

The Hypoglycemic Health Association

NEWSLETTER

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The NEWSLETTER of the Hypoglycemic Health Association is distributed to members of the Association and to Health Professionals with an interest in nutritional medicine and clinical ecology.

PLEASE NOTE: that the Annual General Meeting of the Association will be held half an hour before the start of the next meetings on 2 March 2002, and that copies of the Treasurer's report will be made available.

Mr Stephen McNaughton, now the Patron of the Association, has been made **LIFE** member in recognition of his services to the Association.

The Association wishes to thank **Miss Amitee Robinson** for setting up and maintaining the web site, as a result of which she has been able to win a competition conducted by the company KPMG Pty Ltd thereby receiving a grant of \$1,000. This grant will be used to give support and education to our members. Amitee has been made an Honorary member for her excellent services to the Association.

Members are advised that Dr George Samra is available at our meetings to answer any medical questions. Members are also reminded that any questions, comments, etc. will be answered on our Discussion Forum at: (<http://www.delphi.com/clinutrition>) Members are asked to forward their personal stories for publication either to the Discussion Form or to the Editor (jurplesman@hotmail.com) or fax: 02-9130-6247. They will be published in the Newsletters.

It would be appreciated if unpaid members could forward their membership fees to the Association as soon as possible.

Our Next Public Meeting will be at 2.00 PM
on Saturday, the 2 March, 2002
at **YWCA**
5-11Wentworth Ave, SYDNEY
and our guest speaker is
Dr George Samra
who will be speaking
on the subject of

***"The New Hypoglycemic Connection:
Including the Role of Hormones,
Minerals, Vitamins and Microbiotics"***

DR GEORGE SAMRA is of course well-known to our members. He is the Secretary of our Association as well as a pioneer in Nutritional Medicine. It is mainly through the personal effort by Dr George Samra that the concept of hypoglycemia is recognised as a major cause of ill-health and an important factor in human behaviour. Naturally, since the foundation of the Association the concept has broadened to include the whole range of clinical nutrition and ecology, as well as traditional medicine. Dr George Samra is now well-known among probation officers, the judiciary and legal profession in assisting them to determine to what extent a program of rehabilitation can prevent criminal behaviour. Dr Samra's surgery is located at the Total Therapies Medical Centre in Kogarah, practising with like-minded practitioners.

Dr Samra's chosen topic should prove to be very interesting.

Previous Copies of the Hypoglycemic Newsletter

Back issues of the Hypoglycemic Newsletters are available at the NSW State Library, Macquarie Street, Sydney. They are filed under NQ616.466006/1 in the General Reference Library.

Other libraries holding copies are: Stanton Library, North Sydney; Leichhardt Municipal Library; The Tasmanian State Library; The Sydney University; The University of NSW and Newcastle University. The Association will provide free copies in PDF format to any library upon request to jurplesman@hotmail.com

The Association also has a web site at: www.hypoglycemia.asn.au where there are some Newsletters in PDF format, as well as articles on clinical nutrition and self-help psychotherapy.

Books for sale at the meeting

Sue Litchfield: **SUE'S COOKBOOK**

Dr George Samra's book

The Hypoglycemic Connection

(now out of print) is only available in public libraries).

Jurriaan Plesman: **GETTING OFF THE HOOK**

This book is also available in most public libraries (state and university). By buying this book at the meetings you are supporting

Any opinion expressed in this Newsletter does not necessarily reflect the views of the Association.

DISCLAIMER: The articles in this newsletter are not intended to replace a one-to-one relationship with a qualified health professional and they are not intended as medical advice. They are intended as a sharing of knowledge and information from research and experience in the scientific literature. The Association encourages you to make your own health care decisions based upon research and in partnership with a qualified health care professional.

the Hypoglycemic Health Association.

The Newcastle branch of the Association are still meeting with the assistance of Bev Cook. They now meet at ALL PURPOSE CENTRE, Thorn Street, TORONTO. Turn right before lights at Police Station, the Centre is on the right next to Ambulance Station. For meeting dates and information ring Mrs. Bev Cook at 02-4950-5876.

Entrance donations at meetings

Entry donation is tax deductible and for non-members will be \$5, for members \$3 and family \$5. People requiring a receipt for taxation purposes will be issued when asked for it.

Donations for raffle

One way of increasing our income is by way of raffles. If any member has anything to donate towards the raffle, please contact Dr

George Samra's surgery at 19 Princes Highway, Kogarah, Phone 9553-0084 or Sue Litchfield at (litch.grip@bigpond.com).

At the meeting on the 1 Septemeber 2001, Lynne Grady won the lucky door price.

Fund raising activities

We need money, ideas, donations, bequests (remember us in your will), donations over \$2 are tax deductible.

Raffles

Conducting raffles is an important source of additional revenue for the Association. Raffle tickets are available at \$2 each or \$5 for three tickets at Dr George Samra's surgery. Items to be raffled should be on display at the surgery and will be raffled at the next public meeting of the Association.

The Hypoglycemia support group meets every 3 months at 19 Princes Highway Kogarah (1st floor Dr. Samra's surgery) at 1.45 p.m. The members of this support group meet every second Saturday of the months of February, May, August and November. The cost is \$ 1. Afternoon tea provided - family and friends welcome. For further information please telephone - Lorraine on 02-95209887 or Jeanette on 02-95259178

The Tasmanian Hypoglycemic support group meets at at the CWA (Country Women's Association), 434 Elizabeth Street, North Hobart. Phone Alison on 040 9966 385 A/ hours for more info (altennan@bigpond.com).

Media Release by *The Coeliac Society of NSW*

FOR EVERY KNOWN PERSON WITH COELIAC DISEASE THERE ARE PROBABLY FIVE TO TEN OTHERS WHO HAVE NOT BEEN DIAGNOSED

Symptoms: Fatigue, weakness and lethargy?

Vitamin deficiencies?

