

# The Hypoglycemic Health Association

# NEWSLETTER

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**PATRONS: Dr George Samra &  
Steve McNaughton, BE (NSW)**

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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.**

Unfortunately, Vanessa Tomlinson was unable to deliver her lecture due to unforeseen circumstances. We have included instead an updated version of "**What is Hypoglycemia II**". The meeting was devoted to questions and answers on the psychological aspects of hypoglycemia. See "**Beating Anxiety and Panic Attacks**" page 7. There has been an increase of overseas visitors to our web site. Thus we are fulfilling one of the aims of our Association to educate the public and medical profession on hypoglycemia and its many physical and mental manifestations. But we still have a long way to go. A recent World Health Organisation (WHO) Global Burden of Disease Survey has estimated that mental disease, including stress related disorders, will be the second leading cause of disabilities by the year 2020. Also of late there has been a growth of medical research studies linking mental illness to hypoglycemia or prediabetic insulin resistance. For details please refer to "Research Evidence for Hypoglycemia" at our web site.

**Thus your continued support is vital.** Looking at our finances (see Sue Litchfield's report) we seem to just be keeping our heads above water. Were it not for some unexpected donations which *inter alia* are tax deductible, we would have to increase our annual membership fees. Donations from professionals would be much appreciated.

Our Next Public Meeting will be at 2.00 PM

on Saturday, the 6 September 2003

at **YWCA**

5-11 Wentworth Ave, SYDNEY

and our guest speaker is

**Roger French, Dip. Nutr.**

who will be speaking

on the subject of

**"Easing the Fear of Cancer"**

In his twenties, **Roger French**, was sick and tired of being tired and sick. This led him to abandon professional civil engineering and take up a career in Natural Health, which has included seven years as manager of the Hopewood Health Retreat at Wallacia, NSW, and the past 20 years as Executive Director and Health Director of the Natural Health Society of Australia.

Altogether Roger has been involved with Natural Health, for 35 years. His formal training in lifestyle is in the form of a natural therapies Diploma of Nutrition.

He keeps fit and well, and is a foundation runner in the City-to-Surf, having run in every race but one. Last year he covered the 14 kilometres in 76 minutes.

Roger recently completed a book which condenses under one cover the wisdom of the Natural Health Society's 42 years of experience with illness prevention. Its title is

***The Man Who Lived in Three Centuries - the secrets to his freedom from illness and early ageing.***

Roger's topic "Easing Fear of Cancer" will discuss in his words: "The mechanism by which cancer develops is basically free-radical damage to genes in the nuclei of cells. Roger will outline the causes of free radical damage and also the very powerful defences with which the body can prevent and repair this damage."

## 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 Sydney University; The University of NSW and Newcastle University. The Association will provide free copies in PDF format to any library upon request to [jurpman@hotmail.com](mailto:jurpman@hotmail.com)

The Association also has a web site at: [www.hypoglycemia.asn.au](http://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 II**  
is available at Dr Samra's surgery or PO Box 394, Kogarah NSW 2217. Fax: 612-9588-5290

Jurriaan Plesman: **GETTING OFF THE HOOK**

This book is also available in most public libraries (state and university). By buying

**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.

this book at the meetings you are supporting 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](mailto:litch.grip@bigpond.com).

At the meeting on the 7 June 2003, Naomi Wilson won the lucky door price. The raffle was won by Reg Grady.

### Fund raising activities

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

### Raffles

Conducting raffles is an important source of additional revenue for the Association. Raffle tickets are available at \$1 each or three tickets for \$2 at Dr George Samra's surgery. Donations for raffles would be appreciated. Items to be raffled should be on display at the surgery and will be raffled at the next public meeting of the Association.

**The Kogarah support group** meets every 3 months at 19 Princes Highway Kogarah (1st floor Dr. Samra's surgery) at 1.30 pm. The members of this support group meet every second Saturday of the months of February, May, August and November. The cost is \$2. 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.** For members in Tasmania if you want to form a group or meet people with hypoglycemia phone Alison on 040 9966 385 A/hours or for more info ([altenan@bigpond.com](mailto:altenan@bigpond.com)).

## NEWS FROM THE KOGARAH SUPPORT GROUP

Here are some practical tips, which has been discussed at our meeting:

**Cornflour** - If you can have corn, but not wheat, READ THE LABEL. Some brands of Cornflour have wheat in them also.

Farmland (Coles) have 100% corn products, marked "Gluten Free" in a yellow box. Check the section with ordinary flours, not just the diet section, for this product.

**Stevia** - The herb is excellent for sweetening cake and biscuit recipes. The powdered form is recommended, not the liquid. The powder can be purchased at Dr

Samra's office or at Health Food Stores. Each recipe requires only a quarter to a third of teaspoonful, so it lasts a long time.

**Going Into Hospital** - Ask for a "Diabetic Diet" and take some small snacks in for emergency use. If you are having an operation, tell the anaesthetist you are hypoglycemic and need any IV fluids to be saline only, NO DEXTROSE.

The next Support Group Meeting will be on Saturday, 8th November at 1.30 pm at Dr Samra's rooms (Upstairs) 19 Princes Highway, Kogarah.

