

# Basic Anti-Ageing Strategy for Cognitive Decline From *Evidence-Based Complementary and Alternative Medicine* that can help neurodegeneration and neuroimmune disorders, including some types of **Chronic Fatigue Syndrome / ME, Alzheimer's and Parkinson's Diseases**

## We age because of evolutionary design

There are two reasons for this:-

- 1 **Physical programming** via such things as **telomere shortening, hormone, enzyme, mitochondria** etc decline.
- 2 **Psychological programming**- directly, by influencing cells and organs.  
- indirectly, by following "ageing lifestyles".

Several experiments have revealed that **physical illnesses** actually declined or disappeared when the subjects were **psychologically age reversed**.

The processes involved with ageing CAN be reduced, stopped or even reversed sometimes.

Ageing , CFS/ME and Alzheimer's type illnesses are usually multi-causal. There is usually one main cause plus several contributing factors.

I have balanced the following information between just a list of supplements, drugs and diets, and a detailed description of why each one works.

It is possible to write a 200-page book about one or two products. In fact some international best sellers have been just that, with most of the information just "filler"!

A full metabolic analysis can determine which, supplements, drugs, diet changes etc may be appropriate. See resources at end.

A is for amino acids

B Prevention of neurodegeneration (especially dopamine neurons)

C Promotion of neuroregeneration (neurogenesis)

D Restoration of hormones, enzymes, vitamins and other substances which decline with age.

E is for elimination of unnecessary drugs, counterproductive foods, drinks and toxins

F Meditation

G Basic instincts and needs

Doses

Resources

Interactions and contra-indications

Recommended reading

## A

**A IS FOR AMINO ACIDS**

and substances which affect their metabolism.

TARGETED AMINO ACID THERAPY (TAAT). A **full metabolic analysis profile** can reveal any deficiencies and determine which amino acids to supplement.

**The Noradrenalin (NA) Pathway** may be a prime subject for analysis. It begins with protein intake. Various stages of conversion take place before Noradrenalin is produced, each of which have their own purpose and effect. If any of these stages are blocked a “noradrenalin pathway disorder” may result. One end result of the NA pathway is Vanilmandelic Acid (VMA) in the urine. So a simple VMA test can reveal the efficiency of a persons NA pathway. If the VMA is lower than normal, further test to find “blockages” may be advisable.

**L-Dopa** . Normally only prescribed for Parkinson’s disease, L-dopa can increase **mental energy** in some CFS / ME patients by increasing **dopamine** levels. It is usually only useful for short-medium term, since it may become less effective with long term use. L-dopa and decarboxylase (an enzyme) make dopamine. Mucan bean extract is the best source of L-dopa, but broad beans also contain a small amount.

**MAO and COMT inhibitors.** The two main enzymes that cause dopamine to degrade in the neuron synapse are MAO and COMT. Inhibitors of these enzymes therefore slow this degradation. MAO Inhibitors are the preferred choice. Dopamine neurons have two main types of re-uptake pumps, A and B. MAOI (B) are the preferred choice, since MAOI (A)’s have major food and drug restrictions due to interactions. There is minimal advantage to MAOI(A)’s except that they also increase serotonin levels. However there are plenty of ways to increase serotonin completely safely, such as the supplement 5 – HTP, so I don’t know why this potentially dangerous group of drugs are ever used. By taking an MAO Inhibitor, dopamine is kept in the synapse longer, so increasing mental energy and stamina.

**MAOI(B) drug form** is **Selegiline** (Deprenyl).

In animal studies, a long-term low dose of **Selegiline** has been shown to have considerable life extension properties, which is why it is sometimes included in “anti-ageing” strategies. Natural MAOI(B)’s may also have this effect.

**MAOI(B) foods and supplements:-**

Nutmeg.

Blue / green algae.

Rhodiola root.

Licorice root.

Passion flower. }

St John’s Wort. }

At night time since slightly sedative.

**Modafinil** is a well-established drug which “unblocks” dopamine receptors. It should be taken at breakfast time since its stimulant effect is long lasting. Modafinil is best reserved for occasional situations of serious mental exhaustion.