Flatulence, bloating, abdominal pain?

Diarrhoea or constipation?

Unexplained anaemia?

Unexplained early onset of Osteoporosis?

Coeliac Disease is a genetically based permanent intolerance to dietary gluten (found in wheat, rye, barley and oats). This leads to damage to the lining of the small bowel. Coeliac Disease can occur at any age.

While there have not been any recent studies undertaken in Australia to determine how common Coeliac Disease is, a recent study has been undertaken in New Zealand. Dr Bramwell Cook, a New Zealand Gastroenterologist, reports that the true prevalence probably lies somewhere between 1 in 100 and 1 in 200. What can be said is that for every known person with Coeliac Disease there are probably five to ten others who have not been recognised.

The symptoms can vary from one or more of the following: Anaemia - fatigue, weakness and lethargy - vitamin deficiency - diarrhoea, sometimes constipation - flatulence, bloating, abdominal pain - nausea and vomiting - mouth ulcers - bone and joint pain - miscarriages and infertility - delayed puberty - skin rashes - dental abnormalities - retarded growth in children - mood changes and irritability.

The diagnosis relies upon prov-

ing that the small bowel lining shows the typical damage (villous atrophy) of Coeliac Disease. This is done by endoscopy. A specific panel of blood tests that measure antibodies to gluten is available as a screening aide in the diagnosis.

Although Coeliac Disease cannot be cured it can easily be controlled by a gluten free diet for life. A gluten free diet should never be started before an endoscopy or blood tests, as it will interfere with establishing the correct diagnosis or may delay the diagnosis of another condition with similar symptoms.

Coeliac Awareness Week - March 13th to 20th

If you would like to know more about Coeliac Disease you can contact -The Coeliac Society of NSW Inc, P O Box 703, Chatswood 2057

Telephone: 02 9411 4100 Fax: 02 9413 1296

WebSite: www.nsw.coeliac.org.au

Natural Approaches to Infertility and Reproductive Problems

Melanie A. Koeman BSc. ND 2001
Jocelyn Centre for Natural Fertility Management, (02) 9369 2047

Contents:

- 1) Infertility
- 2) Preconception Health Care
- 3) Female Hormonal Balance
- 4) Male Infertility - role of free radicals
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1. Infertility

One in six to one in 15 couples experience difficulties conceiving, and unfortunately infertility is an area of health concern which is growing rapidly due to our modern diet, lifestyle and environment. Infertility may be seen as the tip of the iceberg, the same factors contributing to increased rates of miscarriage, malformations, and chronic health problems in our children and aging adults.

Unfortunately, the answer is not simply IVF or fertility drugs. Fertility is a reflection of our general health and vitality, the reproductive system influenced by the bodily environment in which it sits. It is also too complex to be dealt with in this short paper and so I refer you to an excellent resource - *The Natural Way to Better Babies* by Francesca Naish and Janette Roberts (Random House, 2000)

2. Preconception Health Care

Sperm take approximately 116 days to generate and eggs about 100 days to mature. This means that the health of the eggs and sperm which are responsible for creating new life will reflect the presence or absence of nutrients and good health, or toxins, or ill

health, in the parents during the 4 months before a conception takes place. Simply put, preconception health care involves consideration and provision of all the healthy factors for the eggs, sperm and embryo and the identification and removal of all those that are harmful. This is also the basis of infertility treatment. Healthy factors include organic food, B vitamins and folic acid, antioxidants and essential fatty acids, exercise and relaxation. Harmful factors include infections, alcohol, caffeine, cigarettes, drugs and medications, heavy metals and chemicals. Often a good detoxification program is in order using herbs such as St. Mary's Thistle, Dandelion root, Burdock and Garlic.

3. Female Hormone Balance

Ensuring healthy menstrual cycles occurs during the Preconception period, with the woman charting her cycle with temperature and cervical mucus readings. The charting allows for the identification of hormonal imbalances, especially inadequate luteal (post-ovulatory) phases. An inadequate luteal phase reflects poor progesterone levels which results in a poor uterine lining and increases the risk of an early miscarriage. Natural remedies that work well in this case are Vitex agnus castus (Chaste tree), B6 (250mg/day) and ground linseeds (1 Tablespoon/day). *For more details and guidance please see 'Natural Fertility' by Francesca Naish (Sally Milner Publishing).*

4. Male Infertility -Role of free radicals (reactive oxygen species) in male infertility

Excessive Reactive Oxygen Species (ROS) can have detrimental effects on sperm functions and may be a leading cause of infertility. (de Lamirande E. Gagnon C. 1995;10 (Suppl 1): 15-21) A study conducted by Aitken RJ, Irvine DS and Wu FC (Am J Obstet Gynecol. 1991;164:542-51) of 139 couples demonstrated that men with high levels of ROS generation had seven times less chance of achieving a pregnancy compared with men with low ROS. In another study, 16 out of 18 (88.8%) infertile patients had higher ROS corresponding with lower antioxidant levels compared to fertile controls. The authors state that disruption of antioxidant protection and increased ROS production are major factors in 'unexplained' male infertility. (Alkan I et al. J Urology 1997;157:140-3)

5. Importance of antioxidant nutrients in the treatment of male infertility

It is difficult to measure the effectiveness of one antioxidant in isolation from another because of cooperation between various antioxidants. However a number of studies have demonstrated significant benefits of nutrient supplementation for male infertility. Antioxidants are naturally present in semen. Infertile men have lower levels of a variety of antioxidant nutrients including vitamin E, selenium, vitamin C, betacarotene, lycopene, Co Q10 and glutathione. ---> P5



DIET FOR REPRODUCTIVE HEALTH

N.B. Individuals may have additional or different dietary needs- your Naturopath can advise.

