The Hypoglycemic Health Association

NEWSLETTER

Correspondence: THE HYPOGLYCEMIC HEALTH ASSOCIATION, P.O. BOX 830, KOGARAH, N.S.W. 1485

Phone: (02) 9553-0084, **Fax:** (02) 9588-5290

PATRON: **Steve McNaughton, BE (NSW)**

Volume *17 Number 4*

Registered Charity CFN 16689
ABN: 65-846-851-613
http://www.hypoglycemia.asn.au

December 2001

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.

You would not believe it, but Christmas is just around the corner again. Please note that we will have a little celebration on Saturday, 1 December 2001. We start one hour before the official time of 2 o'clock when Melanie Koeman will give us a talk. Look up the notice in the top left hand corner of page 2. You are asked to bring along a $5 present for either male or female put it in a bag and then have a little fun for you and the family. Sue Litchfield is leaving for Queensland, but fortunately will continue in the position of treasurer all the way from the Gold Coast. She is doing a marvellous job. Jeanette Bousfield has offered to help out with raffles. We need **Committee Members** to help us out, see page 8 for details. We depend on Committee Members to carry on: just imagine what our meetings would be like without Reg and Lynette Grady serving us delicious drinks and snacks. The response to our reminder letter has been satisfactory, but there are still members who are late with paying their annual fees. ***Please note that expiry dates are shown in the right hand top corner of envelopes!!*** Membership fees now include G.S.T., that is $22 per annum and $16.50 for pensioners and students. ***These are payable one year in advance.*** Application forms are on page 12 at the back of this Newsletter.

Since the founding of our Association we have made much progress in making the health practitioners aware of the problems associated with hypoglycemia. But we still have a long way to go. Hypoglycemia , as distinct from diabetes, is still not recognized by the medical profession. Thus we have not as yet achieved one of our major goals for which the Association was created. Your continued support is still needed. Only patients can convince the medical profession of the need for change in medical practice.

Our Next Public Meeting will be at 2.00 PM
on Saturday, the 1 December, 2001
at ***YWCA***
5-11Wentworth Ave, SYDNEY
and our guest speaker is
Melanie Koeman BSc. ND

who will be speaking
on the subject of

"Natural Approaches to Infertility"

The combination of Medical Science and Naturopathic qualifications has placed Melanie Koeman in a unique role within the Natural and Complementary Medicine industry. She practices at the Jocelyn Centre for Natural Fertility Management, Australia's only dedicated Natural Fertility Clinic, in Woollahra, Sydney. She lectures to students and professionals, regularly presenting at both Complementary and Orthodox Medicine conferences. Melanie also acts as an independent consultant and technical writer to industry. In her talk 'Natural Approaches to Infertility' she will explain the importance of Preconception Care and how Naturopathic medicine works in many different, and often complex, fertility problems.

Christmas Party

Our next meeting at the YWCA, 5-11 Wentworth Ave, Sydney will start one hour earlier at 1 pm on 1 December 2001, to celebrate our Super Christmas Party.

Please bring along a plate of sugar-free foods. **Presents:** The Committee asks everyone to participate in the Lucky Dip. Bring a wrapped present worth about $5.00 with you and mark it "male" or "female". These will be placed in special bags as presents to your fellow members. If you don't you will not be disappointed!!

There will be presents for kids, and they are welcome.º

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 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.

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.

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 9971-5657 or (litch.grip@bigpond.com).

At the last 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 Hypoglycemic Health Association of Australia

has a

web site at:

http://www.hypoglycemia.asn.au

Thanks to Amitee Robinson

Treasurer's Letter

by
Sue Litchfiled

Another year has passed us by and in case you have forgotten the memberships are now due for renewal. So far we have been able to maintain our present prices HOWEVER PLEASE NOTE THAT BY LAW WE HAVE TO CHARGE G.S.T.

I am very grateful to the response to the mail out we had a couple of months ago reminding those that were overdue and also those that paid for next year in advance.

I however mentioned in our last newsletter that we had to add the G.S.T. to our prices and it seems that a number of you either seem to have forgotten or else did not read the newsletter very thoroughly so as a result we are now out of pocket by 10%. If this trend continues I am afraid to say that the subs may have to be put up to $25.00 for Full paying members and &20.00 for Pensioners / Card holders.

I am sorry the raffle was not drawn at the last meeting as at that stage we had a very slow start to the sales however they picked up and we ended up raising $107.00 which is a help to the bank balance.

Now the bombshell! I am moving to the Gold Coast in February as there is more work up there for Grahame, my husband. So this meeting may be my last for sometime. As my mother is still living in Sydney I will try to combine the two together. However I have agreed to continue to do the books for the association and with many thanks to Jeanette Bousefield who has agreed to take on the task of fund rasing so if there is anyone out there that would like to help with the sale of raffle tickets I am sure that Jeanette would appreciate it very much. Also it would be great if more money could be raised by the sale of tickets because again it would mean that our subscriptions would not have to rise.

If there is anyone who lives in the Gold Coast area maybe we can start some form of support group. I feel the need of these groups are very important as it enables people to get together and give the support that is so important especially for those new to Hypoglycemia.

Meanwhile have a great Xmas and a very happy new year and by the way you have not heard the last of me as I will continue to also do the recipes

Sue

Testing For Hypoglycemia and How Your Doctor Can Help.

by
Dr George Samra, M.B.,B.S.,(Sydeny) F.A.C.N.E.M.