For Further information and enquiries ring Jeanette 9525-9178 or Lorraine 9520-9887.

## Treasurer's Reprt

by  
Sue Litchfield

I am sorry that I did not write for the Newsletter for the last time. To cut a long story short Grahame and I ended up in Airlie Beach for over a month as Grahame had a job up there working on a German Production. The film shoot was one of the better locations. I even managed a little snorkelling and getting involved with the local people.

It was great to get down to the March meeting and to see so many familiar faces and also even better to see such a large attendance. This is very rewarding as the committee do put in a lots of time and effort to make these meetings a success, especially Reg and Lynn who have been providing the afternoon tea. I am sure if anyone

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# WHAT IS HYPOGLYCEMIA II

Jurriaan Plesman, B.A., Post Grad. Dip. Clin. Nutr.  
From our web site: [www.hypoglycemia.asn.au](http://www.hypoglycemia.asn.au)

**H**ypoglycemia means low blood sugar level. This term is used to describe a metabolic disorder, that may manifest itself in a variety of physical and 'psychological' symptoms. One must understand that glucose is a source of both physical (muscle) and mental (brain) energy. The brain, representing only 2 percent by weight of the body, has no energy stores of its own. It requires about 60 percent percent of the all available glucose in the body and consumes about 120 grams per days regardless of whether we are asleep or awake. About one teaspoon of glucose is available in the blood at any time. Many doctors believe that hypoglycemia is due to 'insulin resistance', which it shares with diabetes. see Robyn Cosford<sup>1</sup> As in diabetes, when a patient injects excess insulin, it causes the blood glucose concentrations to crash. This happens in non-diabetic hypoglycemia when the body produces too much insulin called hyperinsulinism. Consequently any extreme fluctuation in the supply of glucose to the brain will inevitably affect our emotions, feelings and personality. The symptoms of hypoglycemia may mimic and even cause many psychological and physical disorders some of which are shown in the following list in order of frequency and as reported by hypoglycemics;

*Nervousness, irritability, exhaustion,*

*Faintness, dizziness, tremors, cold sweats,*

*Depression, migraine headaches, insomnia, digestive disturbances,*

*Forgetfulness, mood swings, anxiety, aggression, violence, anti-social behaviour,*

*Sugar addiction, drug addiction and alcoholism,*

*Mental confusion, limited attention span, learning disability,*

*Lack of sex drive in women and men, lack of concentration,*

*Itching and crawling sensation on skin, blurred vision, nightmares,*

*Phobias, fears and neurodermatitis, nervous breakdown,*

*Bedwetting and hyperactivity in children.*

As will be clear later on, hypoglycemia, or low blood sugar level, is only one form of what Dr. **George Samra** in his book **THE HYPOGLYCEMIC CONNECTION II**<sup>2</sup> describes as The Hypoglycemic Syndrome.

He refers to the four most important symptoms: 1) Depression or moodiness, 2) tiredness, 3) memory impairment or poor concentration, and 4) history of sugar addiction. At least three of the symptoms should indicate the possibility of hypoglycemic syndrome.

The blood sugar level is controlled by the pancreas by means of two hormones; 1) insulin, which pushes blood glucose into body cells and so lowers the blood sugar

level, and 2) glucagon, which slowly raises the blood sugar level if it falls too low. Another hormone involved is adrenaline produced by the adrenal glands which may quickly raise blood sugar level in response to a crisis. When there is a overproduction of insulin, as is the case in hypoglycemia, the brain will be starved of its source of energy - glucose.

The proper test for hypoglycemia is a special **Glucose Tolerance Test (GTT)** designed by Dr George Samra and described in his book *The Hypoglycemic Connection II*.

Unlike a test for diabetes, Samra's GTT records the measurements of glucose levels after a load of glucose over time, usually over four hours taken each half hour. He is interested in the rate of variations - the rise and fall of blood glucose during the test. This enables the doctor to discern six types of hypoglycemic reactions in a GTT as described in his book.

There are several forms that the hypoglycemic syndrome can take and we will adopt Dr. Samra's classification;

## **Type 1, Relative Hypoglycemia.**

Following ingestion of glucose the blood sugar level rises unusually high (due to insulin resistance) and then suddenly drops. The rate of descent should be over 2.6mm/L (45 mg/100mL) in any hour, or

over 1.6mm/l (30mg/100mL) in any 1/2 hour.

**Type 2, Absolute Hypoglycemia.** This is any blood glucose recorded below the lower limit of 3.4mm/L (60mg/100mL).

**Type 3, Combined Hypoglycemia.** This is also known as 'Reactive Hypoglycemia'. Here the blood sugar level not only drops suddenly, but goes below the lower limit.

**Type 4, Flat Curve Response.** Where no blood glucose value is more than 1.3 mm/L (24mg/100mL) above the fasting level. This may be due not so much to a reaction to sugar, but a low metabolic rate. People with a Flat Curve Response should have their thyroid tested, for possible hypothyroidism. It is often indicated by low body temperature in the morning. If you measure your temperature before getting out of bed and you get a reading below 36.2 C. or 97.6 F. one should discuss this with your doctor. Vitamin B1 plays a role in the production of thyroxin, as does phenylalanine and tyrosine (the latter is the immediate forerunner of thyroxin). Thyroxin is also needed in the conversion of beta-carotene to vitamin A.

