

The Hypoglycemic Health Association

NEWSLETTER

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



Please note the change in the name of the Association! A unanimous motion was passed at the last Annual General Meeting that the name be changed to **The Hypoglycemic Health Association**. This is only temporary and at the next AGM in March 1996 members will have a further opportunity to vote on the final name of the Association which will be one that does not contain "Hypoglycemic".

The new name should reflect more closely the concerns of this Association. We, like many other organisations, have grown beyond our initial theme of hypoglycemia to the whole range of natural health matters. Our ambition remains to inform and educate both medical consumers and practitioners in how to help nature to preserve and improve health using knowledge generated by both clinical nutrition and traditional medicine. Members are invited to forward suggested names for the Association. Next year we will then select and adopt the most popular name.

Membership fees have remained the same: \$15 pa per family or \$10 for pensioners and students. Nominated health practitioners receive this Newsletter free of charge to promote complementary medicine among doctors. Your expiry date is in the top right hand corner of the address labels.

Our Next Public Meeting will be at 2 PM
on Saturday, the 3rd June 1995
at the YWCA,
2 Wentworth Ave, Sydney and
our guest speaker is

Rita Cozzi N.D.

who will be speaking
on the subject of

***"The Naturopathic Approach
to Hypoglycaemia"***

- **RITA COZZI ND** is a senior consultant Naturopathic Lecturer at Blackmores
- She has been in a successful private practice for more than a decade
- Rita's medical experience began in the nursing profession where she gained her registration in North Queensland
- The nursing experience continued overseas in the UK, before returning to Australia to study Natural Therapies in Melbourne
- She is a leading exponent on mineral herbal and nutritional medicine lecturing throughout Australia

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

Previous Copies of the Hypoglycemic Newsletter

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

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 infor-

mation 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 meetings

Because of increase in costs the Committee has decided to charge an entrance fee of \$2 per person or \$3 per family at our public meetings.

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, Kogarah, Phone 588-5290.

Suzan VanVouklis won the Lucky Door Prize and **Mrs E McNaughton** won the Raffle Prize at our last public meeting on 4 March 1995.

EARLY INTERVENTION OF DIABETES

A anthroposophical view of medicine

By Dr Chris Miliotis
from a lecture given to
the Hypoglycemic Association
on 4 March 1995

Anthroposophy & Rudolf Steiner

Anthroposophy may be described as an attempt by Rudolf Steiner (1861-1925) to recapture the spiritual realities generally ignored by modern man. Steiner was born in Kraljevic in Croatia, studied mathematics and natural science and later worked in the Goethe archives at Weimar. In many ways he represents a renaissance man. He is well known for his theories in education. He had much influence in establishing schools that put his theories into practice. Rudolf Steiner schools are operating in many countries, including Australia. His influence has extended into medicine, where he emphasised the holistic approach to the treatment of disease, particularly chronic illness. He worked in many spheres of learning, including agriculture. He was very interested in not only the food we eat, but also how food was grown. Modern-day biodynamics is another offshoot of Rudolf Steiner's anthroposophy. Nutritionists are indeed concerned with how the food is grown before it reaches our tables.

One of the great difficulties I have in speaking here is that we use a terminology which

derives from esoteric literature, in other words terms that are known only to the initiated.

Before we start to translate these terms, we need to talk about the view of man.

Anthroposophy comes from the words "anthropos" plus "sophy". 'Anthropos' is a Greek word for 'man', or 'human being'. Sophia was the Greek goddess of wisdom. Thus anthroposophy refers to a deeper understanding of human being. We know that human beings are complex. When dealing with any aspect of health from a holistic point of view, we must include the physiological, the biochemical, the emotional and psychological aspects and to some people who are so inclined the spiritual aspect of man. With these perspectives we can look at a "chronic illness".

This is of particular importance in regard to preventative medicine before a disease becomes too entrenched. Hence it is important to pick up the early warning signs. In the hypoglycemic syndrome these become firm indicators that it may develop into more severe problems of diabetes later on. It affords an opportunity to change the course of the illness

earlier on. I realise that members of the audience would be very familiar with symptoms and nature of hypoglycemia. In my practice I have worked extensively in this area of medicine and have experienced much success in the anthroposophical approach in dealing with illness.

The Physical Body

I would like to build up a picture of this approach starting with the physical body. The advantage of this body is that it can be felt, touched and smelt, etc. There are not many philosophical problems with the physical body, apart from the fact that it is extremely complex. The good thing about it is that we can see it and hence medical science is based on it.

However, you come to a problem when you look at the **psychological** aspect. It is not so visible. We can see when a person is stressed and sometimes it also imprints itself in the way the person presents himself. But the issue of stress is not so easily available to the medical science as looking at the physical body.