(Note: This article has also been published on our web site at:

http://www.hypoglycemia.asn.au)

The correct test for Reactive Hypoglycemia is a G.T.T. The test should be ordered by the doctor as follows**: G.T.T. – 4 hours. All 1/2 hourly readings. No special diet prior.**

The Glucose Tolerance Test is the classical test used in diagnosing Diabetes. The Diabetic test is a 2 hour G.T.T. with just 3 readings, the fasting, the 1 hour and the 2 hour. This test is *not correct* for testing Functional or Reactive Hypoglycemia. With Hypoglycemia one is interested in the full reactions to a sugar load. In both cases a 75gram load of glucose is given to the patient after having collected blood for the fasting level. With Reactive Hypoglycemia the emphasis in on the word "Reactive"- one is looking for the sugar reactive phenomenon in which the blood sugar either drops suddenly or falls very low. Part of diagnostic criteria for Hypoglycemia is the rate of fall of blood sugars, hence the relationship between consecutive readings is very important. Sudden drops in blood glucose will usually trigger an adrenaline response and subsequently adrenaline symptoms such as nervousness, shakiness, dry mouth, irritability, agitation, neck stiffness and sometimes palpitations or a racy heart.

With Reactive Hypoglycemia one is also seeking to ascertain how low the blood sugar may go as this in fact is one of the measures of severity. The brain is dependent on blood glucose as it's only fuel supply under normal circumstances. When the blood glucose falls below a certain level, usually 3.6mm/L, there is a lack of available fuel to the brain and symptoms of brain starvation will occur - these include tiredness, moodiness, depression, forgetfulness, poor concentration and cloudy headedness.

The purpose of the G.T.T is to clarify how well one tolerates glucose and by doing it properly one is able to see if the blood sugars drop too rapidly or fall too low. It is important that the glucose tolerance test is done accurately and properly. The following rules apply:

Fasting for at least 10 hour prior. Usually this means fasting from 10.00p.m. the previous night.

Once the fasting sugar level has been collected. A 75gm glucose load is given to the patient. In children this may be adjusted according to their size, however usually a 50gm glucose load is suitable for the vast majority of children.

The pathology lab should be made aware that we are not trying to diagnose Diabetes but rather Reactive Functional Hypoglycemia. For this reason the doctor is requesting a longer test, i.e. 4 hours instead of 2 hours as well as *all 1/2 hourly readings.*

Does Insulin Need to be Measured?

Usually Insulin levels do not need to be measured. However, when the doctor suspects an Insulinoma (Cancer of the head of the Pancreas) and also in the case of an obese patient insulin levels may prove very useful in clarifying the diagnosis.

Determination of the Glucose Tolerance Test Results

The different types of Hypoglycemia have been classified based on the Glucose Tolerance Test. If the blood glucose levels falls below 3.6mm/L (65mg per 100ml) then *Absolute Hypoglycemia* is present. If the blood glucose level drops rapidly i.e greater than 1.6mm/L (30mg per 100mg) in 1/2 an hour or greater than 2.6mm/L (50mg per 100ml) in 1 hour, then *Relative Hypoglycemia* exists. If the curve has a sharp gradient and numbers below 3.6mm/L together, then is regarded as the classical ***Reactive Hypoglycemia***. The lower the blood sugar readings and the larger the gradient the blood glucose falls the more severe is the diagnosis. A fasting Hypoglycemia alerts the doctor the possible diagnosis of Insulinoma. The flat curve response and its implications have also been described elsewhere on this web site.

What to Say to Your Doctor & How to Approach Your Doctor

Most doctors have a problem understanding Reactive Hypoglycemia and this frustrates them. For this reason I'm including a letter to the doctor that you should download and which should help you get a satisfactory response from your doctor.

HYPOGLYCEMIC HEALTH ASSOCIATION OF AUSTRALIA

P.O. BOX 830 KOGARAH NSW 1485
Web Site http://www.hypoglycemia.asn.au

Dear Doctor,

Your patient has identified with the many symptoms suffered by patients with Reactive or Functional Hypoglycemia. As you well know, Hypoglycemia is low blood sugar, however Reactive Hypoglycemia is a sugar reactive phenomenon (and is not Diabetes.) After a sugar load such as a soft drink or cake, patients with this condition often suffer symptoms due to a sudden drop in their blood sugars, which typically occurs between 1 1/2 hours and 2 1/2 hours after the sugar consumption. Typical symptoms of Hypoglycemia include tiredness, poor concentration, moodiness, depression, forgetfulness, nervousness and irritability.

The brain relies on glucose as its only fuel under normal circumstances. The symptoms of Hypoglycemia relate to the fact that the brain is not being fueled properly at some point in time. In order to investigate this condition and help your patient please order a Glucose Tolerance Test as follows:
GTT 4 Hours. All 1/2 Hourly Readings. No Special Diet Prior.

This is the correct way to order a test for Reactive Hypoglycemia. The patient is usually given a 75gm load of glucose soon after the fasting level has been collected. With the prolonged GTT and with the 1/2 hourly readings one is able to ascertain both the rate of fall of blood sugars as well as whether they in fact fall below the Hypoglycemia line that is usually 3.6 mm/L (65mg per 100ml). Guidelines for interpretation of the Glucose Tolerance Test are available on the web site or directly from the Hypoglycemic Health Association.

Thank you sincerely for your co-operation. This test may help to clarify many troublesome symptoms that your patient has been experiencing.

Yours sincerely,
The Hypoglycemic Health Association.

