

# Biogenesis AntiAging

## Age-Prevention: All Ages:

The life-long accumulation of free radicals is a major cause of aging. Therefore, a broad spectrum approach to inhibiting/neutralizing free radicals is recommended. The daily accumulation of toxins and heavy metals means that the body is constantly battling to reduce its burdens. Consequently, a basic program of chelation should include:

- **Vitamin C**: 2 to 3 grams 1 to 3 times daily, as **Beyond C**.
- Vitamin E: 100 IU to 400 IU daily (taken with food).
- Vitamin A: 5000 IU to 10000 IU daily.
- Lipoic Acid: 50mg to 100mg 2 times daily.
- **Resveratrol**: 5mg 1 to 3 times daily, to prevent excessive clotting and artery lining damage which would otherwise promote arteriosclerosis.
- **CoQ10**: 30mg to 100mg 2 times daily.
- EDTA 400mg to 800mg daily.
- Garlic 800mg to 1600mg daily, (preferably organic and high in allicin content).
- Selenium 50mcg to 300mcg daily
- Other chelators, such as Malic and Succinic acid, should be used regular to help eliminate toxins and heavy metal burdens from the body.
- A good general multiple containing multi-vitamins and minerals.

## Age-Prevention: Aged 20-29 (as above plus the following):

- **Aminoguanidine**: 75mg 2 to 3 times daily, to help prevent early-stage glycosylation (sugar-protein cross-linking). This may have a factor in the prevention of the onset of diabetes and other aging disorders.
- **Piracetam**: 800mg to 1200mg 2 to 4 times daily, to enhance brain function and protect the brain from dietary/ environmental toxins. Piracetam is the "smart-drug" with the lowest toxicity profile, so it is the safest for frequent or long-term use.
- **Estrogen Blockers** (such as Di-indolylmethane and Indoly-3-Carbinol): For women; a combination of DIM and I3C at approximately 260mg daily. For men; a combination of DIM and I3C at approximately 260mg to 520mg daily. This

promotes environmental pseudo-estrogen detoxification.

- **Carnosine:** Orally at 50mg to 100mg 2 or 3 times daily to help reduce late stage glycosylation and help to chelate unwelcome heavy metals such as copper.
- **Thymus:** 240mg 1 to 3 times daily. Since thymus atrophy is frequently severe by late teens, those suffering from frequent colds, flu, chronic candidiasis, chronic infections etc. from the 20's onward may wish to compensate for thymus atrophy by utilizing thymus supplements.

### **Age-Prevention: Aged 30-39** (all of the above plus the following):

- **Pregnenolone:** 25mg to 50mg in the morning. Helping to reduce stress levels, inflammation and improve the body's ability to manufacture hormones.
- **Idebenone:** 30mg 1 to 3 times daily. This will enhance brain serotonin and noradrenaline levels, fight free radicals and increase heart, brain and muscle energy production.
- **Hydergine:** 1.25mg to 2.25mg 1 or 2 times daily. This will enhance brain oxygenation, balance neurotransmitter levels, slow down or reverse age-associated mitochondrial structure decay and may enhance nocturnal growth hormone release.
- **Deprenyl:** 1mg or 2mg daily, with occasional breaks. Pioneer deprenyl researcher Professor Joseph Knoll recommends starting deprenyl in this age period to reduce the decay of the part of the brain called the *Substantia Nigra*. This is the key brain structure which usually shows the most accelerated aging, leading potentially to Parkinson's disease. As a *catecholamine* (dopamine and noradrenaline) activity enhancer, deprenyl is also a natural anti-depressant and promotes attention and vigilance.
- **Melatonin:** 1.5mg to 3mg at bedtime. To help promote a good night's rest by improving circadian rhythms, Melatonin is also a potent anti-oxidant. Furthermore, Dr. Walter Pierpaoli's work points to Melatonin as an agent that can reset the endocrine clock, in other words helping to establish a control over the balanced release of other hormones.