**L-Arginine.** Helps – mental energy  
 - Human Growth Hormone release.  
 - Cerebral Vasodilator.

**L-Ornithine.** Helps L-Arginine.

**L-Carnitine.** Helps mental energy – see ALC in Section C.

Other amino acids such as L-Tyrosine, L-Phenynalanine may be indicated depending upon metabolic analysis.

**Probiotics.** A broad spectrum probiotic, such as Probio 7 and Prebio 7, will help dopamine metabolism. These brands also contain pre-biotics, which “feed” friendly bacteria.

**Anti-Fungals** If tests reveal a candida type problem, anti-fungals should be taken. It is well established that some fungals can seriously interfere with the Noradrenalin Pathway. Anti-Fungals MUST be rotated to prevent tolerance, usually every 4-6 weeks. The list of anti-fungal foods and supplements is extensive, but among the most effective are:-

Oregano oil.

Caprylic Acid.

Pau D’Arco.

Black Walnut (Hull).

Others are: Barberry, cloves, Geranium (edible type), Goldenseal, lemongrass, Olive leaf, Peppermint, Rosemary, Spilanthes (tincture) – powerful, and Garlic. However, garlic is a telomerase inhibitor, therefore should normally be minimised.

Probiotics and anti fungals must be taken at opposite ends of the day, preferably probiotics before breakfast and anti-fungals in the evening.

## B

## PREVENTION OF NEURODEGENERATION (ESPECIALLY DOPAMINE NEURONS).

1. **Telomerase Activators.** To cut a very long subject short.: –  
 On the end of chromosomes are telomeres. These shorten every time a cell divides, and when there is no telomere left, the cell dies, SO WE AGE. An enzyme called **telomerase** prevents telomere shortening. So by taking **telomerase activators**, and minimising **telomerase inhibitors**, we can prevent one of the main causes of aging. So far most activators are **astragalus** based. **TA65** is the only proven activator, but is very expensive.  
**Astragaloside IV** is becoming very popular. It is very affordable, but as yet unproven.  
**Vitamin C** is a telomerase activator. The lower limit to have any effect upon telomeres is 500mg 2 x day, or 1000mg slow release. More than this can become inflammatory in the long term. So 1000-1500mg/day seems to be the optimum dose. High dose vit C suits most people but not everyone.  
 High homocysteine levels **triple** telomere loss. Sufficient Vit B2, B6, B12, Folic acid and TMG (Trimethylglycine) are necessary. (Max B6 5mg / day long term, otherwise nerve damage may occur.)  
 Older people may benefit more than younger, from telomerase activators.  
 Cancer patients should avoid telomerase activators since there is a theory that cancer cells may obtain extended lives.
2. **Telomerase Inhibitors.** These should be minimised in older patients. The known ones are:- Curcumin, Resveratrol, Quercetin (found in red onions), Melatonin, Cocoa, Green tea, Allicin (found in garlic) and Silymarin. Conversely, cancer patients should maximise telomerase inhibitors.
3. **Telomeres** themselves are being researched to find ways other than enzymes to preserve them.
4. **Chromosomes** are also being targeted to prevent cell death by other means that will allow only healthy cells to reproduce. An anti-aging product by this means may be in the pipeline.
5. **Physical Activity.** Sufficient exercise can result in **four times less brain shrinkage than those who are unfit!** A downward trend may occur especially in the elderly when insufficient exercise can contribute to physical and mental decline which in turn leads to less exercise and more decline.
6. **Obesity** can cause an up to 70%-increased likelihood of dementia type illnesses.
7. **Neuroprotective Agents.** Most neuroprotective supplements and drugs also aid neuron function, so they have been included in the next section.

C

## PROMOTION OF NEUROREGENERATION (NEUROGENESIS).

1. **Dietary Protein.** Sufficient is necessary to maintain neuron growth.  
Cancer patients should avoid red meat.
  