The Connection between Depression, Addiction & Hypoglycemia

by
Jurriaan Plesman B.A. (Psych), Post Grad Dip Clin Nutr

(Note: This article has also been published on our web site at:

http://www.hypoglycemia.asn.au)

There is very little in the scientific literature that spells out the connection between depression, drug addiction and hypoglycemia. The reason seems to be that the 'hypoglycemia' is as yet not recognized by mainstream medicine as a classifiable illness, despite the fact that many health practitioners agree that it is the forerunner of diabetes. It is difficult to investigate a non-existent disease. The term 'hypoglycemia' does not show up in any search of Medline, except when mentioned in connection with diabetes.

Another reason is that the term 'hypoglycemia' is a misnomer and is bound to confuse many medical practitioners who understand the term to mean quite correctly "low blood glucose levels". A more appropriate term would have been 'dysglycemia', indicating unstable blood glucose concentrations often seen in a Glucose Tolerance Test of people having 'hypoglycemic' symptoms. Again 'dysglycemia' does not show up in any Medline search. Because early literature on hypoglycemia concentrated on the 'low' levels of blood sugar as the cause of symptoms, the expression has stuck as 'hypoglycemia'.

The third reason may well be that over the last fifty years medical research has been dominated by commercial corporations - such as international pharmaceutical companies, instead of independent universities - driven by motives of profits and answerable only to investors, instead of community interests. Hypoglycemia can be treated dietary and lifestyle changes, thus attracting little attention to commercial corporations and their clients.

In the absence of solid research data we are left with a theoretical approach to the understanding of what the connection is between hypoglycemia and depression and drug addiction.

The serotonin/sugar addiction hypothesis

Some scientists believe that sugar addiction (sucrophilia) is due to an error in the metabolism of serotonin. Scientists have noticed that many drug addicts have a history of sugar addiction (Burton, 485-488) and they believe that this is due to a dysfunction in serotonin synthesis.

Serotonin is a neurotransmitter that conveys the sensation of satiety or satisfaction - like a happy hormone. It is said that depressed people have an imbalance of serotonin production. Teenage depression is also due to this defect and could be responsible for the development of addiction. Thus we need to look at brain chemistry.

A **neurotransmitter** is a chemical substance produced by the body that bridges the gap between one neuron (nerve cell) and another. Tiny electrical currents are transmitted from one neuron to another via a gap or 'synapse' when it is occupied by a specific neurotransmitter. It is at this junction which permits the triggering of electric current in the next cell depending on the neurotransmitter at the synapse. Thus neurotransmitters may be seen as some sort of regulators. Neurotransmitters are stored in the nerve cells' 'vesicles' and are released from these cells. They lock on to special receptors of the next nerve cells, very much like a key fitting into a lock. Each receptor is unique to a neurotransmitter.

There are many neurotransmitters but let us concentrate on serotonin. Serotonin - also known as 5-hydroxytryptamine - is a compound widely distributed in tissues, particularly in blood platelets, intestinal wall and the central nervous system.[1] As a brain neurotransmitter it helps us to relax, enjoy life and promotes sleeping (when it is converted to another neurotransmitter called melatonin released by the pituitary gland during darkness).

Like many other neurotransmitters, serotonin is produced from proteins in food. These proteins are broken down during the process of digestion into small units of proteins or building blocks, called amino acids. There are only about

twenty amino acids from which the body builds new proteins necessary for growth and reconstruction of tissues. Of the twenty amino acids or so, ten are essential, which means that the body cannot synthesize them and must obtain these from food.[2]

Serotonin is produced from an essential amino acid called ***tryptophan***. Soya, brown rice, cottage cheese, fish, beef, liver, lamb, peanuts, milk and bananas are rich in tryptophan. If you would like to find out more about sources of nutrients please look up the file "Rich Sources of Nutrients" under "articles" at our web site.

The metabolic processes in the body are driven along by enzymes (or catalysts) - themselves proteins - converting one substance to another without altering the enzymes themselves. These operate with co-enzymes, such as vitamins and minerals, without which these enzymes cannot function efficiently. Vitamin B6 (Pyridoxine) is required to convert tryptophan into serotonin. Additional magnesium also helps. Thus when we have a vitamin B6 deficiency - often the case with people who have high levels of toxins in their body - then tryptophan is not converted to serotonin[3] . Some signs are depression and insomnia.[4] Tryptophan can also be converted to vitamin B3 (niacin) under the influence of B6 (pyridoxine). This takes precedence over serotonin production.[5] This could explain why in some cases of mental illness vitamin B3 supplementation has improved the condition.

The absorption of amino acids follows a pecking order; the absorption of phenylalanine (an other essential amino acids and we will come back to this later) comes before the absorption of tryptophan. They compete with one another for absorption.

Why sugar addiction?

One way to speed up the absorption of tryptophan is by consuming refined carbohydrates - such as sugar. Sugar consumption triggers the body to produce insulin, a hormone that transports glucose, amino acids and fatty acids into cells. Thus high levels of insulin absorb amino acids (as well as glucose) and make room for the absorption of tryptophan.[6] This is then converted to serotonin in the presence of vitamin B6 and presto we feel happy!!!

This may lead to sugar addiction and here is theory connecting hypoglycemia and addiction. "Sucrophilia" or love of sugar is one of the symptoms of hypoglycemia.

The question remains how this can lead to other forms of addictions such as addiction to heroin or cocaine.

