NEW THINKING, NEW POSSIBILITIES

In this issue:

A peptide for sleep
Relieving pain
A peptide for joints
Deprenyl and Alzheimer’s by Dr Ward Dean
Sildenafil-Pro™
(Generic Viagra)

ONLINE CODE:
SILDENAFIL-5-OFF-0917

The classic erectile dysfunction treatment, available in 100mg double scored tablets at a great price.

Our double scored tablets allow easy breakage for dosing 50mg or 25mg if required.

$14.99 (Save $5.00)

Restrictions may apply please see IAS terms and conditions for full details. Offer valid until 1st September 2017
All side effects and contraindications are available on the IAS website.

IAS is dedicated to helping you access the world’s latest commercially available supplements to give you and your family real choices.

The IAS mission is:

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.

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

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.

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.

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

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.

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.

Copyright 2017: All copyrights are acknowledged. Whilst every effort has been made to ensure accuracy, no responsibility can be accepted for illustrations, photographs, artwork or advertising materials while in transmission or with the publisher or their agents.

Disclaimer: All educational information is offered under IAS terms and conditions. This information does not replace the advice of your physician and restrictions may apply in some countries. The opinions expressed by the writers may not be those of IAS or the magazine. All prices shown are in US Dollars and are for reference purposes only and they do not include taxes (where applicable), nor do they include shipping & handling fees. Prices, conditions and terms are subject to change without notice.

∞ TOMORROW’S TREATMENTS TODAY™
Welcome
Summer is here and the time is right!

For those of us living in the northern hemisphere summer has arrived. With its bright horizon, we thought that introducing new products and ideas would be the main feature of this issue.

We continue to be intrigued about the growing knowledge and understanding of peptides. These short chains of amino acids are ‘information’ and as 35-years of Russian research has shown they can act as gene switches. No wonder that numerous medical reports and investments are heading in their direction.

Accordingly, we’ve placed new peptides into this issue of the Aging Matters™ magazine. You will read about those involved with sleep, a vital repair mechanism that we all need on a regular basis and other peptides that are alleviating pain, a debilitating factor that obviously needs to be controlled to avoid living life in discomfort.

Our medical doctor, Dr. Ward Dean updates us on deprenyl, a drug originally designed for Parkinson’s disease, but here we discover how it can also help those concerned with Alzheimer’s.

The next magazine will be in the Fall, (or as we say in the UK- the Autumn). We hope you are looking forward to it. In the meantime, enjoy the summer.

Phil Micans, MS, PharmB
Editor, Aging Matters™ Magazine

Ward Dean, M.D.
Medical Director
There has been a big development, and an even bigger investment made in the world of anti-aging. Billionaire Li Ka Shing, the richest man in Hong Kong purchased $25 million in common stock from an anti-aging company called Chromadex. The ingredient Niagen has scientists at the top universities fascinated with the compound.

Niagen is a branded form of Nicotinamide Riboside, a form of vitamin B3. This ingredient is being examined around the world due to its capabilities to increase life span and enhance health span. Clinical studies have proven it safely and effectively boosts levels of NAD+. The CEO and co-founder of ChromaDex Frank Jaksch, jr stated "we are now ready to show the world the anti-aging capabilities of Niagen and are truly honoured to have Horizons Ventures as a strategic investor and be associated with their family of prestigious global investments."

So What is NAD+?

Scientifically speaking, it stands for Nicotinamide Adenine Dinucleotide. This compound is an important substance necessary for metabolism, found in all human cells. As we age our NAD+ levels typically decrease, by replenishing these levels using supplements it can enhance cognitive health, boost physical and mental energy and even optimise a healthier metabolism. It has even been known to restore functionality in the mitochondria, which is regarded to as the “power house” of cells that converts the food we eat into energy we can then use. The ingredient nicotinamide riboside has certainly got scientists all over talking about its incredible capabilities; we are excited to see its future developments within the anti-aging world.

Could NAD+ be the secret to a healthier and longer life?

The ingredient nicotinamide riboside has certainly got scientists all over talking about its incredible capabilities.
NAD+PRO™

Reverse aging, boost energy and fight fatigue

$44.99

SAVE $5

ONLINE VOUCHER: NADPRO-5-OFF-0917

Restrictions may apply, please see IAS terms and conditions for full details. Offer valid until 1st September 2017. All side effects and contraindications are available on the IAS website.
COW’S MILK - DECREASING YOUR BODY’S ABILITY TO ABSORB THYROID HORMONE MEDICATION

Are you diagnosed or know someone with an underactive thyroid?

A recent preliminary study finds that ingesting the common oral hormone medication levothyroxine with cow’s milk, can significantly decrease the body’s ability to absorb the drug. The results were presented at ENDO 2017, the Endocrine society's 99th annual meeting in Orlando, Fla.

Levothyroxine is prescribed for patients with an underactive thyroid to replace the natural thyroid hormone thyroxine. Primary investigator Deborah Chon, M.D stated that “These findings support previous research that calcium supplements can interfere with levothyroxine absorption. Decreased absorption means that patients may not get the full dose of thyroid hormone that they are prescribed.”

The research consisted of 10 adults, 6 men and 4 women who were studied, with an average age of 33.7 years. Those investigated had no known thyroid disease, and had normal thyroid function at the start of testing. No one involved was allergic to either cow’s milk or levothyroxine.

Participants began by fasting overnight before two study visits, spaced a month apart. At the first visit candidates took 1000 micrograms of oral levothyroxine alone and at the second visit, they ingested the same quantity in addition with 12 ounces of 2% milk. Candidates gave regular blood samples throughout the study to measure their total level of T4.

Investigators measured levothyroxine absorption as the concentration of total T4 in the blood. Results revealed that those who consumed both medicine and milk in conjunction had a lower T4 level.

The brand manufacturer of levothyroxine has recommended that the medicine should preferably be taken on an empty stomach, 30-60 minutes prior to eating or taking any other medication or supplements.

Given the study’s findings, a correlation can be seen that cow’s milk could have an interference with those who manage with thyroid replacement therapy.

A recent preliminary study finds that ingesting common oral hormone medication levothyroxine with cow’s milk, can significantly decrease the body’s ability to absorb the drug.

Got an opinion on this article? Share your views with us: feedback@antiaging-systems.com
Natural and Synthetic Thyroid Supplements to Beat Age Related Thyroid Decline

Available in:
- ¼ grain tablets
- ½ grain tablets
- 1 grain tablets
- 1 ½ grain tablets
- 2 grain tablets
- 3 grain tablets

Full range available online at IAS

Restrictions may apply, please see IAS terms and conditions for full details.
All side effects and contraindications are available on the IAS website.
Anti-aging medicine refers exclusively to slowing, preventing, or reversing the process of aging. In recent news, scientists have revealed a drug to reverse the characteristics of aging has been successfully trailed in animals.

The team at Erasmus University Medical Centre are located in the Netherlands. Although this is a ground breaking discovery it is yet to be tested on humans, though scientists are forecasting human trials for what they hope will be a successful treatment for anti-aging. Additionally, Dr Dusko Lilc, a stem cell scientist at Kings College London commented on the results, stating that the trials were “impossible to dismiss” while some questions remain unanswered.

The drug has enabled old mice to be rejuvenated, to restore their stamina, fur coat and even some organ functions. The method works by flushing out retired or “senescent” cells within the body that have stopped dividing.

Senescent cells are amassed naturally as we grow older, they release chemicals that cause inflammation and have been associated with aging. The drug, a modified FOXO4 peptide was produced by scientists and it selectively kills senescent cells by disrupting their chemical balance.

Dr Peter de Keizer states “I got very rebellious; people insisted I was crazy for trying and for the first three times they were right.”

The mice he tested fell into three categories, some were naturally aged and the equivalent of 90 in mouse years, some were programmed genetically to age rapidly and others were aged by chemotherapy. The drug was given three times a week and the experiment has been taking place for almost a year. There are no known signs of side-effects however as Dr De Keizer states “mice do not talk” it is believed that this drug would have little to no effect on normal tissues.

There are high hopes that this drug will be used for anti-aging purposes in the future, but until more high quality research is carried out, it is better to be reserved about the experiment findings.

Further Reading


Got an opinion on this article? Share your views with us: feedback@antiaging-systems.com
The drug has enabled old mice to be rejuvenated, to restore their stamina, fur coat and even some organ functions.
A PEPTIDE FOR SLEEP
SLEEP, PERCHANCE TO DREAM

DID YOU GET A GOOD NIGHT’S SLEEP LAST NIGHT? OR WERE YOU COUNTING SHEEP?

The 5 main facts about human life are birth, food, sleep, love and death. It's now clear that sensible eating and a solid night’s sleep are the two vital elements for a healthy life. At the end of the day, we all want to look good and feel good. Sleep deprivation has profound consequences on your wellbeing. It can put you at risk of obesity, heart disease, diabetes and other potentially life threatening conditions. Sleeping Beauty had the right idea, look at her when she woke up – full of life and vitality, a healthy weight, wrinkle free and she ended up with the perfect life! However, she didn’t have bills to pay, have a family to feed or a day in front of a computer screen. Some could say that she had a bit too much sleep of course.

Do you get enough sleep? As a rule, if you wake up tired and spend the day longing for a chance to have a nap, it’s likely that you’re not getting enough sleep. Sleep gives us time to rest and rebuild.

IS A GREAT NIGHT SLEEP SOMETHING THAT YOU DREAM ABOUT?

There are 4 stages of sleep.

1. Non-REM sleep – drowsiness, your eyes move slowly under your eyelids, your muscles start to relax and you are easy to wake up.

2. Non-REM sleep – light sleep, your eye movement’s stop, your heart rate slows, and your body temperature drops.

3. Non-REM sleep – deep sleep, it’s not easy to wake you during this stage of sleep. If you do wake you will be groggy and not quite with it for a few minutes. This kind of sleep allows your brain to rest and restores your energy levels and your immune system is helped by deep sleep.

4. Finally, there is REM sleep – rapid eye movement sleep. About 70-90 minutes into your sleep cycle is when you enter your REM sleep. This stage is associated with processing your emotions, filing your memories and relieving stress. Your blood pressure drops, muscles relax, blood supply to the muscles increases and muscle tissue growth and repair occurs. Energy is restored and hormones are released.⁽¹⁾
WHAT IS STOPPING YOU FROM GETTING A GREAT NIGHT’S SLEEP?

Taking into consideration the valuable benefits of good sleep it’s very important that you find out why you aren’t sleeping well. What is preventing you from getting the recommended minimum 7 hours sleep a night? The famous comedian W.C Fields once said, “The cure for an insomniac is a great night’s sleep!” It’s funny and it’s true, but life isn’t that simple and there isn’t one answer for all. Whatever your reason for not sleeping is, your goal should be to find out why and devise a realistic plan of action to give your body what it needs to function at its best. We live in a world of information overload and the long and the short of it is, a lack of sleep can create a whole lot of problems and shorten your life expectancy.

If you struggle to get a good night’s sleep there are different therapies that you can try. There are many benefits of a sleep aid, it reduces anxiety and stress, helps depression and restores the body to a state of calm and relaxation to promote deep sleep. Sleep peptides aid the circadian rhythms in the brain, when those rhythms are disrupted; your body produces less melatonin. You need a good melatonin level to achieve good sleep. (2)

DO YOU SUFFER FROM INSOMNIA?

Insomnia is difficulty getting to sleep or staying asleep for long enough to feel refreshed the next morning. It’s an exhausting and a common problem particularly in elderly people. Occasional bouts of insomnia may come and go without causing any serious problems, but for some people it can last for months or even years at a time. Insomnia can have a significant impact on your quality of life. It can restrict what you’re able to do during the day, affect your mood swings and lead to relationship problems with friends, family and colleagues. To be able to put your head on the pillow and float into a deep sleep is something an insomniac will struggle to ever experience.