2. **Neuron Growth Promoters**
  - Acetyl L-Carnitine (ALC)** } Much more effective together.
  - Acetyl L-Carnitine Arginate** }
  - Alpha-lipoic acid (ALA)**, Diabetic caution, can reduce blood sugar.
  - Gotu-Kola.**
  - Uridine.** Stimulates axon growth and the production of acetylcholine.  
The best dietary source of uridine is broccoli, then tomatoes, dairy, brewers yeast and beer (non-alcoholic). Organ meats such as liver also contain uridine.
  - Phosphatidylcholine.**
  - Folic Acid** (folate) is necessary for proper brain function and neuron regeneration.  
Check the amount in your multivitamin.
  - Ashwagandha** helps dopamine neuron growth, energy, circulation, is anti-inflammatory and is an acetylcholine-esterase inhibitor.
  - DMAE** slows the production of lipofuscin, ceroid and amyloid, which cause neurodegeneration.
  - Zinc** helps prevent oxidation of dopamine.
  - Omega 3.** Fish oil. Helps build receptor sites. See DOSES for further information.  
Minimise vegetable oils (omega 6), since excess omega 6 can reduce omega 6 effectiveness.
  - Huperzia serrata** (0.2% Huperzine A) Encourages the growth of nerve cells and is an acetylcholinesterase inhibitor.
  - Bacopa monnieri extract** Boost nerve impulses in the brain and helps repair damaged neurons. It is also an acetylcholinesterase inhibitor.
  - Glycerophosphocholine (GPC)** stimulates growth, repair and function of **nerve growth factor receptors** In the cerebella cortex.
  - CoEnzyme Q10.** Can increase energy, especially with Evening Primrose Oil.
  - Idebenone** (Q10 analogue) stimulates the production of **nerve growth factor** and counteracts beta-amyloid.
  - Ferulic acid** Has a neuroprotective effect.
  - Methylcobalamin** (methylated form of vit B12) Essential for the formation of myelin sheath, and is also neuroprotective.

Proprietary blends containing some of the most important of the above are NEURON GROWTH FACTOR, NEUREX AND COGNITEX but these are usually sent from USA suppliers.

## HERBS AND EDIBLE PLANTS:-

**Ashitaba** (*Angelica Keiskei* Koidzumi). It is also anti-oxidant, anti-cancer and may reduce hypertension. Ashitaba is a COUMARIN and therefore anti-coagulant.

**Hops**, especially the extract **Xanthohumol**.

**Chrysanthemum** – edible flower variety.

**Gajutsu** (*Curcuma Zedoaria* Roscoe), one strain of tumeric.

**Rosemary extract** (rosmarinic acid). Has a neuroprotective effect by **inhibiting and dissolving beta- amyloid plaques**.

3. **Cerebral Vasodilators**. These can help neuron growth:-

**Ginko Biloba**.

**Periwinkle (Vinpocetine)**.

**Cats Claw**.

**L-Arginine**.

4. **General Vasodilators**. These include:-

Ginger, nettle, olive leaf, parsley, valerian (sedative herb) and L-Dopa.

5. **Cerebral Metabolic Activators (CMA)** are sometimes prescribed by doctors.

These include: **Amantadine Hydrochloride**, which stimulates dopamine neurons.

**Moxisylyte hydrochloride**

**Nicergoline** (from ergot) which enhances choline and dopamine transmission.

6. **Nerve Growth Factor (NGF)**. This is extracted from mice, and has been helpful for some conditions.

**D**

## **RESTORATION OF HORMONES, ENZYMES, VITAMINS** and other substances which decline with age.

Some will have a negligible effect, whilst others can have a major impact upon health.

**DHEA.** It is a precursor to most other hormones. Should not be taken with hormone-related cancers.

**Digestive Enzymes.** A broad spectrum enzyme can help catecholamine metabolism.

**B12.** Low levels can cause mental fatigue. Have your level checked.

A 5year study published in **Neurology** revealed an astonishing connection between brain loss and low vit B12 levels, regardless of initial brain size, age, sex, IQ and other variables. Vitamin B12 is crucial to brain function and the overall health of your nervous system. It's the engine behind your body's ability to make blood. Every cell in your body uses it to convert fuel into energy. It's also the key to DNA synthesis and regulation, and enables your body to produce life-giving fatty acids. B12 also powerfully lowers homocysteine and helps heart function. Up to 500 mcg/day may be necessary for optimum health.