Insulin Resistance follows

Sugar addiction leads eventually to insulin resistance. When the body is exposed to excess insulin over a long period of time, it adapts by 'down-regulating' receptors for this hormone. This means reducing insulin receptors in target cells.

Insulin Resistance is an abnormal response of the cells' receptors to insulin. Both hypoglycemia and diabetes are affected by 'insulin resistance'. In diabetes insulin resistance results in hyperglycaemia, responsible for increase in atherosclerosis, changes in the retina of the eye and cataract, changes in kidney which lead to protein excretion via the urine[7] , damage to nervous system, particularly of the legs producing tingling and numbness.

In hypoglycemia it initially raises the blood sugar level, which triggers the production of more insulin. This is then followed by a crash in blood sugar level. When blood sugar levels crash the brain goes into a panic mode and triggers the adrenal gland to produce adrenaline. The latter converts stored glucose - in the form of glycogen in liver cells - back into glucose. But adrenaline is also the fight/flight hormone, which prepares the body for action. Excess secretion of adrenaline may lead to the shakes and nerves!!

Thus people may have learned that depressant drugs - particularly alcohol and tranquilisers - can calm down nerves, and here we have another mechanism for addiction to depressant drugs!

Insulin Resistance may block phenylalanine?

But there is another important theory that may explain the heroin/cocaine addiction. Hyperinsulinism means that other amino acids are blocked for absorption. Thus it could well be that phenylalanine - an other essential amino acid - is not properly absorbed, because of insulin resistance. Phenylalanine is the forerunner of a series of neurotransmitters - called catecholamines - among these the important neurotransmitter 'dopamine'. Dopamine is the main neurotransmitter responsible for the highs that drug addicts experience when injecting with heroin, or taking cocaine.

Special brain cells produce dopamine (from a long series of biochemical conversions deriving from phenylalanine), a neurotransmitter responsible for feelings of pleasure. Normally dopamine is reabsorbed by the dopamine cell for reuse. It is known that heroine and cocaine occupy these receptors for dopamine so that reuptake of dopamine is prevented. This results in an excess of dopamine, which drug addicts experience as a high. However, the brain - in other words target cells responding to dopamine - respond by down-regulating receptors as a defence against

excess dopamine. Thus down-regulation of receptors is the mechanism whereby 'tolerance' is build up. More of the substance - heroin or cocaine - is required to experience the high! Consequently, the body has to rely on drugs in order to obtain sufficient levels of dopamine for a person to function at all.

GABA cells control dopamine cells

Another set of brain cells, namely GABA (gamma-amino-buteric-acid) cells, regulate the production of dopamine in dopamine cells. GABA is an inhibitory neurotransmitter that sends messages to dopamine cells and controls the amount of dopamine these cells produce. Thus it exerts influence over the dose of dopamine release. What may be useful to know at this stage is, that GABA is produced from glutamine (a non-essential amino acid) and converted to GABA in the presence of vitamin B6. (Chaitow, 79) A supplement of glutamine (easily converted to glutamic acid[8]) is now available from health food stores. Glutamine has been successfully used in stopping alcohol and sugar craving and may be helpful in the treatment of other drug addictions.

Theories about the causes of drug addiction

The question is whether drug addiction is primarily due to an error in serotonin synthesis or results from hypoglycemia? This question is similar to the nature-nurture debate in psychology. We have seen that we could reason that a blockage of serotonin production, would lead to depression, to sugar addiction, which in turn leads to insulin resistance, diabetes and/or drug addiction. No doubt there are genetic factors operating that predispose us towards either or all of these conditions. If we accept the serotonin hypothesis, being seen primarily as an inherited condition, then we would come to a dead end. This would be a form of biological determinism, presenting us with an inevitable outcome of our congenital destiny - a rather pessimistic point of view.

If on the other hand we were to accept that hypoglycemia, a life-style condition, precedes or aggravates an inherited weak link in serotonin metabolism, then this would open the way to new treatments and interventions for either depression, hypoglycemia, diabetes or drug addiction.

The serotonin hypothesis would suggest that it is a mere coincidence that in the twentieth century humans have been increasing their sugar consumption on average 15 lbs per head per year in 1900 to 120 lbs per head per year in 1974. (Cheraskin, 8) In the year 2001 this figure would be much higher! Furthermore, humans are now exposed to 65,000 xenobiotic (often poisonous) chemicals produced in the USA alone (1000 chemicals added each year) and dumped in the environment and undermining our health.

As a result of modern agricultural practice in the USA trace mineral deficiencies in the soil were reported in all fifty states, zinc deficiency in 32 states. This means that an important co-enzyme like zinc may be in short supply in the diet - 80 enzymes are known to require zinc as a co-enzyme. It is no coincidence that alcoholics or anorectic patients are known to be zinc deficient. The evidence of drastic environmental changes during the last few decades, which would decisively affect our health, cannot be ignored.

It would be more reasonable to assume that the nutritional environment of modern humans plays a more significant role in the pandemic of mental illness, hypoglycemia, diabetes and drug addiction. The inherited error of serotonin metabolism appears to be of secondary importance.

The conclusion would be that dietary treatment is significant in any treatment modality for addiction and in particular the treatment of hypoglycemia, which appears to be at the root of all these modern diseases. The finger is pointed to sugar consumption.[9]

Alternative treatment of drug addiction

Most modalities in the treatment of drug addiction start with detoxification. This is probably the most difficult step in treatment. Not only that, but staying off is even more difficult. The reason is clear that the brain has adapted to the use of high levels of dopamine, artificially increased by drugs and resulting in a reduction of receptors for dopamine (and perhaps other neurotransmitters). It will take some time for the brain to readapt (that is build receptors) for the neurotransmitters now synthesized naturally. Thus to expect that the natural production of neurotransmitters (for instance dopamine) will find adequate receptors - now reduced by drug use - may indeed be a tall order.

