The Hypoglycemic Association

NEWSLETTER

Correspondence: THE HYPOGLYCEMIC ASSOCIATION, P.O. BOX 8, SYLVANIA SOUTHGATE, N.S.W. 2224

Telephone: (02) 588-5290 Fax: (02)588-2520

PATRON: Dr George Samra

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

ANNUAL GENERAL MEETING

The *Annual General Meeting* of the Association will be held at the YWCA, 2 Wentworth Ave, Sydney (Nearest Railway Station **CENTRAL**) at 1.30 pm on Saturday, 6 March, 1993. The main purpose is to approve the Financial Statement, the Auditor's Report and Certificate which are shown on page 8 of this Newsletter. The Minutes of last years AGM is shown at the bottom of page 7.

The Association is keen to enrol volunteers to join the Committee. We are also interested in recruiting members who have a flair for writing articles and would like to assist the editor in keeping up the standard of our Newsletter.

Well, a new year has started and, unfortunately, it is that time of the year when we have to remind members to send in their annual fees to the Association. Please note your expiry date in the top right hand corner of the address label. Members who are behind in their payment will find a coloured reminder with this Newsletter. Fees are $15 per annum for a family and $10 concession. This is an entirely voluntary organisation and our income derives from membership fees only! Donations by professionals would be very much appreciated.

Our Next Meeting will be at 1.30 PM
on Saturday, the 6th March, 1993
at the YWCA,
2 Wentworth Ave, Sydney and
our guest will speak at 2 PM

COL TAYLOR

(B COM, DIP ED. DIP BUS STUD, DIP HOM, DIP CH, JP, ATMS)

who will be speaking
on the subject

"Spiritual aspect of health"

COL TAYLOR is an unorthodox healer who claims to get good results. He has a diverse background including careers in economic research, management services, and teaching in TAFE; a life long study of religious philosophies, and all matters spiritual; and is also qualified in homeopathy, hypnotherapy and Neuro-Linguistic Programming.

Col's philosophy is that people are primarily spiritual beings using a physical body and that most problems in life are only the physically apparent symptoms of disturbances in their spiritual bodies. Heal the spiritual bodies first and then their physical bodies usually follow.

If you would like to know:-

- how spiritual and physical bodies are connected
- how different therapies work on different levels of the "total" person, and
- about some of the wonderful results that have already been achieved,

then you will come to this talk.

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

Steve Duff telephone advisory service

Our life member Steve Duff is willing to talk to any person by phone on any problems relating to hypoglycemia, allergies and diet. This voluntary advice is based on his personal experiences with hypoglycemia and allergies and any problems of a more complex nature will be referred to nutritional practitioners. If you would like to have a talk with Steve, please ring him at his home on 529-8040.

Books for sale at the meeting

Jur Plesman: **GETTING OFF THE HOOK**
Sue Litchfield: **SUE'S COOKBOOK**

Contributions of articles by members and by practitioners are very welcome. If you would like to contribute an article to this Newsletter, please contact the Editor.

The Newcastle branch of the Association are still meeting with the assistance of Bev Cook. They meet on the last Saturday of each month beginning 1.30 PM to 3.30 PM at the Hillsborough Primary School. Enter the school from the Waratah Avenue. For further information ring Mrs. Bev Cook at 049-59-4369.

Organise local meetings

If any member would like to organise meetings in their local area or meet other members, we can help by advertising your name and phone number in this Newsletter.

Entrance fee at the next meeting Because of increase in costs the Committee has decided to charge an entrance fee of $2 per person or $3 per family at the next meeting.

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 32-38 Montgomery St., Kogarah, Phone: 558-5290.

The Association is looking for volunteer **word processing operators** copying material for publication in this Newsletter. If you have a computer and some time on your hand, please contact Jur Plesman (30-6202).

Raffle & Lucky Door Tickets

The lucky winners at the last meeting of 5th December, 1992 were A. Woodcock and Barbara M.

Public Address system at next meeting

The Association has obtained a wireless microphone that can be pinned to the speaker's lapel or other attire. This microphone can broadcast to any portable radio with an FM band on 91.5 frequency or thereabouts. Thus members can take a tape-recording of the lecture, if they so desire. This will be an experiment to see whether we can provide our own public address system

Vitamins and Nutrients

*Talk given by **Robert Lucy**, DC.,DO.,Dip CE Hon*
To the Hypoglycemic Association
On Saturday the 5 December, 1992

Mr Robert Lucy opened his talk by referring to the Nutritional Foundation Seminar at Sydney University on the 4th December, 1992, where he noted with some dismay the amount of technical information which was being produced in laboratories all around the world which is not really being applied to people. Mr Lucy found in his experience that many discoveries emanating from laboratories have little application in his practice dealing with illnesses in the real world.

He feels that we have lost sight of the fact that we treat real people - whole people. We tend to treat them as if they were test tube cases where we need to treat the one thing that we want to fix. "We are living human beings; body, mind and soul. Tiny little bits of us do not tell the whole story."

Medical history goes back for many thousands of years, when humans were trying to help the Gods to improve our health; for example with various herbs. It was only in the eighteenth century that they started to think a little more clearly. Chemistry was just in the early stages still preoccupied at that time with dyes and metals and how they could make them last longer. Physicians began to feel the need to gain a better knowledge of how the body works.

