The eyesight saviors

By Dr. Marios Kyriazis

Peptide bioregulators improve vision

An interview with Professor Trofimova

ARMD & MZS™

A breakthrough for wet and dry varieties

By Dr. Thierry Hertoghe
1. Declaration: The IAS Aging Matters™ magazine is intended for IAS private club members (and therefore is not intended for the public). It focuses on the latest international nutritional, hormonal and drug therapies to help combat the signs of aging. These signs include the physical, mental and internal changes consisting of the diseases and disorders such as cancer, arthritis and senile dementias etc. However, the main focus is upon the prevention of such aging diseases and disorders for the ‘healthy-aging’ individual.

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TESTIMONIALS

DR. AUBREY DE GREY

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

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 difficulty accessible medications available to patients. IAS is one of the pioneering societies in anti-aging medicine that has helped this new medical specialty move forward.”

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 Anti-aging 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.”

DR. WALTER PIERPAOLI

“I have known IAS for many years and they are a qualified group who provide for me, my family and my patients. Their skill and professional capacity has liberated me from all sorts of problems concerning the search of guaranteed and often rare dietary supplements or anything which is available but problematic to find. Their service goes far beyond duty and helps in many ways to maintain our own health.”

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Well, I know for a fact that as you are reading this text you are looking through your eyes (duh!)

Many of us take our vision for granted, but as we age many deleterious effects can take place. At that point, most of us then become concerned, since vision is naturally one of our most precious and valued senses.

There is a long procession of age-related eye complaints, from cataract, to macular degeneration, retinal pigmentosa, dry-eyes, glaucoma and others.

These are issues that have been attributed to free radicals, glycated proteins, the breakdown of collagen and more besides. So, what can we do?

To help us understand what’s available now, Dr. Marios Kyriazis has written a new book called; ‘the eyesight saviors, how nutrition can improve and protect your vision.’ In his article, in this issue, you can read about the journey of discovery he took in researching that book.

What is more, Professor Svetlana Trofimova has spoken to us about the clinical work undertaken at her Russian based eye clinic. Remarkably, they are perhaps the only place in the world who are reversing retinal pigmentosa, such is the power of the gene-switch peptide bioregulators that they employ.

Now we have covered the subject of Dr. Walter Pierpaoli’s studies with his MZS™, (a mix of melatonin, zinc and selenium) before, and how it has been shown to reverse macular degeneration. But as so many people still don’t know about this breakthrough for both wet and dry types of ARMD, we decided that this issue should have a recap of those momentous results.

Lastly, Dr. Thierry Hertoghe, a world-renowned endocrinologist and strong proponent of preventative and regenerative medicine has graced our pages with his latest article titled; ‘hormones make the difference.’

See them for yourself!
THIS WILL BE THE LAST PRINTED COPY OF AGING MATTERS™ MAGAZINE

Head over to www.aging-matters.com to sign up for the free online magazine
Millions of people around the world wear contact lenses.

Did you know that lactic acid can build-up behind your contact lens and lead to negative consequences?

Over-wearing contact lenses can result in damage from lactic acid within the cornea of the eye. A contact lens is a foreign body that is placed in your eye, a man-made object that sits on top of the cornea and interacts with the inner tissue. The cornea is made of living breathing cells. It supplies most of the refractive power of the eyes.

There are metabolic changes in the human body every day. Waste material and debris from the cells in the cornea are excreted. We often find little bits in the corners of our eyes and debris can sometimes collate underneath a tight-fitting contact lens. This, in turn, can create a toxic environment for the cornea.

How should you deal with an acid attack behind your contact lens?

Can-C™ eye drops are the original N-acetylcarnosine eye drop formula. N-acetylcarnosine lubricant eye drops possess all-in-one universal antioxidant protective effects. Unlike a lot of eye drops, they contain naturally occurring nutrients that combine amino acids and proteins. Can-C™ eye drops inhibit the build-up of lactic acid behind your contact lenses.

When a lactic acid level is too high, swelling occurs in the cornea causing it to spread apart. Bacteria and viruses can easily be absorbed into potential spaces within the swollen cornea. This can cause an infection and or scarring. Wearing a lens for too long can lead to oxygen deprivation to the eye, new blood vessels will begin to grow into the cornea to try to find the oxygen that it needs. This can become a big problem.

Everybody is different when it comes to the types of lenses – the wear-time, if the wearer has allergies, the fit of the lens, cleaning and their disinfecting habits. If you wear contact lenses, you should feel good in them and your vision should be at peak performance. Contact lenses should never be uncomfortable but there are several reasons why they could be.

The most common reason for discomfort among lens wearers is the fit. Most people should be able to wear contact lenses for up to 12 hours comfortably. If the diameter of the lens and the curve isn’t the right size it can cause an issue. The lens should cover the cornea and should move slightly when you blink. A lot of wearers experience dryness, irritation and itchiness etc…

Reasons that can cause discomfort could be:

- Allergies – are a major reason why people feel irritation from their contact lenses
- Type of lens – if you are wearing Rigid Gas Permeable, or RGP or GP lenses. It takes a while for wearers to adjust to the thickness of the material. Soft lenses are better if you are struggling with the adjustment
- Cleaning solutions – solutions are for cleaning and disinfecting your lenses. However, some solutions can be an irritant and don’t remove build-ups

Can-C™ bringing comfort to your contacts.
- Wear-time – Like a lot of things, if you wear them for too long, they will cause discomfort
Your eyes can be irritated by dust, pollution, computer use, a busy work schedule and travel. All these things can leave the eyes feeling dry and tired.

Can-C™ Eye drops allows contact lenses to stay in the eye in comfort for a longer period of time, improving the quality of your vision.

But that's not all...

N-acetylcarnosine has also shown efficacy in the non-surgical treatment of age related cataracts. N-acetylcarnosine is known to reverse the glycation process and decrease the occurrence of long-term complications of aging.

In a cohort in excess of 50,500 various patients seeking cutting-edge medical care, the N-acetylcarnosine topical eye drops target therapy was demonstrated to have significant efficacy, safety, and good tolerability for the prevention and treatment of visual impairment in this older population with relatively stable patterns of causes for blindness and visual impairment.

Overall, accumulated study data demonstrate that the IVP-designed new vision-saving drugs, including N-acetylcarnosine eye drops, promote health vision and prevent vision disability from senile cataracts, primary open-angle glaucoma, age-related macular degeneration, diabetic retinopathy, and aging. N-acetylcarnosine eye drop therapy is the crown jewel of the anti-aging medical movement and revolutionizes early detection, treatment, and rejuvenation of aging-related eye-disabling disorders. N-acetylcarnosine, as an innovative medical science tool and component of the home medicine and alternative medicine approaches, has the potential to alleviate visual impairment and its associated social, economic, and political woes for an aging population.