**Multivitamin / Mineral.** A broad spectrum but LOW STRENGTH multivitamin is best. High strength may not be helpful. Too much B6, Manganese and Vit A are unhelpful.

**Glutathione.** There is well researched correlation between declining Glutathione levels and neurodegeneration.

**N-Acetyl-Cysteine (NAC)** is the best dietary precursor to Glutathione. Alpha-Lipoic-Acid (ALA) mentioned in section C, helps glutathione metabolism.

**Human Growth Hormone.** This dramatically declines after the age of 30. Fasting triggers increased production, as does very strenuous exercise, but these are only appropriate for certain healthy people.

Injections are the most effective, but oral supplementation is possible. Over 500mg/day of L-dopa increases HGH, as does a high protein diet – which is probably the safest.

**Cortisol.** This is one of the few hormones that actually increases with age. Excess cortisol is counterproductive and causes neurodegeneration. Stress can cause too much cortisol to be released, so relaxation and meditation may be helpful.

**Aromatherapy Massage.** This is helpful in several ways. It reduces cortisol level, increases beneficial hormone levels, increases lymphocytes which help boost the immune system, and the appropriate essential oils can give added benefit.

**E****E IS FOR ELIMINATION OF UNNECESSARY DRUGS, COUNTERPRODUCTIVE FOODS, DRINKS AND TOXINS.****Eliminate unnecessary drugs.**

Believe it or not, research shows that the first (and sometimes last) treatment given to dementia or CFS / ME sufferers is **Seretonin** metabolism disorder drugs. These may be helpful in the short term if the situation is caused by depression. However MUCH more CFS / ME is caused by **catecholamine** metabolism disorders, which may be treated with MAOI type drugs. Note:- Some anti-depressants required gradual discontinuation, with doctor's guidance.

A vicious circle of decline may be the result in what would have been a mild or moderate illness, e.g.:-

CFS / ME / Dementia etc.

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Dopamine antagonist or drugs causing neurodegeneration, which rapidly exacerbate the problem.

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Eventually the situation is less manageable so stronger drugs are used.

**Sugar and a low carbohydrate diet.** Although an instant stimulant, sugar can feed fungi such as candida. Excess carbohydrates, especially refined ones such as sweet processed foods can be at the root of many major illnesses. Even fruit should be kept to a minimum. Obviously complex carbohydrates such as a vegetables are essential, but most people consume too much of the "cake, bread and potatoes" variety. Surface vegetables are by far the best forms of carbohydrate.

The problem with excess carbohydrates is **insulin** release. There is well researched evidence to connect insulin levels with the immune system, many illnesses and lifespan.

A long-term low carbohydrate diet, especially sugars, can be an essential part of anti-aging strategies.

**Caffeine.** It is also an instant stimulant, but in the long term caffeine can increase neurodegeneration.

**Aspartame.** Deadens neuro-receptors.

**Tea, especially green tea,** which has the highest concentration of decarboxylase inhibitor, should be minimised. Decarboxylase is necessary for L-dopa to dopamine synthesis. It is only caffeine that makes tea stimulant. Without it, tea is actually slightly sedative.

However, green tea has a neuroprotective effect. Therefore its short-term effect is unhelpful, but its long term effect is helpful.

**Food Allergy Test.** A basic common foods Igg test will reveal any intolerance's, but a maximum food variety test is well worth the expense. Food allergies / intolerance's can

seriously “drain” the immune system and cause mental exhaustion. Almost everyone has slight intolerance’s that come and go. It is the major ones that need to be eliminated or reduced. Gluten and dairy are the two most common. Even without an intolerance some people experience increased cognitive functions after they have been gluten and dairy free for a few weeks, since they both act as “external endorphins”, and affect the brain’s receptors.