(Also see additional information in *Natural Fertility*, *The Natural Way to Better Babies*, *The Natural Way to A Better Pregnancy* or *The Natural Way to Better Birth and Bonding*)

ALL FOODS TO BE FRESH AND ORGANICALLY GROWN/FED WHENEVER POSSIBLE
(higher in nutritional value, lower in toxins)

Do not overcook – Do not use microwave oven for cooking or defrosting

PROTEIN: You need an average sized serving (equivalent to the palm of your hand) of protein-providing food at least 2x day before conception and 3x a day during pregnancy. This should be food giving you either: 1) A PRIMARY protein, which comes from ANIMAL source, and is a COMPLETE protein (i.e. one which contains all the amino acids).

2) A combination of SECONDARY proteins, which come from PLANT source, and are INCOMPLETE proteins (i.e. they do not contain the full range of amino acids).

By combining TWO of the food groups below (within one meal or one day), you will have a COMPLETE protein source, as each group has a different range.

1. NUTS
2. GRAINS/SEEDS.
3. LEGUMES/PULSES

FATS. You need to avoid saturated fats, which will upset your PROSTAGLANDIN / HORMONE / NUTRIENT balance. This means heated and animal fats.

NO FRIED FOOD except stir-fry. Cook with minimal amount of olive oil (or sesame). These are monounsaturated fats, and will not saturate upon heating.

USE LOTS OF COLD PRESSED OILS ON SALADS (extra virgin olive or flaxseed). These oils are high in essential fatty acids if never heated. They should be kept out of light (in dark containers) & in the fridge (except olive oil). Add lemon / pepper / garlic / herbs to dressing.

AVOID BUTTER/MARGARINE. It saturates during processing and is also full of chemicals. Try avocado, banana, humus, nut spreads (if fresh & refrigerated & kept away from light).

PROTEIN PROVIDING FOODS

*****FISH** - 3 times weekly. Low in saturated fats, high in essential fatty acids, especially deep sea/ocean/cold water fish, which are also less polluted, for example mackerel, mullet, salmon, taylor, trevally & sardines. Avoid large fish, e.g. tuna, shark & swordfish (too high in mercury), crustaceans (often polluted) and raw fish (can contain bacteria). Fresh definitely preferable to tinned/frozen.

****POULTRY** - Trim the skin to avoid fats. Use certified organically fed ONLY (free range is not necessarily organic and may still be fed with hormones and antibiotics).

****EGGS** - are an excellent source of protein. Limit their consumption only if they cause gastrointestinal problems such as gas or constipation. Certified organically fed (see above).

***DAIRY** - Avoid cows' milk/cheese, as it creates mucus in tubes and malabsorption. Natural cultured non-flavoured yoghurt good. Goats' (or soya) milk/cheese preferred (avoid G.E. or high fat/aluminium/sugar brands of soya, keep consumption low). Avoid soft cheeses

***RED MEAT** - in moderation. Unless certified organically fed, avoid organ meats/offal/sausage/mince (or get the butcher

to mince on site). Organ meats contain high levels of pesticides/hormones. Avoid delicatessen meats (high in fats, offal content and toxic preservatives) and raw/uncooked meat. Trim all fats.

***** LEGUMES/PULSES/GRAINS** (see over for grains which have higher carbohydrate content than protein), Lentils/chickpeas/split/peas/tofu/tempeh (soya). (Fermented forms of soya preferred). Good plant protein (also contain carbohydrate). Must combine as shown. Good detoxifiers.

*****NUTS/SEEDS** -raw/unsalted/fresh (store in fridge, away from light and eat within 2 weeks or freeze. Nuts should not taste bitter). Use in stir fries, salads, pasta, dishes as a snack. No dried fruits (high in sugar).

CARBOHYDRATES

Keep consumption to moderate levels and choose low glycaemic carbohydrates where possible (most vegetables, pulses, whole (not refined) grains.) High glycaemic foods (e.g. sugar, white/refined grains) can disrupt hormones. Refined carbohydrates also leach nutrients from your body's stores which, in turn, increases your desire for these foods. The balance of protein to carbohydrate foods should be approximately 1:1 in volume.

VEGETABLES - LOTS EVERY DAY. Should make up minimum 40% of total food intake. Organic whenever possible. Wide variety, especially dark green leafy / red and orange / avocado. Eat both raw and cooked regularly.

RAW - Juices - try carrot/celery/beetroot as a base (great way of ensuring adequate vegetable intake).

Salads - use a wide variety of vegetables. Pale lettuce is not highly nutritious. Add chopped fresh herbs e.g. parsley & watercress. Potatoes must not be eaten raw.

COOKED - steamed/stir-fried/(dry baked). (Root vegetables require light cooking/grating/juicing for absorption) Do not cook or defrost with microwaves. Discard green potatoes (toxic).

FRUIT - 2 - 3 pieces daily, maximum (because of high sugar content). This includes fruit that is juiced, (dilute 50/50) though better eaten whole. No dried fruit. Organic and low glycaemic whenever possible.

GRAINS - Whole grain bread/rice/pasta/pastry only and organic whenever possible. (Green pasta may be white with dye added). **AVOID REFINED FLOUR PRODUCTS.** Read bread packets carefully and avoid those containing preservatives/additives. Grains provide limited protein compared to carbohydrate content

SUGAR - AVOID ALL SWEET THINGS (includes honey, sugar substitutes, undiluted fruit juices, cakes, biscuits, soft drinks).

ALCOHOL - AVOID. Foetal alcohol syndrome is traced to PRE-conception, with BOTH parents. It is toxic to the foetus and leaches nutrients.

BEVERAGES

COFFEE - AVOID. Related to fertility/pregnancy/foetal health problems, including miscarriage. Decaffeinated not recommended. Cereal based substitutes and Dandelion Root OK (check for added sugar).

TEA - 2 cups weak, naturally low caffeine (not decaffeinated) max daily. Green and herb teas preferred.

PURIFIED WATER - 8 - 12 glasses daily (or bottled). Mineral water OK occasionally. Unpurified tap water is high in many toxins and heavy metals which are concentrated, not destroyed, by boiling. Do not store in plastic.