The mechanistic and vitalistic approach

Round about the 1840's Rudolf Virchow (1821-1902) - German pathologist - began to explore the workings of the cell in the course of which he was the first to document leukaemia and embolism. Well advanced among his contemporaries, he strongly believed that we should not so much worry about the organs of the body, but rather the cells of which the organs are made. He said that whatever is wrong with man he has the means to fix it. It was then that the mechanistic approach to medicine occurred.

The mechanistic approach is mainly concerned with the mechanics of the body. This is a valid approach. We should know more and more of smaller parts, but at the same time never forget that if you have the *vitalistic* approach you believe that within man there is a vital force. Man is greater than just the sum of his parts! Medicine has been concerned in re-vitalising this healing force. This concept has been around for many thousands of years. For example, the Chinese, the Indians and Egyptians have always used this vital force idea. In these cultures there has always been a great deal of respect for many procedures that are not part of "traditional Western Medicine".

Under the vitalistic approach we have acupuncture, chiropractice, homeopathy, herbalism and nutritional biochemistry. They all aim at re-vitalising the healing forces within us.

Pasteur, Béchamp and the growth of pharmaceuticals

The mechanistic approach, on the other hand, are always trying to kill a bug, ever since Louis Pasteur (1822-1895), who popularized his "germ theory" of disease and introduced sterilization of medical equipment thereby saving many lives. After Pasteur modern pharmaceuticals came to the fore. This is, of course, very scientific in that if you take a synthetic drug, you can measure accurately its parameters.

However, what it does to your body after thirty years, nobody knows. The drug you take in the 1960's may kill you in the 1990's. Nevertheless, drugs play a useful role in medicine and they can save your life. However, when the drug has done its job you are left on your own. Nobody has questioned why the illness occurred in the first place. Was it a virus or bacterium? Then why did you get a virus or bacterium? What happened to your immune system that allowed that virus to take over?

It is curious that in Pasteur's days there was also a Béchamp - professor of Chemistry at the University of Mont Pellier, whereas Pasteur was a private biochemist to begin with. Pasteur advocated that diseases were caused by germs, however, Béchamp believed that the germs only occur if the conditions inside the body allow it to occur. Pasteur was a flamboyant person able to attract the world's attention, whereas Béchamp was a rather quiet and withdrawn academic. Even Pasteur at the end of his days was able to admit that Béchamp was right and that we have to cure the body itself rather than try to kill germs. Still the mechanistic approach up to this day has been able to promote itself over the years to the state where huge pharmaceutical companies have produced more and more powerful drugs. From a simplistic point of view every time you take a drug, it gives your body time to heal itself. If you supply the body with the nutrients it requires, then you give it the needed building blocks to help it rebuild damaged tissues.

Acupuncture, herbalism and homeopathy try to release that vital force. If there is a blockage in the system that vital force goes to a specific area helping the healing process. The mechanistic approach may overcome some symptoms, but may cause other symptoms to appear. Mr Lucy believes that the mechanistic approach does not cure a disease. But he cannot see any reason why the two approaches - mechanistic and vitalistic - cannot cooperate.

Prevalence of hypopglycemia

Robert Lucy quoted figures from a study conducted in Western Australia which showed that 25 per cent of people had sugar diabetes, another 25 per cent had it but did not know it and another 25 per cent had irregular sugar levels. Thus 75 per cent of the population had some sort of problems relating to their sugar levels. Although there is a genetic background much can be done with nutritional biochemistry.

Doctors have the difficulty that when they graduate from University they may face matters of life and death the very first day they start to practice. This is unlike engineers, who may start off with a small project and then as they get more experience embark upon larger projects.

The mechanistic approach has all the scientific evidence on its side.

Biochemical and anatomical individuality

There is no standard human being. Dr Roger Williams stated that we all have slight deviations from the norm. Anatomically, some people have large stomachs others have small ones, some have large hearts, others have small ones and the same applies to livers.

Thus the eye also shows individuality. Eye diagnosis is a developing science. One may call it a science or rather an art as no two eyes are alike. Around the pupil of the eye is a coloured area called a **ruff** so named by the Germans who have done more in eye diagnosis than anyone else in the world. Some configurations in part of the ruff denote the length of the gastro-intestinal tract. The small eaters have a small area indicating a short digestive tract and whereas others show they have a large digestive tract. However, as people with a short digestive tract still have the same nutritional needs and have a more inefficient digestive system, they need higher quality proteins. Mr Lucy recommends a diet containing 25 per cent animal protein and 75 per cent fruits, vegetables, nuts and whole grains. These people would need five meals a day with a high protein breakfast to start off with. They all have the digestive tract working efficiently. Their gastro-intestinal lining may have become damaged as a result of their life-style. Most of them would have what is called a "leaky gut syndrome", because the mucous membrane of the digestive tract has degenerated to the extent that they are leaking small amounts of partially digested material which enters into the blood stream.

The eye, again, may show areas denoting that the nerves leading to the gastro-intestinal tract has been interfered with. They are not sending them right messages.

The digestive tract and the liver

The villi of the gastro-intestinal tract has a water-lipid layer. The integrity of this layer depends on the acid-alkaline balance in your duodenum. You need bile of the right viscosity coming from your liver, you need sufficient bicarbonate and enzymes to work inside your gastro-intestinal tract to maintain this water-lipid layer.