**Alcohol** may increase neurodegeneration, so it should be kept to a minimum. However some studies have shown that 4 glasses of dry red wine a day may be neuroprotective. More or less than 4 glasses is apparently less helpful.

**Vegetable oils and spreads.** These are mainly Omega 6. Too much Omega 6 counteracts Omega 3. Most people consume too much 6 and not enough 3. Deep frying in oil is by far the worst since all vegetable oils (except coconut) degrade when heated. Olive oil partially degrades. Each time the same oil is RE-HEATED it further degrades and becomes carcinogenic.

Note: It is the continuous long term intake of harmful foods and drinks that is the problem, not the occasional consumption. Stress over a too rigid diet is the last thing you want.

**Amalgam Fillings.** Mercury is one of the most deadly neurotoxins known. It is well researched and recognised by the World Health Organisation that amalgam fillings leach mercury well above any safe limit. In some countries existing amalgam fillings are removed free of charge. Unfortunately the NHS is in a state of denial, so replacing amalgam with white composite has to be paid for. This can be expensive but is well worth it. A dentist experienced in amalgam replacement is essential to prevent inhalation or ingestion of mercury. A special procedure, not “normal” replacement, is necessary.

**Immune Boost:** If a weak immune system is suspected after tests, the following products will help:-

Echinacea, Golden Seal, Evening Primrose Oil and Astragalus.

A proprietary blend of “Immune Boosters” is another alternative. Usually 2 weeks on, 1 week off is the best routine to prevent tolerance.

Overuse of antibiotics or long term over-cleanliness especially as a child, or the wrong **sort** of cleanliness can lead to a weak immune system. Our metabolisms are designed to ingest fairly large amounts of soil bacteria, one reason why gardeners are generally less susceptible to a wide range of illnesses. Surface soil may be contaminated, so soil more than 1 ft deep is being considered as a source for supplemental bacteria.

Apart from times of viral infections, overuse of household cleaning products should be avoided. Regular swimmers should use a plain barrier cream (which **is** allowed, not a **medical** cream) since a large amount of disinfectant can be absorbed from the water at public baths, which can weaken the immune system.

In hospitals cleanliness must be strict.

A **strong** but **occupied** immune system appears to be the healthiest.

**Detox.** Hydrotherapy (colonic irrigation) can be very helpful. “Coffee colonic” is increasingly popular and the best, since caffeine in the large intestine stimulates toxin release via the bile duct process.

## F

**MEDITATION.**

**Visualisation / Imaging, seeding and Mantras, are types of meditation that can be a powerful aid to any illness.**

**Visualisation / Imaging.** This consists of picturing for instance neuron growth or cerebral blood vessels being cleared of deposits, or whatever the particular roots of the illness is thought to be. There are many techniques, use the one you are most comfortable with. If you are not very good at this, CDs are available to help you for general good health. Many hypnotherapists include visualisation in their practice and usually make an individual cassette to take home.

**Seeding.** This is visualising a healthy future. For instance you can picture yourself five or ten years from now completely healthy, talking to friends about how well you have been for the last .... years.

**Mantras.** These are positive phrases that imprint upon subconscious mind and greatly help healing. They have been used for thousands of years by many cultures. Probably the most well known mantra is “Day by day in every way I am getting better and better”. I use this one but substitute “better” with “healthier”. Another one I use is “I can, I must, I will let myself be well and make myself much healthier and happier now and forever”. You may add “This process is increasing minute by minute, hour by hour, day by day until I am completely healthy”. Or you may add “Every time I say this mantra it WILL be more effective, it IS more effective”.

**Imprinting mantras**

1. Mantras can be “shouted out” in the mind to make them more effective.
2. An old self-hypnosis technique is to close your eyes and roll them up, then say the mantra.
3. “Did you get out of the wrong side of the bed this morning?” This well known phrase comes from the fact that how you feel when you start the day off, can affect the whole day. Therefore one of the best times to imprint mantras is as you are rising. You should also try to be as cheerful as possible at this time, even if you don’t feel it. **It will** help all day.  
A “negative word” must **never** be used in a mantra e.g. “my **illness** is disappearing” will not work. It should be “my **health** is improving”.