SPICES/CONDIMENTS – Do not routinely add salt to your cooking/meals. If necessary use sea/rock salt to taste on individual foods, sparingly. Pepper and spices are OK (unless you are sensitive to them). Avoid any sauces containing sugar/salt/additives.

ACID/ALKALI balance should be OK if you eat lots of vegetables and only moderate amounts of animal products and

grains. See Natural Fertility or Better Babies for more information.

“JUNK” FOODS - Avoid fats/sugars/salt/additives. Read labels carefully.

CIGARETTE SMOKING is harmful to your (and your baby's) health.

PHYTO-OESTROGENS If suffering from endometriosis, fibroids or hormone imbalance, eat regular, moderate amounts of phyto-oestrogenic foods, e.g. soya (fermented forms preferred)/parsley/cucumber/whole grains and seeds.

EXERCISE - a varied programme of regular low impact aerobic exercise minimum 30 minutes 3-4 times/week. Rebounding particularly beneficial for health of reproductive organs. Yoga also excellent for all aspects of reproductive health.

TO HELP MAKE POSITIVE CHOICES - try an affirmation such as:- ‘I AM MAKING A POSITIVE CHOICE FOR MY HEALTH AND WELL BEING (AND THAT OF MY CHILD)’.

<---P3

Vitamin E - in vitro and in vivo studies have shown significant protection of spermatozoa from oxidative damage and loss of motility. Treatment of patients with vitamin E significantly decreased lipid peroxidation of spermatozoa and improved sperm motility. Eleven out of 52 treated patients (21%) conceived, with nine successfully giving birth, while no pregnancies were reported in the placebo group. (Suleiman SA et al J Androl. 1996;17(5):530-7)

Selenium - Nine infertile men were supplemented with selenium (200 mcg) and Vit E (500mg) for six months. At 4 months statistically significant increases were observed for sperm motility, percent live and percent normal spermatozoa. All parameters returned to baseline values during the post-treatment period. (Vezina D et al. Biological Trace Element Research 1996;53(1-3):65-83)

Vitamin C - there is a positive correlation between high ascorbic acid level and normal sperm morphology. Supplementation has been shown to increase the percentage of normal sperm.

Coenzyme Q10 - A significant association between Co Q10 con-

tent and sperm count and motility, and an inverse correlation between CoQ10 content and hydroperoxide levels and abnormal sperm morphology has been found in infertile men. Supplementation appears to benefit count, motility and morphology. (Alleva R et al. Mol Aspects Med 1997;18 Suppl:S221-8)

Zinc - essential for testosterone levels, prostate function, sperm count, motility, morphology and longevity, zinc is deficient in the majority of men. It is the key fertility mineral.

Recommended doses of nutrients for male infertility:

Vitamin E - 500 iu/day

Selenium - 200 mcg/day

Vitamin C - 1-3 g/day (with bioflavonoids)

Coenzyme Q10 - 50 -150 mg/day

B12 and folate - 500 mcg of each, plus a B complex

Zinc - 25 - 75 mg/day

6. Impotence

Only 5% of men affected by impotence seek assistance or advice from their doctor. Originally

considered a predominantly mental or emotional problem, it is now known that more than 50% of impotence cases are due to vascular (blood vessel) problems resulting from underlying atherosclerosis. The small vessels in the penis are similar in size to those found in the heart, and therefore impotence often develops with aging, as the heart and blood vessels succumb to the atherosclerotic process. Some of the best lifestyle advice includes - if you smoke, stop; exercise every day; if you are overweight, lose weight; avoid animal fats including dairy products. Nutrients and herbs that have been shown to be of benefit include:

Vitamin E - 500 - 800 iu/day (take care if you have high blood pressure and start with just 100 iu/day and build up 100 iu each week)

Coenzyme Q10 - 50 -150mg/day (may also help bring blood pressure down)

Arginine - 1 - 5 g/day (avoid if you are prone to herpes or cold sores)

Ginkgo biloba - standardised 50:1 extract, 120mg/day

Panax ginseng - standardised 5:1 extract, 200mg/day or 500 - 1000mg dried root/day

Treatment of Anxiety, Gambling and Phobias

by Jurriaan Plesman BA (Psych), Post Grad Dip Clin Nutr

This article has also been published in our web site at:
<http://www.hypoglycemia.asn.au>

We will try to show how best we can treat our selves of the debilitating afflictions of anxiety and phobias. If problems arise the assistance of a psychologist or counselor should be sought.

Anxiety and phobias have this in common that they are driven by the fear response. We can learn to be fearful of any object if it is accompanied with a negative experience, like an electric shock, or heat. This is how children learn to avoid stoves, heaters, hot irons, boiling water and other dangerous things. Fear is essential to our survival, when we think about the dangers of driving a car and making sure the brakes work properly. Such fears cause us to think of methods to overcome the threat. A soldier's survival in war may depend on how cautious he is. Many war heroes were in fact very cautious people.

Anxiety is closely related to this fear response. It can become associated with any neutral stimulus, if it is paired with a traumatic stimulus like the sensation of pain. However, by the same token this kind of problem solving may also lead to **obsessive-compulsive reactions** if the object or situation comes to haunt a person by senseless repetition of thoughts or acts in his attempt to reduce anxiety or guilt. Examples are **kleptomania** or the compulsion to steal something for which the kleptomaniac has no

use. The compulsive washing of hands for fear of becoming infected by germs is another example. This may be classed as "**making sure**" behaviours, such as compulsion to check whether one has closed the doors, water taps or windows, compulsion that everything is in its proper place. In all these acts there appears to be some attempt to reduce some internally generated metabolic or 'psychological' anxiety, unrelated to environmental events.

When the object of fear becomes less specific and a person cannot identify the cause of the fear response, then we speak of a **free-floating anxiety**. It is free-floating, because it tends to occur from one situation to another, not generated by external happenings but from within.