Doctors are reluctant to prescribe sleeping tablets, this is because they don’t treat the cause of your insomnia and are associated with a number of side effects. They can also become less effective over time. (3)
ARE YOU A NIGHT OWL OR EARLY RISER?

Do you know your chronotype? This describes a person’s timing preference and their potential for awareness within different times of the day. Are you the early riser chronotype? Up and ready for action at the crack of dawn, going for a jog whilst others sleep like babies in their beds. Or are you the night owl chronotype? Hates mornings and is not enthused but come late evening the brain is switched on and ready to go.

We should all aim to be the intermediate chronotype – somewhere in the middle. A flexible person who can have mental alertness where needed. (a)

WHAT’S GOING THROUGH YOUR HEAD RIGHT NOW?

Well, if you are reading this article at bedtime, unless otherwise stimulated, your cortisol levels are dropping, your body temperature is lowering and as you start your sleep cycle the melatonin, serotonin and growth hormone levels will go up. Melatonin suppresses harmful free radicals and slows down the production of estrogen.

The amount of cortisol and catecholamines produced from the adrenal rises through the night from its lowest point when going to sleep, to its highest point upon awakening. Catecholamines and cortisol play a large part in the ‘bright eyed and bushy tailed’ behaviour you sometimes experience in the morning. However, a low level of cortisol can cause gogginess on wakening.

If you are reading this article because it’s the middle of the night and you can’t sleep, the stress hormone cortisol is raising leading to less new brain cell growth. Your insulin levels in your blood are rising, leading to hunger. There is a decrease in growth hormone leading to less body and brain restoration and leading to accelerated aging. Potentially you are aggravating a stomach ulcer and increasing the risk of cancer.
WHAT CAN YOU DO TO GET A BETTER NIGHT’S SLEEP?

- Sleep in complete darkness.
- Have your room at a comfortable temperature.
- Make sure there are no magnetic fields in the room.
- Keep alarm clocks with bright lights away from the bed.
- Avoid a loud alarm noise.
- Reserve your bed for sleep, not watching TV or working.
- Sleep in separate bedrooms if your partner disturbs you (i.e. snores).
- Reduce or avoid drugs near bedtime.
- Avoid alcohol.
- Avoid caffeine.
- Exercise regularly.
- Get some sunshine.
- Have your adrenal condition checked.
- Don’t eat foods that you are sensitive to.
- Try not to be overweight.
- Therapy.
- Remove any blue lights from the room - TV or computer screens.
- Take a sleep aid, like Sleep-Pro™.

Sleep-Pro™ is a deep sleep peptide dietary supplement that contains- CAP (Circadian Adjustment Peptide). When circadian rhythms in the brain are disrupted, your body produces less melatonin. You need a good melatonin level to achieve good sleep.

CAP- Can inhibit the secretion of hormones in the hypothalamus of the brain, (this links the nervous system to the endocrine system via the pituitary gland). In doing this, it helps reduce the adrenal secretion of large amounts of cortisone that is recognized as being a contributing factor in sleep disorders. By reducing the amount of cortisol it helps to restore the body to a state of calm and relaxation.

Sleep-Pro™ uses the technology of ultrafiltration membrane purification, the development of peptide orientation fermentation technology, the production of high milk peptides, and the high concentration and purity of amygdalin CAP; it allows the capsule to remain intact in the intestine allowing it to fully absorb into the system. (5)

Sleep has been provided by nature to do the body’s healing work and it takes 7 or 8 hours for this process to happen. You should try to commit to getting at least 7 hours sleep at night to keep your body and hormones in balance. Experts say, for every two hours that we are awake, the brain needs an hour’s sleep.

Sleep routines may include taking a warm bath or a relaxing walk in the evening or practicing meditation/relaxation exercises. Psychologically, the completion of such practice tells your mind and body that the day’s work is over and you are free to relax and sleep.

When sleeping, your brain is extraordinarily active. Much of that activity helps the brain to learn more and remember. Sleep helps you remember forgotten skills because the brain goes through a consolidation period.

Sleeping plays a crucial role in helping us to grasp the meaning of our lives. Are you having trouble making sense of your life? Do you find yourself forgetting things more often? Is it taking you longer to learn more skills than it used to?

Sleep-Pro™ effectively regulates the secretion of cortisone and it is non-addictive. It inhibits the secretion of hormones in the brain hypothalamus to reduce adrenal secretion of cortisone and achieve anti-stress. It can act as an anti-depression, anti-bipolar disorder, mental decompression and help a sleep disorder. Helping you to get a great night sleep and improve your memory.

Sleep-Pro™ contains bovine a-casein hydrolyzed peptide-3, the same peptide found in milk. When observing the sleeping patterns of babies after they drank their milk, scientists began to study that relationship between sleep and peptides. French studies related to bovine a-casein hydrolyzed peptide-3 revealed that after taking the peptide for two weeks, sleep quality was better. After four weeks it reduced sleepless conditions and daytime drowsiness. (6)

It’s about knowing how to sleep well and how to do it. You can be a pro at sleeping with Sleep-Pro™. Why not sleep on it and see what happens?

References:
1. WebMD, reviewed by William Blahd MD, National Institutes of Health, National Sleep Foundation.
3. Shelby Freedman Harris Psy.D, C.BSM. Director of behavioral sleep medicine program at the Sleep-wake Disorders Center at Montefiore Medical Center. 'What do you do if you suffer from middle of the night insomnia?'
4. Dr Michael J Breus - The Sleep Doctor. ‘Night owls and early risers have different brain structures.’
5. ‘Sleep - How sleep works.com, ASA (American Sleep Association), supported by Dr Everett Koop.
SleepPro™

30 capsules
Helps to regulate cortisol and promote a deep sleep

Save $10.00

$49.99

Restrictions may apply, please see IAS terms and conditions for full details. Offer valid until 1st September 2017

All side effects and contraindications are available on the IAS website.

ONLINE VOUCHER: SLEEPPro-10-OFF-0917
IMPROVING
JOINT MOBILITY
JOINT-PRO™

The very latest peptide cream for joint pain relief

Joint pain is a common problem, and aging can take its toll, we must deal with DNA damage, cell damage, muscle atrophy, bone loss, decreased muscle mass and joints worn out from overuse. Life can play havoc on our hips and knees!

But aging doesn’t have to be all negative. Life is about choices, we can sit and keep moaning about our aches and pains, or we can choose to educate ourselves and make the aging process easier.

We should take the time to understand our mind, body and soul.

The body is made up of proteins that are essential for tissues, the immune system, enzymes and cells. Proteins are made up of a sequence of amino acids, peptides are short amino acid fragments and when taken in a supplement or cream it is a natural source that can improve your health.

Each organ or bodily function has its own unique peptide bioregulator. Peptide bioregulators have been shown to shortcut the protein synthesis process by interacting directly with cell DNA – meaning that organs can build and repair tissues easier and quicker when peptide bioregulators are active. (1)

WHAT IS THE ROLE OF PEPTIDES IN THE JOINTS?

Peptides can stimulate the target cells to repair cartilage tissue, increase intra-articular lubrication, and pain relief, unlike glucose amine of nutritional supplements.

SOLID-PHASE PEPTIDE SYNTHESIS

Adding First Amino Acid in DIC

90% TFA (Final Step, Peptide-Linker Uncapping)

1st Fmoc Deprotection
THE LEG BONE IS CONNECTED TO THE KNEE BONE...

Bones are rigid organs, their function is to move, support and protect various organs of the body. They produce red and white blood cells and store minerals. Our bones are connected at our joints and the average amount of joints in the human body is 360.

Weight bearing joints like the knees and hips can cause pain - nerve related, osteoarthritis, infectious, trauma-related or genetic. Whatever the reason, knee and hip pain can be excruciating!

Pain can catch your breath, bring tears to your eyes, cause a fall, limit your movement and in some cases, take over your life. It can be depressing and exhausting.

THE KNEE

The knee joint consists of 2 articulations between the femur and tibia and the femur and patella. The knee is the largest joint in the human body. It’s a modified hinge joint that permits flexion and extension with internal and external rotation. The knee is vulnerable to osteoarthritis. It is the most complicated joint, a hinge joint that is formed to move on an axis. The knee is reinforced with both internal and external ligaments to give it a full range of movement.

THE HIPS

The hip region is located lateral and anterior to the gluteal region. The joint is between the femur and acetabulum of the pelvis. The primary function of the hip is to support the weight of the body both standing and in walking/running postures.

We stand connected by our joints, joints we sometimes take for granted in our youth. We push ourselves without thinking of the consequences.

Joint pain is a very common problem with many possible causes - but it's usually a result of injury or arthritis. In older people, joint pain that gets steadily worse is usually a sign of osteoarthritis. It may affect just one joint, or many. You should seek advice if you experience joint pain. The information and advice in this article shouldn't be used to self-diagnose your condition, but will give an insight into joint pain.
THESE ARE SOME COMMON CONDITIONS ASSOCIATED WITH JOINT PAIN:

- Osteoarthritis, Reactive, Psoriatic, Rheumatoid, Septic arthritis.
- Traumatic Synovitis, Chondromalacia Patellae, Haemarthrosis.
- Osgood Shlatter’s disease, Sciatica, Neuropathy, Gout.
- Fibromyalgia, Planter Fasciitus, Carpal Tunnel, Tendonitis.
- Golfer’s elbow, Meniscus, Bursitis, nerve pain.

Knee pain can also be caused when the thin layer of tissue lining in the joints and tendons become inflamed or where there is bleeding inside the joint.

The cause of arthritis or any type of joint pain doesn’t always have to be from aging, it can be a result of an accident or viral infection.

WHAT’S THAT NOISE?

Crepitus is the grating or popping sounds and sensations experienced under the skin and joints. The sound is created when two rough surfaces inside the body come in contact, for example, in Osteoarthritis or Rheumatoid arthritis, when the cartilage around the joints erodes the surfaces in the joint grind against each other. (2)

PAIN RELIEF

Your doctor or specialist can advise you on the best course of action for any joint pain that you are experiencing. There are a number of approaches that can be used to preserve the joints:

- Surgeons can make holes or scratches in certain places in the bones to spur new cartilage growth.
- Use the patient’s own cartilage to fill in areas of damage.
- Use donor cartilage.
- Inject steroids
STERIOD JABS

Steroids have been used in treating joints for a long time. However, a recent study has revealed that steroid jabs could make knees worse. Potentially, using injections double the rate of cartilage loss. If you have joint pain, you may not need anything too intrusive. Sometimes specific exercises, anti-inflammatory medication, ice and elevation is enough to treat the pain. The use of a pain relief cream can take the edge off or alleviate discomfort.

EXERCISE AND JOINT PAIN

Lots of people worry that running ruins their knees. However, a study revealed that activity may benefit the joint by changing the biochemical environment inside the knee in ways that can maintain good conditions of your joints. For many years runners have been told that pounding the streets is putting their knees at risk. The argument being that running slowly wears away at the cartilage that cushions the bones in the joint and causes arthritis.

However, research has shown that long-term runners are generally less likely to develop Osteoarthritis in the knees. Scientists have speculated that running may protect knees because it is often associated with relatively low body mass. Carrying less weight is known to reduce the risk for knee arthritis. (4)

If you do have knee or hip problems, gentle, low-impact exercise - such as walking and swimming combined with weight training is sometimes recommended. You should seek professional advice with regards to your physical limitations and when performing any exercise, listen to your own body. If it hurts, stop! When you swim the water supports your body weight and helps to keep your joints supple. Aqua aerobics is also a good option for someone suffering with arthritis or other types of joint pain.

Regular light weight training can strengthen your muscles, improve tone and reduce the risk of pain and stiffness. Find a form of exercise that suits you and your body. It’s always best to start slowly and build up as you get stronger. With all the exercises that we have mentioned, it’s really important to warm up at the beginning of the exercise and stretch at the end.