Most people in our society have a liver problem to some degree. When you consider that there are 64,000 chemicals added to our food, in the form of emulsifiers, colouring matters, herbicides, pesticides and so on and although they don't kill us on the spot, you can imagine what it does to our liver as your blood passes through it once every 4 minutes. The liver was designed to eliminate the wastes from the body, but it was not designed to deal with the herbicides, pesticides and the other chemicals. This is not always shown in liver function tests, in fact these are often very inaccurate.

If your liver does not produce sufficient bile you'll find that fatty acids are not properly emusified. As a consequence, the water-lipid layer dries and then the epithelial cells lining the villi start to peel off. Long strings of epithelium start to run into the bowel. Also insufficient bile causes all the fat in your food to become insoluble soaps and they will then cling to the surface of the villi, further interfering with the absorption of food. This may cause constipation. Colonic irrigation will help the bowel to rid itself of the epithelial strings.

The 'leaky gut syndrome' and free radicals

With a defective intestinal tract partially digested material enter the blood stream triggering the immune system to mount a defence. White blood cells attack the 'foreign' material and bombards it with hydrogen peroxides and superoxides. At the instance it destroys that material it also destroys itself. Free radicals are then formed which are in turn destroyed by superoxide dismutase (SOD) one's natural defences against these dangerous substances.

When you have a leaking gut syndrome and you have trillions of white blood cells being produced, you are left with free radicals, because there is not enough SOD being manufactured.

Free radicals eventually find a mucous membrane to which they attach themselves and become lipid peroxides. These lipid peroxides are probably the most destructive substances in your body. Your nose, or eyes start to run and you get allergies of all descriptions.

The more specialised we become in medicine the more we lose sight of the whole person. There are not many allergists who think of the gastro-intestinal tract and the leaky gut syndrome when they are treating allergies. Therefore, *we need to treat the gastro-intestinal tract to overcome the majority of allergies.* It re-enforces the concept that we need to look at the whole person.

The importance of keeping the bowel villi in good health

Re-growing the villi inside the intestinal tract is a major job. It means that you have to make the liver produce more bile. It would be essential to have the sulphur containing amino acids for the re-growth of the villi. Also in the case of candida it is necessary to have the sulphur containing amino acids. Candida is a natural constituent of the bowel in the ovoid form. If you have sufficient amount of these sulphur containing acids, such as methionine, taurine, homocysteine and cystine, in your diet and sufficiently of them coming through the bile, then the life cycle of candida which lasts about 30 seconds, produces daughter cells in which disulphite bridge are formed. The daughter cell lives and the mother cells die.

However, if there are insufficient sulphur containing amino acids (SCAAs) in your diet then instead of dying it starts to grow. It becomes a mycelial form. In the mycelial form it starts to grow inside the villi of the gastro-intestinal tract and studies have shown that they gain access to the blood stream. When you have tiny bits of yeast breaking up in the blood, you trigger your immune system again and you will have more of those white blood cells trying to keep you well.

Hence you have to re-grow your microvilli, get your liver working, increase production of bile and get your pancreas working to produce bicarbonate and enzymes or you won't be well.

No matter what condition you come up with, unless you have a correct digestion, correct absorption and correct circulation and excretion, you won't feel well. It is important

to go to the toilet regularly. If you have three meal per day, then you have sufficient waste material to pass through, so that you actually should go to the toilet three times per day. Otherwise, the body will accumulate toxic materials, which means that your liver, bowel and kidneys are not working at their optimum.

The stomach first organ of digestion

The stomach is the great mixing organ of the body. It churns all ingested food and make it into chyme. The stomach looks like a sea swirling around breaking down the food. The pylorus (valve) at the base of the stomach squirts the chyme into the duodenum. It is here where the digestion starts. The pancreas excretes its enzymes including the bicarbonate into the duodenum. The pH of the stomach should be round about 2.2 as you need the acid condition to break down the food. In the duodenum you need about a pH of 5.5, which is a much more alkaline environment. This is produced by the alkalic bile and the bicarbonate from the pancreas. Without a proper alkaline environment the enzymes cannot do their job. The enzymes from the pancreas digest the fats in the food into chylomicrons**.** The carbohydrates are broken down into sugars and, proteins into amino acids. These all depend on the enzymes produced in the pancreas.

The lymph glands that gets rid of gunk

If insufficient lipase (fat splitting enzyme) is supplied you will have large globules of fat and they will be absorbed into the lacteal glands and find their way into the lymph system. The lymph system of the body runs parallel to the arteries and is often overlooked by traditional medicine. This system helps the body get rid of gunk. The lymph system may become blocked by partially digested fatty material, which provide a perfect environment for breeding viruses and bacteria. In every case of glandular fever that Mr Lucy has seen he has noted a very poor lymph system. To clear this lymph system you have to increase the blood circulation of the body, as this is adjacent to the lymph system. The pressure of the circulatory system enables the material to move through the lymph system.

However, you have to get your digestion, absorption and excretion working correctly in the first place to clear the lymph glands themselves.

Once you get your liver working with methionine, taurine, choline and inositol and others, you'll find that your lymphatic system starts to go down.