**Type 5, Fasting Hypoglycemia** where the fasting blood sugar level is below 3.4 mm/L (60 mg/ 100ml)

**Type 6, Cellular Level Hypoglycemia** This is energy starvation at the level of brain cells. The person may have a normal GTT but presents the same hypoglycemic symptoms. This may be caused by a dysfunction in enzymes involved with glucose metabolism, usually as a result of an abnormal zinc/copper ratio. Zinc is a coenzyme in the break down of glucose to simpler biochemical substances, be-

fore being used as energy inside brain cells. High copper levels depress zinc levels and vice versa.

Other coenzymes and vitamins are also involved in glucose metabolism inside the mitochondria.

You can also test yourself with a paper-and-pencil test for hypoglycemia with the **NBI** at our web site.

**ALLERGIES** are closely related to the hypoglycemic syndrome. Many asthmatics have improved their condition by adopting the hypoglycemic diet to be discussed later. Very often, when we adopt the hypoglycemic diet - by eating natural food - hitherto hidden allergies may emerge. Common foods, causing allergic reactions are cows milk, eggs, fish, crustaceans, legumes, grains and various seeds. These may all result in hypoglycemic symptoms. Food allergies often interfere with the proper absorption of nutrients in the intestines, thus causing vitamin and mineral deficiencies. Others obstruct the synthesis of neurotransmitters in the brain (such as serotonin), often resulting in 'psychiatric' disorders. Allergic reactions can be overcome by either avoiding the offending foods and/or by supplementation with special enzymes, vitamins and minerals. Depending on the severity of allergic reactions, these should be treated in consultation with professional nutritionists. Other factors that may be responsible for allergic reactions may be the Leaky Gut Syndrome, or liver dysfunction. See also Samra, Dr G. The Allergy Connection.<sup>3</sup>

**Coffee (caffeine) and cigarettes (nicotine) - and allergens - stimulate adrenaline production,** which raise the blood sugar level by converting glycogen back into glucose. This provides a 'high' to

hypoglycemics, who are then often addicted to these substances. This explains why we may be addicted to our allergies.

Food, drug and allergy addiction - and even hypoglycemia - over a long period of time may cause adrenal exhaustion, as the body has relied on adrenaline production to raise the blood sugar level. Adrenaline is a defence hormone against all forms of stress. Thus often the nutritional treatment of hypoglycemic syndrome must include nutrients to restore the exhausted adrenal glands.

In brief the **nutritional treatment** of the hypoglycemic condition consists of:

**1) Avoidance** of sugar, coffee, strong tea, nicotine if possible, refined carbohydrates, such as white bread, white rice, cakes and sugary drinks etc.

**2) High protein + complex carbohydrates snacks every three hours or sooner,** to provide a slow release of glucose, and to prevent the hypoglycemic dip. A high protein breakfast must be considered the most important meal of the day. Good sources of proteins are eggs, white meat as in chicken and fish. Eat plenty of green vegetables and fruits and the more varied the diet the better it is.

**3) Supplementation of diet with Anti-stress vitamin B-Complex tablets, including chromium, zinc + Vitamin C.**

A rule of thumb is: "*Is what you are about to eat nature-made or man-made?*" Nature-made food consists usually of complex carbohydrates and proteins, the kind of food that we were meant to eat. There are exceptions, such as sugary fruits; melons, honey, dates and bananas. These can be re-introduced into the diet after some

time in moderation.

When you change your diet suddenly, you may be left with low blood sugar levels, without the highs, causing depression, fatigue and worsening the symptoms initially. These are withdrawal symptoms, that should not last longer than a week or so. Nevertheless, these unpleasant feelings can be alleviated, by taking a tablespoon of *glycerine* mixed in milk or diluted natural fruit juice or better still in a glass of water three times a day. When glycerine is metabolised into “energy” in the liver, it by-passes glucose, and is therefore not recognized by the pancreas as sugar. Hypoglycemia is a stress symptom. This causes potassium to be excreted in the urine and salt to be retained. Adelle Davis suggests that the unpleasant feelings of hypoglycemia may be relieved by taking potassium chloride tablets. Avocado contains an odd sugar called mannoheptulose, which may actually depress insulin production. Apart from avocado there are many other herbs that can help regulate blood sugar levels. See [Research Evidence](#) at our web site.

### **What's in a name?**

As described previously, hypoglycemia means low blood sugar level. This is the common term used by people who suffer from the hypoglycemic symptoms. Unfortunately, this term causes immediate confusion for conventional doctors who understand hypoglycemia to be low blood sugar occurring in diabetic patients who have accidentally overdosed with their insulin injections.

However, if we consider the condition in terms of ‘insulin resistance’ the difference between diabetes and hypoglycemia is one of degree. In diabetes we have high blood sugar concentrations,

whereas in hypoglycemia we see wildly fluctuating sugar levels, depending on the severity of insulin resistance.