Visualisation, seeding and mantras need to be done with sufficient frequency and intensity until a critical point is reached where healing is achieved. This could be a few times a day or 100’s a day depending upon the person and the illness.

## G

**BASIC INSTINCTS AND NEEDS**

1. **Holidays.** You may think “holidays, they are very nice but not **essential**”. There is a direct link between health and travelling, research shows. As long as the holiday **suits** the person. So they can be more important than realised.

The need to travel stems from evolutionary migration programming, which still exists today long after it became unnecessary, just like many other mental and physical functions. Even a “new” food can take 10,000 years for it to be fully accepted by our metabolism. This is why wheat / gluten is commonly intolerant, since it was introduced into “western diets” less than 10,000 years ago. There is almost no wheat intolerance in some eastern countries where wheat has been consumed for a much longer time.

Satisfying basic evolutionary instincts can be a tremendous health benefit. An illustration of the powerful therapeutic effect that can occur is the “camp fire experience”. If we sit by a log fire at sunset, near a river, a powerful calming effect can occur, when it connects with something deep within us, going back right to the roots of mankind.

**For CFS / ME sufferers**

One of the biggest problems is getting into a rut that is difficult to get out of. Fatigue can prevent holidays being taken, which in turn may cause stress and more fatigue, and in rare occasions lead to housebound or even bedbound situations. Careful incrementally increased outings will usually overcome this problem, but there is a **much quicker way** that can be tried. Have an **instant short break holiday**. Select a hotel (or a relative or friend who is accommodating) that is close enough for an acceptable journey. Travel as late as possible in the evening and go to bed as soon as practical. If travelling is difficult go by car, wear dark glasses and close your eyes and relax your mind. The improvement over the next few days can sometimes be quite rapid. Some people are so pleased to get out of their rut that they want to stay longer or use their improvement to try a better holiday.

2. **Sunlight.** Our metabolism is designed to receive far more exposure to sunlight than is available in northern or southern climates. Our furless skin, designed to be comfortable in the winter shows what climate the human species is designed for. Indoor lifestyles, clothing and air pollution also exacerbate the problem. **THE INCIDENCE OF ALL MAJOR ILLNESSES INCREASES WITH DISTANCE FROM THE EQUATOR!** This includes heart disease, cancer, stroke, multiple sclerosis and Alzheimer’s disease. The two reasons are the amount of skin exposure to **sunlight** and the number of **daylight** hours. Certain hormones and vitamins are produced in the body by sunlight and daylight, which have a profound effect upon our health, especially in the long term.

A carefully incremental routine of sunbathing can be very beneficial, even causing the skin to become self-protective against cancer. This is why in tropical climates, whether the population is dark or fair, huge amounts of skin exposure do not correlate with skin cancer rates. One of the main problems is when someone suddenly sunbathes excessively without protective cream after a long period of very little exposure. Otherwise sunlight and daylight hours should be maximised, with appropriate protection. In the home FULL spectrum (not broad spectrum) light bulbs can be helpful.

The old saying “early to bed, early to rise, makes you **healthy**, wealthy and **wise**” has turned out to be fact!

3. **Oxygen.** The oxygen concentration of air has gradually diminished over the millenniums so we are not getting the optimum intake that our bodies are designed for. Physical exercise is the best help, but if this is not practical, breathing exercises, oxygen producing supplements (e.g. “oxymoxy”) and various home oxygen devices may be helpful. These include:-

**Fresh Air Globe.** Around £50.

**Tranquil Sounds Oxygen Bar.** Around £300.

**Airnergy.** Around £3,000 depending upon the model.

The price reflects the oxygen output, effectiveness and specifications of the device.

As mentioned earlier, sufficient physical activity can reduce brain shrinkage by as much as **four times**. This is partly due to the extra oxygen intake.

4. **TLC.** It goes without saying that love and affection can be hugely beneficial to our health. The need varies from person to person, some people desiring highly affectionate relationships, whilst others desire little or no love and still live long, healthy lives. The problem is when the need for love is not matched with the person’s circumstances.