Fasting

You cannot fool the body. You have to supply it with the nutrients it needs. If you think, for example, you can do with one meal a day, you're fooling yourself but not your body.

Once the body does not receive the required nutrients in terms of amino acids etc. it will start to break down muscle tissues. These tissues will provide the most essential amino acids to deal with functions of the heart, the brain and other vital organs.

Mr Lucy spoke of his experience how in the early days he believed in the benefit of fasting. He was a strict vegetarian for four year and he used to fast every month for 10 days. He wonders why he did not die. Nowadays, he is not a great advocate of fasting. In the first three days of one's fast you will make your pituitary gland work much harder, sending hormone alarm signals to keep the heart and the brain going. After those first three days you start to metabolise yourself.

It is much better to get your digestive system operating properly.

Enzymes and bacteria in digestion

To improve digestion we may have to treat the pancreas with pancreatic enzymes. Irritable bowel syndrome is mainly caused by a lack of liver metabolites or lack of pancreatic enzymes. In their absence the bacteria take over straight away. Mr Lucy said that about 1100 different variety of bacteria live in the gut. Each segment of the small intestines has its own sort of bacteria, which should remain in their respective areas. When they start to migrate to other areas in search of their foods, they could cause havoc in the form of disorders like irritable bowel syndrome. The bulk of one's stool is about 50 per cent bacteria.

People who consume fermented milk, as some folks in Bulgaria, do have the longest life span. Taking acidophilus helps to control toxic bacteria in the gut. The problem with most commercially available yoghurt and butter milk is, that the manufacturers add sugars (such as lactose) to them. Most people have a lactose intolerance. Commercial food processors add other chemicals that are not good for the intestinal tract.

However, it should be realised that manufacturers are forced to put preservatives in their products to make them available to us.

We have already mentioned how methionine, taurine, choline and inositol all help absorption which in turn relies on the health of the microvilli of the gut lining. The health of the villi depends on the muco-polysaccharides which you absorb from the food you eat. It is mainly derived from fibrous materials. Soyabeans are a very good source of polysaccharides.

Blood circulation, vitamin C and hesperidin

Vitamin C and hesperidin are probably the most important nutrients to rectify problems with blood circulation. Very few people have an allergic reaction to hesperidin, unlike bioflavonoids which have a biochemical structure resembling pollen, and some people are very allergic to pollen.

If you have pins and needles in your fingers, cold feet and hands, blue toes in winter time, then you probably have a circulation problem. Although the Recommended Daily Allowance of ascorbic acid is 30 mg per day, this will only give you protection against scurvy. If you have a high blood pressure, you need two grams of vitamin C daily and one gram of hesperidin. On this regime the blood pressure will drop without any side effects. Mr Lucy has been using this treatment since 1969 and he claims thousands have cured their high blood pressure with these nutrients. Most chemical anti-hypertensive drugs have all sorts of side-effects.

There are quite a few people with **varicose ulcers**. Most of his patients have been using vitamin C and hesperidin. To heal a varicose ulcer you need to restore the blood circulation inside the body, so that eventually all the blood vessels re-unite. This can be seen around the edge of the ulcer where a thin red line indicates tissues are growing again. Thus ulcers heal from the inside and not from over the top. Vitamin E and essential fatty acids may help to take the itch out of the ulcer.

There is a difference between the activity of vitamin C and hesperidin, as dictinct from vitamin E. **Vitamin E** increases the stroke of the heart. It enables you to use oxygen more efficiently. It does not rebuild the artery walls. Vitamin C makes collagen (with proline), which is the elastic material in the arterial wall. So every time your heart pumps the arteries expands and contracts. Thus taking vitamin E by itself may not help reduce blood pressure. It increases the heart stroke, but vitamin C and hesperidin improve the elasticity of the artery walls. These vitamins plus essential fatty acids increase the blood circulation, especially the fish oils containing eicosapentaenoic acid (EPA) and docosahexanoic acid (DHA). The two acids are believed to control the fibrillation of the heart. If you are allergic to EPA capsules (and this is rare), it is probably due to the person not producing the bile to emulsify the fat properly.

Excretion

Excretion is dependent on the presence of sufficient bile in the digestive system. In the top part of the bowel there is the Meissner's plexus and the Auerbach's plexus - networks of nerves - which coordinate the movements of bowel. There are two layers of the bowel; 1) one which stretches the bowel, 2) the other which pulls it back**.** These are causing the peristaltic waves and sometimes people think they have a palpitating heart, but in fact they feel the movement (peristalsis) of the bowel.

The two halves of the nervous system are the sympathetic nervous system and the parasympathetic nervous system. These two should be balanced, so that when the sympathetic nervous system drives you to do something the parasympathetic system should respond appropriately. This is how iridologists can see in the eye some of the signs indicating the sympathetic reactions of the body; for instance when the pupils of the eye dilate or

contract in response to processes going on in other parts of the body. After it is all over, you should be able to relax and your pupils should go back to the normal size. Some people have a sympathetic nervous system that is dominant or over-reactive; thus they tend to have large pupils and this would indicate a whole cascade of events which may not be helpful for the body.