Reduce the risk of a lactic acid attack, the Can-C™ eye drops are like artificial tears that can eliminate discomfort, refresh, soothe and cleanse tired eyes.

The demand for this breakthrough product is snowballing as consumers around the world become aware of its benefits and value for money. The eye drops can be taken in conjunction with Visoluten, a retina peptide.

Look and feel your best with Can-C™ eye drops.
According to new research, the Herpes virus is linked to half of all Alzheimer’s cases; the new paper was published in the Frontiers in Aging Neuroscience journal. Ruth Itzhaki, the leading professor of recent studies in Taiwan found that antiviral drugs significantly reduced the risk of dementia in patients with severe Herpes infections.

Herpes simplex (HSV1) is a common virus and the majority of the population will have contracted it by the time they reach old age and it could be behind more than half of Alzheimer’s cases. The Herpes virus remains permanently in the body and resurfaces in blisters when we are run down by stress or illness.

It’s estimated that 46 million people worldwide suffer with Alzheimer’s disease, the most common form of Dementia. Professor Itzhaki’s research suggests a potential way to treat the disease. She has found strong evidence that the Herpes virus is a cause of Alzheimer’s and suggests that effective antiviral drugs may be able to treat the disease. It could even be possible in the future to vaccinate children against it.

Previous studies presented that cold sores occur more frequently in those carrying a gene mutation called APOE -ε4 that increases the risk of Alzheimer’s.

Professor Itzhaki said: “Our theory is that in APOE -ε4 carries, reactivation is more frequent or more harmful in HSV1-infected brain cells, which as a result accumulate damage that culminates in development of Alzheimer’s”.

Researchers in Taiwan have collected population data and tested whether antiviral treatments reduce the risk of dementia.

Prof Itzhaki stated: “The striking results include evidence that the risk of senile dementia is much greater in those who are infected with HSV, and that anti-herpes antiviral treatment causes a dramatic decrease in number of those subjects severely affected by HSV1 who later develop dementia.”

Her own scientists have found HSV1 causes protein deposits characteristic of Alzheimer’s – ‘plaques’ between neurons and ‘tangles’ inside them.

She said: “Viral DNA is located very specifically within plaques in postmortem brain tissue from Alzheimer’s sufferers.

“The main proteins of both plaques and tangles accumulate also in HSV1-infected cell cultures – and antiviral drugs can prevent this.”

HERPES MAY ACCOUNT FOR 50% OF ALZHEIMER’S CASES, LEADING SCIENTIST SAYS

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Further Reading

Trending Topic: ‘How to take antiviral BHT (Butylated Hydroxytoluene) for Herpes’: https://aging-matters.com/how-to-take-bht-butylated-hydroxytoluene-for-herpes/

There is mounting evidence that herpes leads to Alzheimer’s: http://www.bbc.com/future/story/20181022-there-is-mounting-evidence-that-herpes-leads-to-alzheimers

References


Two people with severe sight loss are now able to read after receiving tissue that is grown from human embryonic stem cells. A man in his 80’s and a woman in her 60’s received treatment for age related macular degeneration (AMD), this disorder leads to rapid loss of central vision.

Both people involved in this study went from being unable to read, to reading 60 to 80 words per minute with normal reading glasses. They were observed for 12 months after the procedure and reported to have no severe side effects.

More than 60,000 people in the UK suffer with Age Related macular Degeneration; the results from this study are a positive step in creating a treatment.

Lyndon da Cruz, consultant ophthalmologist at Moorfield Eye Hospital NHS Foundation Trust stated, “The results suggest that this new therapeutic approach is safe and provides good visual outcomes. The patients who received the treatment had very severe AMD, and their improved vision will go some way to enhance their quality of life.”

Journal reference

Nature Biotechnology, DOI: 10.1038/nbt.4114
https://www.nature.com/articles/nbt.4114
THE EYESIGHT SAVIOURS BOOK - HOW NUTRITION CAN IMPROVE AND PROTECT YOUR VISION

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THE EYESIGHT SAVIOURS BOOK

THE EYESIGHT SAVIORS

By Marios Kyriazis, M.D.

The progress of medical research in general, is astounding. New developments come to confirm or reject previous research and it is difficult for any member of the public to keep in touch with the latest research. For this reason, I am presenting here an update on the most recent findings regarding treatments for age-related eye conditions. This article complements and enhances my book ‘the Eyesight Saviors’ which has recently been launched.

MELATONIN

It is well known that melatonin plays an important role in the eye. A few months ago, researches have shown that patients with glaucoma have a significant increase in serum melatonin compared to healthy people. Conditions such as sleep abnormalities, anxiety and depression worsen the abnormality in melatonin levels. This shows the complex relationship between eye conditions and psychiatric disturbances, a process mediated by melatonin (among others), and strengthens the case for a better control of melatonin levels (1).

Light hitting the eye passes through the suprachiasmatic nuclei (SCN) and regulates melatonin production by the pineal gland (i.e. it activates or suppresses production, depending on how much light passes through).
Loss of photoreceptors is a common occurrence in aging. Melatonin modulates photoreceptor viability and this may be due to a modulation of the Fas/FasL-caspase-3 pathway. This pathway is involved in the process of apoptosis, the orderly cell death. Researchers have shown that the presence of melatonin prevents photoreceptor cell death (apoptosis) by inhibiting the proapoptotic pathway Fas/FasL-caspase-3. This protective effect of melatonin (which is relevant in the prevention of Age-Related Macular Degeneration - ARMD) has also been confirmed by other recent studies, showing that its antioxidant actions reduce the likelihood of apoptosis of photoreceptors.

The simplified diagram shows the multiple influencing factors and interdependence with other elements.
Here it is worth mentioning that Endoluten®, a short chain peptide bioregulator, (developed by Prof Khavinson – see the Peptide Bioregulator Revolution book), can increase the levels of melatonin synthesis in older people, which shows the potential of bioactive peptides in restoring changes caused by aging\(^5\).

**DIET AND NUTRIENTS**

Recently, researchers have identified a decreased risk of ARMD in people who follow a Mediterranean or an Oriental diet, and an increased risk in those who follow a typical Western diet\(^6\).

Vegetables and fish oils were beneficial whereas a high glycemic diet was detrimental. But things get a little confusing when we consider the results on another large study of the effects of nutrition on ARMD. Here, it was found that consumption of fish can reduce the risk of the disease by 18%, whereas alcohol consumption increases the risk by 20%. So far, so good. But, no association (positive or negative) was found between the risk of ARMD and the consumption of vegetables, fruit, nuts, grains, fats and butter, dairy products or margarine!\(^7\). This may send out confusing messages with regards to the ideal diet in ARMD, but the general fact remains that fish oils are beneficial, whereas a ‘bad diet’ by Western standards is detrimental.