FOOD THAT IS GOOD FOR YOUR JOINTS

Sardines – for rheumatoid arthritis: Research shows that omega-3 polyunsaturated fatty acids (found in rapeseed oil, free range eggs, oily fish and fish oil supplements) can help ease the symptoms of rheumatoid arthritis.

Green tea – for rheumatoid arthritis: Research suggests that green tea may have anti-inflammatory properties. A study from Case Western Reserve University in the US found that EGCG (a substance in green tea) may halt arthritis progression by blocking interleukin-1, a pro-inflammatory cell, from damaging cartilage.

Broccoli – for osteoarthritis: According to researchers from the University of East Anglia, sulforaphane (found in broccoli, and to a lesser extent cabbage and Brussels sprouts), blocks enzymes that cause joint damage associated with osteoarthritis.

Blueberries – for rheumatoid arthritis: Eating an antioxidant-rich diet helps reduce the inflammation associated with rheumatoid arthritis and other inflammatory types of the condition. In addition, antioxidants are known to support the immune system, which may be suppressed in those taking anti-inflammatory medication.

Extra-virgin olive oil – for osteoarthritis & rheumatoid arthritis: Extra-virgin olive oil contains a natural phenolic compound called oleocanthal, which prevents the production of pro-inflammatory COX-1 and COX-2 enzymes. This reduces inflammation and eases the pain of rheumatoid arthritis, much in the same way that ibuprofen works.

Garlic – best for osteoarthritis: Eating a diet high in allium vegetables, such as garlic, onions, leeks and chives, may help prevent and even slow down the progression of osteoarthritis.

Sweet potatoes – best for rheumatoid arthritis: Sweet potatoes (also known as Mexican yams) contain high amounts of fibre and beta-carotene, an antioxidant which has been shown to reduce inflammation in the body. Both beta-carotene and fibre lower levels of C-reactive protein (one of the tell-tale biomarkers of rheumatoid arthritis), in the blood.

Turmeric – best for osteoarthritis & rheumatoid arthritis: This spice widely used in Indian cooking contains curcumin, which can help ease the pain of knee osteoarthritis and regulate the body’s immune response, reducing the inflammation associated with rheumatoid arthritis. (5)
IMAGE
Osteoporosis Stage 01 Cross sections
HOW TO DECREASE PAIN QUICKLY...

Joint-Pro™ is a new and effective pain relief cream. It’s a natural approach to pain relief for your joints. It penetrates the skin deeply and rapidly reduces inflammation and swelling. Instead of just masking the pain it can speed up recovery. Its optimization results in safe effective pain relief.

Joint-Pro™ cream uniquely contains the ICPP peptide.

The ICPP Peptide:

• Is a protein fragment whose specific sequence of aminoacids passes easily through the skin epidermis and acts directly on the affected area.

• It Increases type-II Collagen: thus improving bearing pressure, maintaining tension and strength and resists further wear.

• It has anti-inflammatory and pain relief properties.

• Has a warming effect that quickly resolves discomfort.

• It can stimulate the target cells to promote hyaluronic acid within the extracellular matrix (ECM) as well as a variety of growth factors.

CLINICAL STUDIES

According to the 2016 report ‘Scientific proof of ICPP for Tendinopathy and Degenerative Arthritis’, ICPP stimulated the gene expression of type-1 collagen, TGF-B and the biosynthesis of collagen and fibronectin and ICPP synergized with TGF-B1 up-regulation of ECM biosynthesis. This stimulation makes it a promising treatment for a damaged tendon.

The study concluded that the ICPP peptide can stimulate the fibroblasts in joint cavities to produce collagen, ECM and the secretion of growth factors, thus contributing to tissue repair of degenerative arthritis.(6)

Joint-Pro™ is the ICPP peptide cream that has the key ingredients to relieve joint pain, making your life as pain free as possible.

NOTE

Novisyn® Plus (hyaluronan) is a highly absorbable form of hyaluronic acid, and it is synergistic with Joint-Pro to help lubricate your joints and reduce the pain of discomfort at the same time.

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

References
1. 'Peptide'. Wikipedia, the free encyclopaedia.
2. 'Crepitus and joint disorders'. Verywell.com 22nd May 2017. Content reviewed by the Senior Medical Advisor David Katz.
3. 'Steroid injections'. Mail online, Victoria Allen – 17th May 2017. Research from Dr Timothy Mc Alidon – Tufts Medical Center, Boston.
5. 7 foods to ease the pain of arthritis. Rachel Burge 11th June 2016. Source Arthritis Research UK.
6. James, 2016 'Scientific proof of ICPP for Tendinopathy and Degenerative Arthritis'.
JointPRO™
A brand new peptide cream for joint pain, arthritis and tendon injuries.

Available in 2 x 10ml and 1 x 50 ml

Restrictions may apply, please see IAS terms and conditions for full details. Offer valid until 1st September 2017
All side effects and contraindications are available on the IAS website.
DEALING WITH PAIN
Are you having a painful experience?

Most of us experience pain whether that is a result of a cut, a muscle sprain, a broken bone or disease.

There is also a rare condition called Congenital Analgesia, this is when a person doesn’t experience pain at all. As much as that may sound like a good thing, it can be life threatening. Pain is an indicator that something is wrong in your body. If you don’t experience a pain sensation then you could be unaware of an injury or life-threatening condition.

OMIM (Online Mendelian Inheritance in Man) is a database for information about genetic resources. It is authored and edited at the McKusick-Nathans Institute of Genetic Medicine, Johns Hopkins University School of Medicine, under the direction of Dr. Ada Hamosh. In the article; ‘Indifference to pain, congenital, autosomal recessive; CIP inheritance’, it lists conditions that can be associated with Congenital Analgesia. Problems found within the ears, nose, mouth and feet. Skeletal issues such as bone deformities resulting from untreated fractures and the effects on the nervous system.

About one in a million people are thought to be born without a sense of pain. Scientists studying the condition have now identified mutations in a gene called PRDM12. The study found that mutations in both copies of the gene that a person inherits from their mother and father, who are unaffected carriers of the defective gene – results in all the pain sensors of the body being turned off from birth.

“The ability to sense pain is essential to our self-preservation, yet we understand far more about excessive pain that we do about lack of pain perception,” said Professor Geoffrey Woods from the Cambridge Institute for Medical Research at Cambridge University.

Scientists hope to better understand the nature of pain and how to combat it in patients who suffer from long-term, chronic pain.

“We are very hopeful that this new gene could be an excellent candidate for drug development, particularly given recent successes with drugs targeting chromatin regulators in human disease,” said Ya-Chun Chen from Cambridge University, the first author of the study. “This could potentially benefit those who are at danger from lack of pain perception and help in the development of new treatments for pain relief,” Dr. Chen said. (1)

We all deal with pain in a different way to some degree. There are many factors associated with pain. Pain is subjective and it’s hard to define. It is an unpleasant emotional and physical sensation resulting in tissue damage or worse. It is a warning signal to your brain that something is wrong. Something is causing damage and actions need to be taken.

If ignored or masked for too long with incorrect treatment it could be fatal.

PMC, the US National library of medicine reports on the individual differences in the subjective experience of pain. They state that the individual differences in pain sensitivity have long remained a perplexing and challenging clinical problem. How can one individual have a sensory experience that is vastly different than that of another, even when they have received similar sensory input? (2)
WHAT HAPPENS WHEN YOU CUT YOURSELF WITH A KNIFE?

It’s normally a painful experience. You bleed. You feel a sharp pain and then a stinging dull aching sensation but eventually, those feelings of pain and discomfort do go away if treated correctly.

WHAT IS PAIN PERCEPTION?

Otherwise known as nociception, pain perception is the process where painful stimulation is sent from the area of infliction to the central nervous system. The infliction could be pressure, punctures, cuts or burns for example and a nerve ending located in that area senses a painful experience. The nerve ending signals to the central nervous system, the brain receives the information then further processing and actions start to take place.
WHAT ARE NEURAL PATHWAYS?

Nociception uses different neural pathways like touch, pressure and temperature. Neural pathways are like channels in which the sensation travels from the infliction. When you put your elbow on a table, the first group of neurons to respond are normal somatic receptors. When you bang your elbow on a table and knock your funny bone, pain is experienced and nociceptors are activated.

HOW DO NEURONS TRAVEL?

Normal sensory neurons and nociceptor neurons travel in peripheral sensory nerves. Cell bodies belonging to the neurons lie in the dorsal root ganglia of peripheral nerves, located inside the spine. Normal sensory neurons are insulated and conduct quickly. Nociceptor neurons are less insulated and are slower.

WHAT FACTORS PLAY A PART OF THE PAIN RECEPTION AND PERCEPTION WHEN YOU HAVE CUT YOURSELF WITH A KNIFE?

- A mechanical stimulation from the sharp object.
- A release of potassium from the insides of the damaged cells and prostaglandins, histamines and bradykinin invade the area – from the immune cells to the area of inflammation.

The first thing you may feel when you cut your hand is an intense pain at the moment of the injury. The signal for this pain is conducted rapidly by the A δ-type nociceptors. The pain is followed by a slower, prolonged, dull ache, which is conducted by the slower C-fibers. The pain signals from your cut hand travel into the spinal cord through the dorsal roots. There, they make synapses on neurons within the dorsal horn. They synapse on neurons within the spinal cord segment that they entered and also on neurons one to two segments below and above their segment of entry. These connections relate to a broad area of the body, this could be why it’s sometimes hard to find the exact location of pain, especially internal pain.

The secondary neurons send their signals upward through an area of the spinal cord’s white matter called the spinothalamic tract. This area has multiple channels where traffic from all of the lower segments goes up the spinal cord. The signals of the spinothalamic tract travel up the spinal cord through the brain stem and synapse on neurons in the thalamus; this is the brain’s relay center. Some neurons also synapse in the medulla’s reticular formation, which controls physical behaviors.

Nerves from the thalamus send the signal to various areas of the brain’s somatosensory cortex.

When the brain receives the pain information, some signals go to the motor cortex, then down through the spinal cord and to the motor nerves. This process would cause muscle contractions to move your hand out of the way of whatever is causing the pain. The pain from the cut on your hand eventually subsides or reduces to a lower intensity. Some of the pain relief comes from the stimulation of natural pain relieving opiate neurotransmitters called endorphins, dynorphins and enkephalins.

Thoughts and emotions can affect pain pathways. So, several factors, physiological and psychological, can influence our pain perception.
Older people tend to have a lower pain threshold. The brain degenerates with age so there are more issues dealing with pain. Women tend to have higher sensitivity to pain than men. Sex related genetics and hormones play a part in that. Our pain threshold can also be influenced by past experiences and when the body is tired or stressed the ability to deal with pain is more challenging.

Acute pain is normally associated with an injury to the body. It alerts the body of potential damage that requires action from the brain. It can happen quickly or develop over time. It can last for a few minutes or months until the injury heals.

Chronic pain is persistent long after a painful experience starts. Chronic pain doesn’t warn the body and normally lasts for a long period of time. Cancer or malignant pain is associated with tumors. Tumors put pressure on nerves or blood vessels and can damage healthy tissue. Cancer pain can be associated with chronic pain.

Then there is the rare genetic disorder where a body is unable to feel pain, Congenital Analgesia, as mentioned earlier. It can be a life threatening condition because pain serves as a warning sign and if you are unable to experience that then you could be unaware of an injury or other health issues.

Pain can be dealt with in different ways. It can be managed with medications, supplements, or surgery or alternative treatments. Quite often hypnosis, acupuncture, massage therapy or manipulation is used to help deal with pain.

Different types of medication can act in different places in the pain channels or pathways. It is best to seek advice as to what is appropriate for the type of pain you may be experiencing. You may be recommended to take non-opioid analgesics such as aspirin, acetaminophen, ibuprofen or naproxen. These analgesics tend to act at the site of the pain.