The speaker finished his talk by summarising that if we look at our health in general and the various diseases to which we may fall victim, we need to look at 1) Digestion, 2) Absorption 3) Blood circulation and 4) Excretion.

Mr Lucy's lecture was received enthusiastically by his audience and went well beyond the allotted time. By relating the many illnesses so prevalent in present day society to digestion, absorption, circulation and excretion, he was able, on the one hand, to simplify the complexity of 'degenerative' diseases, and on the other, to provide us with a practical nutritional model for the treatment of such diverse disorders as allergies, blood pressure, varicose ulcers, bowel disorders and candidiasis.

Note: Robert Lucy has a practice at Suite2, 235 Macquarie St, Sydney Phone: 223-6601

BOOK REVIEW

PSYCHO-NUTRITION

By
William Vayda

William Vayda's latest book published by Lothian Publishing Company Pty Ltd, Port Melbourne Vic discusses the relationship between nutrition and behaviour. Each page of the book is packed with information, dealing with well-known problems of a psychological nature. Bill has given us permission to copy some chapters of the book for publication in this Newsletter and we, of course, thankfully accept this offer. We hope to publish some chapters in future issues.

Here we can only touch upon certain parts of the book.

Memory

Vayda points out that psychologist are still unable to pinpoint the area in the brain where memory is stored. However, in 1976 scientists have found that a small structure of the brain called the *hippocampus* is essential to memory. Animals without the hippocampus are found to be unable to remember. Certain drugs are known to wipe out memory and Vayda mentions that Puromycin, an antibiotic, affects long-term memory by blocking the synthesis of certain proteins.

Studies show that sleeping pills prevent 'Rapid Eye Movement' (REM) which then interfere with your ability to remember. Thus serotonin (a neurotransmitter), although it does not directly improve memory, does so indirectly by promoting natural (REM) sleep which is essential in consolidating memory. Serotonin is made from an amino acid called tryptophan found in relative large amounts in pork, soya flower, pumpkin seeds, milk, bananas, cashews and cheeses. (William Vayda gives lists of foods containing vitamins, minerals and amino acids at appropriate places in his book).

The uptake of tryptophan competes with other amino acids and hence one can maximise its absorption by taking it on an empty stomach away from meals or by taking it with some carbohydrates (honey is ideal). The carbohydrates stimulates the pancreas to excrete insulin which depletes the blood of precisely those amino acids which are competing with tryptophan.

Fast thinking and relaxation

Glutamic acid causes rapid excitation of brain cells and Vayda believes this to be an important chemical to 'encode' information, that is, memory. Glutamic acid appears to 'clear' the head.

Ironically, glutamic acid in the presence of vitamin B6 is converted to gamma-aminobutyric-acid (GABA) which is a inhibitory neurotransmitter and has a sedating effect. Thus in the absence of B-complex vitamins and especially vitamin B6, there appears to be an accumulation of glutamic acid which may be causing us to be irritable and overexcited. On the other hand, if we have too much vitamin B6 we may be depleted of glutamic acid to the point where proper excitation and hence perceptive thinking is impaired.

Acetylcholine

Acetylcholine is a neurotransmitter secreted at the end of many nerve fibres and has been associated with improved memory. It is made from choline obtained from foods (especially lecithin, egg yolk, liver, wheatgerm and soybeans). Its transformation to acetylcholine require vitamin B5 (pantothenic acid) and vitamin B1 (thiamine).

In another section of the book Vayda mentions that certain neuropeptides (small fragments of proteins) affect memory. **Vasopressin**, an antidiuretic hormone produced by the pituitary gland can increase memory when applied to the brain. A synthetic form of vasopressin found in nasal sprays has been reported to restore memory to amnesia patients.

Ribonucleic Acid (RNA) is also found to be essential for learning processes. Orotic acid is converted to RNA and is an memory enhancer, found in milk. RNA helps cell protection against oxidising agents. However, the drawback of RNA is:

1) Its acidity can cause stomach upsets.
2) RNA metabolism produces large amounts of uric acid, which can aggravate gout and precipitate crystals.

Yeast contains about 6 per cent RNA, but it is behind cell walls that we cannot break down. One way of stimulating RNA is to take B12.

Adrenaline produced from the adrenal glands also seems to play a role in memory and learning. Vayda argues that in moments when the body produces large amounts of adrenaline as in crises or under stress conditions, brain chemicals (noradrenaline) act "as an embalming fluid for memories." These chemicals derive from phenylalanine or tyrosine, amino acids obtained from foods. These 'catecholamines' are also responsible for the production of dopamine - an intermediary neurotransmitter - excess of which has been blamed for schizophrenia. The major tranquilisers used in the treatment of psychosis - the phenothiazines - occupy the receptors for dopamine, thereby blocking its effects on behaviour. Vayda believes that vitamin C and B3 (niacinamide) can occupy the same receptor sites and this explains why some schizophrenics improved on this supplementation.

Vayda mentions **Chocolate** in several places in his book and its significance is that chocolate addiction is seen by Vayda as the body's response to a deficiency of phenylalanine. Chocolate contains *phenylethylalanine* which is used to produce norepinephrine - a by-product of phenylalanine. This amino acid is used by clinical nutritionist such as Vayda as an antidepressant (as well as a painkiller). Phenylalanine blocks the degradation of the body's natural opiates and hence increases its brain levels. Tyrosine also produces norepinephrine and brain levels are dependent on vitamin B12 and magnesium.