**WORTH REMEMBERING**

Taking oral supplements in the presence of eye conditions is not always a good thing. For example, it was shown that oral iron supplementation in people who have Age Related Macular Degeneration is associated with an increased incidence of retinal hemorrhage\(^8\). On the other hand, oral flavonoid supplementation is beneficial for these patients. Flavonoids have antioxidant and anti-inflammatory properties. In a study, over 2000 people showed that those who use flavonoids in their diet have a reduced risk of developing ARMD in a 15 year period. Also, those who consumed one or more orange a day have a reduced risk, compared to those who don’t eat oranges.\(^9\)
UPDATE ON N-ACETYL-CARNOSINE (NAC)

The fact that NAC in eye drops form (Can-C™) may be of help in cataract, has been the subject of my previous book with the title ‘The Cataract Cure’. Since the release of that book new research has clarified several of the underlying mechanisms of cataract and of the NAC mechanisms of action.

It is well known that carnosine on its own right has significant beneficial effects in the eye. Researchers have concluded that:

“The results showed that L-carnosine is a highly potent anti-glycating agent but with weak metal chelating and antioxidant properties.... L-carnosine showed a dramatic inhibition of advanced glycation end product formation.... L-Carnosine offers prospects for investigating new methods of treatment for diabetic cataract and any diseases that are caused by glycation”(10).

This month, researchers have reported that they have created solid lipid nanoparticles which carry N-Acetyl-Carnosine molecules in order to treat cataract. These nanoparticles are able to deliver NAC straight through the cornea, in a sustained released manner. Their comments were:

‘Therefore it may be concluded that (NAC nanoparticles) may revolutionize cataract treatment and reversal, by improving drug permeation, reducing toxicity and no damage to corneal tissue’(11).

In general terms, the findings about NAC and carnosine, as reported in my book ‘Eyesight Saviors’ are confirmed and strengthened.
METFORMIN

Metformin is one of the drugs that is being investigated against several aspects of aging. This has now been found to reduce inflammation and excessive angiogenesis in diabetic retinopathy. Remember that one of the hallmarks of retinopathy is excessive formation of new blood vessels (angiogenesis) which causes several symptoms. In this experiment, metformin reduced inflammation markers such as nuclear factor kappa B p65 (NFkB p65), intercellular adhesion molecule-1 (ICAM-1), monocyte chemotactic protein-1 (MCP-1), and interleukin-8 (IL-8), as well as significantly reducing spontaneous blood vessel formation in the retina (13).

Another study confirms the protective effects of oral metformin (14). In this study, 234 patients with type 2 diabetes were examined. Those patients who were using metformin had fewer eye complications compared to the patients treated with other oral antihyperglycemic agents. The authors said:

Our results suggest that metformin may have a protective effect on ocular complications, especially glaucoma, in patients with type 2 diabetes. The effects of metformin either regarding prevention of ocular complications or ocular complications already developed in patients should be further investigated.

CONCLUSIONS

Certain drugs or supplements turn up again and again in our search for compounds that can help aging. The old favorites such as melatonin, metformin and carnosine have passed the test of time and appear to be supported by research, even the latest cutting-edge research.

Both patients and doctors have ample opportunities to explore compounds or other health measures that can be of help in age-related eye conditions. What is needed is a will to learn about new developments and work together in a personalized medicine framework, in order to find the right therapy for the individual patient. This article is meant to accompany and enrich my latest book ‘The Eyesight Saviors’. These two works should provide enough information for anyone who is interested in age-related degeneration affecting vision.

References

New and abnormal formation of blood vessels in the eye, together with spots of bleeding.
PEPTIDE BIOREGULATORS AND VISION

An interview with Professor Svetlana Trofimova

Q Professor Trofimova, would you kindly tell our readers something about yourself and your background?

A I was born into a family of doctors, so since childhood I knew that I would dedicate my life to medicine. Therefore, after graduation, I went to the St. Petersburg Pediatric Medical Institute and in 1994 I graduated with a diploma as an ophthalmologist. While still a student at the Institute, I was engaged in a scientific club at the Department of Ophthalmology, so I graduated from the Institute and went to work for the St. Petersburg Institute of Bioregulation and Gerontology, where I was able to have not only clinical practice, but also scientific work, studying the effect of peptide bioregulators on various retinal pathologies.

As a result of my scientific work, I defended two theses and now I am a Doctor of Medicine—full professor of ophthalmology and gerontology. I have participated in numerous European and World congresses on ophthalmology, gerontology and anti-aging medicine with abstracts, and I have received many awards (2002 Germany, 2003 Singapore, 2010 Moscow, etc.). I am the author of more than 150 scientific publications, 4 monographs and 4 patents. For several years I was a consultant to the pharmaceutical company BioDim, (Australia). I am the founder and President of the Russian Association of Anti-Aging Medicine, Secretary General of European Society of preventive regenerative and anti-aging medicine (ESAAM) and of the World Council for Preventive, Regenerative and Anti-Aging medicine (WOCPM). I am Deputy Director of the St. Petersburg Institute of Bioregulation and Gerontology for Clinical Work and I head one of the leading clinics in the field of anti-aging medicine the “Tree of Life” in St. Petersburg, Russia.
Today, you operate one of Russia’s leading antiaging centers, based in beautiful Saint Petersburg: the Tree of Life clinic. Can you please describe some of the treatments and therapies you apply there?

The scientific achievements of the St. Petersburg Institute of Bioregulation and Gerontology in the field of diagnostics and treatment of age-related pathology formed the basis for the work of the Medical Center the Tree of Life. Thus, for the first time a new type of medical institution was created, using in its work a personalized approach to each patient, based on the results of molecular-genetic testing and biological age tests. Knowledge of such individual characteristics of the patient allows a purposeful approach to treatment and prevention of age pathology, using epigenetic activity of peptide bioregulators.

Unique medical bioregulating technologies were the basis for the programs for treating such serious conditions as complications of diabetes mellitus, osteoporosis, female urinary incontinence, macular degeneration, diabetic retinopathy, retinitis pigmentosa, prostatitis, erectile dysfunction, and prevention of signs of premature aging of the human body. Medical care is provided at all stages of the disease.

However, the greatest attention is paid to the prevention of diseases. Thus, innovative technologies based on modern diagnostics, as well as activation of the body’s own resources with the help of peptide bioregulators, allow reducing the rate of aging of the body and improving the quality of human health regardless of age.

With reference to your expertise in the treatment of eyesight problems, can you please outline what kinds of cases you deal with?

One of the most common problems of vision loss and blindness is the retinal degeneration. Earlier, patients with such a disease were almost doomed to blindness. The only current method for treating this
pathology, developed at the St. Petersburg Institute of Bioregulation and Gerontology is used in the medical center the Tree of Life.