This scenario applies equally to the prescription of Selective Serotonin Reuptake Inhibitors (SSRIs) by doctors for the treatment of depression. These, like street drugs, block the reabsorption of a neurotransmitter, serotonin. Long term use may alter the brain structure - down regulates receptors for serotonin. Hence withdrawal often results in rebound depression. You can only withdraw from these drugs gradually and under the supervision of the doctor. If this is so, why not the same for street drugs?

I am just wondering in the light of the above knowledge, whether

it would be possible for drug addicts to eventually reach a point, where drugs are not needed, if and when they would treat the underlying causes of drug addiction. This could be achieved by adopting hypoglycemic diet, take suitable vitamins and minerals[10] , and neurotransmitter supplements such as tryptophan, phenylalanine and glutamine UNDER THE SUPERVISION of a doctor or drug counsellor (phenylalanine may have adverse effects in some people). This suggests a reversal in the official treatment process, deal with underlying causes first, before withdrawing from drugs. This may be a radical view, especially because there appear to be no studies to support this hypothesis.

Many more studies will be required to clarify some of the points raised here. It is expected that clinical nutritionists will contribute further to this research.

It cannot be stressed enough, that this regime should be accompanied with a course in psychotherapy or Rational Cognitive Behaviour Therapy (RCBT), which will help a person to deal with the normal stresses of life. Drug addicts - and for that matter others suffering from a mental disorder - have a severely damaged self image which affects their personality at the core. This can be remedied by doing a course in psychotherapy. Such a self-help course is freely available at this web site at **PSYCHOTHERAPY**.

References to addiction and hypoglycemia

Burton Goldberg Group, The, Strohecker, J (Ed) (1994), **ALTERNATIVE MEDICINE: The definitive guide**, Future Medicine Publishing, Puyallup WA

Chaitow,L(1985), **AMINO ACIDS IN THERAPY,** Thorsons Pub. Inc N.Y.

Wade, C (1985), **AMINO ACIDS BOOK**, Keats Pub Inc, New Canaan, Conn.

1) The sudden contraction of smooth muscle in brain capillaries is one of the factors involved in the development of 'migraine' headaches. Serotonin is thought to play a role in inflammation similar to that of histamine.

2) These are arginine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan and valine.

3) When there is a vitamin B6 deficiency, tryptophan is converted to xanthurenic acid and excreted in the urine. Xanthurenic acid may damage the pancreas and may cause diabetes. It is also a carcinogenic substance. Xanthurenic acid in the urine indicates a vitamin B6 deficiency. There is anecdotal evidence that B6 deficiency is indicated when people cannot remember their dreams, as is common among drug addicts. This is thought to be due to B6 being used up in detoxification.

4) Doctors prescribe antidepressant drugs, called Specific Serotonin Reuptake Inhibitors (SSRIs) to artificially increase serotonin levels in depression.

5) It takes 60mg of tryptophan to produce 1mg of niacin, which also requires vitamin B6 as coenzyme. (Chaitow, p65)

6) Plasma tyrosine, phenylalanine, leucine, isoleucine and valine, being large neutral amino acids - unlike tryptophan - are affected by insulin and are consequently absorbed, leaving free the absorption of tryptophan.

7) This supports the concept of insulin resistance failing to absorb amino acids (including phenylalanine) by cells, which are then excreted in the urine, along with glucose, typical in diabetes.

8) Glutamic acid is a brain fuel. It cannot pass the blood brain barrier, but it is easily converted to glutamine, which can. When glutamic acid combines with ammonia - a nitrogenous by-product of amino acids and toxic to the brain - it becomes glutamine. Ammonia is then converted to urea and excreted via the urine. Glutamine is said to improve intelligence, control alcoholism, sugar craving, heal ulcers, alleviate fatigue, impotence, depression, and may be useful in schizophrenia and senility.

9) Just recently it has been announced that the consumption of kola 'soft' drinks - the popular high sugar drinks of young people - has been increased by 7 per cent in the last six months of the year 2001. The fact that they may contain aspartame may aggravate the impact on their behaviour.

10) Some of the vitamins and minerals suggested are, Vitamin C (up to tolerance level +/- 3000 mg (Drug addicts can tolerate high doses of vitamin C), zinc, chromium (picolinate), selenium, B-Complex, vitamin B6, B12, folate and herbals supporting the liver: Dandelion, St Mary's Thistle, Gentian, Fringe Tree, Greater Celandine, Withania (for anxiety) and many more.

Editor's Comment

It is important for the Association to have a sound financial basis for its continued existence. Members of the Hypoglycemic Health Association will not have achieved one of our major goals - establishing a medical profession that knows how to treat hypoglycemia and its allied illnesses as a matter of course.

Sue Litchfield has done a marvellous job by organizing our raffles. Unfortunately Sue is now going to live in Queensland. She will however continue in the position of our treasurer. This is possible thanks to electronic communication via the internet. Jeanette Bousfield will take over from Sue in organizing raffles. All members are asked to support Jeanette's efforts in raising funds for the Association.