Histamine brain levels play a major part in our behaviour and mood swings. Histamine is derived from the amino acid histidine. People with excess histamine levels - called **histadelics** - have a large capacity to drink alcohol, have a high sex drive, need little sleep and often suffer from fluctuating blood sugar levels. They tend to be allergic, suffer migraines, and they salivate a lot. So, they are said to have good teeth, but bad stomachs because of stress related ulcers. Blood tests can be used to determine histamine levels. The normal range of basophils is somewhere between 10 and 140. A high level indicates high histamine levels.

On the other hand, people with low levels of histamine - the **histapenics** - have a deficiency of histamine and may therefore be suffering from fluctuating moods, generally on the down side. They tend to be "daydreamers, often out of touch with reality and, generally speaking, they are low achievers who

show little productivity in their work or chosen career. They are easily frustrated and become quite irritable and, as soon as they are under stress, they become physically tired and easily depressed." (p 31). They get drunk on little alcohol and are easily affected by most drugs.

Methionine methylates histamine, **Pangamic Acid** or **Calcium Pangamate** or **B15** high in cabbage also reduces high histamine levels.

Again Vayda gives foods containing rich sources of vitamin B12 (cyanocobalamine) and folic acid, beneficial to histapenics.

Some of the foods high in methionine are: Brazil nuts, Brussels sprout, cabbage, cauliflower, chicken, cottage cheese, soya beans, liver, milk, garlic, fish.

Foods high in pangamic acid (B15): almonds, apricot kernel, liver, rice bran, rice shoots, Brewer's yeast. They should avoid, however, foods rich in folic acid and vitamin B12, as these are exactly the nutrients required to *increase* histamine levels.

Anxiety attacks are often caused by an excess of pyruvate an intermediary substance in the generation of energy and derived from glucose, which is then shunted to lactate. Lactate is associated with anxiety attacks and hence Vayda recommends that vitamin B1(thiamine) and B5 (pantothenic acid) be taken to facilitate the breakdown of pyruvate. He also states that a deficiency of vitamin B12 (cyanocobalamine) can also increase the pyruvate levels dramatically. Calcium binds excess lactate in the blood stream and hence he recommends the taking of calcium on an empty stomach.

He devotes a whole chapter on the various aspects of **depression**. This can be caused by almost anything, lowered immune response, candida, alcohol abuse, vitamin B12 deficiency, deficiencies of minerals, amino acids, low thyroid, blood sugar. He discusses at length the use and misuse of various nutrients such as inositol, vitamin B3 (niacin), niacinamide (an other form of vitamin B3) and treatment with amino acids, such as tryptophan, phenylalanine, tyrosine, choline and their different application in the treatment of depression.

For instance: Vayda mentions that **Tyrosine** not only helps overcome depression but also can normalise blood pressure. People having this kind of depression crave cheeses, chocolate and other tyrosine containing foods.

If there is poor tyrosine absorption due to candidiasis or low hydrochloric acid in stomach, antibiotics, stress; tyrosine is converted to **tyramine** which stimulates the adrenal glands and causes norepinephrine depletion. **Tyramine** causes anxiety, palpitations, headaches (migraine), mental/physical exhaustion.

Another aspect of depression often overlooked is that of the influence of broad spectrum daylight has on behaviour.

Vayda explains that the **Pineal gland** a small organ located behind the hypothalamus in the brain, affects the breeding cycle in most animals. Its removal causes fish to lose their protective colours, deers to grow their antlers at the wrong time, and frogs and squirrels cannot adjust their body temperature.

When daylight shortens, the pineal gland produces *melatonin* a hormone-like substance that triggers some animals to hibernate. The general effect is a slowdown in metabolism. This hormone is made within the body from serotonin derived in turn from tryptophan. Hence when serotonin is used to produce melatonin, less is left over to "feel happy".

Daylight causes the pineal gland to make less melatonin from serotonin, hence more is available to curb the appetite, to prevent cravings for sweets, induce better sleep and avoid depression. It is well to remember that serotonin also stimulates the **immune system.**

Daylight must be of full spectrum. Incandescent light bulbs only emit yellow, orange and red portions of the spectrum, not ultraviolet and infra-red light. Fluorescent light emit "cool-white" light. This can cause **calcium malabsorption** and additional vitamin A is required.

Thus having a stroll in full sunlight each day takes on an new meaning!

Vayda's book devotes whole chapters on the Aging and Alzheimer's disease, Stress, Premenstrual syndrome, Hyperactivity, Neurotoxins in the environment, Alcohol and The Chemistry of Love. Each chapter is of great interest and a major attraction of Vayda's book is that it is written in clear simple language and above all with great humour. For instance, Vayda finishes his book discussing *aphrodisiacs* and his very last paragraph typifies his style of writing which is quoted here:

"Androsterone a potent male hormone (scent) is said to "attract females faster than a gleaming red Porshe". Celery is said to contain androsterone and is released through perspiration. People, I am told, find it irresistible, although it is not detected consciously and I am not sure whether your partner will want to cuddle or nibble you after a celery binge, but it may well be a healthier and sexier alternative to expensive perfume!"