Anxiety attacks are usually due to an overactive autonomic nervous system which produces such physical symptoms as a rapidly beating heart, gastric disturbances, bowel disturbances, visual difficulties, cold hands and feet, tense muscles, particularly in the back and neck. These happen also to be symptoms of **reactive hypoglycemia**, and this should be considered the first candidate in the treatment of free-floating anxiety. Anxiety attacks are said to be caused by the rapid descending blood glucose concentrations typical of hypoglycemia.

Over time, tense feelings exhaust the immune system and the

person complains of fatigue and failing memory. Such symptoms may also lead to **chronic fatigue syndrome**.

Anxiety attacks may also follow **allergic reactions to food** items or environmental toxins and sensitivities. Often specific sensitivities tend to spread out over time to a wider range of substances in the environment as the immune system weakens further. Allergic reactions generalize to more and more substances.

Anxiety may also emerge from stressful social conditions, our workplace environment, problems in the home, worries about the future or stressful relations with loved ones, constant worries about children.

When blood sugar levels crash from high to low - mainly in response to stresses and to refined carbohydrates (sugars) or allergic reactions - the body produces adrenaline to convert stored sugar (glycogen in muscle tissues and liver) back into glucose. This prepares the body for action. But adrenaline is also a **fight/flight hormone**. Thus it is important to stabilize the blood sugar levels by having frequent or three hourly snacks (depending on how fast your reaction to sugar intake is). One way of providing a slow but regular release of glucose is by taking glycerine. Glycerine is a sweet tasting substance, obtainable from your chemist, that bypasses the pancreas and it is converted to glu-

cose in the liver, thus providing a slow release of glucose.

This should be considered a temporary measure until blood sugar levels settle down. The herb *fenu-greek* is also a glucose stabilizer as are many other herbs. Perhaps a herbalist can help you out there.

The aim in the treatment of hypoglycemia is to avoid these wild fluctuations of blood sugar levels by a natural diet, very similar to the diabetic diet. (See "The Hypoglycemic Diet" in the web site)

Continued exposure to these stresses may lead to *adrenal exhaustion* when the adrenals fail to synthesize the necessary stress hormones at the right amount and time.

The immediate nutritional treatment for adrenal exhaustion would be the adoption of the hypoglycemic diet and supplementing the body with the various coenzymes, vitamins and minerals such as vitamins B1, B2, B6, B12, folic acid, pantothenic acid (B5), C, zinc, magnesium and potassium - all involved with stress reactions. Hypoglycemia aggravates adrenal exhaustion, because erratic blood sugar levels drain stress hormones.

In addition to the hypoglycemic diet there are many antistress herbals which may be beneficial such as *Withania somnifera* (*Indian ginseng*, *Winter cherry*), also *Korean and Siberian Ginseng*, *Damiana*, *Gotu Kola 2500mg pd*, *Wood Betony*, *Skullcap*, *Vervain* and *Zizyphus*.

A herbalist or naturopath should be able to help you to choose the proper remedies.

The underlying causes of stress - nutritional, environmental, psychological, social - need to be isolated in the first place. If it is not possible to have regular holidays

from stress - in both the physical or spiritual sense - then we may need to look at our relationships with significant others, rearranging responsibilities in the household or the work place, and re-examining one's priorities and goals in life. These may all be sources of stress. To deal with these problems we need the various social and problem solving skills learned in the *psychotherapy* section in this web site. Familiarity with the psychotherapy course in the web site should therefore enable people to pinpoint most of the sources of their internal or social conflicts and how to deal with them. People with a high regard for the self, with a clear outlook on life, and an ability to assert themselves in a non-aggressive manner and able to resolve conflicts seldom experience anxiety attacks. Unachievable goals such as displayed in "**perfectionism**" is a major source of stress and anxiety. It is not only restricted to self-criticism, but often directed at others, causing social disharmony. Behaviour patterns prompted by avoidance of anxiety are sometimes classified as *Avoidance Personality Disorders* (APD). Leisure activities such as playing golf, fishing, sailing, bush-walking and bowling are instances when people find relaxation.

Other remedies may be regular periods of relaxation each day as explained below when we consider *relaxation therapy*.

Thus the treatment of *free floating anxiety* begins with the adoption of the hypoglycemic diet together with the antistress nutrients and herbs mentioned above, the elimination of allergies and other stresses in one's diet, health or environment.

This should then be followed by an attack on some psychological sources of stress, such as inner

conflicts and doubts about oneself, stemming from a negative self-image which has ramification in one's network of important relationships. Many of these stresses, leading to anxiety, can easily be resolved by some minor alterations in the way we react to people and situations, simply by studying the **PSYCHOTHERAPY** course in the web site.

Anxiety seeking behaviours - Gambling

Thus far we have considered behaviour patterns that aims at avoiding anxiety. There are behaviours that appear to seek the opposite, namely activities that are rewarded by an adrenaline rush. Just like a person who is addicted to coffee, which temporarily triggers a bursts of energy, so there are people who seek the thrills of *risks and competition* to mobilize an anxiety response as a reward. Possible mechanisms are that the adrenaline rush elevates blood glucose levels, which in turn raises insulin levels, which then facilitates the absorption of amino acids including tryptophan which leads to the reward of serotonin. Whatever the internal metabolic mechanism involved, no doubt the hypoglycemic condition may be implicated. Many *risk seeking* sports reward people with the needed excitement, such as parachute jumping, boxing, mountain climbing, car and motor-bike racing. These activities may be within the normal range, but some activities may become pathological and very self-destructive as when a person becomes addicted to *compulsive gambling*. A gambler competes with *luck*, which by definition is a rare event. Compulsive gamblers report the enjoyment of their adrenaline upsurge as the major element of addiction. It provides them with a needed high, usually followed by a bout of depression,

sense of hopelessness and guilt. These roller-coasters conform with the symptoms of hypoglycemia. In some individuals the desperation of paying off debts may lead to the selling of their homes, and in extreme cases have prompted them to commit armed robbery, or bank robbery. Unlike businessmen who seek to reduce risks at all costs, gamblers enjoy exposure to risks and the adrenaline rush they create. Gamblers may also be seen to live a **sheltered life**, when needs for excitement are stifled.