Let’s try to understand what retinal degeneration is and what types it has.

The retina of the eye consists of several layers, but the main part is the cones and rod cells – special photosensitive elements, through which the image is perceived by a person and then transmitted through the optic nerves to the cortex of the brain. Retinal diseases lead to atrophy (death of) cones and rod cells, that is, those elements that perceive the image, and as a result the person is blinded. Retinal injury is the most common cause of blindness. If the cones located in the center of retina are exposed to atrophy, macular dystrophy occurs, if it happens to the rod cells located on the periphery of the retina – there is peripheral (pigmentary) degeneration of the retina.

Macular dystrophy is the most common retinal disease, leading to an abrupt loss of central vision. With this disease, the central part of retina—the macula suffers. Hence the name of the disease is “macular dystrophy”. In the macula there are light-sensitive cells—cones, which provide a central vision and a color perception. Therefore, the first signs of macular dystrophy are a reduced visual acuity, a distortion of letters and lines during reading. With the progression of the disease, a spot appears before the affected eye (central scotoma). The disease is most often bilateral, only the degree of manifestation of changes in the area of the macula of both eyes is different.
Retinitis pigmentosa is a disease that is associated with atrophy of the rod cells, a retina photoreceptor responsible for peripheral black-and-white mesopic vision. People with retinitis pigmentosa usually find that they are sick, noticing the loss of peripheral vision and the ability to navigate in poorly alighted spaces. As it was, the disease is revealed in childhood or adolescence, but sometimes it can appear already in adulthood.

Diabetic retinopathy is an eye disease developing as a complication of the underlying disease - diabetes. Increased blood sugar leads to a violation of the state of blood vessels, including the vessels of the retina. Such sick vessels cause bleeding. Blood, getting into the retina and vitreous body of the eye, leads to a sharp decrease in visual acuity, up to blindness.

In the world of ophthalmology it is commonly believed that there are practically no effective methods for treating retinal degeneration and diabetic retinopathy. There are attempts to treat only certain forms of retinal degeneration and diabetic retinopathy with the help of a laser. However, this method of treatment only cauterizes the retina without affecting the causes of the development of diseases and has a number of side effects.

In the St. Petersburg Institute of Bioregulation and Gerontology, a unique method for the treatment of diabetic retinopathy and retinal degeneration was developed based on the complex application of peptide bioregulators. Thirty years of experience in the application of this method of treatment allows us to confirm the high clinical effect, as well as the complete safety of this method of treatment. This unique method we use in the Medical Center the Tree of Life.

Peptide bioregulators, used in a complex way, stimulate the activity of the organs of vision and stop the degenerative process. In addition to the retinal peptide, which has a direct effect on the cones and rod cells, we use a vascular peptide that optimizes the activity of the vascular system that supplies the eye, as well as the brain peptide that restores nerve impulses through the optic nerves. In patients with diabetic retinopathy, we additionally use a peptide that restores the pancreas and normalizes the blood sugar level. Thus, we have a health-improving effect not only on the eyes, but on the whole organism. We treat not signs of disease, but the illness itself. Only such complex approach allows not only to stop the progression of these diseases, but also to increase visual functions in humans.

Q How successful have the peptide bioregulators been in certain cases?

A We have an exclusive technology for the treatment and prevention of retinal diseases such as macular degeneration, diabetic retinopathy and even retinitis pigmentosa. The only effective method of treatment of retinitis pigmentosa is developed in the St. Petersburg Institute of Bioregulation and Gerontology and is used in our clinic. Our thirty-years experience in treatment of patients with retinal pathology allows us to state good results of treatment. We manage not only to stop the progression of the pathological process, but
in 80% of cases even to increase the visual functions of our patients. In addition, the complex of peptide bioregulators used in the treatment of retinitis pigmentosa, promotes retention of retinal receptors – rod cells, which allows prolonging patient ability to see for 10-15 years.

Q Please describe a case, taking us through the experience from the patient’s point of view? I mean, can you describe how the treatment is applied and what the patient should expect or do?

A Depending on the disease and the stage of the pathological process, the course of treatment of patients with retinal pathology is from 25 to 30 days. Moreover, for the first 5-10 days the patient should be treated at our medical center the Tree of Life, the rest 20-25 days the patient continues the therapy course of peptides in capsules at their home. For each disease, a special scheme for the application of peptide drugs has been developed. In our medical center the Tree of Life, patients receive with the medical purpose injectable peptide bioregulators (intramuscularly, parabulbar, infusion), then treatment continues with peptide bioregulators in capsules such as, for example, Visoluten (eye peptides), Ventfort (peptides of blood vessels), Cerluten (peptides of nervous tissue) and others.

However, I want to draw your attention to the fact that the treatment should be regular. As a rule, retinal pathology is a genetically predetermined process. Peptide bioregulators do not change the structure of genes; they affect only the activity (expression) of genes. Therefore, the course of therapy should be repeated 2-4 times a year. Such a serious disease, as, for example, retinitis pigmentosa is impossible to cure completely. However, it is possible to stop the loss of vision and give the patient an additional 10-15 years of vision and quality of life!

Q What have been some of the outstanding results?

A Peptide bioregulators are not hormones and not anesthetics, the results from the actions of which the doctor and patient are observed immediately. Peptide bioregulators are natural substances that are present in the body of every person, but the number of which decreases with age or as a result of the disease. Therefore, the effect of peptide bioregulators application we observe after a certain time. As an example, I want to cite one of the clinical cases. One of my first patients was the patient K., suffering from retinitis pigmentosa. In 1999 he was only 21 years old. Dystrophic eye disease began early in his life—at 12 years, so the prognosis was sad—blindness in the next 5 years. At the time of the meeting, the patient had only 10% visual acuity and 5-8% visual field. Over the next 19 years, the patient K. 4 times a year received a course of bioregulating therapy. By 2018, the patient still sees and has the healthy lifestyle!

Q Super! We shall include some of the photos in the text for people to review. But it is exciting that the eyesight problems, including retinal pigmentosa, which is so difficult to address, are being helped so effectively.

A For me, as the doctor, the patient’s wellness is the greatest reward!
Above: A patient treated with peptide bioregulators improves from a 30% vision impairment (left) to a less than 5% impairment (right).

Q I suspect you are excited about the development of the peptide bioregulators and we have informed our readers of the long history that Russia has in dealing with them. May I ask, why do you believe they have been so efficacious when other ‘orthodox’ treatments have not fared so well?

A You are absolutely right, the first peptide bioregulators were developed back in the 70’s of the last century in the Military Medical Academy named after Kirov, and then at the St. Petersburg Institute of Bioregulation and Gerontology the scientists continued their study and the creation of new peptide drugs. All peptide bioregulators are patented in the Russian Federation and in the leading countries of Europe and the USA (more than 200 patents).