Committee Members rquired

The major part of our funds come from memberships fees. We should aim at increasing members. So we ask members to recruit more members among their acquaintances. Another way would be to publicize our meetings more widely so as to enlist members from the public. For this we desperately need another committee member -***a promotion officer*** - who's task would be to contact editors of local newspapers in the Sydney area and to place small free ads in the their "Community Announcements". I have already done so with two local newspapers and was surprised how cooperative these editors were. A promotion officer on the committee could make an art of this. Such a person needs a computer and internet facilities to place these ads. The Committee would be pleased to hear from any member who would be willing to undertake this job. Please contact: jurplesman@hotmail.com.

Suddenly Stevia: Rediscovering one sweet herb

by
Ray Sahelian
(Ray Sahelian, M.D., is the co-author, with Donna Gates, of The Stevia Cookbook. See his web site www.raysahelian.com for the latest updates on natural therapies, herbs, hormones, and supplements.)

While not yet a household term here in the United States, many people are beginning to hear of stevia, particularly in reference to its use as a safe, non-caloric sweetener. Ironically, a "sweetener" is exactly what the U.S. Food and Drug Administration has disallowed this herbal supplement to be marketed as.

About stevia

Stevia is a plant of the daisy family that grows naturally in South America. The green leaves of this plant contain large amounts (up to 5 percent of dry weight) of stevioside, a sweetener estimated to be 300 times as sweet as table sugar.

Certain Indian tribes in South America have used stevia for hundreds of years, possibly even before Columbus landed there. Since the natural habitat of this plant is in northeastern Paraguay near the Brazilian border, certain Native Americans of the region, particularly the Guarani, were the first to take advantage of its sweet properties. They commonly used the leaves to enhance the taste of bitter mate (a tea-like beverage). They also used it in medicinal potions, or simply chewed them for their sweet taste.

The credit for the discovery of stevia by a Westerner goes to an Italian botanist with the name of Bertoni. He first learned of what he described as, "this very strange plant" from Indian guides while exploring Paraguay's eastern forests in 1887.

Sayonara saccharin

Originally introduced to Japan in the mid 1970s, stevia products quickly caught on. By the late 1980s, they reportedly represented approximately 41 percent of the market share of potently sweet substances consumed in Japan. In addition to widespread use as a table-top sweetener, stevia was also used by the Japanese to sweeten a variety of food products, including ice cream, bread, candies, pickles, seafood, vegetables, and soft drinks. Stevia was even added to chewing gum.

The spread of stevia was not limited to Japan, though. Today it is also grown and used in Thailand, China, and South Korea, as well as in Paraguay and Brazil.

Sweet to the tongue, bitter to the competition

By the mid-1980s, stevia's reputation had sparked the interest of various U.S. companies that were becoming aware of its potential commercial value. Tea manufacturers had begun using crushed and powdered stevia leaves to create herbal teas that were sweet, yet non-caloric, and free of reported side effects. With the addition of stevia to a number of popular brands of herbal tea (as a sweetener and flavor enhancer), the remarkable ancient sweet herb of the Guarani Indians was at last poised to make a delayed debut in the American marketplace. By this time, however, powerful market forces were at work.

The artificial sweetener industry was noticing the potential threat by the appearance of a sweetener that was natural, virtually non-caloric and safe, and that could be cultivated and sold by anyone. No sooner had stevia been introduced to the U.S. herbal scene and growing in market share, when the FDA, just as quickly, launched an aggressive campaign to nip it in the bud. In 1987, the FDA began notifying companies selling herbal products that they could not market stevia because it was not an approved food additive.

By 1991, the FDA imposed a full-fledged ban on the import of stevia into the U.S. based on a study conducted at the University of Illinois, in which a genetically altered, synthetic version of stevia extract was allegedly found to cause precancerous changes in a strain of bacteria. Ironically, this was the same year that a follow-up study pointed out flaws in the first study and threw its conclusions into serious doubt.

The seize on stevia

On a summer's day in 1991, a bevy of armed federal marshals raided the Arlington, Texas warehouse of businessman Oscar Rodes, served him with a warrant, and proceeded to seize his most recent shipment of stevia. Rodes himself was not taken into custody. The arrest warrant was for the boxes he had just imported from South America, which contained some dried leaves and a white powder extracted from them. "They just asked me to open the warehouse door, and they backed up the truck and loaded it up," he recalls. "They said they were going to burn it. I was surprised — all the marshals, ready to go and take away my teas."

Deja vu in 1998-the FDA and Fahrenheit 451?

The FDA was not done with Mr. Rodes. In May of 1998, a compliance officer from the Dallas, Texas district office of the FDA, sent a fax to Rodes,

The letter by the FDA said, in part: "The inspection of your facility on April 27, 1998, conducted jointly by investigators of the FDA and the Texas Department of Health, along with visits to your consignees, documented your firm's continued marketing of your stevia products as conventional foods accompanied by offending [sic] literature, cookbooks, and other publications. A current inventory must be taken by an investigator of this office, who will be available to witness destruction of the cookbooks, literature, and other publications for the purpose of verifying compliance."