Opioid analgesics such as morphine, meripidine, propoxyphene, fentanyl, oxycodone and codeine are used for a higher level of pain relief but they can become addictive. Co-analgesics such as lidocaine, novocaine and benzocaine tend to be used to treat neuropathic pain and chronic pain that comes from an injury to the central nervous system. Some people like to treat pain management with supplements and you can read more about PEA capsules below.

In extreme cases, surgery may be needed to manage pain. To sever pathways and alter the areas of the brain associated with pain perception. Destroying peripheral nerves or destroying tracts in the spinal cord, but these procedures are normally last resort. Certain surgery may involve removing a part of the body that is creating pain. For example, removing part of a disc in the lower back which could relieve pressure on the nerve. Sometimes the use of anti-inflammatory medication and a pain relief gel is enough to prevent surgery. (3)

There are alternative therapies to pain management or relief. A chiropractor manipulates joints to relieve compression on the nerves. Massage stimulates blood flow and relieves muscle spasms. Hot applications can also increase blood flow and cold...
If you suffer pain you need to find the right treatment for you. Seeking advice and maybe trying alternative therapies.

PEA capsules are a natural painkiller. PEA or palmityolethanolamide has been shown to bind to the receptor in the cell nucleus that relates to chronic pain and inflammation.

Mental control of pain relief relies on the ability of the person to control the mind and emotions through relaxation techniques such as hypnosis, biofeedback and distraction techniques.

In a lot of cases, pain management should involve the participation of doctors. If it is having a big impact on your everyday living it might be relevant to involve family members or other caregivers. Consideration should be given to the source of the pain, pain tolerance and the risk or benefits of treatment. There isn’t an absolute measurement of the degree of pain, pain is subjective. Numeric pain ratings are one way of measuring pain intensity on a scale of 0-10, 0 being no pain at all and 10 be unimaginable pain.

If you suffer pain you need to find the right treatment for you. Seeking advice and maybe trying alternative therapies.

PEA capsules are a natural painkiller. PEA or palmityolethanolamide has been shown to bind to the receptor in the cell nucleus that relates to chronic pain and inflammation.
PALMITOYLETHANOLAMIDE (PEA 100% PURE)

PEA is a fatty acid and is made by your body. The key function is cell protection, anti-inflammatory and pain relief. It protects against damage caused by oxygen deprivation, damaged caused by inflammation or mechanical damage.

Palmitoylethanolamide can boost the effect of regular pain killing medication. It has anti-tumour effects and protects the nerves when going through chemotherapy. The mix of R-alphalipoid acid and PEA has a synergetic effect of diabetes – cell protection and analgesia.

CHRONIC PAIN:
- Arthrosis
- Migraine
- Pelvic disorders
- Prostate diseases
- Endometriosis
- Chronic low back pain
- Chronic unexplained abdominal complaints
- Neck pain and whiplash injuries
- Fibromyalgia

NEUROPATHIC PAIN:
- Hernia
- Nerve entrapment syndromes
- Shingles
- Multiple sclerosis
- Pains and spasm post-stroke
- Chronic idiopathic axonal neuropathy
- Diabetes type 1 and 2
- Neuropal pain
- Pains in ALS
- Chemotherapy and radiation for cancer

CHRONIC INFLAMMATION:
- Chronic low-grade inflammation
- Inflammatory bowel disease
- Metabolic syndrome
- Vaginitis, vulvodynia, vestibulitis
- Bladder pain syndrome
- Prostatitis
- Arthritis

When it comes to chronic and neuropathic pain, the combination of acetyl L-carnitine and vitamin D3 with PEA improves the analgesic effect. A vitamin B complex in low doses helps the analgesic effect of PEA. There are no known side effects with the use of PEA and it is considered suitable for children and elderly people. In addition to that, it is a suitable painkiller for animals.

The PEA capsules can help with the following:

References:
2. The Independent - The people who can't feel pain. Scientists discover cause of rare inherited condition that turns off pain sensors. Professor Geoffrey Woods - Cambridge University for Medical Research.
4. How pain works by Craig Friedenrich, Ph.D.

NOTE
The PEA capsules can be used in conjunction with the Joint-Pro2™ peptide pain relief cream.

Order Hotline: 1-866-800-4677 | Email: ias@antiaging-systems.com
ONLINE VOUCHER: PEA-5-OFF-0917

PEA CAPS
(Palmitoylethanolamide)
A new and unique all natural painkiller
90x 400mg capsules

$34.99
SAVE $5

Restrictions may apply, please see IAS terms and conditions for full details.
All side effects and contraindications are available on the IAS website.
DEPRENYL AND ALZHEIMER’S DISEASE
Deprenyl (aka seligiline, trade names Eldepryl®, Jumex®) was discovered in Hungary in the 1950s and was patented by Professor Jozsef Knoll of Semmelweis University in Hungary in 1962. Deprenyl was shown to extend maximum lifespan in animals, enhance cognition in normal healthy animals, reduce the symptoms and delay the progress of Parkinson’s and Alzheimer’s disease and act as an aphrodisiac and performance-enhancer in male animals and men.

In our book, Smart Drugs II, the Next Generation (1993), based on a number of positive studies, we wrote that deprenyl appeared to be a powerful weapon against Alzheimer’s disease. At about that same time, Professor Knoll recommended that; “Alzheimer’s disease patients need to be treated daily with 10 mg deprenyl from diagnosis until death.”

Curiously, research on selegiline peaked ten years after the publication of our book and plummeted there after. What happened, I wondered, to the interest in what I still believe to be an effective anti-aging, cognitive-enhancing substance?
REVIEW META-ANALYSES SLAMS DEPRENYL’S VALUE AS ALZHEIMER’S DRUG

From 2000-2003, a series of articles critically reviewed deprenyl’s efficacy in Alzheimer’s disease—two in Cochrane Reviews3,4 and one in International Journal of Geriatric Psychiatry.5 Cochrane Reviews is considered the “gold Standard” for “meta analyses,” in which the authors critically analyze a number of double-blind controlled studies to arrive at a consensus of “evidence-based medicine.” All three of these meta-analyses relied on the same statistician, reviewed essentially the same studies and arrived at progressively more negative conclusions in each review.

The first Cochrane Review conceded that of the 17 trials considered, 14 trials reported beneficial effects of deprenyl in the treatment of cognitive deficits, and 3 reported improvements in behavior and mood. Pooled data for all cognitive tests suggested significant benefits with deprenyl compared to controls. Two years later, a follow-up report by the same statistician (Birks)—but with different co-authors again reported that overall, the studies indicated that deprenyl users demonstrated improved cognition at 4-6 and 8-17 weeks. But the following year in 2003, the authors of the first Cochrane Review issued a blisteringly negative third meta-analysis.5

In this third review, the authors again positively reported that; “the meta-analysis revealed benefits on memory function shown by improvement from several cognitive tests,”6,18 and “The combined memory tests, and overall combined cognitive tests...showed an improvement due to deprenyl compared with placebo at 4-6 weeks and 8-17 weeks.” [Emphasis added] In addition, in “several studies [which] assessed activities of daily living using several different scales,”5 the combined tests showed an improvement due to deprenyl at 4-6 weeks.5

Inexplicably, the reviewers then concluded paradoxically and without apparent justification that “Despite its initial promise, i.e. the potential neuroprotective properties, and its role in the treatment of Parkinson’s disease, deprenyl for Alzheimer’s disease has proved disappointing. There would seem to be no justification, therefore, to use it in the treatment of people with Alzheimer’s disease, nor for any further studies of its efficacy in Alzheimer’s disease.”5

With that disparaging conclusion, further research into the use of deprenyl for Alzheimer’s use ground to a screeching halt (Fig. 1). Another understandable reason for the fall-off in published studies about deprenyl is that brand-name protection for Eldepryl® (selegiline) in the U.S. had ended, and there was little likelihood for pharmaceutical-sponsorship of further trials.
Figure 1:

Time-line of selegiline studies.19 Note the dramatic drop in annual studies following the publication of the disparaging meta-analyses.

1977  Deprenyl effective in Parkinson’s Disease (Lancet)
1982  Deprenyl Available in Britain
1984  Deprenyl’s world-wide patent expires
1989  Deprenyl approved by FDA in U.S.
1996  U.S. patent for Deprenyl expires
2003  Meta-Analysis disparaging Deprenyl for Alzheimer’s published
ANALYSIS OF THE META-ANALYSES-REVIEW OF THE REVIEWERS

I was thunder-struck by the negative conclusions reached by the Cochrane Reviewers, which seemed to fly in the face of the positive clinical studies that we had reviewed in SDII and, for that matter, which were included in the Cochrane Reviews. Admittedly, Alzheimer’s disease is a chronic debilitating disease that results in progressive death of brain cells, for which there is no known definitive cure. Deprenyl is not the “silver bullet” for Alzheimer’s disease that we all hope for but it has been shown to delay neurodegeneration, and restore the catecholamine balance in brains altered by Alzheimer’s disease. Certainly, any treatment that slows or reverses this debilitating disease to any degree, with minimal or no adverse side effects, is a welcome addition to our therapeutic armamentarium.

I re-examined the 17 studies in the meta-analysis, as well as the studies which were specifically not included— as well as a major study that had not previously been considered (but which should have been) to determine the credibility of the meta-analyses.

Of the papers included in the reviews, most reported positive results to varying degrees. Unless otherwise noted, the studies were all double-blind, placebo-controlled trials with Alzheimer’s patients, using 5 mg deprenyl twice daily. Here, in summary, are the outcomes of the positive studies I could find (several were obscure and unavailable):

Twenty patients diagnosed between stages 3 and 5 of primary degenerative dementia were treated for 90 days with deprenyl or placebo. Subjects in the deprenyl group demonstrated improvement in both attention and memory measures. In a 14-week study of deprenyl or placebo in twenty-five outpatients, there was a significant benefit of deprenyl treatment on the Brief Psychiatric Rating Scale (BPRS), the Dementia Mood Assessment Scale (DMAS), and in cognitive function on the Alzheimer’s Disease Assessment Scale-Cognitive (ADAS-COG) with deprenyl compared to placebo. The authors concluded that “short-term selegline treatment produced an improvement in behavior and cognition.”

In one hundred nineteen patients treated with deprenyl or placebo for 3 months, deprenyl significantly improved the activities of daily living, dementia symptoms and many cognitive functions including memory, attention and visuospatial ability, and was reported to be “a useful and reliable tool … to improve cognitive functions and reduce behavioral alterations, without frequent or severe side effects.” Six months’ treatment of deprenyl vs placebo in 20 patients showed significant positive effects of deprenyl on memory and attention.

Of 341 patients treated with deprenyl (10 mg a day), alpha-tocopherol (vitamin E, 2000 IU/day), both deprenyl and alpha-tocopherol, or placebo for two years, “treatment with selegline or Vitamin E slows the progression of Alzheimer’s disease.” Sixty-seven patients were given deprenyl or placebo, and were evaluated every six months with the mini-mental state examination (MMSE). The deprenyl group deteriorated significantly less than the placebo group.

Nineteen patients were treated with deprenyl or placebo for six months. The deprenyl - treated patients showed significantly better performances in learning, long-term memory skills, cognitive functions and behavior. The researchers concluded that; “Deprenyl represents an effective treatment for memory disorders in Alzheimer’s disease.” Nineteen seventy-three nursing-home residents with mild to moderate Alzheimer’s disease were treated with deprenyl or placebo for 24 weeks, resulting in improved cognitive and behavioral functions.