The first generation of peptide bioregulators were extracts from animal organs and tissues, then a new generation of peptides synthesized from amino acids in the laboratory was obtained. A modern method for obtaining such peptides is by biosynthesis, through the sequential addition of one amino acid to another. The most surprising thing is that peptides are universal bioregulators. When ingested, peptide bioregulators begin to restore the function of the organ from which they were extracted: for example, peptides from the retina restore cells only in the retina, and peptides from the cartilage cells restore cartilaginous tissue. Peptide bioregulators control the expression of genes and protein synthesis, i.e. peptides approach genes as keys to locks, interact with them and include mechanisms of protein synthesis. As a result, the full life of an organ can be increased by 30-40%. Another important feature of peptide bioregulators is that they have antioxidant and immunomodulatory effects. In addition, peptides are able to direct the differentiation of pluripotent cells in a particular direction. It is known that every organ and tissue of the body, including the retina, contains 30% of undifferentiated (or stem) cells. This allows you to use the reserve capabilities of each tissue and thus restore its function even with very severe damage.

Q Naturally, there are many more people concerned about failing eyesight, or just the typical deterioration that most of us experience as we age. Do you have any recommend protocols for using the peptide bioregulators for such folks?

A If a patient’s vision loss is not subjected to severe retinal damage or cataracts, and a decrease in vision
is associated with age-related presbyopia or visual fatigue, then peptide bioregulators in capsules, such as Visoluten (eye peptides), can be recommended for this patient. As a rule, to patients with presbyopia we recommend Visoluten 1 capsule 2 times a day for 30 days at least 2 times a year to improve metabolic processes in the structure of the eye and to slow the process of vision loss. Patients with visual fatigue (long-term work at the computer) in order to relieve eye strain and prevent the development of retinal

pathology – Visoluten 1 capsule 1 time per day for 60 days, too, at least 2 times a year

Q In an earlier interview I did with Professor Vladimir Khavinson, he recommended certain synergistic combinations of peptide bioregulators for different disorders. Do you have any other synergistic combinations you can recommend for eyesight?

A Yes! As I have already said, only complex application of peptide bioregulators gives the best clinical effect. We treat not signs of disease, but the illness itself. Therefore, in addition to Visoluten®, Ventfort® (a vascular peptide) should be administered to patients to improve eye trophic, to improve the metabolic processes in the optic nerve. Cerluten (brain peptide), to activate the body's defense system, Vladonix® (thymus peptide) and so on. Due to the results of many years of scientific research, we have developed special schemes for the application of peptide bioregulators, which you, Dr. Micans, know and can recommend to patients.

Q Professor Trofimova many congratulations on your outstanding work that can bring hope to so many people. It has been wonderful to talk with you and I thank you very much for all your time today.

A My pleasure. Thank you too.
ILLUSTRATION OF THE LAYERS OF THE HUMAN EYE
By Phil Micans, MS, PharmB

Age-related macular degeneration (ARMD) is the leading cause of severe visual loss in older people, indeed it is the main cause of central vision loss (blindness) in the USA today for those over the age of fifty; (Source: American Academy of Ophthalmology).

Macular degeneration is a condition whereby the light sensing cells in the eye’s macula malfunction and eventually they cease to work. Often individuals with macular degeneration will notice that straight lines, such as poles, walls or wires appear to be wavy; other symptoms can include blurred text, often with dark or even empty spaces that may block the center of the field of vision.

Fortunately, macular degeneration rarely results in complete blindness since side vision is usually unaffected, but even so because of its propensity, it has been estimated that more than a million people worldwide are completely blind because of advanced ARMD!

ARMD makes activities that require sharp vision such as reading or driving very difficult. A test to determine the presence of ARMD uses something called an Asmler grid. This involves staring at a center dot to see if the lines around it are affected by blurriness, waviness or even are out of vision altogether.

An Asmler grid as seen by a person with normal vision.

The same grid viewed by a person with ARMD.
MELATONIN AND AGE RELATED MACULAR DEGENERATION

ARMD BACKGROUND

It is not clear how or why ARMD is triggered, although the focus has been on the hardening of arteries that supply the retina at the back of the eye. Over time this deprives the tissues of oxygen and other nutrients that help it to protect itself and to thrive, the consequence of which is a gradual deterioration of vision.

The central part of the retina contains a yellow pigment called macular pigment, this helps to protect the receptors in the retina from sunlight, especially from the harmful effects of blue light. The lessening of the density of this protective pigment can be linked to poor diet and in those who smoke, thus its protection from free radical damage and its enrichment are also seen as a key to ARMD.

PHYSICIANS CLASSIFY ARMD INTO TWO PARTS, NAMELY WET AND DRY

The wet form affects about 15% of patients with ARMD. This form differs from the dry type in that there is a growth of abnormal blood vessels under the retina. This can lead to bleeding and scarring and results in a more rapid and severe progression of the disease, (when compared to the dry form). Luckily for about 70% of patients with the wet form of ARMD they can be treated with laser photocoagulation to help stabilize the vision, or to limit the growth of further abnormal blood vessels.

But whilst the dry form affects 85% of patients with ARMD and thankfully is less progressive and not as severe as the wet form, unfortunately to-date there have been no successfully reported treatments regarding the reversal of this condition.

Presently, most treatments for all ARMD’s have relied heavily upon supplementing with nutritional elements, particularly lutein and zeaxanthin to alleviate, slow down and sometimes halt its progression.

A BREAKTHROUGH FOR ARMD

The study; (Changxian Yi et al, effects of melatonin in age-related macular degeneration, Ann NY Acad Sci, 1057:384-392) gives hope to millions with ARMD.

Dr. Changxian Yi studied 100 patients over a period of 2-years to see if treatment with tablets of MZS™ (so called because it also contains zinc and selenium in addition to melatonin), could help the condition of ARMD.
His thinking was that melatonin could have the capacity to control eye pigmentation and thereby regulate the amount of light reaching the photoreceptors. The unique combination in the tablets could also scavenge hydroxy-radicals and help to protect retinal pigment epithelium cells from oxidative/ free radical damage - knowing that this damage is also considered to be a cause for the initiation of ARMD. As Dr. Changxian stated; “Our purpose was to explore a new approach to prevent or treat ARMD.”

The approach was very simple; firstly, the patients were diagnosed with ARMD, with both the wet and dry forms included. Then 3 mg of MZS™ were given orally each night at bedtime for a minimum of 3 months, with 55 patients continuing for more than 6 months and some onto 12 and 24 months. The patients were then evaluated at regular periods to measure the extent of their ARMD.

The study reported that at 2-3 months of treatment the visual acuity had been kept stable, (in other words there appeared to be a halting of the progression of ARMD in general). It is worth noting that although this follow up time is not long; this result is already better than the otherwise normal course that could be expected.