AMINO ACIDS IN ACTION

ABOUT ASPARTAME (NUTRASWEET)

From
Chaitow,L(1989), ***THE HEALING POWER OF AMINO ACIDS****,*
Thorsons Pubs, Wellingborough,
pp 49-51

Amino acids are used in many commercial processes, a recent example being as artificial sweeteners for food.

Dr Michael Weiner, author of Maximum Immunity, discusses the harmful effects on the immune function of the amino acid combination marketed as the sweetener NutraSweet or aspartame. Once ingested in a cold drink or artificially sweetened food, aspartame, Weiner informs us, breaks down into its constituents, the amino acids phenylalanine and aspartic acid, and the following sequence occurs. 'Methanol (wood alcohol) is formed. Many foods in nature contain methanol, including drinking alcohol, but most sources of methanol in nature are accompanied by ethanol, and it turns out that ethanol is a specific antidote for methanol'. Weiner points out that, when metabolized in the body, methanol (which remember is the end product of aspartame or NutraSweet) becomes the highly poisonous and immune suppressing substance formaldehyde (used for embalming bodies).

If methanol was accidentally consumed, the standard procedure would be to pump the stomach and then to get the individual to consume a large amount of ethanol, making him or her more than slightly drunk. By saturating the system with ethanol in this way, methanol is degraded into acetaldehyde, resulting in drunkenness and a hangover - preferable to death which could result were the methanol allowed simply to degrade into formaldehyde. When Nutrasweet is consumed in sweets, soft drinks etc. there is unlikely to be any counterbalancing ethanol intake to allow the relatively safe degradation into acetaldehyde.

Thus, as Weiner points out, the only safe way to consume anything containing this undesirable sweetener would be to accompany it with an alcoholic beverage, not perhaps the best prospect for the health and immune system of a three-year-old who happened to be eating an ice-cream sweetened with aspartame!

Further dangers of the use of aspartame are highlighted by the internationally renowned researcher Professor Richard Wurtman of the Massachusetts Institute of Technology. In a report he shows that a number of neurochemical changes may result from its use, with serious potential consequences. In rats aspartame was shown to double the levels of phenylalanine in the brain, which effect was redoubled when carbohydrates (sugars) were consumed at the same time. This combination raised the levels of tyrosine (which derives from phenylalanine) in the brain by over 300 per cent! There was coincidental depression (by 50 per cent) of the normal increase in brain

levels of tryptophan, which would usually follow ingestion of carbohydrates. The amount of sweetener used in this study was equivalent to that consumed by a normal North American child on a hot afternoon (soft drinks, sweets, ices etc.). The full implications of such effects on the brains of children were not clear at the time of the study, but subsequent correspondence from Professor Wurtman on the subject indicates that the anxiety felt by many was justified.

Writing to The Lancet, Professor Wurtman describes the possibility of a link between seizures (fits) in healthy adults and the use of aspartame. He describes three cases in which the association is assumed. In one a 42-year-old woman drank 3 3/4 litres of diet soda daily. She experienced mood swings, depression and headaches, along with nausea. Ultimately she had seizures (epilepsy).

A second case involved a 27-year-old male who drank four or five glasses of diet (no-sugar and sweetened with aspartame) drink daily. He developed twitches at night along with abnormal breathing, a severe headache and eventually grand mal seizures (epileptic fits). The third case involved a 36-year-old man who drank nearly a litre daily of aspartame-sweetened tea. He too developed seizures. In all cases headaches and other symptoms disappeared after aspartame sweetened drinks were stopped.

In his letter, Wurtman described a sequence of events as involving increased level of phenylalanine, leading to abnormal levels of catecholamine and serotonin production in the brain, due to imbalances caused by the absence of other neutral amino acids. This would set the scene for the sort of symptoms listed above.

It is well to consider that in certain instances the use of supplemental amino acids could cause imbalances similar to this, unless strict attention is paid to the guidelines given as to dosage etc. Because something is helpful it does not mean that more of the same will be better. This is especially true of some of the amino acids which sometimes work therapeutically in small amounts, and not in large ones. If advice given in this book is followed, then there will be no such dangers. Please follow the guidelines and doses recommended.

ALUMINIUM BABIES

By Dr Ian Brighthope
An article published in
The Journal of
Nutritional and Environmental Medicine, *May 1992, 3*

According to a study by a neonatologist at Flinders Medical Centre, Dr Karen Simmer, mothers who gave antacids to their irritable babies for what they believe is reflux or colic, are unwittingly putting their children at risk of the toxic effects of aluminium. 50 per cent of healthy infants aged under 1 year, who received an antacid after each feed for "reflux" had plasma aluminium levels as high as those prescribed in older children with renal failure. Approximately 30 per cent of health adult South Australian infants receive antacid therapy, and many healthy infants were absorbing aluminium through over-the-counter preparations. High aluminium levels in children with renal failure cause dementing encephalopathy, osteomalacia and anaemias. Babies who received antacids had plasma aluminium levels of 3.3 μmol per litre, compared with control levels of 1.5 μmols per litre. The antacids most commonly used after each feed were Mylanta and Gaviscon. Between 500 and 3,500 μmols of aluminium per kilo per day were administered and, interestingly, because of the great variability in absorption, plasma levels did not correlate with the amount of aluminium administered. This may be related to renal excretion rates. The article goes on to state that wingeing, crying babies and babies who wake at night are often thought to have reflux, but Dr Simmer states that 80 per cent of normal babies reflux and there was little evidence to show that reflux was the cause of the irritabilities. I would suggest here that we look very carefully at the possibility of food sensitivity causing both the irritability and the reflux and that the child's diet/formula/breast milk composition should be examined. There are a number of very effective and safe alternatives to the use of toxic aluminium in so-called reflux, including avoidance of food intolerances, the use of safe time-proven herbal remedies such as meadowsweet, German chamomile and slippery elm. The avoidance of fruit juices, even diluted, and other sweet, sugary fluids is essential.