Thus, at least 10 of the 17 studies showed apparent benefit from deprenyl in Alzheimer’s patients. Although 5 studies did not find any benefit from deprenyl, there were no adverse effects.
IMAGE
Parkinson and Alzheimer in the brain
DEPRENYL STUDIES EXCLUDED FROM THE META-ANALYSIS

The Cochrane Review authors also considered but excluded an additional 16 studies, for various reasons. Of these studies which reported positive results:

Seventeen Alzheimer’s patients received deprenyl in doses of 10 mg or 40 mg per day. Total Brief Psychiatric Rating Scale (BPRS) scores improved significantly on the 10 mg dose, and measures of anxiety/depression, tension, and excitement decreased. Approximately half of the patients’ conditions improved clinically, with increased activity and social interaction, along with reduced tension and retardation. The behavioral changes were associated with improvement in performance on a complex cognitive task requiring sustained effort. Unexpectedly, these improvements were not seen with 40 mg. Similarly, improvement occurred in episodic memory and complex learning tasks requiring information processing and sustained conscious effort with deprenyl 10 mg/day, but not with 40 mg.22

Eleven elderly female patients 7 with Alzheimer’s and 4 with multi-infarct dementia - were treated with deprenyl. Improvement was most notable in the Alzheimer’s patients—especially regarding self-care, short term memory, and mental alertness.24 Twenty-eight patients treated for three-months with deprenyl or placebo resulted in a global improvement of cognitive performances in the deprenyl group compared to placebo.25

Five patients with behavior problems, ranging in age from 50 to 82, were treated with deprenyl for 8 weeks. The authors reported; “Clinical significance was noted by improvement in cognition,” and “Alzheimer’s patients with behavior problems may benefit from selegiline therapy.”26

A 4-week study of fourteen patients treated with deprenyl demonstrated significant improvements on the agitation and depression factors of the BPRS, the Cornell Scale for Depression in Dementia, and spouses’ blind rating (SBR). Recall improved on the Buschke Selective Reminding Task. Overall, the authors concluded that; “selegiline may be associated with improvement in behavioral and cognitive performance.”27

Twenty-two patients (14 men, 8 women) mean age 62.8, in a double-blind crossover study for 26 weeks, showed that deprenyl possesses significant beneficial activity on memory parameters, with an improvement both in information processing abilities and in learning strategies.28
COMPARISONS AND COMBINATION THERAPY-DEPRENYL VS (OR COMBINED WITH) OTHER COGNITIVE ENHANCERS

Oxiracetam, (an anotropie drug similar to piracetam) was tested against deprenyl in a trial involving 22 men and 18 women. Deprenyl was given to one group and 800 mg oxiracetam per day was given to the other group. Deprenyl was more effective than oxiracetam in improving higher cognitive functions and reducing impairment in daily living. Deprenyl helped more with short- and long-term memory, sustained concentration, attention, verbal fluency, and visuospatial abilities.28

In another 3-month study, deprenyl was compared to phosphatidylserine (100 mg twice daily) in forty patients (24 men and 16 women). For most measures of cognition, "the selegiline group showed improvements superior to those obtained in the phosphatidylerine group."29 Deprenyl was also compared to acetyl-L-carnitine (ALC) (500 mg twicedaily) in forty patients (13 men, 27 women, 56 to 80 years). ALC and deprenyl both led to global improvements in the capacity to process, store and retrieve given information, as well as improvements in verbal fluency and visuospatial abilities. However, the degree of improvement was even more effective with deprenyl than ALC.30

Deprenyl added to the regimen of 10 patients receiving either Tacrine® or physostigmine was assessed in a 4-week pilot study. Deprenyl was associated with significant improvement in scores on the cognitive subscale of the Alzheimer’s Disease Assessment Scale (ADAS), suggesting additive effects of deprenyl to the effects of cholinesterase inhibitors.31

LARGEST, MOST POSITIVE STUDY IGNORED BY META-ANALYZERS

One large study that was not evaluated by the Cochrane Reviewers was conducted by scientists from the University of Catania in Italy. Two hundred outpatients over 65 were treated with deprenyl or placebo for 120 days. The physicians conducting the test and the patients themselves agreed that deprenyl treatment was beneficial. The 17-item scale of clinical assessment for geriatrics (SCAG) was used to determine efficacy. One element of the SCAG was the Short Term Memory scale, which indicated dramatic improvement in the deprenyl users (Fig. 2). When deprenyl treatment was suspended, the improved cognitive functions began to deteriorate.32

---

Figure 2:
Improvement in SCAG short term memory scale with deprenyl (solid line) compared to placebo (broken line).32
Unfortunately, Alzheimer's Disease is presently an incurable neurodegenerative disease. Although a number of treatments are used to minimize or improve the symptoms, there is no proven treatment to reverse its downward course. By the time the diagnosis is made, the patients are usually past complete recovery, since the neuropathological changes in the affected neurons are on an irreversible downward path.

Since Alzheimer's disease is believed to be a by-product of "normal" brain aging, our best hope to significantly decrease its prevalence is to slow the natural aging of the threatened neurons by administering a protective substance like deprenyl. Although deprenyl does not alter the landmark neurofibrillary tangles, amyloid beta or abnormal tau proteins, it has demonstrated over and over via multiple mechanisms that it can slow the progression of Alzheimer's disease, and in many cases enhance cognitive and behavioral indices of the disease. Therefore, the optimum time to use selegiline is before the disease presents.

References:
20. Figure adapted from data obtained at: http://www.ncbi.nlm.nih.gov/pubmed/?term=selegiline
Enhances dopamine and improves your focus and attention

Restrictions may apply, please see IAS terms and conditions for full details. Offer valid until 1st September 2017. All side effects and contraindications are available on the IAS website.
DEPRENYL FOR FOCUS AND CONCENTRATION

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 on rats produced 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 treated rats hadn’t! These results were in another study conducted from research by, Dean, Fowkes and Morgenthaler - published in the book, ‘Smart Drugs and 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-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,’ 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 its self’, 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 behavior, as others around you are not so focused and ‘on the ball’ as you! We recommend breaks from deprenyl use.

Some advocate one week off in the month and others 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.
CENTROPHENOXINE, (PRONOUNCED, CENT, ROW-FEN, OX-IN) IS A CLASSIC ‘SMART DRUG’

The term ‘smart drugs’ has become synonymous with substances that aid memory and cognition although the correct medical terminology is ‘nootropics’ (which when translated from Greek is – ‘towards the mind’). Centrophenoxine is an ester of PCPA (a plant compound) and DMA which is a natural choline-based substance found in the diet.

About Centrophenoxine

Centrophenoxine has been studied over decades. Principally in Europe and one of its leading experts is Professor Imr Zs-Nagy. He said, “Centrophenoxine has shown many facets to improve conditions related to my membrane hypothesis of aging. For example, its ability to improve brain performance, survival time in animal experiment and to remove the cell-aging pigment called lipofuscin. It has been my anti-aging supplement for more than 30 years.”

Centrophenoxine improves acetylcholine levels in the brain. It is this neurotransmitter that declines in Alzheimer’s disease. The target is at the early stage of dementia or even before then at the anti-aging stage, wherein smart drugs like centrophenoxine improve/enhance and protect the performance of an aging but otherwise recognised as a healthy individual.

Lipofuscin is a waste material that accumulates in aging cells especially those in the brain, heart, lungs and skin. In skin cells, Lipofuscin can form part of the pigmented spots that are often referred to as ‘age or liver spots’. Lipofuscin accumulation can be very troublesome for the cell because it inhibits proper functioning taking place, reducing the transference of chemicals through cell walls thus damaging both messaging and detoxification abilities. When there are significant amounts of Lipofuscin present in the brain they are then referred to as ‘plagues’ and then become a recognised trait of Alzheimer’s.

Centrophenoxine’s primary mode of action is to help remove lipofuscin deposits. Patients that take Centrophenoxine possibly over a couple of weeks can see aging spots fade or disappear. Whilst knowing, at the same time, Lipofuscin is reducing in their heart, lungs and brain.

General cognitive benefits

further evaluation. Which of the following is your issue?

- Short term memory
- Medium term memory
- Long term memory
- Do you get bored easily?
- Do you lack focus/attention?
- Does your mind quickly become tired?
- Is the problem remembering new experiences?
- Does it take you too long to recall memories?

Centrophenoxine is best suited to the last one. It can help people especially those over 40 to hasten their recall speed, bringing clarity and order to both speech and thought. A typical dose for the average person is 250mg once or twice daily.
PIRACETAM, THE ORIGINAL NOOTROPIC

Smart drugs and nutrients, or to give them their correct medical terminology, nootropics are agents that can improve conditions of senile dementias and 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

This smart drug was first developed by Dr. Giurgea for UCB laboratories in Belgium in the 1960s. Originally it was designed to assist with travel and altitude sickness, but shortly afterwards 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’. It 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’. The level of clarity piracetam creates is often described, “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.
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 brought to the field of aesthetic medicine.

What does each peptide provide for?

The beauty product line Youth Gems contains the following four peptides and a ginseng extract called Neovitin. The latest developed program of complex skin care designed for the face, neck, hands and the body.

The line includes four unique active ingredients of short-chain peptides that have a directed tissue-specific action to improve all basic skin structures:

- **Thymus peptide**: Stimulates tissue regeneration and synthesis of tissue-specific proteins. Cells proliferative and metabolic activity is enhanced accelerating the renewal of cell tissues. Has an anti-inflammatory action, improving healing time of wounds, as well as antioxidant, immune stimulating and anti-stress actions.

- **Pineal peptide**: Regulates metabolic processes and increases protein synthesis in skin cells. It possesses potent antioxidant activity, normalizes the lipid peroxidation processes in skin cells that promotes the elimination of negative influences on the skin from external factors.

- **Cartilaginous peptide**: Stimulates regeneration of fibroblasts and keratinocytes and interferes with the destructive changes in collagen skin structure. It strengthens collagen structure of elastic skin fibres and increases elasticity.

- **Blood vessel peptide**: 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.

Youth Gems contain beneficial natural agents. The range includes: Neovitin (a complex from ginseng), olive oil, raisin-seed oil, Argon oil, Soya oil, Jojoba oil, Bisabolol (from chamomile), Peony extract, sodium hyaluronate (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. They concluded that these short chain peptides have many beneficial activities.

- Improved metabolism in vascular wall cells, growth of new skin cells, enhanced antioxidant activity, increased blood flow circulation and greater moisturization. The skin’s appearance becomes smoother, fewer wrinkles and more elasticity, 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 clinical trial.

What’s available?

- **Body milk**: A very light cream that can be applied to most areas of the body.

- **Day cream**: A core product designed to be applied to the face and hands.

- **Serum**: To be used sparingly against the most noticeable skin aging effects on the face and neck.

- **Tonic**: Used to help any area become more firm and taught and may be splashed on as required.

- **Face pack**: An anti-aging facial mask with peptides and ginseng extract.

- **Night cream**: This unique formula provides resilience against skin aging.

All of the Youth Gems products should be applied onto clean, dry skin - avoiding the eyes. Makeup can be applied after absorption - if required.
MONITORING YOUR VASCULAR CONDITION

The BioClip® Cuff is a simple way of assessing both your blood pressure condition and your arterial flexibility. You can use it in the comfort of your own home. You simply attach the device to your arm just like an ordinary blood pressure cuff.

What does the BioClip® Cuff measure?

It provides a series of metabolic indicators that you can use to improve your lifestyle and help prevent the causes of cardiovascular disease. These include:

- Diastolic blood pressure
- Systolic blood pressure
- The heart rate
- Vascular condition – which links to arterial flexibility

We know the risks of being overweight, having high cholesterol or suffering from high blood pressure. We know how to reduce those risks – exercising, not smoking, reducing alcohol intake and eating a balanced diet. Few of us know about the dangers of arterial inflexibility, or how to measure it. BioClip® Cuff is unique, the first at-home device able of delivering information to you within minutes. It evaluates your arterial flexibility, a most important factor when it comes to assessing the likelihood of a heart attack or stroke. Arteries are responsible for blood flow around your body via your cardiovascular system. The poorer your vascular condition, the greater your chances of serious health issues. Our arteries stiffen with age, bringing greater risk of a heart attack, heart failure or stroke. You may not recognise the symptoms, arterial stiffness can occur without warning.