If you want to research hypoglycemia in the medical scientific literature, you have to look for terms like hyperinsulinism, hyperglycemia, insulin resistance, Syndrome X, diabetes and so on.

Many nutritional doctors use the term **Dysglycemia**. It is possible that in the near future the medical fraternity may agree on a term.

There is no doubt that the impact of hypoglycemia is underestimated by the community. ***There are studies to show that hypoglycemia is associated with a vast array of modern degenerative diseases, from atherosclerosis, arthritis, various bone diseases, heart diseases, in fact every organ found in the body.***

And there is much evidence that **hypoglycemia is a factor in mental illnesses**, not generally recognized by conventional medicine or psychology. See [Research Evidence](#) at our web site.

### **Candidiasis**

This condition is one of sensitivity to yeast in the diet occurring in foods such as bread, alcohol, mushroom and malt, as well as to yeast germs which normally live in the intestines, particularly candida albicans. Approximately 25 percent of hypoglycemic patients suffer with candidiasis. The symptoms are almost identical and are mainly tiredness, vagueness, poor concentration, poor memory and depression. People with candidiasis need to follow the rules recommended for hypoglycemics but must also avoid yeast foods and in most cases do better with antifungal agents such as Nystatin prescribed by the doctor as well as acidophilus capsules obtainable from health food stores.

### **Chronic fatigue syndrome**

Other names include ME or myalgic encephalomyelitis or the yuppie flu. Severe fatigue is a common feature of CFS. This disease is becoming more common and many doctors regard it as predominantly a psychological condition. Some of the sufferers do have hypoglycemia and candidiasis and these can be treated mainly with diet and supplements. Dr Samra and other doctors regard this condition as a weakness of the immune system which has developed as a consequence of modern medicine as well as environmental pollution. Defying Darwin's laws of nature, these days even people with weak constitutions live to become adults and do reproduce. This is one theory; others include the development of CFS as a result of exposure to antibiotics over some years. Again others believe the disorder has resulted from pollutants in the environment, including petrochemicals, lead, mercury and even fluoride in our drinking water.

### **The Serotonin Connection**

One obvious reason for the development of hypoglycemia and diabetes is our modern lifestyle with easy access to manufactured foods laden with sugar. Our sugar consumption has increased exponentially over the last sixty years. Much of it is promoted by the fast food industry. Sugar is addictive and helps to boost the sale of food products.

But there is another mechanism that may have contributed to excess sugar consumption.

Studies have shown that psychological stress produces stress hormones, such as cortisol and adrenaline, that may interfere with the synthesis of a neurotransmitter, serotonin. This is why we have included a self-help **PSYCHO-**

**THERAPY** course, that will help people deal with stress in a more effective way.

**Serotonin** is the main 'feel-good' neurotransmitter in the brain. An imbalance of serotonin in the brain can cause endogenous depression. Doctors usually prescribe Selective Serotonin Reuptake Inhibitors (**SSRIs**) for endogenous depression. These drugs increase serotonin by blocking its reabsorption in the brain and so may reduce depression. The body produces serotonin from tryptophan, an essential amino acid (protein unit) found in food, such as soya protein, cottage cheese milk and many others. See **Rich Sources of Nutrients** at our web site.

The absorption of tryptophan from food has to compete with the absorption and digestion of other amino acids - such as phenylalanine. Most amino acids (including glucose) - but not tryptophan - are transported into cells for utilization via the action of insulin! ***The absorption of tryptophan for conversion to serotonin can be sped up by consuming refined carbohydrates, such as sugar.***

Increased sugar consumption has the effect of triggering the release of insulin from the pancreas. This helps to absorb all the amino acids (including glucose) - but not tryptophan - leaving tryptophan free for absorption.

*Unfortunately, people who are depressed may be inclined to increase their sugar consumption. This will speed up absorption of tryptophan for conversion to serotonin with the help of vitamin B6 and magnesium and presto they feel happy!!!* But this may precisely lead to 'sugar addiction' and hypoglycemia!

Many depressed people, including those with an addiction prob-

lem have been found to have a history of sugar-addiction.

A high sugar diet, however, will cause the body to 'down-regulate' receptors for insulin in the membranes of cells. This means the cells will fail to respond to normal levels of insulin and eventually show "**insulin resistance**".

The body will try to compensate for this through what is called the hypothalamic-pituitary-adrenal axis (the **HPA axis**). This means in response to the perceived energy starvation by the hypothalamus in the brain, a message is sent to the adrenal glands to secrete **adrenaline** into the blood stream. This hormone functions to convert glycogen stores in the liver and muscles into glucose, so as to quickly raise blood glucose levels. But adrenaline is also the fight/flight hormone readying the body to face the dangers of life by pumping energy into muscles and the brain. *This panic hormone is also responsible for the myriad of hypoglycemic symptoms, such as tremble, shakes, mood swings, depression and confusion.* Some people have learned that taking sedating drugs such as alcohol, marijuana or benzodiazepines will temporarily give relief to these symptoms. But these can lead to addiction. See: **The Serotonin Connection** at our web site.