Tell me what you eat, and I tell you what you are (Brillat-Savarin)

May be there is some truth in this statement.

As Walter de la Mare so aptly said:

I's a very odd thing
As odd as can be
That whatever Miss T eats
Turns into Miss T.

MINUTES OF THE ANNUAL GENERAL MEETING OF 7th MARCH, 1992 AT YWCA, 2 Wentworth Ave. SYDNEY.

The meeting commenced with the Auditor's Report by Mr K E Keelan being unanimously accepted and approved as a true and accurate record of the Association's financial situation and the Committee of the previous year was re-elected; that is all members with the inclusion of Martin Harris.

This Committee comprised of
Steve McNaughton President
Joy Sharp Treasurer
Dr George Samra
Acting Secretary
Jur Plesman Editor
Steering Committee
Ted Grant
Mildred Grant
Sue Litchfield
Martin Harris
S Choc Catering Committee
R Grady Catering Committee

The position of Secretary was not filled and our patron Dr George Samra continued in the role of Acting Secretary.

RECIPES

by
Joy Sharp

PECAN SLICE

1 cup brown rice flour
2 teaspoons baking powder
4 oz margarine
5 dessertspoons brown rice syrup
1 dessertspoon light carob powder
1 cup crumbed puffed rice
1 cup chopped pecan nuts

Combine the margarine and rice syrup and melt. DO NOT BOIL. Add the vanilla. Mix together all the dry ingredients and then add the mixed margarine, syrup and vanilla. Line a slice tray with greaseproof paper and press the mixture into the tray. Bake at 350-375° F for 25 minutes.

This slice is nice topped with a carob frosting and sprinkled with chopped pecan nuts or coconut. Vary the recipe by using different nuts, coconut or dried fruit.

PIKELETS

2 cups brown rice flour
1/4 cup soy flour
2 teaspoons baking powder
Pinch of salt
2 eggs or 1 egg and 2 egg whites
2 tablespoons of sunflower oil
1 teaspoon sugarine or sweetener of your choice
2 cups of milk

Combine the beaten eggs, milk sweetener and oil. Sift the dry ingredients and gradually add to the mixture until fairly smooth. Spoon onto lightly oiled hot pan and turn when bubbles appear. Makes approximately 20 pikelets.

THE HYPOGLYCEMIC ASSOCIATION
FINANCIAL STATEMENT
YEAR ENDED 31st DECEMBER, 1992

INCOME			EXPENDITURE		
Cash at Bank 31/12/91		2596.45	Newsletter Printing		521.50
" on Hand 31/12/91		61.10	Editor's expenses		661.82
					1183.32
Members' subs. 1992	1475.00		Stationary, Postage		
			Catering etc.		1095.36
1993	1000.00		Y.W.C.A. Rental		385.00
	2475.00		Fed/State taxes		8.21
Meeting Proceeds	332.55				
Sale of books	105.00				2671.89
Donations -			Cash at Bank 31/12/92	3186.81	
D.Muller Memorial	30.00				
Dr. J. Guzowska	30.00		" on hand 31/12/92	38.19	
S. Duff	150.00				
Others	25.00				
Bank Interest	91.79	3239.34			
		$5896.89			$5896.89

AUDITOR'S REPORT TO MEMBERS

I have audited the accounts of the Hypoglycemic Association for the year ended 31st December, 1992. Current funds have been verified and suitable information was provide to me when required.

In my opinion the accounts are properly drawn up so as to give a true and fair view of the affairs of the Association for the year under review.

(signed)

K. E. KEELAN
HON. AUDITOR

10 Arcadia Ave.
GYMEA BAY 2277

22nd January, 1993

The President
Hypoglycemic Association
P.O.Box 8
SYLVANIA SOUTHGATE N.S.W. 2224

Dear Sir,

Attached is my certified summary and report to members following my review of your Association's financial records for the year ended 31st December, 1992.

The total revenue for the year decreased by $733.00 as against 1991, mainly due to the fall in donations. Members' subscriptions remained basically static whilst revenue from meetings slightly increased.

Expenditure for the year decreased by $1362.15 as against 1991, resulting from reduced costing in production of your "Newsletter". Other expenses were comparable with those for 1991.

A surplus of income over expenditure for the year amounted to $567.45 and adequate available funds have again been maintained to provide for the Association's future requirements.

May I again wish the Association continued success in its efforts.

(signed)
K. E. KEELAN
HON. AUDITOR

1993 MEETING DATES

6th MARCH - 5th JUNE - 4th SEPTEMBER - 4th DECEMBER