Summary:

The BioClip® Cuff provides a cardiovascular condition scale, shown by LED bars - that are either within the green zone (good), yellow zone (fair) or red zone (poor). Like blood pressure, vascular condition should be monitored over time and not just taken as one reading. The BioClip® Cuff makes this simple by averaging your tests over time and therefore provides a more accurate result. It provides reassurance and a vital early warning system that helps you to be aware of changes and therefore keep your vascular condition in check.

The BioClip® Cuff is easy to use. It doesn't puncture your skin and is used on its own, without any additional attachments. The procedure is straightforward and you don't need to link to a computer, the results are shown on the BioClip® Cuff screen.

If you want to see it in action there is a video available on the IAS website. With this information, it's easy to keep a check on your cardiovascular health and the risks associated with arterial stiffness, such as heart attacks and strokes. It is possible to make changes to your lifestyle and supplement program to improve results and keep you biologically younger! Above all, the BioClip® Cuff provides reassurance and a vital early warning system that helps you to be aware of changes and therefore keep your vascular condition in check.
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 1980s he was a Colonel in 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 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/tissues use 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.

Though 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 contradictions. 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 peptide bioregulators is a remarkable one and we recommend that you read the articles, interviews and see the video on the IAS website.
A BREAKTHROUGH FOR CATARACTS

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 cataracts. 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 trails. They contain a purified and racemized form of n-acetylcarnosine (made in Japan); this natural di-peptide has potent anti-glycating and anti-oxidant properties that prevents liquid peroxidation. Note that the formula is important-it’s not all about the n-acetylcarnosine; he specific carrier agents and their purity are also important. If you look at the Can-C™ formula you will see the 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 Trail:

Patients placed two-drops of Can-C™ into their eyes twice a day 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 always been numerous reports on 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 colour perception is enhanced.

Improving Eye-Sight:

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

• Cataracts (particularly in senile vision)
• 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 this aids glaucoma.

Can-C™ Plus Capsules

In addition to the eye-drops, Can-C™ 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.
ESNATRI AND
PROGESTERONE

BIOIDENTICAL HORMONES - NATURAL ESTROGENS AND PROGESTERONE FOR WOMEN

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 bioidentical 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 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. 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 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. 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.
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. Commonly used by shift workers and 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 wellknown 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. It's a difficult disorder to treat and 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. 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 3 mg. 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 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.

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 any significant effect, then we highly recommend you try Dr. Pierpaoli’s MZS for a superior experience.
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 relaxes 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. 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!

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 own 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 (10 IU 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 book, (transmitted via personal conversation to me). Currently, IAS is providing Oxy-Sub in 20 IU troughes (a soft sublingual tablet). These can 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.
ENHANCING AND IMPROVING STEM-CELL ACTIVITY

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 systems 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, self-renew 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 should not be confused with embryonic stem cells that come from an embryo.

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 abruption 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
- Cytokines

Stem Cell Works® has all three of these factors in abundance and 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 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 or natural growth and immune factors compared to any other health supplement currently on the market. This enables natural stem cells activation to be as much as 75% per 36mg of the formulation. This provides:

- 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 chose 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, and then swallow the remainder. It’s best taken on an empty stomach, at least 30 minutes before or after eating any food.
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!

The thyroid gland is of pivotal importance to our overall health, as we age the production of thyroid hormones decline. This lack of thyroid function is the root cause of a 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 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 a 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. Your doctor can have your blood levels of thyroid checked. In addition to that, you can 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 hyperthyroid.

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 3 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.
RetinPRO™

ONLINE VOUCHER: RETIN-5-OFF-0917

Retinolic Acid for treatment of skin wrinkles

Tretinoin 0.05% Cream, 30ml pump $34.99
(usual price $39.99)

Restrictions may apply, please see IAS terms and conditions for full details. Offer valid until 1st September 2017
All side effects and contraindications are available on the IAS website.
Can-C™ Plus is the perfect accompaniment to Can-C™ Eye Drops.

Maximise the benefit from day one of the Can-C eye-drops. Those who have very dense cataract and severely diminished vision to start with should combine the tablets with the eye-drops from day one.

All side effects and contraindications are available on the IAS website.

Restrictions may apply, please see IAS terms and conditions for full details. Offer valid until 1st September 2017
PEPTIDE BIOREGULATORS

20 x 200mg capsules
Buy 3+ and save $10.00 each

Peptide Bioregulators, gene switches that could replace stem cells!

Restrictions may apply, please see IAS terms and conditions for full details. Offer valid until 1st September 2017

All side effects and contraindications are available on the IAS website.
Cross-reference list highlights individual products that have been used for these disorders.

www.antiaging-systems.com/conditions

Metformin
The most recommended and effective Anti-ager

MetPro™
100 x 500mg tablets $25
Sale price $19.99

Restrictions may apply, please see IAS terms and conditions for full details. Offer valid until 1st September 2017

ONLINE VOUCHER: METPRO-5-OFF-0917
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, 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 healthspan 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 antiaging medicine that has helped this new medical specialty move forward.”
PAYMENT OPTIONS

PAYMENT OPTIONS FOR www.antiaging-systems.com

**Pay via:** Bank Wire
**Use:** electronic check via Check2Pay (US banks only)

PAYMENT OPTIONS FOR www.antiaging-nutrition.com

**Pay by:** Visa
**Pay by:** Mastercard
**Pay by:** American Express
**Pay by:** Debit cards

WEBSITES

www.antiaging-systems.com
www.antiaging-nutrition.com
www.antiaging-nootropics.com
www.antiaging-peptides.com
www.antiaging-hormones.com
www.japanias.com
www.iasjp.com

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

(our nutritional products; English language)

(our smart drugs and nutrients; English language)

(our peptide bioregulators; English language)

(our hormones; English language)

(our nutritional products; Japanese language)

(our medicines and hormones; Japanese language)

EMAIL

ias@antiaging-systems.com
iasjapan@antiaging-systems.com

(English language)

(Japanese language)

PHONE

USA: 1-866-800-4677 (orders only) 1-415-992-5563 (enquiries)
Japan: 050-553-29606
UK: 0208-123-2106
ROW: +44-208-123-2106

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.

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.
KEY: If you see your country flag alongside a product there may be restrictions. Please contact us for further details.

**Multipack offers until September 1st, 2017**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DETAILS</th>
<th>OFFER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HORMONES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esnatri™ (estrogens)</td>
<td>50ml 100mg cream</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
<tr>
<td>T3-Pro™ (T3 thyroid)</td>
<td>50x 20mcg tablets</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
<tr>
<td><strong>MEDICINES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acarbose (Glucobay**)</td>
<td>30x 100mg chewables</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
<tr>
<td>MetPro™ (metformin)</td>
<td>100x 500mg tablets</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
<tr>
<td>SildenafilPro™ (generic Viagra*)</td>
<td>10x 100mg tablets</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
<tr>
<td><strong>NUTRITION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACF228*</td>
<td>90 capsules</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
<tr>
<td>AminoPro™ (aminoguanidine)</td>
<td>90x 75mg tablets</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
<tr>
<td>Can-C™ eye-drops</td>
<td>2x 5ml vials</td>
<td>Buy 3 and save 10% or buy 6 and save 20%</td>
</tr>
<tr>
<td>Stem Cell Worx*</td>
<td>3.5oz. liquid spray</td>
<td>Buy 3 and save $10.00 on each pack</td>
</tr>
<tr>
<td><strong>PEPTIDES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PEPTIDE BIOREGULATORS</strong></td>
<td>20x capsules</td>
<td>Buy 3 and save $9.99 on each pack</td>
</tr>
<tr>
<td><strong>SMART DRUGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CENTROPRO™ (CENTROPHENOXINE)</td>
<td>60x 250mg capsules</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
<tr>
<td>Idebenone (IdebPro™)</td>
<td>60x 30mg capsules</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
<tr>
<td>PIRAPRO™ (PIRACETAM)</td>
<td>100x 800mg tablets</td>
<td>Buy 3 and save $5.00 on each pack</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BOOKS</th>
<th>AUTHOR</th>
<th>PAGES</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREAT TEETH FOR LIFE</td>
<td>Dr Brian Halvorsen</td>
<td>169 pages</td>
<td>$17.49</td>
</tr>
<tr>
<td>NATURAL MEDICATION FOR SKIN CANCER</td>
<td>Dr Bill Cham</td>
<td>82 pages</td>
<td>$19.99</td>
</tr>
<tr>
<td>PASSION, SEX, LONGEVITY &amp; OXYTOCIN</td>
<td>Dr. Thierry Hertoghe</td>
<td>159 pages</td>
<td>$39.99</td>
</tr>
<tr>
<td>THE PHYSICIAN’S HORMONE HANDBOOK (VERSION 2)</td>
<td>Dr. Thierry Hertoghe</td>
<td>833 pages</td>
<td>$349.99</td>
</tr>
<tr>
<td>THE PICTURE ATLAS OF ENDOCRINOLOGY</td>
<td>Dr. Thierry Hertoghe</td>
<td>327 pages</td>
<td>$299.99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GHRP (GROWTH HORMONES)</th>
<th>CONTAINS</th>
<th>RETAIL</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHRP-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHRP-2-PRO™</td>
<td>120ml 120mg bottle liquid</td>
<td>$75</td>
<td>$159.99</td>
</tr>
<tr>
<td>GHRP-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RELEASE-PRO™</td>
<td>5ml 500IU nasal spray</td>
<td>$25</td>
<td>$59.99</td>
</tr>
<tr>
<td>SEMORELIN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SERM-PRO™ LIQUID</td>
<td>30ml 30mg sublingual</td>
<td>$25</td>
<td>$149.99</td>
</tr>
<tr>
<td>SERM-PRO™ SPRAY NEW</td>
<td>5ml 500IU nasal spray</td>
<td>$25</td>
<td>$39.99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIAGNOSTICS</th>
<th>CONTAINS</th>
<th>RETAIL</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BioClip® Cuff</td>
<td>Arterial stiffness monitor - one complete kit</td>
<td>$199</td>
<td>$149.99</td>
</tr>
<tr>
<td>FOODSAFE* NEW</td>
<td>Blood spot food allergy test-kit for 95 foods</td>
<td>$250</td>
<td>$239.99</td>
</tr>
<tr>
<td>NEO40®</td>
<td>25 Nitric Oxide Saliva Test Strips</td>
<td>$35</td>
<td>$24.99</td>
</tr>
<tr>
<td>VIOLIGHT®</td>
<td>Violight 633 intranasal LED</td>
<td>$399</td>
<td>$274.99</td>
</tr>
</tbody>
</table>
# JULY 2017 PRICE LIST *