It is known that the lifespans of married people are up to 7 years longer than single people and the risk of dementia is far less. Those who are divorced or bereaved (i.e. not **used** to being single) fair the worst, as do men ,who may lead less healthy lifestyles than women when older. This shows the importance of companionship.

Satisfying basic human instincts and needs can be a vital part of a healing strategy.

## DOSES

The Recommended Daily Allowance (RDA) of supplements and drugs will depend upon the analysis of their condition, age etc. and can vary considerably from person to person.

<b>L-Dopa</b>	10 – 100mg	3 x day	
<b>Selegiline</b>	2 – 30mg	2 x day.	An incremental build up is necessary, starting 2-5 mg 1 x day. Normal dose is 5-10mg 2 x day. Avoid abrupt withdrawal.
<b>Modafinil</b>	50-200mg	1 x day	After breakfast only.
<b>L-Arginine</b>	500mg	1-3 x day.	
<b>L-Carnitine</b>	See ALC and ALCA,		otherwise RDA if taken alone.
<b>Acetyl L-Carnitine (ALC)</b>	200-800mg	2 x day	} Much more effective together
<b>Acetyl L-Carnitine Arginate</b>	650mg	2 x day	
<b>Alpha Lipoic Acid (ALA)</b>	200-1000mg	2 x day	
<b>Gotu Kola</b>	600mg	2 x day	
<b>Uridine</b>	100mg	2 x day	
<b>Phosphatidyl Serine</b>	10-50mg	2 x day	
<b>Phosphatidyl Choline</b>	500-1000mg	2 x day	
<b>Arginine Pyroglutamate</b>	150-500mg	2 x day	
<b>Glutamine</b>	250-2500mg	2 x day	
<b>Ashwagandha</b>	150-1500mg	2 x day	
<b>Folic Acid (Folate)</b>	200mcg / day	minimum	
<b>DMAE</b>	100-1000mg / day	taken AM	
<b>Zinc</b>	Usually included in multivitamin / mineral. Take RDA only 1-10mg / day. Excess zinc can cause neurological damage.		
<b>Omega 3</b>	Fish oil. Some fish oil contains fish <b>liver</b> oil which normally contains too much Vit A. Take Holland and Barrett Fish oil capsules or Seven Seas “High Strength” or “Extra High Strength” cod liver oil which both have Vit A removed. Seven Seas “ordinary strength” or “with added vitamins” both contain high amounts of Vit A. A minimum of 2000mg EPA / DHA per day is required.		
<b>DHEA</b>	2-25mg / day.		
<b>CoEnzyme Q10</b>	30-100mg / day.		
<b>Multivitamin / Mineral.</b>	A broad spectrum, but <b>low strength</b> multivitamin is best. A high strength may not be helpful. Too much Vit B6 or manganese can cause neuron damage. No more than 5mg / day B6 and 2mg / day manganese, long term. Should contain Folic Acid (Folate) minimum 200 mcg / day, and zinc 1-10 mg / day. <b>Lifeplan extravits, wide spectrum are good.</b>		
<b>Vitamin C</b>	1g-1.5g / day slow release , or 500mg 2-3x day. Vit C is slightly stimulant, so should not be taken in the evening, and not directly with Vitamin E (unless RDA which is very small)		
<b>Glutathione N-Acetyl-Cysteine (NAC)</b>	is the best dietary precursor to Glutathione. Take 500mg/day NAC.		
	Alpha-Lipoic-Acid (ALA) helps glutathione metabolism. See above.		
<b>Human Growth Hormone</b>	HGH itself is normally only available via injection, but <b>HGH releasers</b> can be very useful when appropriate.		

The RDA's mentioned can vary, depending upon individual cases, and should be advised by a qualified practitioner. Those not mentioned will be the dose stated on the container.

## RESOURCES

**Brain Bio Centre.** An excellent diagnostic centre, providing complimentary and conventional treatment. They offer a wide range of tests tailored to suit the individual.