The gambling pigeon

Psychologists - called behaviourists - have another theory that clearly explains the power of compulsion in behaviour. This is based on studies that show that a certain behaviours can be reinforced by reward or non-reward. The latter leads to extinction of that behaviour. This can be illustrated by Skinner's experiments with pigeons in 1968. They in fact can be taught a **gambling addiction**, by a series of what is called a schedule of reinforcement.

Let us suppose a pigeon pecks at a red button, and is then immediately rewarded with food (a seed). Every time it hits that button it is rewarded with food. We can increase the rate of pecking by presenting food after say every ten hits of the button. This is called **an intermittent reinforcement schedule**. Note that the pigeon can maintain a rate of pecking of about 4,000 responses per hour for as long as 15 hours. Studies have shown that by reducing the number of rewards we increase the rate and number of pecks by the pigeon.

If we vary the intermittent reinforcement schedule, that is we reward the pigeon at **an average** of say fifteen hits, then we can increase even more the intensity and number of hits by the pigeon. Strangely enough it means that we

can make an organism respond more by reinforcing him less!! **A gambler has learned to respond in the absence of previous reinforcements!!** He has learned to **continue** to bet when his previous bets has been rewarded only a fraction of the time. Thus he has learned to be loser, a psychologically proven fact on which casinos and gambling organisations depend. It is interesting to speculate, whether the negative self-image is the consequence or the original cause of the gambler's disease.

Like an alcoholic, a compulsive gambler usually hits his **rock-bottom** - the red line beyond which he won't go - before he is ready to seek help in psychotherapy. The location of this red line, depends on his values system. "Where are his priorities?" His struggle with control over his behaviour - and over the demon of luck - is a major prop in his self-image.

As in alcoholism, there usually is an **'alcoholic wife'**, to whose controlling character he is strangely attracted. The gambler often satisfies the wife's need to control, and often both need to undergo therapy. But it is also this wife and children, who usually are the source of motivation to undertake this psychotherapy, because they often become major victims of his addiction. Again treatment should start with the adoption of the hypoglycemic diet, followed by a course of psychotherapy with a chief emphasis on the self-image and **"values clarification"**.

Phobias

Unlike free floating anxiety attacks, a phobia is a fear response to an identifiable object in the environment but in the absence of any real danger. They are called **phobic reactions**. Common phobias are **agoraphobia**, fear of open spaces, **claustrophobia** fear of confined spaces.

Some other strange-sounding phobias are **mysophobia** fear of dirt, **monophobia** fear of being alone, **arachnophobia** fear of spiders, **homilophobia** fear of sermons, **onomatophobia** fear of names, **melissophobia** fear of bees, **katelophobia** stage fright, **benolephobia** fear of sharp objects and **hydrophobia** fear of water to name just a few.

Phobias are sometimes difficult to treat, because the person is often persuaded to believe that it is a sign of weakness in one's personality. Thus he forces himself to confront this 'weakness' thereby unwittingly reinforcing the phobia.

Any object or situation can become the subject of a phobia. Most of these may have been acquired from a frightening childhood experiences, but some developed in adulthood. Sometimes the object of fear has been generalized, as in a case when a person has developed an unreasonable fear of all furry animals or furry things after an attack by a dog in early childhood. Or the fear response is generated as a result of word associations. Fear of white things may have become associated with the snow white collar of a minister of religion instilling purity and high standards of morality in one's childhood ridden with feelings of guilt.

Another possible and perhaps more plausible explanation for a phobic reaction is that an object may have been paired with the fear response during a free-floating anxiety attack.

Like free-floating anxiety attacks phobias are closely related to hypoglycemia and hence the first step in the treatment is the adoption of the hypoglycemic diet.

Agoraphobia

To explain the psychological treatment of phobias, we will discuss the treatment of agoraphobia as an example as to how most other phobias can be treated.

Agoraphobia should be seen as a separate, or perhaps an additional condition to hypoglycemia. I had a client who had severe hypoglycemia, crashing half an hour after ingesting refined carbohydrates (in her case milk shakes) AND agoraphobia or fear of open spaces. On many occasions she had tried and forced herself to leave the house, which may have aggravated her condition.

It is important never to force yourself to leave the house if you are anxious, because this could reinforce the fear response. You should only leave the house if you are totally relaxed.

Let us look at how a phobia can be treated.

Imagine a child frightened of water. This is hydrophobia. Psychologists use “***Systematic Desensitization***”, that is getting the child to relax by letting it play near or far away from the water. By gradually getting the child to play nearer the water (by gradually placing toys near the water for instance) it remains relaxed near the water. Very soon the child will play **IN THE WATER**, and you may now have to educate the child on some of the dangers of water. Technically speaking, what we have achieved is to pair a relaxation response with the object of the original fear response. This process takes place over a period of time depending on the severity of the phobia. The principle is to introduce the fear object ***gradually*** whilst in a state of relaxation. The response of fear has been replaced with the response of relaxation.

This technique can be extended to “***Imaginal Systematic Desensitization***” where a person’s mental image of the fear object is gradually introduced whilst in a state of relaxation. Here again we pair the fear object with the response of relaxation.

Thus in the treatment of agoraphobia, we must first learn how to relax in the house! This can be learned by mastering ***relaxation therapy*** at first as follows:

Sit and relax in an easy comfortable chair, close your eyes, and feel how heavy your body is, starting with your feet, gradually working up to your legs, your body, your arms, chest and head. Imagine that you are laden with lead and that you are sinking deep into the easy chair. Feel the pressure of your body against the cushions in the chair. Soon you should feel so relaxed that you cannot be bothered to get up and then enjoy the whole experience!!