For the patients who continued onward past 6 months and onto 12 months of nightly use of 3mg MZS™ the change in their fundus pictures were remarkable, (please note the before and after eye pictures presented within this article in figures 1-3).

**Figure 1:** The left slide shows the eye of a 67-year old male before treatment; his vision had been deteriorating for 2-years. The right picture shows the same eye 2-months later after daily ingestion of 3mg MZS™ tablets. He now has stable visual acuity of 0.3 with remarkable improvements in sub-retinal macular hemorrhage.

**Figure 2:** The left slide shows the eye of a 71-year old female with ARMD who after 6-months of 3mg MZS™ daily her vision had improved from 0.2 to 0.4 (as indicated in the right slide).
Figure 3: A 58-year old male whose visual acuity at the start (left slide) was 0.2. This improved to 0.4 after 6-months of regular use of MZS™. The sub-retinal hemorrhage and exudate was remarkably absorbed.

At the end of the study, of the original 110 eyes tested only 8 eyes showed more retinal bleeding and 6 eyes more retinal exudates, the clear majority had dramatically reduced pathologic macular changes. This was made self-evident by the patients themselves reporting better vision and general ocular experience with improvements to flare, dryness, clarity and comfort. Whilst the authors called for larger studies to confirm their findings, they concluded that; “melatonin supplementation among the aged population may be beneficial in preventing, relieving or reducing the severity of ARMD, which is one of the leading causes of blindness in the elderly.” What’s more during the entire period (with some patients taking the 3mg tablets every night for 2-years) no significant side effects were observed.

DR. PIERPAOLI’S VIEWS

We spoke with world melatonin expert Walter Pierpaoli, M.D., author of the best seller; ‘the melatonin miracle’ about this finding, he told us; “Many people are aware of melatonin’s role in jet-lag, or as a potent antioxidant, but we know it is far more than this. Our research with MZS™ has highlighted its ability to re-synchronize the endocrine system as well as the circadian rhythms of the wake-sleep cycles. I note that whilst the authors of the ARMD study have discussed the role of melatonin in the eye as being able to control eye pigmentation, to help regulate the amount of light reaching the photoreceptors and other functions in relation to eye structure as possible factors in the benefits for ARMD; I also surmise that through the rebalancing of hormones and improvement of repair functions- through better sleep patterns- that these have also had this significant and profound ability to reverse this condition.”

Dr. Pierpaoli went on to say; “We’ve seen many miraculous reversals of diseases in our patients with MZS™, this latest study showing that it can halt and even reverse age-related macular degeneration is another important highlight of the power of MZS™.”

In the past Dr. Pierpaoli has gone on record to say that melatonin is a unique molecule, going as far as to announce that; “In my opinion melatonin is one of those molecules that existed before life began and that it has been put to a special use.”

Asked whether there may be further studies regarding ARMD and melatonin, Dr. Pierpaoli said; “We accept that additional studies are needed to confirm these results and its mechanism, however we are delighted that a vital benefit to slow, halt and even reverse ARMD has been discovered. Whatever the outcome of further research into the pathways and actions of the MZS™, the fact remains that thousands, even millions of people can now benefit from this research to protect their vision.”
As one of the world’s leading antiaging researchers, Dr. Pierpaoli has been exposing the benefits of his own and others work with melatonin, particularly at the unique Stromboli conferences in Italy.

When asked for a final comment on the ARMD findings Dr. Pierpaoli said; “Here is yet another clinical study, this time about age-related macular degeneration, that can be added to the long list of disorders that include cancer, Alzheimer’s, cardiovascular, depression and even aging itself, all of which can be successfully ameliorated with MZS™.”
The International Hormone Society (IHS) now offers its extensive scientific databank on hormone therapies via its website. This may be a crucial step, one that has been long awaited by physicians and patients, as it works towards establishing hormone therapies as a serious, medically acceptable treatment option for the prevention and treatment of many medical disorders.

Furthermore, IHS’s new international board certification on hormone therapy provides the best international exam to ensure a physician can handle basic hormone therapies successfully and safely.

Why are these two advances so important for physicians and their patients? It’s because the human body, mind, and emotional behavior are shaped by hormones. Although vitamins, trace elements, and other nutrients can help us remain or become healthy, hormones are, in most cases, much more potent.

THE DOMINANT IMPORTANCE OF HORMONE THERAPIES

When hormones are lacking, the body malfunctions and may age prematurely. An increasing number of studies demonstrate the ability of hormone therapies to attenuate or even reverse important aspects of aging and disease.
THE HORMONE HANDBOOK
833 page book by Dr Thierry Hertoghe. $349.99
Teaches physicians how to effectively correct hormone deficiencies that range from mild and partial insufficiencies to severe or total lacks of hormone. It identifies and provides solutions to the various problems that may occur in the course of therapy. It is probably the best quick guide on the practical use of hormone treatments.

ATLAS OF ENDOCRINOLOGY
327 page book by Dr Thierry Hertoghe. $299.99
This incredible book is a pictorial guide to the physical attributes of what each hormone, whether it is in hyper or hypo activity within a patient can do.

REVERSING PHYSICAL AGING
1089 page book by Dr Thierry Hertoghe. $449.99
This book will help to discover how to reset or reduce all the important aspects of physical aging of the head, hair, face and the 5 senses - vision, hearing, smell, taste and touch. This is a practical guide full of ready to use information for medical therapies that reverse physical aging signs, and it assesses the efficiency of each treatment.
Since their appearance in the late 1930s, hormone therapies have triggered controversies and encountered opposition. Their beneficial effects have been met with unbelief or even mistrust on the part of physicians who feel that the important benefits of hormone therapies might hide unacceptable risks. Several portions of the scientific and medical communities still incorrectly think that there might still not be sufficient evidence to support treatment with hormone therapies.

Today, the scientific evidence has accumulated in support of the use of hormone therapies- not only to improve the quality of life, but also to optimize health and physical appearance; prevent, reduce, or even cure disease; and perhaps even to increase longevity.

Current knowledge in hormone therapy has progressed to the extent that scientific publications backing hormone therapies have become references for evidence-based research. The most important hormone therapies have, on average, 10 to 100 times more double-blind placebo-controlled studies in support of their efficacy and safety than most newly released pharmaceutical drugs. There is now sufficient evidence to the regular use of hormone therapies.
THE INTERNATIONAL HORMONE SOCIETY (IHS)

Over the years, the IHS has stimulated research, data collection, and education on hormone therapy, promoting a scientific, patient-oriented approach with its conferences and data collection.

To make this scientific evidence accessible, the IHS has released the extensive evidence it has reviewed on its website. Most of the information is presented at no cost to all academics, medical doctors, patients, and other interested parties. This free access not only helps patients and physicians’ access scientific information more easily, but also may help to increase the acceptability of hormone therapies by increasing awareness about its scientific support and safety.