Brain Bio Centre, Avalon House, 72 Lower Mortlake Rd, Richmond TW9 2JY.

Tel: 020 8332 9600. [www.brainbiocentre.com](http://www.brainbiocentre.com) [info@brainbiocentre.com](mailto:info@brainbiocentre.com)

**Genova Diagnostics.** The “Metabolic Acid Analysis” is one of a range of extremely useful tests done by them.

Genova Diagnostics, 356 West Barnes Lane, New Malden, Surrey KT3 6NB.

Tel: 020 8336 7750.

**York Test Laboratories.** These offer an IgG intolerance test for 133 foods, via a simple pin prick blood test kit sent in the post.

York Test Labs Ltd, York Science Park, York YO10 5DQ. Tel 0800 074 6185.

Several other UK labs do an excellent range of tests. Actual brain levels of neurotransmitters **can** be measured, but normally blood levels are used as indicators.

Some supplement suppliers which have wide ranging product lists are:-

**Revital** Unit D3, Braintree Ind. Est, Braintree Rd, Ruislip, Middlesex HA4 0E3.

Tel 020 8845 4118.

**The Nutri Centre** Unit 3, Kendal Court, Kendal Ave, London W3 0RU.

Tel: 0845 602 6744.

**Nutri Link** Nutrition House, Unit 24 Milber Trading Estate, Newton Abbot Devon TQ12 4SG. Tel 0870 4054 002.

**All Star Nutrition** is one of the few suppliers that sell Acetyl – L – Carnitine / Acetyl – L – Carnitine combination product, for those who do not choose a multi neuron-growth formula.

All Star Nutrition, Admin 1246 Maidstone, Kent ME14 9LG.

Tel: 0845 2871228.

**Holland and Barrett** and most health food shops, sell many of the most popular anti-ageing products.

If you have any difficulty obtaining products please contact me.

Cutting edge strategies for anti-ageing and cognition can be found on many websites.

## INTERACTIONS AND CONTRA-INDICATIONS

Although interactions are quite rare it is best to check a supplement or diet programme with a qualified health professional. Do not ask if they recommend a product or regime, since some doctors feel rivalry with complementary medicine. All you need to know is whether any interactions or contra-indication are known to exist.

**Thyroid hormones** may interact with the following products. They should either be avoided completely or separated by several hours. The main problem is usually a slight increase or decrease in thyroid hormones effectiveness, but check with a qualified health practitioner :-

**L-Tyrosine.**

**Alpha Lipoic-Acid.**

**Carnitine in any form.**

**Iron.**

**Calcium.**

**Ashitaba.** A mild coumarin.

**Vitamin B6** should be minimised in cases of peripheral neuropathy

**Alpha-Lipoic Acid.** Diabetics should take note that ALA can reduce blood sugar.

Pregnant women should normally avoid amino-acids unless advised by their health care provider.

People with rare EXISTING cancers, such as **pre-existing pigmented melanoma** should not take Phenylalanine or Tyrosine.

**Ashitaba.** This is a **coumarin** and therefore may be anti-coagulant, so may increase the effect of other anti-coagulant treatments.

Ashitaba may also help reduce blood pressure, so increase the effect of hypertension treatments. Coumarins may reduce the effectiveness of thyroid hormones.

**DHEA.** Do not take with hormone related cancers.

**Selegiline (MAOI-B).** It is potentially **dangerous** for MAOI-B's to be taken with MAOI-A's.

## **RECOMMENDED READING**

**Optimum Nutrition for the mind**, by Patrick Holford.

**The Alzheimers Prevention Plan**, by Patrick Holford.

**The Brainwash** “A Powerful, All Natural Programme to Protect Your Brain Against Alzheimer’s, Chronic Fatigue Syndrome, Depression, Parkinson’s and other Diseases” by Michelle Schoffro Cook.

This programme and any other extracts from [www.complementaryapproachestohealth.co.uk](http://www.complementaryapproachestohealth.co.uk) should be used in conjunction with a qualified practitioner.

**Dave Gamble**

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