### **Age-Prevention: Aged 40-49**

- **Gerovital-H3**: 100mg daily in the morning on an empty stomach. Gerovital-H3 is a weak, reversible MAO inhibitor which helps to correct the age increased levels of MAO. MAO is the enzyme responsible for the breakdown of the brain neurotransmitters dopamine, noradrenalin and serotonin (and usually increases with age). Gerovital was the world's first anti-aging drug developed by Professor Ana Aslan.
- **SAMe**, as methylation processes really begin to decline by this decade, the conversion of hormones from cholesterol can be improved with the use of SAMe at 300mg to 500mg 1 to 3 times daily. SAMe can also assist with arthritis and joint mobility, which may be noticed as deteriorating and is also noted as a potent anti-depressant.
- **DHEA**: 25mg to 50mg in the morning. DHEA is a natural counterbalance to cortisol. DHEA levels are already significantly down by this age bracket, while cortisol is gradually increasing. High levels of cortisol promotes poor sleep, depression, immune weakness and lean body mass loss. (Women may want to use 7-keto DHEA instead, in order to avoid possible conversion to testosterone).
- **Metformin**: 250mg to 500mg 1 to 3 times daily (taken with or before meals). Metformin is helpful in mitigating the adult-onset diabetes or generally poor blood sugar/ insulin regulation, typically seen in "middle-aged" sedentary/ overweight individuals. Furthermore Metformin lowers "bad" LDL cholesterol levels and increases "good" HDL cholesterol levels. Researcher Gerald Reaven, pioneer behind the discovery of "Syndrome X," has found a strong connection between obesity, hypertension, heart disease and poor blood sugar/ insulin control. Metformin may be an antidote to Reaven's Syndrome X. Dr. Ward Dean also believes that Metformin is one of the most remarkable anti-aging medicines, and very useful in the control of his and Professor Vladimir Dilman's "neuroendocrine theory of aging."
- **Wobenzym-N** to improve enzyme activity, Endozym-Med (containing Nattokinase) to thin blood (lowering the risk of clots) and both to reduce inflammation, which is believed to be the root indicator of virtually all diseases.
- **Thyroid**: One quarter to 1 grain day. Nutritionalist *Ray Peat* has observed that people in many "primitive" cultures routinely consume the necks of their animals, supplying them with approximately one quarter grain of natural thyroid daily. For those suffering chronic fatigue, weight gain, high blood cholesterol, poor memory/ concentration and who show no medical signs of hyperthyroidism, an empirical trial of low dose regular whole natural thyroid extract may be in order. Many

people whose thyroid blood tests have labeled them as "low/ moderate/ normal" thyroid level have found diverse health improvements from taking natural thyroid regularly.

**Age-Prevention: Aged 50-59** (all of the above plus the following):

- **Natural Estrogen and Progesterone:** For women; the "normal" *Hormone Replacement Therapies* (HRT) typically used by doctors for menopause consists of synthetic variants of the female hormones, these often have serious side-effects. For those desiring HRT, the natural human forms of estrogen and progesterone may be safer and more effective. (Dr. Jonathan Wright refers to these as BHRT, or *Bioidentical Hormone Replacement Therapies*).
- **Natural Testosterone Prohormones:** For men; The effectiveness of natural testosterone precursors, such as androstenediol is controversial. Yet a quick look in any biochemical text shows they are capable of being converted to testosterone. Taking testosterone precursors 2 times a day in moderate doses may actually minimize their conversion into unwanted estrogens. Taking **DIM** daily may help prevent this unwanted side-effect (see **Estrogen Blockers**). By the late 40s or early 50s, free testosterone blood levels are significantly lower than youthful levels. There is also a consistent loss of sex-drive, vigor, lean body mass and *joie de vivre*. Taking natural testosterone precursors as sublingual or transdermal (topical) agents, or the use of natural testosterone gel may be the answer.
- **L-Tryptophan:** 500mg to 1500mg at bedtime. For those suffering frequent insomnia or depression associated with irritability and carbohydrate cravings, L-Tryptophan can be particularly beneficial. An alternative to L-Tryptophan can be its more potent cousin **5HTP** at 50mg to 100mg at bedtime.
- **Centrophenoxine:** 250mg to 500mg 1 or 2 times daily. Centrophenoxine helps to remove the age-accumulating toxin *lipofuscin* from brain, heart, lung and skin cells. In turn, the cells perform more efficiently and therefore this enhances intra-cellular communication. Centrophenoxine also improves the brain's use of glucose and mental performance facilities can be enhanced. Centrophenoxine is recommended by Professor Imre Zs.-Nagy to help combat his "membrane hypothesis of aging."
- **HGH** injectable therapy, or potent oral agonists of growth hormone such as **Beyond GHS** are often used before this age bracket, however when used now their impact

is often greatest.

**Age-Prevention: Aged 60 plus** (all of the above plus the following):

- **Laetrile**: 1ml of cream can be applied to the skin daily, (or every other day). As there are many cultures around the world with cancer rates far below the high rates found in the western world, the reason why has been looked for, and a common connection between these cultures is their routine dietary consumption of various foods rich in Laetrile (or Laetrile like compounds). Regular use of low dose Laetrile may provide some cancer protection. Additional cancer protection may be afforded by the use of Artemisinin, at 100mg to 300mg morning and night, and/or Poly-MVA at one half to one tea spoon full daily.
- **NeyGeront** which contains a plethora of RNA therapies, (including placenta) can be used to help as a general rejuvenator of DNA, protecting against senile disorders. Orally, the capsules are used once or twice daily, but are best combined with the injectable therapy.
- **Vinpocetine**: 5mg 1 to 3 times daily. For those suffering memory lapses, decreased focus and attention, "brain fog" etc., Vinpocetine's dual action of enhancing brain cell energy production and increasing brain blood flow is helpful. As the risk of stroke increases dramatically at this period, regular Vinpocetine use may protect against potential triggers.
- **Carnosine: Can-C Eye-Drops**, 1 drop into each eye, 1 or 2 times a day to help prevent and slow the appearance of senile cataract. If you live in a particularly sunny place start the regime earlier.