***So we see that there is more to hypoglycemia than meets the eye.***

—O—

See also:

[Treatment of Drug Addiction](#)

[Rich Sources of Nutrients](#)

[Research Evidence for Hypoglycemia](#) at our web site:

<http://www.hypoglycemic.asn.au>

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<sup>2</sup>) Samra, Dr George (2003), The Hypoglycemic Connection II, One Stop Allergies, Fax (612-9588-5290), PO Box 394, KOGARAH NSW 2217, Australia

<sup>3</sup>) Samra Dr George (2003), The Allergy Connection: Food and Disease Paradigm, One Stop Allergies, Fax (612-9588-5290), PO Box 394, KOGARAH NSW 2217, Australia

## **BEATING ANXIETY AND PANIC ATTACKS**

by

*Jurriaan Plesman, BA (Psych), Post Grad Dip Clin Nutr  
From our web site: [www.hypoglycemia.asn.au](http://www.hypoglycemia.asn.au)*

The mystery of having these strange anxiety attacks coming from nowhere can be explained by a sudden secretion of adrenaline into the blood stream.

**Adrenaline** is a hormone that converts glycogen [stored glucose (sugar)] back into glucose in order to feed the brain. When your body is suddenly deprived of glucose, causing brain starvation, adrenaline kicks in to bring these levels up again as soon as possible.

*Thus the question is why these unstable blood sugar levels?*

When we suffer from **insulin resistance** it means that the body's cells do not respond properly to

insulin that functions to control blood sugar levels. Insulin transports nutrients (including glucose) across cell membranes. With insulin resistance blood sugar level rises with the result more insulin is pumped into the system.

This is called **hyperinsulinism**. With so much insulin we now have a crash in blood sugar levels to low levels, that the brain interprets as brain starvation.

Now the brain sends a message (hormone) to the adrenal gland to pour adrenaline into the system to raise blood sugar level quickly.

*It is excess adrenaline that is responsible for the sudden anxiety attacks* coming from within the body. Thus anxiety is a fear

response without an external object of fear also known as 'floating anxiety'.

Very often the mind invents an object by a process that psychologists call '**reverse conditioning**', whereby any random stimulus in the environment is paired to a fear response. This can be demonstrated if we inject a rat with adrenaline and it will develop a fear at any innocuous object in its cage. It might even bite you.

Thus if you have an anxiety attack and you happen to be in a lift, then the lift may become a trigger for anxiety at a subsequent event. This **Reverse conditioning** or the pairing of an external stimulus with a fear response may be seen as the

mechanism by which a person develops a **phobia**. That stimulus then becomes the trigger for the fear response.

When an anxiety is paired with a recurrent idea which then functions as a stimulus to that response, this may become an **obsessive idea**. The idea that we may not have closed the doors properly may result in a **compulsion** to check the doors. Similarly, if the fear reaction is linked to a negative self-image, the latter may trigger stage fright (an anxiety response) as when we have to give a speech before a large audience.

Psychologists may help a patient to overcome this reaction by means of **systematic desensitization** whereby the patient first learns to relax by means of "relaxation therapy", which is then paired by the gradual introduction of the object of a phobia. This is fully explained in. This technique is fully discussed in an article at our web site: "**Anxiety, Phobias and Gambling**".

**TREATMENT: Go on the hypoglycemic diet and do a Psychotherapy course!**

The hypoglycemic diet will stabilize blood sugar levels and insulin levels. The brain should be fed a steady supply of glucose and should not need to send panic (stress) hormones to the adrenal gland to get more glucose.

The psychotherapy course will help to break the link between a negative self-image and fear response. It teaches the client to handle life stress situations in an more effective way.

**Psychological stress causes stress hormones to interfere with the synthesis of serotonin**, and hence a life with less stress allows the body to produce serotonin natu-

rally.

If you are hypoglycemic, which can be tested you are likely to deplete your magnesium levels, which in turn increases the lactate to pyruvate ratio, also found to be responsible for anxiety. Thus it may pay to increase your magnesium intake. *Buist RA 1985 mentioned in Werbach 1991, 53.*

You can have yourself tested with a special **Glucose Tolerance Test (GTT)** designed by Dr George Samra and described at our web site in the section of ARTICLES.

An alternative test is a paper-and-pencil questionnaire called the **NBI** - also at the web site.

If you are on medication for anxiety, you cannot withdraw from drugs except with the help of your doctor. Receptors for neurotransmitter may have been damaged and takes a while to rebuild. The hypoglycemic diet helps you to withdraw comfortably from medication. It also helps to avoid any stress situation that can trigger the roller-coaster of stress hormones.

Hence it is important to do a course of **PSYCHOTHERAPY**. One such course is available at our web site.

This will help you to deal with inevitable stresses in one's personal relationships, bosses, work situations etc. There are many other activities that will reduce stress, such as regular exercises, walking your dog, listening to classical music, do yoga, meditation, in fact any enjoyable activity that does not produce stress hormones.