WHO MIGHT BE INTERESTED IN THE IHS INTERNET HORMONE THERAPY DATABANK?

- Patients doubting the scientific aspects of one or more hormone therapies and desiring additional information.
- Doctors who treat with hormone therapies and need an informative website to which to send people
- Opponents to hormone therapy searching for the truth.

REFER THE WEBSITE TO YOUR FRIENDS, FAMILY, AND MEDICAL DOCTORS

Please refer to the: www.intlhormonesociety.org link to all who might benefit of more information, whether they are proponents or opponents of hormone therapy. A special section is reserved for physicians who want to deepen their scientific knowledge, access medical training, and get help for medical board matters.
CONTENTS OF THE EVIDENCE-BASED HORMONE THERAPY DATA ON THE WEBSITE

Information on the following 20 hormone therapies

1. Thyroid
2. Estrogen therapy in women
3. Progesterone therapy in women
4. Cortisol/ hydrocortisone
5. DHEA
6. Aldosterone/ fludrocortisone
7. Pregnenolone
8. Melatonin
9. Vasopressin/ desmopressin
10. Oxytocin
11. Growth hormone
12. IGF-1
13. Relaxin
14. MSH derivatives
15. Calcitonin
16. Parathormone
17. Thymosin-alpha-1
18. Thymosin beta-4
19. Estrogen therapy in men
20. Progesterone therapy in men

AN EXTENSIVE LIST OF REFERENCES

- Scientific studies that show the link between hormone deficiencies and physical appearance losses (including sarcopenia), and their reversal with hormone therapies.
- Scientific studies that show the links between hormone deficiencies and somatic (physical) diseases and hormone deficiencies such as dyslipidemia, (including hypercholesterolemia), atherosclerosis, coronary heart disease, cardiac failure, obesity, diabetes, rheumatic disorders, osteoporosis, cancer, and mortality, and their improvement or reversal with hormone therapies.
- Scientific studies that show links between many (suboptimal) hormone levels within the reference range and disorders/diseases, suggesting that these suboptimal or supra-optimal levels are hormone deficiencies. These studies are enriched by graphics that represent these associations and they suggest the existence of a narrower optimal range within the large, (population) reference range- where the risk of disease is minimal and hormone health likely optimal.
- Scientific studies reporting the association between hormone deficiencies and complaints/ symptoms and physical signs of hormone deficiencies and excesses.
- Scientific studies that show hormone levels decrease with aging and by which physiological mechanisms, i.e. hormone therapies may therefore protect against aging.
- Scientific studies that address specific controversies in hormone therapies, such as the use of:
  - thyroid hormones in heart disease and osteoporosis.
  - androgen therapy and prostate cancer.
  - female hormone therapy or levels before or after breast cancer.
  - growth hormone and cancer.
  - and many more hormone topics in discussion.
- Scientific studies that show the frequency of hormone deficiencies, autoimmunity, usefulness of lab tests, etc.

Note: The content is regularly updated.
PHYSICIANS CAN BECOME IHS MEMBERS

Physicians from all countries and medical specialties can become members of the IHS for free providing they complete the IHS membership. We also advice physicians to sign the IHS hormone therapy consensuses on the major hormone therapies used at physiological doses. The greater the number of physicians from all over the world who sign these consensuses, the more these treatments gain acceptability worldwide.

ADVANTAGES OF IHS MEMBERS

- Members of a large group of physicians in an international scientific and medical society will help medical progress and education.
- A reduced rate to gain access to the deeper part of the IHS website, which contains additional and extensive information on hormone therapies, (abstracts of studies, articles, useful information when dealing with medical institutions and boards, expert advice, special forums, etc.)
- Your presence in the society helps boost the movement and influence medical communities.

Dr. Thierry Hertoghe’s Hormone Handbook V2 is one of the most comprehensive manuals for hormone use available today.
BOARD CERTIFICATION IN HORMONE THERAPY

Until now, there has been no international nor, in most countries, any national examination to test the ability of physicians to prescribe hormone therapies and solve follow-up treatment problems. The IHS is proud to announce its written, multiple choice examination that effectively evaluate the practical skills of physicians of all specialties in hormone therapy prescription and follow-up. Successful completion of the examination provides greater guarantees to patients and fellow medical doctors of a physician’s expertise in hormone therapies.

WHO CAN TAKE THE EXAMINATION?

The hormone therapy examination is for certified, licensed physicians. A copy of the physician’s official diploma must be provided. Other health professionals that may legally prescribe hormone therapies in their countries may apply for permission to take the examination.

WHY SHOULD PHYSICIANS TAKE THIS EXAM?

- Improved medical skills in hormone therapy
- Official recognition and acknowledgement of expertise in hormone therapy by an international medical and scientific organization, the IHS.
- Fun: It is a pleasure to master the basic and advanced skills in hormone therapy. As the learning material is well structured and contains all the necessary information for physicians to practice hormone therapy issues appropriately, questions are easy to answer for physicians who have studied the learning material. Physicians who have gained experience in hormone therapy prescriptions and follow-up will appreciate the quality of the exam even more. Passing the exam provides satisfaction and pride.

Dr. Thierry Hertoghe’s Atlas of Endocrinology is an incredibly detailed book that features the physical attributes that document the hypo and hyper affects of individual hormones.
WHAT TO LEARN FOR THE EXAMINATION

The learning material consists of both:

2. Its complementary book on the physical signs of hormone deficiencies and excess, the Atlas of Endocrinology for Hormone Therapy (pages 13-48, 61-143, 169-228, 243-308, and 319-324).

The exam tests a physician’s competence in 12 hormone therapies:

1. Thyroid
2. Estrogen and progesterone
3. Testosterone in women
4. Testosterone in men
5. DHEA
6. Melatonin
7. Cortisol and glucocorticoids
8. Pregnenolone
9. Aldosterone and fludrocorisone
10. Oxytocin
11. Vasopressin
12. Growth hormone in adults

CONCLUSION

For further information and free access to the scientific evidence on the 20 most important hormone therapies go to: www.intlhormonesociety.org
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. 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-radicals than the two well-known free radical scavengers, glutathione and mannitol. Its effect on longevity is well documented. Experts believe melatonin has a positive effect on aging.

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?
Firstly it is of pharmaceutical quality at a dose of 3mg. Secondly, it contains the synergistic ingredients of selenium and zinc. 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. MZS is the only melatonin supplement to follow nature’s own night peak. Take half to one 3mg 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.