<table>
<thead>
<tr>
<th>HORMONES</th>
<th>CONTAINS</th>
<th>OTHER INFO</th>
<th>RETAIL</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALDOSTERONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALDO-PRO™</td>
<td>15x 125 mcg capsules</td>
<td></td>
<td></td>
<td>$79.99</td>
</tr>
<tr>
<td>ALDO-SPRAY™ NEW</td>
<td>5ml 10mg ear spray</td>
<td></td>
<td></td>
<td>$59.99</td>
</tr>
<tr>
<td>DESMOPRESSIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MINURIN®</td>
<td>2.5ml nasal spray</td>
<td></td>
<td></td>
<td>$24.99</td>
</tr>
<tr>
<td>DHEA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DHEA-PRO™</td>
<td>60 x 25mg capsules</td>
<td></td>
<td></td>
<td>$17.49</td>
</tr>
<tr>
<td>DHEA 7-KETO</td>
<td>60x 100mg capsules</td>
<td></td>
<td></td>
<td>$34.99</td>
</tr>
<tr>
<td>ESNATRI™ (BIOIDENTICAL TRIPLE ESTROGENS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESNATRI™</td>
<td>50ml 100mg (90-7-3%) jar cream</td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
<tr>
<td>HCG (HUMAN CHORIONIC GONADOTROPIN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCG-PRO™</td>
<td>5ml/250IU nasal spray</td>
<td></td>
<td></td>
<td>$49.99</td>
</tr>
<tr>
<td>HYDROCORTISONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYDROCORT-PRO™</td>
<td>100 x 5mg capsules</td>
<td></td>
<td></td>
<td>$22.49</td>
</tr>
<tr>
<td>MELATONIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MZS™ (UK CAN ORDER VIA <a href="http://WWW.MELATONINZNSE.COM">WWW.MELATONINZNSE.COM</a>)</td>
<td>60x 3mg tablets</td>
<td></td>
<td></td>
<td>$21.49</td>
</tr>
<tr>
<td>MELA-MAX™</td>
<td>60x 10mg capsules</td>
<td></td>
<td></td>
<td>$21.49</td>
</tr>
<tr>
<td>MELA-PRO™</td>
<td>2 oz. 90mg liquid</td>
<td></td>
<td></td>
<td>$17.49</td>
</tr>
<tr>
<td>MSH (MELANOCYTE STIMULATING HORMONE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSH2-PRO™</td>
<td>5ml 500IU nasal spray</td>
<td></td>
<td></td>
<td>$44.99</td>
</tr>
<tr>
<td>OXYTOCIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OXY-PRO LOZENGE™</td>
<td>100x 5IU lozenges</td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
<tr>
<td>OXY-PRO SPRAY™</td>
<td>5ml 500IU nasal spray</td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
<tr>
<td>OXY-PRO SUBLINGUAL™</td>
<td>30x 20IU sublingual trouches</td>
<td></td>
<td></td>
<td>$69.99</td>
</tr>
<tr>
<td>PREGNENOLONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PREG-PRO™</td>
<td>50x 100mg capsules</td>
<td></td>
<td></td>
<td>$19.99</td>
</tr>
<tr>
<td>PROGESTERONE (BIOIDENTICAL 5%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROGEST-PRO™</td>
<td>50ml 2.5G cream</td>
<td></td>
<td></td>
<td>$29.99</td>
</tr>
<tr>
<td>THYMUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THYM-UVOCAL®</td>
<td>90x 200mg capsules</td>
<td></td>
<td></td>
<td>$99.99</td>
</tr>
<tr>
<td>THYROID (NATURAL DESICCATED PORCINE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERFA*</td>
<td>100x 30mg tablets</td>
<td></td>
<td></td>
<td>$59.99</td>
</tr>
<tr>
<td>ERFA*</td>
<td>100x 60mg tablets</td>
<td></td>
<td></td>
<td>$79.99</td>
</tr>
<tr>
<td>ERFA*</td>
<td>100x 125mg tablets</td>
<td></td>
<td></td>
<td>$129.99</td>
</tr>
<tr>
<td>NATURE*</td>
<td>100x 15mg tablets</td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
<tr>
<td>NATURE*</td>
<td>100x 32.5mg tablets</td>
<td></td>
<td></td>
<td>$49.99</td>
</tr>
<tr>
<td>NATURE*</td>
<td>100x 65mg tablets</td>
<td></td>
<td></td>
<td>$59.99</td>
</tr>
<tr>
<td>NATURE*</td>
<td>100x 97.5mg tablets</td>
<td></td>
<td></td>
<td>$69.99</td>
</tr>
<tr>
<td>NATURE*</td>
<td>100x 130mg tablets</td>
<td></td>
<td></td>
<td>$79.99</td>
</tr>
<tr>
<td>THYROID (SYNTHETIC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3 (T3-PRO™)</td>
<td>50x 20mcg tablets</td>
<td></td>
<td></td>
<td>$29.99</td>
</tr>
</tbody>
</table>
## JULY 2017 PRICE LIST *

### HORMONES

<table>
<thead>
<tr>
<th>Name</th>
<th>Contains</th>
<th>Other Info</th>
<th>Retail</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRH (Thyrotropin Releasing Hormone)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abaris™</td>
<td>20x 5mg sublingual tablets</td>
<td></td>
<td></td>
<td>$149.99</td>
</tr>
<tr>
<td>VASOPRESSIN</td>
<td></td>
<td></td>
<td></td>
<td>$49.99</td>
</tr>
<tr>
<td>Vaso-Pro™</td>
<td>5ml 500IU nasal spray</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NUTRITION

<table>
<thead>
<tr>
<th>Name</th>
<th>Contains</th>
<th>Other Info</th>
<th>Retail</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST LINE™</td>
<td>OSCN kit</td>
<td></td>
<td></td>
<td>$79.99</td>
</tr>
<tr>
<td>4-METHYLUMBELLIFERONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4MU-PRO™ NEW</td>
<td>120x 100mg tablets</td>
<td></td>
<td></td>
<td>$199.99</td>
</tr>
<tr>
<td>5HTP (5-HYDROXY-TRYPTOPHAN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHTP-PRO2™</td>
<td>90x 100mg capsules</td>
<td></td>
<td></td>
<td>$21.49</td>
</tr>
<tr>
<td>ACF228*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACF228*</td>
<td>50x capsules</td>
<td></td>
<td></td>
<td>$49.99</td>
</tr>
<tr>
<td>ANDRO-PRO2™ (TESTOSTERONE ENHANCER)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANDRO-PRO2™ NEW</td>
<td>60x capsules</td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
<tr>
<td>ATP (Adenosine Triphosphate ++)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATP-PRO™ NEW</td>
<td>60x capsules</td>
<td></td>
<td></td>
<td>$24.99</td>
</tr>
<tr>
<td>B-12 (Methylcobalamin)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin B-12 NEW</td>
<td>100x 1mg sublingual tablets</td>
<td></td>
<td></td>
<td>$12.99</td>
</tr>
<tr>
<td>BETA-GLUCANS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BG-PRO CREAM™</td>
<td>50ml tube cream</td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
<tr>
<td>BG-PRO CAPS™</td>
<td>60x 400mg capsules</td>
<td></td>
<td></td>
<td>$29.99</td>
</tr>
<tr>
<td>BHT (Butylhydroxytoluene)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHT-PRO™</td>
<td>120x 180mg capsules</td>
<td></td>
<td></td>
<td>$21.49</td>
</tr>
<tr>
<td>BOLUMOKE® (LUMBROKINASE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOLUMOKE® (LUMBROKINASE)</td>
<td>60 capsules</td>
<td></td>
<td></td>
<td>$92.99</td>
</tr>
<tr>
<td>BONE-PRO2™</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BONE-PRO2™</td>
<td>60 capsules</td>
<td></td>
<td></td>
<td>$29.99</td>
</tr>
<tr>
<td>BOOST-PRO2™ (VITAMIN C+++ DRINK)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOOST-PRO2™ NEW</td>
<td>30x 2 gram sachets</td>
<td></td>
<td></td>
<td>$34.99</td>
</tr>
<tr>
<td>CAN-C™ PLUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAN-C™ PLUS</td>
<td>90 capsules</td>
<td></td>
<td></td>
<td>$34.99</td>
</tr>
<tr>
<td>COQ10 (COENZYME Q10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COQ10-SR™</td>
<td>30x 100mg capsules</td>
<td></td>
<td></td>
<td>$17.49</td>
</tr>
<tr>
<td>CURCUMIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CURCUMIN-SR™</td>
<td>30x 125mg capsules</td>
<td></td>
<td></td>
<td>$12.49</td>
</tr>
<tr>
<td>DI-INDOLYMETHANE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIM-PRO2™</td>
<td>100x capsules</td>
<td></td>
<td></td>
<td>$44.99</td>
</tr>
</tbody>
</table>
## JULY 2017 PRICE LIST *

<table>
<thead>
<tr>
<th>NUTRITION</th>
<th>CONTAINS</th>
<th>OTHER INFO</th>
<th>RETAIL</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DMSA (DIMERCAPTO Succinic Acid)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMSA-PRO™ New</td>
<td>60x 100mg capsules</td>
<td></td>
<td>$444</td>
<td>$39.99</td>
</tr>
<tr>
<td><strong>EDTA (Ethylenediaminetetraacetate Acid)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDTA-PRO™ New</td>
<td>120x 10mg capsules</td>
<td></td>
<td>$444</td>
<td>$24.99</td>
</tr>
<tr>
<td><strong>GABA/GABOB</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RELAX-PRO™ New</td>
<td>60x 250mg tablets</td>
<td></td>
<td>$444</td>
<td>$17.49</td>
</tr>
<tr>
<td><strong>GEROVITAL-H3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEROVITAL-H3*</td>
<td>5x 5ml ampoules</td>
<td></td>
<td>$444</td>
<td>$49.99</td>
</tr>
<tr>
<td>GEROVITAL-H3* Original</td>
<td>24x 100mg tablets</td>
<td></td>
<td>$444</td>
<td>$29.99</td>
</tr>
<tr>
<td>GH3-PRO™</td>
<td>60x 100mg tablets</td>
<td></td>
<td>$444</td>
<td>$12.49</td>
</tr>
<tr>
<td><strong>GREEN COFFEE BEAN EXTRACT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCB70-PRO™</td>
<td>30 x 500mg Capsules</td>
<td></td>
<td>$444</td>
<td>$24.99</td>
</tr>
<tr>
<td><strong>L-CARNOSINE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARNO-PRO2™ New</td>
<td>100x 250mg capsules</td>
<td></td>
<td>$444</td>
<td>$29.99</td>
</tr>
<tr>
<td><strong>LITHIUM ORotate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LITH-PRO™</td>
<td>100x 5mg capsules</td>
<td></td>
<td>$444</td>
<td>$17.49</td>
</tr>
<tr>
<td><strong>L-TRYPTOPHAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L-TRYP-PRO2™ New</td>
<td>100x 220mg capsules</td>
<td></td>
<td>$444</td>
<td>$14.99</td>
</tr>
<tr>
<td><strong>MITO-PRO2™</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MITO-PRO2™</td>
<td>75G powder</td>
<td></td>
<td>$444</td>
<td>$49.99</td>
</tr>
<tr>
<td><strong>MULTI V45-PRO™ (MULTI VITAMINS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MULTI V45-PRO™</td>
<td>90x capsules</td>
<td></td>
<td>$444</td>
<td>$14.99</td>
</tr>
<tr>
<td><strong>NADH (Nicotinamide Adenine Dinucleotide)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECONNECT*</td>
<td>15x 5mg capsules</td>
<td></td>
<td>$444</td>
<td>$20.99</td>
</tr>
<tr>
<td><strong>NEO40</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEO40*</td>
<td>30x lozenges</td>
<td></td>
<td>$444</td>
<td>$59.99</td>
</tr>
<tr>
<td><strong>Nicotinamide Riboside</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAD+PRO™ New</td>
<td>30x 260mg capsules</td>
<td></td>
<td>$444</td>
<td>$49.99</td>
</tr>
<tr>
<td><strong>NITRIC-PRO3™ (Nitric-Oxide Inducing Drink)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NITRIC-PRO3™ New</td>
<td>30x sachets</td>
<td></td>
<td>$444</td>
<td>$44.99</td>
</tr>
<tr>
<td><strong>NOVISYN® + (Hyaluronic Acid)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVISYN® (Hyaluronic Acid)</td>
<td>30x 5ml liquid sachets</td>
<td></td>
<td>$444</td>
<td>$22.49</td>
</tr>
<tr>
<td><strong>OXALOACETATE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OXALO-PRO™ New</td>
<td>30 x 100mg capsules</td>
<td></td>
<td>$444</td>
<td>$54.99</td>
</tr>
<tr>
<td><strong>PEA (Palmitoylethanolamide)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEA CAPSULES NEW</td>
<td>30 x 100mg capsules</td>
<td></td>
<td>$444</td>
<td>$34.99</td>
</tr>
<tr>
<td><strong>PEO (Parent Essential Oils)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEO-PRO CAPSULES New</td>
<td>120x 725mg capsules</td>
<td></td>
<td>$444</td>
<td>$34.99</td>
</tr>
<tr>
<td>PEO-PEO LIQUID™ NEW</td>
<td>236ml bottle liquid</td>
<td></td>
<td>$444</td>
<td>$39.99</td>
</tr>
</tbody>
</table>
## NUTRITION