Please discuss with your doctor for a plan to withdraw gradually from your medications whilst you are on the hypoglycemic diet and doing the **self-help PSYCHOTHERAPY course**.

**Sue Litchfield Continued from page 2**

out there would like to volunteer to make a cake or biscuits that would be very much appreciated. If you could also send me a recipe I will print it in the newsletter.

Our last financial year has been and gone and we managed to keep our heads above water yet again. The reason being due to the very generous donations we have had during the year and also we now have 3 more life members whom I am sure will have a very long and happy association with us. As a result of all this we will be able to leave the subscriptions the same for the next year. More about that later on in the year.

Also there is good and sad news this month. The sad news is that the Victorian HYMAG group has disbanded so all those members of that group are more than welcome to our group and if any of you require any assistance please feel free to contact me or one of the committee and we will do our best to accommodate you needs. The good news for our group is that when the group was disbanded they had \$500.00 in their bank which the group very generously passed onto our group. Many thanks Eleanor! This money will be used by providing a support to our members, especially new members, because we all know how difficult it is when we are first diagnosed. I know I always look forward to all the emails that come in from various members that are seeking support in the form of recipes, diets etc please keep them coming!

While on the subject of thanks I would like to thank my niece Amitee Robinson for all the time and effort she has put into updating our web page. Please have a look at it as there is a whole wealth of information now on it and also thanks Jur for all his effort as we now have had over 40,000 hits which is a credit to both Amitee and Jur.



# *Dr George Samra's Radio Interview with Larry Emdur*

*This is an interview conducted on the 19 June 2003  
by Larry Emdur of the 2UE Radio Station with  
Dr George Samra discussing his book*

## **The Allergy Connection: Food and Disease Paradigm.**

**Larry Emdur:** According to Dr George Samra, the patron of the Hypoglycemic Health Association of Australia, it is time to throw away your medical kit and start looking at exactly what you are eating. Dr Samra has written a book *The Allergy Connection*, which looks at the link between chronic illness and the food we eat. He calls it the food and disease paradigm. This is very interesting I have him on the line, Dr Samra.

What is the food and disease paradigm?

**Dr George Samra:** A paradigm is a way of thinking, the food and disease paradigm is really a new way of thinking about chronic illness, linking food with symptoms. There is a relationship between food and chronic illness. Really the relationship is one where the foods that cause chronic illness have a common pattern. This book shows up that common pattern.

**Larry Emdur:** OK, now we all know that food, such as dairy products, citrus fruits and even wine can produce allergic reactions.

**Dr George Samra:** Absolutely, they are common ones.

**Larry Emdur:** What's new in your book and what will it tell us?

**Dr George Samra:** I suppose we are really trying to get patients and doctors to use foods as a first line of addressing chronic illness. Hoping for doctors to incorporate this in their mind-set of how they treat things. For example, when somebody comes in with migraines, especially bad migraines, instead of just using drugs and juggling drugs, a food change often makes a dramatic difference to patients. The most common foods causing migraines and headaches are chocolate, oranges and peanuts.

**Larry Emdur:** Alright, now I know what's my problem! Saves me a trip to the doctor.

**Dr George Samra:** I hope so, we hope we save many trips to the doctor. A lot of suffering can be avoided by just getting the food right for a lot of people. That is not to say that we should throw away our drugs. But certainly, this way of thinking, changing by trying foods first in chronic illness has

the potential for cure for a lot of people. Certainly, the less reliance on drugs and all the nasty side effects that drugs have in short term and long-term usage.

**Larry Emdur:** Are they the main advantages of introducing such a diet, that allows you to side step all those side effects?

**Dr George Samra:** Those side effects for drugs for arthritis can cause stomach ulcers and osteoporosis, and all sorts of nasty thing Larry. It is very much worthwhile to give diet a go.

**Larry Emdur:** Now let me run through some common problems here and I would like to ask you the common triggers for them. Because these are the more general ones and probably the ones that affect most of us. For instance, you suggested migraines and you suggested that chocolate may be a trigger.

**Dr George Samra:** Chocolate is on top of the list. It includes cola drinks. That has the cola bean, that is very much like the cocoa bean and they are cousins. Oranges include orange juice, mandarins, marmalade, and all the foods with orange in them. Peanuts include

peanut butter and sate sauce. Also such foods as green beans and peas, MSG, number 612 and cow's milk protein concentrate, things like cow's cheese, yoghurt and the like.

**Larry Emdur:** Some of these are obvious and some others are quite well hidden aren't they?

**Dr George Samra:** Well for a lot of the doctors, none are obvious. When somebody says I get a headache every time I eat chocolate, many doctors just don't hear that and would say: "That's very interesting". The logical thing to say is "Well don't eat chocolate".

**Larry Emdur:** What would be the trigger for eczema, say?

**Dr George Samra:** Well, there is an interesting overlap with these. All sorts of foods such as chocolate, peanuts and oranges are involved with eczema as well. Certainly cow's milk, dairy is high on that list.