MZS is much more than a sleep aid and melatonin has many published benefits. MZS comes with the endorsement of Dr. Pierpaoli. If you’ve tried other melatonin and didn’t notice a significant effect, then we highly recommend you try Dr.Pierpaoli MZS for a superior experience.
OXYTOCIN FOR PASSION AND SEX

Oxytocin is a hormone produced by the hypothalamus, excreted via the pituitary gland. Its orthodox medicine role is to help women give birth, since the large dose that’s injected helps to relax the uterus and alleviates the passage of the child. Dr. Thierry Hertoghe’s book, ‘Passion, sex and longevity, the oxytocin adventure’ highlights that it has many other roles too.

The Love Hormone

Oxytocin has been dubbed ‘the love hormone’. It can induce feelings of bonding and care. Its measurements have been taken between lovers, friends, relatives, parents and their children etc. 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. However, 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. Women undergo a burst of oxytocin during orgasm. Trails 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!

The effects of Oxytocin

Dr. Hertoghe explained that some will not feel the effects of oxytocin. For two reasons, (if we consider that the dose is correct for that individual). Firstly, some people are ‘low’ in their principal sex hormone, 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 (10IU) each of vasopressin via the Vaso-Pro nasal spray.

Doses are very dependent upon its use. For social or sexual enhancement, 5 IU to 10 IU is a ‘typical’ dose. Dr. Hertoghe reduced the doses that he recommends in his books, (Transmitted via personal conversation to me). Currently IAS is providing Oxy-sub in 20 IU trouches (a soft sublingual tablet). These can be cut into half or a 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.
A BREAKTHROUGH FOR CATARACT

Can-C™ eye-drops are the original™ 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™ 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 dipeptide has potent anti-glycating and anti-oxidant 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™ formula you will see differences to the copycats, (remember it is only Can-C™ 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 trials.

Clinical trial:

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™ 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™ 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™ 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.
Deprenyl is also known as selegiline, it was created in the 1960s by Professor Joseph Knoll, principally as an aid to Parkinson’s patients—because deprenyl has a significant benefit to improve dopamine levels in the brain.

**Significant longevity studies**

Professor Knoll’s experiments with rats produced some of the most incredible longevity benefits. When fed deprenyl in their food, they lived longer than those that were not. After the last non-treated rat died, the first of the deprenyl rats hadn’t! These results were in another study conducted from research by, Dean, Fowkes and Morgenthaler—published in the book, ‘Smart drugs & nutrients’. It highlights that the loss of dopamine in humans with age, can be mapped against the development of Parkinson’s and even death.

Deprenyl has been expressed as a MAO-b inhibitor. Preventing the enzyme monoamine-oxidise 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,’ not a side effect of deprenyl, although it should be noted that dopamine can inhibit type-a, usually at very high doses of 20mg. Professor Knoll has noted that there is another significant action of deprenyl and this is the raising of PEA levels. PEA is a catecholamine activity enhancer that raises norepinephrine levels, it’s a significant attention agent that is behind the primary mechanism of the famous Eugeroic drug- modafinil (Provigil). Read professor Knoll’s books- ‘The brain and itself’, or ‘How selegiline/deprenyl slows brain aging.’

**Typical patient responses**

A patient who has mild cognitive impairment, or age related minor cognitive dysfunction, the most common report is 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 behaviour, as others around you are not focused and ‘on the ball’ as you! We recommend breaks from deprenyl use.

Some advocate one week off in the month and other use it during the weekdays but not at the weekends.

Doses are based on need and age. Parkinson’s patients will require large doses. A person wanting to improve their cognitive performance may want to consider 1mg to 3mg per day, with occasional breaks. These doses do not take into account synergy with other dopamine enhancing agents and persons using anti-depressants should consult with their physician. Deprenyl tablets are provided in 5mg form (Jumex), some like to take ½ to 1 of these tablets 3 times a week. 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, the liquid can be dosed very precisely by placing those drops into a cold drink. Avoid use in the late evening to prevent any sleep disruption.
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, 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).

Dosing

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.
PIRACETAM

PIRACETAM, THE ORIGINAL NOOTROPIC

Smart drugs and nutrients, or to give them their correct medical terminology - nootropics, 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.

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 being 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. Most experts believe it 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.

What are the doses of piracetam?

A common dose is 800mg tablets three times a day, then lowering to 800mg twice a day after the first month. 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 a headache then it is usually caused by an overdose. In which case reduce the dose and build up more slowly.
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 age-related health disorders. Ergo, supplementation with a synthetic, or a natural thyroid can have a significant positive effect on a wide range of age-related problems.

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.

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).

Natural desiccated thyroids are measured in grains; with one grain being equivalent to approximately 60 mg. IAS carries doses from ¼ 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.
In this featured section we are focusing on the use of natural estrogens and progesterone for women, normally utilised to aid the menopause. IAS carries a wide range of bioidentical hormones - a term that means ‘natural to and in the body.’

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 or expensive to synthesize. Facts pointed out by Dr. Wright in his best-selling book ‘Stay Young & Sexy’. 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.

Introducing Esnatri

Esnatri™ is our bioidentical triple estrogen cream. One of the best biodentical estrogen creams 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% estradiol and 3% estrone.

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 overlook estriol, claiming it is a weak estrogen. But, women naturally produce high levels of estriol and it is considered to have anticarcinogenic effects.

The Esnatri cream can be applied by daily rotation to your neck, upper chest, breasts and behind your knees, or inner thighs. A typical starting dose is 2mg. Start from day one (of what would have been the start of your menstrual cycle) and continue until day 25. 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.

Combining Estrogen with Progesterone

Progesterone is the counterbalance to estrogens. Women can significantly decline in estrogen levels during menopause – they rarely reach zero production levels, whereas progesterone can sometimes not be measured at all in elderly women. It is also the low progesterone that most significantly impacts bone strength, leading onto osteoporosis. 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 25mg to 30mg of progesterone applied on day 10 and continuing to 25. The start date varies according to the usual timing of your ovulation. As with the Esnatri cream, sop for the last 5 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.
SAVE ON MANY ANTIAGING PRODUCTS.

Simply use the voucher codes below within the stated timeframe and on the websites mentioned, (products may be restricted in some countries and prices may be subject to taxes and S&H where appropriate).

For the above go to [www.antiaging-systems.com](http://www.antiaging-systems.com) (we accept payment for these products by echeck and wire).

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www.antiaging-systems.com is your comprehensive resource for information about all the leading commercially available antiaging, preventative and regenerative products and therapies available today. Visit www.antiaging-systems.com and find articles, videos, audio-files, all referenced with a guide of where to obtain your needs.

Currently the site covers topics related to all the following products.

**BOOKS**

- Atlas of Endocrinology  
- Great Teeth for Life  
- Passion, Sex & Oxytocin  
- Physician Hormone Handbook V2  
- Cataract Cure  
- Melatonin, the Key of Life  
- Peptides in the Control of Ageing  
- Reversing Physical Aging V1  
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- GHRP6 (Release-Pro™)  
- Sermorelin (Serm-Pro™)

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