Do this a couple of times until you can relax in a shorter period of time each time you sit down to relax.

Following a series of these exercises you should be able to relax in a fairly short period of time. These daily exercises alone should help you in free-floating anxiety attacks. The success of ***non-directive*** counselling is based on the fact that a person can relate traumatic experiences in an atmosphere of acceptance, understanding and relaxation in the presence of a counsellor, thus pairing anxiety arousing images with the relaxation response!

In phobias we are going to use your ability to relax by introducing images in your mind, ***whilst you are relaxed***, on similar principles.

Thus the next step is TO IMAGINE that you walk around the house whilst relaxed.

In a session of ***Imaginal Systematic Desensitization*** by a psychologist, you will be asked to lift your index finger, whenever you feel the first sign of anxiety. This is usually felt in the pit of your stomach or a tension in another part of the body. Each individual has a unique locus of such tension. You will be asked to recognize this sign as a first warning of anxiety.

In your imagination, walk around in the house, go to the kitchen, to the corridor, to the bedroom, to the laundry, to the front door. ‘*Oops*’ you feel a tension in your stomach when you imagine going to the front door. Walking to the front door could easily arouse the fear response and then you should lift the index finger indicating to the psychologist that the image of the door arouses fear. You may do this as well, although there is no real psychologist in the room. You are your own psychologist now! When you lift your index finger, the psychologist would immediately lead you away from the front door and guide you to a safer place in your home. Thus don’t go to places in your imagination that the first warning signs tell you may be dangerous.

This indicates that you get anxious, and immediately in your imagination return to the lounge room, the place of safety. Thus whenever you feel the first signs of anxiety you immediately return to the place of safety. Get to know this bodily warning sign, this is the first sign of the uncontrolled fear response! Never allow your autonomic nervous system to trigger an anxiety reaction because of your imagination! Gradually you will discover that you can leave the house and walk around in your garden in your imagination.

As an aside, some people may find it difficult to reach this state of relaxation, because they have been “**trying**” to relax. “Trying” implies “making an effort” which is the opposite of being relaxed. Trying to do anything at all, implies that you will fail to do whatever you are trying to do. Just relax!

Your exercises in relaxation should be pleasurable.

You will soon discover that you can remain relaxed by walking to the front gate *in your imagination*, or perhaps to the street in front of your house.

Now still imagining, make a trip into town, on the railways, bus stops and in shopping centres. The aim is to be able to walk into the street or anywhere you fancy in your imagination all the time sitting in the chair!!!! Remember to return home immediately into your chair whenever you feel the warning sign of anxiety in your stomach.

Repeat the relaxation exercises and imaginal trips at home over several days, even weeks if necessary, until you feel you have control over your autonomic nervous system. Here it should be said that individuals differ in their learning curves: some people are fast learners, others somewhat slower, but you all will get there in the end.

You are now ready to experiment *in vivo*, **in real life**, by walking to the door, into your garden, into street, always ready to return home when you start to feel anxious. My bet is that you won't feel anxious and that in fact you will experience a sense of relief and exhilaration.

When you have gained total control over your ability to relax and walk anywhere in your imagination, you will soon find that you can get out of the chair and walk out of the house. But remember, if you feel tension (in your stomach)

immediately return to the safety of your home and start all over again. Learning to respond in the correct way at the level of the autonomic nervous system requires repeated exercises, just as we learn to play the piano. Furthermore, we need to keep an eye on other causes of anxiety reactions when we are not on the correct diet!

If at this stage you still encounter difficulties, it would be wise to get help from a professional counsellor who is familiar with *Imaginal Systematic Desensitization*.

Car Phobias

I have been able to help car phobic people to drive a car. These are clients who have learned and know how to drive a car, may even have a licence, but have developed an abnormal fear of driving. This could have been exaggerated, by forcing themselves to drive a car under condition of extreme anxiety. They have been able to overcome these fears by *imaginable desensitization* by imagined trips whilst in a relaxed state. They visualized walking around a car in the middle of an empty paddock, getting to sit inside the car, then driving the car in the paddock - no fences or other objects - then introducing lonely country roads, then gradually introducing houses on the side of the road. When the client experienced the warning sign, there was always a side track leading back to an large empty paddock. Gradually more houses were introduced, then a dog or cat on the road, then a cyclist, then an other car in the distance, but fortunately he disappeared into a side road. You will have to have a vivid imagination, changing the scene immediately when the index finger goes up. Soon the client is driving a car in a busy city street, reversing his car for parking purposes....all in his imagination. Having done this several times the

client is now ready to experiment in real life.

This is another example of *Imaginal Systematic Desensitization*.

Stage Fright

Other scenes can be created for people with stage fright, a very common phobic reaction. We can start off standing at the back of a hall full of people, or a hall with only one person. The possibilities are infinite. Then in one's imagination we move the client progressively to the front, until he stands viewing a sea of faces staring at him. Imagining what people would think of you at this stage may point to a negative self-image - a useful tool of the “*paranoid situation*” as discussed in “Improving one's Self-Image”. Apart from that, it is still important to prepare your speech and practise this at home in a safe surrounding, before embarking on your speaking engagement to a large crowd in a real life hall.

This is an outline of the program to give you an idea how people overcome their phobias. It is like the hydrophobic child playing with his toys which are gradually placed near the edge of the water. There are other methods such as ‘**implosion**’, where a client is exposed to a fear object without an escape route. The theory is that by forcing a person to confront the object of fear, he/she learns from experience that the object is harmless. Many counsellors - among them myself - are reluctant to use this method on ethical grounds.

In summary: Both anxiety attacks and phobias are marked by an exaggerated fear response that derive from internal factors most probably related to a hypoglycemic reaction or a response to allergies. These need to be attended to first by adopting the hypoglyc-

emic diet and a program designed to avoid allergies.