**Larry Emdur:** What about arthritis?

**Dr George Samra:** The top four are, tomatoes, potatoes, beef and veal and oranges.

**Larry Emdur:** Depression?

**Dr George Samra:** Very interesting, sugar comes right up at the top of the list, and that is strange because people think that sugar gives them a lift. And it does, sugar gives you a lift, but then you get the let-down. Glucose or blood sugar is the only petrol the brain can use normally, so when people eat sugar they get a mental lift, but then they get a let-down and the let-down is more powerful than the lift. With depression also yeasts in foods, such as vegemite, mushrooms and beer. All foods that are yeasted such as many breads. You can get yeast-free bread this days.

**Larry Emdur:** What about weight gain? I suppose there would be a natural crossover there.

**Dr George Samra:** Yes there is. Sugar, honey and glucose are a part of a list of foods to be avoided. People have to avoid drinking calories. In nature if you are a cave-man, you would be drinking water. Seventy percent of your body is water, and it would make sense that you should not be drinking calories. People, these days drink orange juice, and cola drinks, milk and all sorts of beverages, such as alcoholic and spirits that are full of calories. Your body only needs water.

**Larry Emdur:** We hear a lot about cavemen today. Cavemen are very healthy until they are 35 and when they are eaten by a dinosaur.

**Dr George Samra:** At least the dinosaur would not get indigestion!

**Larry Emdur:** But what about a condition such as arthritis or depression, and say it runs in the family, can a diet change that?

**Dr George Samra:** It has a chance of changing that. This is what it is really all about, not relying on drugs and giving food a chance. People with arthritis in the family would do well to avoid oranges, tomatoes and potatoes, may be once a week instead of every day.

**Larry Emdur:** Doctor, the book is out already?

**Dr George Samra:** It is in most book shops. It is distributed by Gary Allen Books in Sydney and people can chase Gary if they cannot find it in book shops.

**Larry Emdur:** Very interesting. This is Dr George Samra talking about his book **The Allergy Connection**. Thanks for you time Doc.

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## ***Insulin Receptors in the Brain***

Department of Endocrinology, Royal Children's Hospital, Parkville, Victoria, Australia.

In order to identify likely sites of action in insulin in rat brain we have used the technique of in vitro autoradiography and computerized densitometry to map, characterize, and quantify its receptors in coronal and sagittal

sections. A discrete and characteristic distribution of insulin receptor binding was demonstrated, with specific binding representing 92% of total binding. Displacement and specificity competition curves in olfactory bulb are typical for authentic insulin receptors, and computer analysis indicates a single class of binding site with a dissociation constant (Kd) 0.48 nM for choroid plexus and 0.44 nM for olfactory bulb external plexiform layer. Insulin receptor density is

maximum in the choroid plexus, and high in the external plexiform layer of olfactory bulb. Structures of the limbic system and hypothalamus reveal moderate to high insulin receptor density, particularly the lateral septum, amygdala, subiculum, hippocampal CA1 region, mammillary body, and arcuate nucleus. Moderate insulin receptor density occurs in regions of cerebral cortex and cerebellum, and moderate to low binding occurs in discrete brainstem and midbrain

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# *Recipes*

*sent in by members and compiled by*  
*Sue Litchfield*

The recipes for this newsletter have all been sent to me by **Jeanette Bousfield, Lorraine Smith and Linda Buckthorp**, the latter all the way from Mexico. It is great to get a few different recipes and ideas. If there is anyone who has a favourite recipe or even a few tips

PLEASE do send them in who knows your recipe may end up on the web page as the recipe for the month!

## **HANDY HINTS**

To bulk up rice flour mixture add a maximum of 1/4 teas Guar Gum

If using a fan forced oven use a lower heat e.g 30 deg less

Adding 1-2 tabs of glycerine to cake mixture will result in a moister cake and also act as a natural preservative

## **WALNUT SURPRISE**

2 eggs  
3/4 cup Wholemeal S.R. Flour  
1 cup Chopped walnuts  
1/2 cup sultanas  
1/2 cup desiccated coconut  
1/2\_ teaspoon cinnamon

Beat the eggs until light and frothy. Combine the remaining ingredients and add the beaten eggs. Mix well  
Shape into small balls and Place on a greased tray  
Bake at 180 degrees C. for 15-20 mins

## **CARROT CAKE**

BOWL 1 mix well together  
3 Beaten eggs

1 teaspoon cinnamon  
1/2 teas Stevia Powder  
1/4 Cup Canola Oil or oil of choice  
1 tab glycerine  
2 grated medium Carrots  
BOWL 2 mix well together  
1/2 cup Rice Flour 1 cup Soy Flour ( Debited for preference)  
2 1/2 teas Baking powder  
1/2 cup slivered Almonds or chopped Walnuts

1 grated raw apple maybe used if preferred

Combine the 2 bowls. Mix well. Pour into well-greased loaf tin. Bake 180 C deg

(150 Fan forced) for approx 40 mins

Adding the apple will help to make the cake moist also this cake will freeze

## **GLUTEN FREE SCONES**

1 1/2 Cups rice flour  
2 tabs margarine  
3 teas Baking Powder  
150 mils milk water or liquid of choice