<table>
<thead>
<tr>
<th>Product</th>
<th>Contains</th>
<th>Other Info</th>
<th>Retail</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQQ (PYROLOQUINOLINE QUINONE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PQQ-PRO™</td>
<td>30x 20mg capsules</td>
<td></td>
<td></td>
<td>$29.99</td>
</tr>
<tr>
<td>RESVERATROL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESVERATROL-SR™</td>
<td>30x 150mg capsules</td>
<td></td>
<td></td>
<td>$14.99</td>
</tr>
<tr>
<td>SAME (S-ADENOSYL-L-METHIONE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAME-PRO™</td>
<td>20x 400mg enteric coated tablets</td>
<td></td>
<td></td>
<td>$29.99</td>
</tr>
<tr>
<td>SILVER PROTEIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SILVER NANO™</td>
<td>15ml spray bottle</td>
<td></td>
<td></td>
<td>$14.99</td>
</tr>
<tr>
<td>SLEEP-PRO™</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLEEP-PRO™ NEW</td>
<td>30x capsules</td>
<td></td>
<td></td>
<td>$59.99</td>
</tr>
<tr>
<td>STEM CELL WORX*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEM CELL WORX*</td>
<td>3.5oz mouth spray</td>
<td></td>
<td></td>
<td>$64.99</td>
</tr>
<tr>
<td>SYMPROVE®</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYMPROVE®</td>
<td>4x 500ml liquid bottles</td>
<td></td>
<td></td>
<td>$94.99</td>
</tr>
<tr>
<td>TA65*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA65*</td>
<td>90x capsules (250 dose)</td>
<td></td>
<td></td>
<td>$599.99</td>
</tr>
<tr>
<td>TA65*</td>
<td>30ml bottle cream</td>
<td></td>
<td></td>
<td>$499.99</td>
</tr>
<tr>
<td>TRIGONELLA FOENUM-GRAECUM SEED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FENFURO-PRO™</td>
<td>30 x 500mg Capsules</td>
<td></td>
<td></td>
<td>$24.99</td>
</tr>
<tr>
<td>ZINC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZINC NANO*</td>
<td>15ml spray bottle</td>
<td></td>
<td></td>
<td>$14.99</td>
</tr>
</tbody>
</table>

## OTHERS

<table>
<thead>
<tr>
<th>Product</th>
<th>Contains</th>
<th>Other Info</th>
<th>Retail</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACARBOSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GLUCOBAY®</td>
<td>30 x 100mg chewable tablets</td>
<td></td>
<td></td>
<td>$19.99</td>
</tr>
<tr>
<td>ANASTROZOLE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARIMIDEX®</td>
<td>28x 1mg tablets</td>
<td></td>
<td></td>
<td>$59.99</td>
</tr>
<tr>
<td>AMINOGUANIDINE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMINO-PRO™</td>
<td>90x 75mg tablets</td>
<td></td>
<td></td>
<td>$17.49</td>
</tr>
<tr>
<td>BROMOCRIPTINE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARLODEL®</td>
<td>30x 2.5mg tablets</td>
<td></td>
<td></td>
<td>$19.99</td>
</tr>
<tr>
<td>CABERGOLINE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOSTINEX®</td>
<td>8x 0.5mg tablets</td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
<tr>
<td>METFORMIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MET-PRO™ NEW</td>
<td>100x 500mg tablets</td>
<td></td>
<td></td>
<td>$19.99</td>
</tr>
<tr>
<td>NALTREXONE (LDN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAL-PRO™</td>
<td>30x 4.5mg capsules</td>
<td></td>
<td></td>
<td>$44.99</td>
</tr>
<tr>
<td>SILDENAFIL (GENERIC VIAGRA*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SILDENAFIL-PRO™ NEW</td>
<td>10x 100mg scored tablets</td>
<td></td>
<td></td>
<td>$19.99</td>
</tr>
<tr>
<td>STABLON® (TIANEPTINE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STABLON® (TIANEPTINE)</td>
<td>60x 12.5mg tablets</td>
<td></td>
<td></td>
<td>$49.99</td>
</tr>
</tbody>
</table>
## JULY 2017 PRICE LIST *

### PEPTIDE BIOREGULATORS

<table>
<thead>
<tr>
<th>Contains</th>
<th>Other Info</th>
<th>Retail</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADRENALS (GLANDOKORT*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>BLADDER (CHITOMUR*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>BLOOD VESSELS (VENTFORT*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>BONE MARROW (BONOMARLOT*) <strong>NEW</strong></td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>BRAIN/ CNS (CERLUTEN*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>CARTILAGE (SIGUMIR*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>HEART (CHELOHART*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>KIDNEYS (PIELOTAX*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>LIVER (SVETINORM*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>LUNGS (TAXOREST*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>MUSCLE (GOTRATIX*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>OVARIES (ZHENOLUTEN*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>PANCREAS (SUPREFORT*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>PARATHYROID (BONOThYRK*) <strong>NEW</strong></td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>PINEAL (ENDOLUTEN*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>PROSTATE (LIBIDON*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>RETINA (VISOLUTEN*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>STOMACH MUCUS (STAMAKORT*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>TESTES (TESTOLUTEN*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>THYMUS (VLADONIX*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
<tr>
<td>THYROID (THYREOGEN*)</td>
<td>20x capsules</td>
<td>⭐⭐⭐⭐</td>
<td>$70</td>
</tr>
</tbody>
</table>

### SERMORELIN

<table>
<thead>
<tr>
<th>Contains</th>
<th>Other Info</th>
<th>Retail</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERM-PRO™</td>
<td>30ml 30mg liquid</td>
<td>⭐⭐⭐⭐⭐</td>
<td>$179.99</td>
</tr>
<tr>
<td>SERM-SPRAY™ <strong>NEW</strong></td>
<td>5ml 500IU nasal spray</td>
<td>⭐⭐⭐⭐</td>
<td>$44.99</td>
</tr>
</tbody>
</table>

### SMARTS

<table>
<thead>
<tr>
<th>Contains</th>
<th>Other Info</th>
<th>Retail</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADRAFINIL</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>ADRA-PRO™</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>ANIRACETAM</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>ANI-PRO™</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>CENTROPHENOXINE</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>CENTRO-PRO™</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>DEPRENYL (SELGILINE)</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>DEP-PRO LIQUID™</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>DEP-PRO TABS™ <strong>NEW</strong></td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>HYDERGINE® (ERGOLOID MESYLATE)</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
<tr>
<td>HY-PRO2™</td>
<td></td>
<td>⭐⭐⭐⭐</td>
<td>$39.99</td>
</tr>
</tbody>
</table>
## JULY 2017 PRICE LIST *

### SMARTS

<table>
<thead>
<tr>
<th>Product</th>
<th>Contains</th>
<th>Other Info</th>
<th>Retail</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDEBENONE</td>
<td></td>
<td></td>
<td>£25</td>
<td>$21.49</td>
</tr>
<tr>
<td>IDEB-PRO™</td>
<td>60x 30mg tablets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PICAMILONE</td>
<td></td>
<td></td>
<td>£20</td>
<td>$17.49</td>
</tr>
<tr>
<td>PICAMILON-PRO™</td>
<td>60x 50mg tablets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIRACETAM</td>
<td></td>
<td></td>
<td>£25</td>
<td>$19.99</td>
</tr>
<tr>
<td>PIRA-PRO™</td>
<td>100x 800mg tablets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRAMIRACETAM</td>
<td></td>
<td></td>
<td>£50</td>
<td>$44.99</td>
</tr>
<tr>
<td>PRAM-PRO™</td>
<td>40x 300mg tablets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VINPOCETINE</td>
<td></td>
<td></td>
<td>£30</td>
<td>$24.99</td>
</tr>
<tr>
<td>VIN-PRO™</td>
<td>120x 10mg capsules</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TOPICALS

<table>
<thead>
<tr>
<th>Product</th>
<th>Contains</th>
<th>Other Info</th>
<th>Retail</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>BECS CURADERM®</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BECS CURADERM*</td>
<td>20ml tube cream</td>
<td></td>
<td></td>
<td>$144.99</td>
</tr>
<tr>
<td>CAN-C™ EYE-DROPS</td>
<td></td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
<tr>
<td>CAN-C™ EYE-DROPS</td>
<td>2x 5ml vials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DERCOS® (AMINEXIL)</td>
<td></td>
<td></td>
<td></td>
<td>$17.49</td>
</tr>
<tr>
<td>DERCOS® (AMINEXIL)</td>
<td>200ml bottle shampoo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOINT-PRO2™ CREAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOINT-PRO-2™ CREAM</td>
<td>2x 10ml pump</td>
<td></td>
<td></td>
<td>$29.99</td>
</tr>
<tr>
<td>MINMAX-PRO™ (HAIR LOSS LOTION)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MINMAX-PRO™</td>
<td>60ml spray and dropper bottle</td>
<td></td>
<td></td>
<td>$44.99</td>
</tr>
<tr>
<td>NYEDENT® TOOTHPASTE</td>
<td></td>
<td></td>
<td></td>
<td>$9.99</td>
</tr>
<tr>
<td>NYEDENT® TOOTHPASTE</td>
<td>50ml tube</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORALTIDE-PRO™</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORALTIDE-PRO™</td>
<td>60ml concentrate bottle</td>
<td></td>
<td></td>
<td>$29.99</td>
</tr>
<tr>
<td>RETIN-A® (TRETINOIN/ RETINOLIC ACID)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RETIN-PRO™</td>
<td>30ml 0.050% pump cream</td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
<tr>
<td>YOUTH GEMS®</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BODY MILK</td>
<td>200ml bottle</td>
<td></td>
<td></td>
<td>$44.99</td>
</tr>
<tr>
<td>DAY CREAM</td>
<td>50ml pump</td>
<td></td>
<td></td>
<td>$64.99</td>
</tr>
<tr>
<td>EYE SERUM</td>
<td>30ml pump</td>
<td></td>
<td></td>
<td>$69.99</td>
</tr>
<tr>
<td>FACE PACK</td>
<td>New</td>
<td></td>
<td></td>
<td>$49.99</td>
</tr>
<tr>
<td>NIGHT CREAM</td>
<td>50ml pump</td>
<td></td>
<td></td>
<td>$64.99</td>
</tr>
<tr>
<td>SERUM</td>
<td>30ml dropper bottle</td>
<td></td>
<td></td>
<td>$79.99</td>
</tr>
<tr>
<td>TONIC</td>
<td>200ml liquid bottle</td>
<td></td>
<td></td>
<td>$39.99</td>
</tr>
</tbody>
</table>
MinMaxPRO™

60ml liquid spray or dropper application.
Maximum strength Minoxidil, plus IGF-1, bFGF and caffeine growth factors, plus the DHT blocker azelaic acid.

ONLINE VOUCHER: MINMAX-5-OFF-0917

Restrictions may apply, please see IAS terms and conditions for full details. Offer valid until 1st September 2017.

All side effects and contraindications are available on the IAS website.