	Centrophenoxine	Turmeric	Curcumin
noxyacetic acid)	Oer in Oprier Ioxine	Ubiquinone, ubiquinol	CoQ10
Pepermint Oil	Min-Mouth™ mouth rinse	VEGF	Hair-Pro™
Peptides GHRP2, GHRP6, pept		Vincamine	Anacervix®
	bioregulators, sermorelin,	Vinpocetine	Vin-Pro™
		Vitamin B1 (thiamine)	Mito-Pro2™
Pimagedine	Aminoguanidine	Vitamin B2 (riboflavin)	Mito-Pro2™
Pomegranate extracts	Andro-Pro™	Vitamin B3 (niacin, niaci- namide)	Mito-Pro2™, Picamilone, Xan-Pro™
Potassium	Gerovital®, Potassi- um-Pro™	Vitamin B6 (pyridoxal, pyridoxine)	ACF228™, Andro-Pro™, DIM-Pro2™, pyridoxamine
Prasterone	DHEA	Vitamin B12 (cobalamin)	DIM-Pro2™, Neo40®
Propionyl-L-carnitine	Vigor-Pro2™	Vitamin C (ascorbic acid)	MinSaw™, Neo40®
Probiotics	Symprove®	Vitamin E (tocopherols)	Can-C Plus™, DIM-Pro2™,
Procaine (Novocain®)	Gerovital®	vitariiii E (tooopriorolo)	Prostate-Pro2 <sup>TM</sup>
Pygeum africanum	Prostate-Pro2™	Vitamin K2 (menatre-	Bone-Pro2™
Pyroloquinoline quinone	PQQ	trenone)	
Red clover herb extracts	Prostate-Pro2™	Yohimbine	Vigor-Pro2™
Reminyl®	Galantamine	Zeolite	ACZ®
Resveratrol	Resveratrol-SR™, Stem Cell Worx®	Zinc	Andro-Pro™, Can-C Plus™, Mito-Pro2™,
Retinolic acid (tretinoin)	Retirides®		MZS™, Thym-Uvocal®,
Ribonucleic acids (RNA)	NeyDent® toothpaste		Zinc-Pro™





IAS are delighted to announce the launch of our exciting new website www.antiaging-hormones.com, placing IAS firmly on the map in leading the supply of Hormones to EU and EEA countries.

#### **TESTIMONIALS**

#### DR. AUBREY DE GREY

RESOURCE

**OUTSTANDING** 

AN

"IAS has shown great vision and leadership, as an organisation focused mainly on the provision of contemporary medical interventions against aging, and in also supporting the SENS Foundation's efforts to hasten the development of much more powerful future interventions."

#### GARRY GORDON, MD,DO,MD(H)

"I am a 77 year old Physician who has practiced medicine for nearly half a century. My antiaging research has permitted me to overcome serious health problems. Everyone can do this, but it requires specialized knowledge and the highest quality products. IAS is a vital link in my antiaging program because they continually provide both accurate information AND the high quality products we all require, if we are to achieve our maximum intended useful lifespan."

#### **JONATHAN WRIGHT, M.D.**

"Every adult has the right to take care of his or her own personal health as he or she chooses. In the 20th and 21st centuries, this universal human right has been nearly obliterated by an ocean of nanny-state regulation and deliberate suppression of information by bureaucracies, with hidden and not-so-hidden agendas. International Antiaging Systems is a beacon of useful health care information and a literal island of freedom of health care product choice in our otherwise un-free health care world."

#### NICHOLAS PERRICONE, M.D.

"IAS is an outstanding resource for the finest, most up-to-date news and information on healthy aging. They also offer products of the highest integrity and efficacy. In fact, IAS is the world's greatest source (often the only source) for the most cutting edge and advanced nutrients to ensure optimum health span and maximum life span."

#### THIERRY HERTOGHE, M.D.

"IAS has a history of making throughout the world crucial, but difficultly accessible medications available to patients. IAS is one of the pioneering societies in antiaging medicine that has helped this new medical specialty move forward."

#### A BEACON OF USEFUL HEALTH CARE



DR. AUBREY DE GREY GARRY GORDON.



JONATHAN WRIGHT.



THIERRY HERTOGHE,

SOCIETIES THE PIONEERING ANTIAGING MEDICINE 9

#### PAYMENT OPTIONS

Payment options for www.antiaging-systems.com

Pay by VISA credit card



Use an electronic check via CHECK2PAY (US banks only)

Pay via Bank Wire

Payment options for www.antiaging-nutrition.com







#### **WEBSITES**

www.antiaging-systems.com www.antiaging-nutrition.com www.antiaging-nootropics.com www.antiaging-peptides.com www.antiaging-hormones.com www.IASjapan.com

(our hormones; English language) (our nutritional products; Japanese language)

(our peptide bioregulators; English language)

(our nutritional products; English language)

(all of our products in one place; English language)

(our smart drugs and nutrients; English language)

**EMAIL** 

ias@antiaging-systems.com iasjapan@antiaging-systems.com (English language) (Japanese language)

PHONE

Japan:

ROW:

1-866-800-4677 (orders only)1-415-992-5563 (enquiries)

0208-123-2106 +44-208-123-2106

Please note: Our customer care team is available from 9am till 6pm GMT Monday-Friday. Outside of these times your call will be handled by our out-of-hours answering service or go to voicemail.

#### MAIL

Unfortunately personal checks and money orders cannot be accepted at this time.

Please contact our customer service team if you need any assistance in placing your order.



Tomorrow's **Treatments** Today™





# MetPro™

Offer valid until 2nd November 2016.

METPRO

100 x 500mg tablets \$19.99
Sale price \$14.99

ONLINE CODE: METPRO-5-OFF-AMM5



Restrictions may apply please see IAS terms and conditions for full details.