1/2 teas Stevia (optional)  
Rub margarine into the combined dry ingredients. Lightly mix in the liquid

Roll out to about 1 cm thick and bake in hot 210 deg (190 Fan forced) 7-10 mins

Serve with a sugar free jam

## **AGUA de HORCHATA (RICE WATER)**

1 cup Cooked white rice  
1 litre water  
1 teas Cinnamon

1 teas Vanilla 1 cup milk or substitute

Sweetener to taste (Recommend Pear concentrate)

Blend all the ingredients together and refrigerate till ice cold and serve

## **BBQ MARINADE FOR CHICKEN /BEEF**

For 1 kilo of chicken or beef use This has an oriental twist and is great for chicken wings or skirt steak

1/2 cup (must use as is best) Kikkoman Soya Sauce

1/2 cup sugar free Apple Sauce  
3-4 cloves crushed garlic

Mix all the ingredients and place in a thick plastic bag ( tied with a firm knot!!.)

Marinate for 3-4 days turning the bag daily to mix up all the meat  
Drain and BBQ

## **SUNFLOWER BUTTER**

Roast the required amount of Sunflower seeds in a moderate oven shaking occasionally

till crispy. When cool grind in a coffee grinder or blender till fine add salt to taste and

add olive oil to make a paste. This is good with Rice cakes.

Thanks *Florence Anderson* who is a new member from Norfolk Island

structures. Insulin binding in the pituitary gland is greatest in the anterior lobe, with clear distinction from intermediate and posterior lobes. The circumventricular organs and the thalamus show low insulin binding. We conclude that insulin receptors are widespread throughout rat brain, with concentration in regions concerned with olfaction, appetite, and autonomic functions. The distribution is distinct from other neuropeptides and not related to either vascularity or cell density. A common feature of regions rich in insulin receptors is that they contain dendritic fields receiving rich synaptic input. Whether insulin plays a specific neurotransmitter or metabolic role in these sites remains unclear, but these studies have provided detailed information on potential sites

action of insulin in the brain, and will allow further studies to examine insulin receptor function in specific brain regions.

Werther GA, Hogg A, Oldfield BJ, McKinley MJ, Figdor R, Allen AM, Mendelsohn FA.

Localization and characterization of insulin receptors in rat brain and pituitary gland using in vitro autoradiography and computerized densitometry. **Endocrinology. 1987 Oct;121(4): 1562-70. PMID: 3653038**

Studies re Alzheimer's Disease."the hippocampus, hypothalamus and olfactory bulb--the three areas where the insulin receptors are most dense"

Holden RJ, Mooney PA. Interleukin-1 beta: a common cause of Alzheimer's disease and diabetes mellitus. **Med Hypotheses. 1995 Dec;45(6): 559-71. Review. PMID: 877105**

### Publicity Officer

The Association is looking for a person with a computer and internet access who is willing to become our Publicity Officer (PO). The aim is to advertise our meetings in local Newspapers. It is not an arduous task as the PO should contact the editors of these local newspaper and ask them to put our ads in their "Community Events". This can be done by just sending emails to the editors on the PO's data base, advising them of our meetings.

The PO is free to think of other means to publicize the activities of our Association. He/she will be working in close cooperation with the Editor, Jur Plesman.

### Email Contacts:

- Lynette Grady -President  
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- Sue Litchfield - Treasurer  
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- Jeanette Bousfield - Meetings  
rjbous@bigpond.com

Feel free to contact any of the above members for suggestions.

### BEQUEST TO THE HYPOGLYCEMIC HEALTH ASSOCIATION OF AUSTRALIA

If you would like to include a bequest to the Hypoglycemic Health Association of Australia in your will, the following options will guide you in its wording.

**Option 1:** I devise the sum of \$..... to the Hypoglycemic Health Association of Australia for the general purposes OR for the specific purpose of ..... such purpose being consistent with the aims and objectives of the Hypoglycemic Health Association of Australia.

**Option 2:** (for a proportional bequest) I give the Hypoglycemic Health Association of Australia for its general purposes or the specific purpose of ..... per cent of my estate .

The gift you make to the Hypoglycemic Health Association of Australia will be an enduring record of you.

### THE HYPOGLYCEMIC HEALTH ASSOCIATION

P.O. BOX 830, KOGARAH NSW 1485

### MEMBERSHIP APPLICATION

PLEASE PRINT

Surname: \_\_\_\_\_

First Name: \_\_\_\_\_

Address: \_\_\_\_\_

Town/City: \_\_\_\_\_ Postcode: \_\_\_\_\_

Phone: \_\_\_\_\_ Age: \_\_\_\_\_

Membership \$22.00 pa			
Pensioners \$16.50 (incl GST)	RENEWAL	<input type="checkbox"/>	Occupation _____
Life Membership \$200	NEW MEMBER	<input type="checkbox"/>	_____

Please Tick ✓

Do you have hypoglycemia? YES/NO Does a family member has hypoglycemia? YES/NO

My Email Address: .....

## 2003 MEETING DATES ON FIRST SATURDAYS OF MARCH - JUNE - SEPTEMBER - DECEMBER