If these attacks have taken place over a long period of time the possibility of adrenal exhaustion should be considered, which need to be treated with the hypoglycemic diet and special vitamins and minerals, plus antistress herbals as mentioned (i.e., *Withania somnifera*).

In free-floating anxiety attacks the person needs to have a careful look at some of the sources of stress in his/her social life, apart from internal factors. These may be related to the environment in the home or work place, relationships with significant others such as family members, partners, children, or to ambitions in one's career. These are usually centered around a poor self-esteem, and lack

of social skills in handling people.

The most common source of anxiety is "**perfectionism**" or the striving for unattainable standards of performance by the self and others.

Most of these sources of stress can be traced to a negative self-image - the core of our personality - and can be corrected by studying the **PSYCHOTHERAPY** course in our web site.

In "**anxiety-seeking**" behaviour a person is believed to be driven by an inner metabolic need for adrenaline, the energizing hormone, that can provide a high, just as a person addicted to caffeine derives 'pleasure' from the drug. Many 'risky' sports satisfy these needs. But addiction to adrenaline may be severely self-destructive in the case of compulsive gambling. The treat-

ment for this has common features with the treatment of alcoholism. **It is a question of finding a more satisfying life-style.**

Phobias are treated, 1) by learning how to relax (relaxation therapy), 2) and by gradually introducing the objects of fear in imagination, *whilst in a state of relaxation*.

Thus adopting the hypoglycemic diet and doing the daily mental exercises over a period of time will help you overcome the debilitating affliction of anxiety and phobias.

If these do not help, please consult a clinical psychologist.

FIBROMYALGIA: A REVIEW OF RECENT RESEARCH REVIEW

from *International Clinical Nutrition Review* October 2001, p151

Fibromyalgia is characterized by chronic (at least 3 months), widespread, musculoskeletal pain with multiple tender points, headaches, morning stiffness and fatigue. It is diagnosed on digital palpation with an approximate force of 4kg at eleven of eighteen specific tender point sites. These sites include the occiput, C5-C7 intertransverse spaces, mid trapezius upper border, origins of the supraspinatus, second rib, lateral epicondyle, upper outer quadrants of the gluteal, greater trochanter and the medial fat pad of the knee.

There is no definitive treatment for fibromyalgia, although many practitioners administer standard analgesics and low-dose antidepressants. It has been shown that there are decreased serum levels of serotonin and tryptophan and an increased density of serotonin receptors in patients with fibromyalgia. A review, however, of three trials using SSRIs concluded it is unclear whether they are beneficial for fibromyalgia. Other trials have been poorly conducted and so their results cannot be accepted.

As there is no specific medical treatment for fibromyalgia, many patients turn to home-

opathy, food and herbal supplements with magnesium and malic acid being the most popular treatments. Anthocyanidins, members of the flavonoid group, are also recommended. Anthocyanidins are generally recommended for the treatment of circulatory disorders, to increase intracellular vitamin C, to support collagen structures as well as to prevent the destruction of collagen. As it is possible that some of the symptoms of fibromyalgia may derive from poor circulation and problems with collagen, and because there is anecdotal evidence supporting the benefits of anthocyanidins in this condition, Edwards and colleagues, chose to study the effects of anthocyanidins at doses of 40, 80 or 120mg per day in the treatment of fibromyalgia.

The trial was a double-blind, placebo-controlled, crossover trial in which the 12 patients all received four treatments. The patients kept a daily diary recording the severity of their pain, fatigue and sleep disturbances. At the end of each treatment period of 4 weeks they were tested for the specific tender sites associated with fibromyalgia. They also completed a General Health Questionnaire, a scaled questionnaire designed to identify diagnosable psychiatric disorders.

The results demonstrated that anthocyanidins at a dose of 80mg per day showed a significant effect in the treatment of sleep disturbance and on the severity of fatigue (as assessed by the investigator). No effect, however, was seen on the primary

variables of pain and fatigue as recorded by the patients. Of interest is that 9 out of 10 patients who completed the trial also had symptoms of irritable bowel syndrome, while no patients were found to be clinically depressed. Some of the patients had food allergies. The authors suggested that fibromyalgia may improve in some cases with better management of diet. In conclusion, Edwards and colleagues found that this trial supports the use of anthocyanidins at 80mg per day to provide significant benefits for patients with fibromyalgia.

In an open pilot study of thirteen patients with fibromyalgia, the benefits of cerasomolcis-9-cetyl myristoleate (CMO) (a mixture of fatty acids derived from beef tallow), combined for this trial with sea cucumber and shark cartilage, was studied. CMO is classified as a food supplement and has been recommended for the treatment of rheumatoid and osteoarthritis. The CMO combination provided symptom improvement of pain, fatigue and sleep disturbance for five of the ten patients who completed the trial. Previous studies have found that in CFS, CMO reduces trans-9-octadecenoic acid (elaidic acid) and increases octadecenoic acid (stearic acid). It is possible that fibromyalgia patients have abnormalities in plasma lipid homeostasis similar to those in CFS, and that the CMO may have corrected these abnormalities in some of the patients.

In a third research paper, Merchant and Andre examined the benefits of the green algae, *Chlorella pyrenoidosa*, in treating 37 patients with fibromyalgia. This type of algae

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Edwards AM, Blackburn L, Christie S et al.

Food supplements in the treatment of primary fibromyalgia: a double-blind, crossover trial of anthocyanidins and placebo. **J Nutr & Environ Biol** 10, 189-199 (2000)

Edwards AM. CM0 (cerasamol-cis-9-cetyl myristoleate) in the treatment of fibromyalgia: an open pilot study. **J Nutr & Environ Med** 11, 105-111 (2001)

Merchant RE, Andre CA. A review of recent clinical trials of the nutritional supplement Chlorella pyrenoidosa in the treatment of fibromyalgia, hypertension and ulcerative colitis. **Alt Ther** 7(3), 79-91 (2001)

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