According to FDA officials, the herb stevia can be "adulterated" merely by being in the presence of information that reveals its sweetening property. Furthermore, the FDA confiscated two shipments of stevia to Rodes from Brazil and asked him to recall the books he had already distributed. The story was picked up by the media who strongly criticized the FDA. Pressure mounted, and at the end of June, Rodes got a letter from the FDA saying that he was allowed to sell two out of the three books. The sale of one cookbook was not permitted since it mentioned Rodes' product name in the text. While it is important to have a law that restricts claims made oil labels and accompanying literature regarding the therapeutic use of supplements since some marketers may, in turn, make exaggerated or inaccurate claims about the products they sell; however, but, it seems silly that it is illegal to claim on a product label that stevia is a sweetener when this fact is so obvious. How can stevia ever fairly compete with artificial sweeteners, such as aspartame and saccharin, when the latter two are allowed to be called sweeteners?

Sweetening the palm?

Just what prompted the FDA to intervene in the marketing of stevia is difficult to fully unravel. Rumors persist that the catalyst was a "trade complaint" from a company with a vested interest in not wanting stevia made available to consumers.

Despite presentations to the FDA of substantial historical and scientific data of stevia safety in petitions submitted in 1992 by the American Herbal Products Association (AHPA), and an association of companies that manufacture and distribute herbal products, seeking GRAS (generally recognized as safe) status for stevia, the FDA refused to consider filing the petitions. (When particular herbs or natural products have been historically in use for a long time, the FDA generally allows them a GRAS status.) In fact, a review of the correspondence between the FDA and representatives from the AHPA, reveals a number of unreasonable requests made by the FDA and delays that appeared to be of a stalling nature.

The FDA and stevia

Rob McCaleb, president of the Herb Research Foundation, had this to say about the FDA's stand against stevia, "Basically stevia was made illegal because it is unpatentable, and no one can profit from putting it through the FDA's red tape. The fact that this benefits large [artificial sweetener manufacturers] corporations [...] is probably not a coincidence. Intended to ensure consumer safety, the FDA had instead become a means for the makers of more expensive chemical products to prevent competition from less expensive natural products." By denying it official GRAS status, the FDA was able to place stevia in the "food additive" category, which requires that it undergo substantial scientific study prior to marketing. The fact that stevia is a sweetener complicates the matter further, since the FDA tends to view any "new" sweetener as an additive with a particularly high potential for mass consumption, necessitating special scrutiny.

DSHEA opens doors for stevia

In 1994, passage of the Dietary Supplement Health and Education Act (DSHEA) created an opportunity for stevia to enter the US market despite the FDA's opposition. Under this legislation, various vitamins, minerals, herbs, or other botanicals not considered conventional foods or the sole item in a meal or diet may be marketed in the form of capsules, tablets, liquids, powders, or soft gels provided they are labeled "dietary supplements." Such supplements can no longer be classified by the

FDA as "food additives" and need not be subjected to intensive safety testing. The following year, in the fall of 1995, stevia did indeed gain status as a dietary supplement.

Stevia today

At long last, stevia is legally available in the United States — but only in its limited form as a dietary supplement. Any other use (such as in teas or processed foods) continues to be prohibited. Stevia "supplements" cannot be labeled as sweeteners, or in any way described as having sweetening power.

Benefits for diabetes

The availability of artificial sweeteners has been of enormous benefit to diabetics. However, there's always been a concern that over-consumption of these synthetic sweeteners may cause some unknown harm to the body. Stevia leaves have been used as herbal teas by diabetic patients in Asian countries, and no side effects have been observed in these patients after many years of continued consumption.

If you have diabetes, chances are you consume a large amount of artificial sweeteners and you may be concerned about switching to stevia. You may also be accustomed in your use of these artificial sweeteners and would not be willing to completely stop them. One option is to gradually use less of them while substituting stevia. For instance, you can initially use stevia in some of your drinks, like coffee or tea. After a few weeks, if your comfort level with stevia increases, you can gradually use more of the herbal extract. Over the next few weeks and months you can either switch completely to stevia, or you can continue using it in combination with artificial sweeteners

Whole leaf, powder, extract, and liquid

With stevia now permitted on the market as a dietary supplement, and poised to become an extremely popular product, there are a variety of different forms and extracts being marketed (even if none of them can officially be called a sweetener). Which stevia products you want to use will probably depend on the amount of sweetness required by the recipe and the degree to which the particular recipe or beverage will benefit from the licorice-like taste that accompanies its less refined forms.

If you shop at a health-food or grocery store, you will generally find there are several forms of stevia from a number of different manufacturers. Each product may taste slightly different. If you have never tried stevia, it is important to know that it does not have the exact sweetness of sugar. For some people, appreciating stevia, just like wine, is an acquired taste.

For more on stevia, check out The Stevia Cookbook - Cooking with Nature's Calorie-Free Sweetener (Avery Publishing Group, Gardeb City Park, NY, 1999).

In addition for more on the history and safety of stevia, it provides more than 100 recipes.

For more information

For more information about stevia check out "www.steviapetition.org," the website of James E. Kirkland of Arlington, TX, whose book, Cooking with Stevia, was ordered to be destroyed by the FDA because it told people the stevia was a sweetener.

Printed here with the permission of the author.

Sue Litchfield's recipes

How often have you looked at a recipe and the heading says flourless whatever cake only to find it has plain flour as an ingredient. The muffin that is gluten free again only to find it has wheat germ as an ingredient or better still the sugar free dessert again only to find it is sweeten with honey.

I feel it is about time if anyone find that this is the case please do not hesitate to write to that particular magazine because one of these days someone not knowingly will make up the recipe with dire results. I have already approached the Coeliac Society on quite a few recipes that are supposed to be Gluten free except they have an ingredient that contains gluten

RECIPES

Sorry about the lack of them in the last newsletter but due to an illness in the family, and trying to organise myself to get away it was just too hard. That's why I would really love a few of you members to send in a few of your favourites as a back up.

INDIVUAL FRITTATTAS

100 gr finely chopped ham
90 gr crumbled goat cheese or sheep's cheese
1/4 cup chopped chives or use a mixture or fresh herbs if preferred
6 eggs
1/2 cup yoghurt of choice (Sheep's Yoghurt is fine)

Grease a patty cake tin (12). The easiest way is with "Pure & Simple"

Combine ham cheese and herbs in a small bowl; divide the mixture evenly into 12 and place into the patty cake tins.

Combine the eggs and yoghurt and whisk lightly together. Pour even amounts into each cup. Bake in a moderate hot oven (190- C.) for about 10 mins or until golden brown. Turn onto a cake cooler to cool. Serve as a snack hot or cold or if preferred as a meal with a salad.

SWEET POTATO &POTATO CAKES

Served Herbed Yoghurt
200 g potato peeled and grated
200 g. sweet potato peeled and grated
1 onion finely chopped
2 tabs flour of choice e,g rice or barley flour
2 tabs fresh basil chopped
2 eggs ,lightly beaten

Combine all the ingredients for the cakes in a bowl. Stir to combine

Spay a frying pan with cooking spray

Place 2-3 tabs of mixture into the pan and press down to form a cake.

Cook for 3-4 mins on each side or till golden. Cook 3-4 at a time

Cook 3- 4 cakes at a time.

Serve with the herbed Yoghurt

HERBEB YOGHURT

200 g Natural Yoghurt of choice
1 Tab fresh basil
1 tabs fresh oregano
1 tab fresh thyme

Continued on page 12

***Doctor** wanted to share a practice with Dr George Samra in Kogarah. Must have an interest in nutritional medicine or keen to learn. Excellent terms and conditions. Please ring 9553-0084 for further enquiries.*

INTERNATIONAL CLINICAL NUTRITION REVIEW

By Editor

Dr Robert Buist, Editor in Chief of the ICNR, has indexed the **International Clinical Nutrition Review** which will be updated in the last issue of each year.

This makes the series of International Clinical Nutrition Review a valuable commodity in one's private library for anyone who is interested in the scientific basis of clinical nutrition.

Researchers from all corners of the world review medical and other scientific literature and cull out the latest news on the clinical application of nutrients in the treatment of disease. The serial also publishes in-depth-editorials written by experts on various topics of concern to clinical nutritionists.

No longer can it be argued that this new branch of medicine is without scientific foundation.

A "must" for naturopaths and doctors with an interest in nutrition, practitioners and interested members of the public can subscribe to this quarterly publication by sending $54.00 (New Zealand Subscribers $64) to:

Integrated Therapies
PO Box 370
MANLY NSW 2095
Australia
http://www.intacad.com.au

Serious students might also consider the one year correspondence course in Nutritional Medicine. The course is registered with ATMS and the $850 fee includes all texts, tapes and study guides as well as subscription to ICNR.

Please write to the above address for brochure.

Or choice of herbs to taste

Finely chop the herbs and combine with yoghurt

EASY BAKED PUMPKIN RISOTTO

1 cup Arborio rice
2 1/2 cups chicken stock or vegetable stock
60g margarine or butter
350g Jap or Butternut pumpkin, peeled and diced
1/2 cup grated Parmesan cheese (OPTIONAL)
Pepper and salt to taste
1 tabs chopped parsley

Pre heat the oven to 190C.

Place the rice stock butter and pumpkin in an ovenproof dish and cover with a tightly fitting lid or foil. Bake for 30 mins or until the rice is soft. Stir in the cheese if using add pepper and salt to taste. Then add parsley and serve

OATCAKES

2 1/2 cups oat bran (unprocessed)
1 tab fructose or 1 tab Rice syrup
1/2 teas salt
1/2 teas baking powder
80 g r butter (cubed)
1/2 cup water

Preheat the oven to 180.C. Line 2 baking trays with non-stick baking paper.

Place the oat bran fructose/rice syrup. Salt and baking powder in a medium mixing bowl and stir well to combine.

Place the butter and water in a small saucepan and heat over a low heat giving the odd stir until the butter just s melts. Add to the oat mixture and use a wooden spoon to combine well. Use your fingertips to bring together to forma dough. Turn the dough onto a well-floured surface and knead for 1 or 2 mins or until pliable. Divide the dough into 4 equal portions.

Use a lightly floured rolling pin to rollout 1 portion of the dough on the floured surface and roll till about 5mm.thick. Use a round 6.4 cm cutter to cut into rounds and place them onto a lined tray. Repeat with the 3 remaining portions of dough

Cook the oatcakes in preheated oven for 12-15 mins or until a light golden and cooked through. Cool on the trays.

These are great served with Meredith Blue vein sheep's cheese also any tasty cheese will do.

Email Contacts:

Sue Litchfield- Treasurer
litch.grip@bigpond.com

Jurriaan Plesman - Hon Editor
jurplesman@hotmail.com

Reg & Lynette Grady - Catering
lgrady@fastrac.net.au

Jeanette Bousfield - Meetings
rjbous@bigpond.com

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 pa (Incl GST)
Life Membership $200

Please tick √

RENEWAL ☐ **Occupation** _____

NEW MEMBER ☐ _____

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

My Email Address: .....

2002 MEETING DATES ON FIRST SATURDAYS

OF MARCH - JUNE - SEPTEMBER - DECEMBER