There are interim things such as biochemical processes which take us into the realm of

the condition called hypoglycemia.

Yet hypoglycemia may be exacerbated after a person had a psychic shock. The question is how does the psyche affect the physical. How are they related?

The Ego

Behind the psychological aspect I'd like to call in another concept, the Ego. Freud uses the term to mean that part of the psychic apparatus which experiences the outside world and reacts to it, thus mediating between the primitive drives and the id. In Greek it simply means "I". When we talk of oneself as "I", we speak of ourself as an individual entity. Our individuality is as individual as our DNA imprint. I see our DNA imprint as a reflection of our individuality, rather than determining causes of who we are as spiritual beings. We come to see the Ego not as seen by Freud but rather as the spiritual essence or the core of a person. By this I don't mean an airy-fairy idea, but I would like to present the idea that this entity of the spiritual core also impacts on the psychological, biochemical and the physical. Thus the Ego needs to be taken into consideration in treatment.

The Four Elements of Nature

The Greeks believed that all nature consists of the four elements of earth, air, fire, and water. The body was thought to be composed of the four corresponding humours; black-bile (earth), blood (air), yellow-bile (fire), and phlegm (water), and illness to be the result of an imbalance among the humours.

The Ego can be related to a fiery process. If a person is enthused about something you see something of the individuality of that person. He seems to be "fired" up with enthusiasm. Interestingly, the fire process is warmth and the organisation of warmth. A person in a state of shock, has the fiery processes removed from him, and he gets a certain coldness in him, restrictions and chronic stress. These may be the precursors to establishing a condition, where the metabolism is not working well. When we cook something we need warmth. It is as if we take substances from the earth and if we cannot cook these internally (rather than externally) - that is metabolize them - the body has to deal with these foreign substances by different metabolic pathways. This may explain how hypoglycemia and other metabolic disorders in general occur.

Chronic stress a major precursor to illness

It is generally accepted that a psychological stress may be a precursor to illness. Genes may predispose to an illness, but the question is why does an illness arrive at a certain time. Often one hears that the pre-cursor is a major stress. This is revealed when we ask when last a patient was well, and then investigate what happened between that time and the onset of illness. Often we hear that the person suffered the loss of a significant partner or was subjected to some other trauma.

The ancient Greeks saw the air was the

soul. They believed that they imbued the air with the soul when they performed in the arts. This is also reflected in the sculpture that depicted the garments flowing in the air. Perhaps the connection between this concept and illness may be vague, but I will leave this as a puzzle to the audience.

The Astral Body

Another idea used here is the Astral Body, a term derived from the word star. The ancients had a belief that the constellation of the stars had an influence on people, or that the macrocosm influenced the microcosm. The Astral body is the body we share with the animals. The animals move and they have consciousness unlike the plants; they also reproduce like ourselves. Their physiological functions are associated with the Astral Body. For example the waking and sleeping cycle is mediated by the Astral Body. When we are awake, that is conscious, the Astral Body comes into our physical body. It engages us and we have an alertness. When we go to sleep, the Astral Body leaves and returns to the starry realm.

The Astral Body also imparts a number of

Fire	Spiritual
Air	Psychological
Water	Biochemical
Earth	Physical

impulses, for instance secretions of the pancreas and gall bladder and saliva. So when we sit down to eat, the Astral Body is engaged by seeing, smelling and tasting the food causing the secretion processes. We know when we are in a stressed state we should not eat and that is in a sense because the psychological aspect is not in harmony with the Astral Body.

The Etheric Body

Another concept related to the biochemical aspect is what is called the Etheric Body. It is related to the water element. Without water there is no life. It is in the watery realm that life exists. When talking about biochemical processes one has to ask: How are they ordered? There is a multiplicity of biochemical transaction going on beyond our understanding. The image I would like to invoke is that the action of enzymes etc. are mediated by this life body. When you make a pot you need clay, which is the raw substance but the potter has to be there to shape and organise it in the right way. The Etheric Body is in a way like the invisible potter. In a biochemical process you can see the final results - glucose - but it has been mediated through this organising principle of the Etheric life processes.

Balance among the Four Elements

Fire, air, water and earth connect with our spiritual, psychological, biochemical and physical processes.

When you look at any illness this frame-

work gives us an indication of excess activity in one region or the other and it gives us a clue as to how to balance things out.

In looking at the problem of hypoglycemia more and more is being discovered, but I do not want to just look at the physical details, but rather the interactive process between the four aspects discussed so far.

We know that the carbohydrates come primarily from the plant realm and its is interesting that we share the plant realm with our Etheric Body or Life Body. We have plant-like processes as when we say we are "veged out", when our consciousness is not there. It is from the plant world we derive our carbohydrates primarily. There are three principle kinds of carbohydrates: 1) galactose, 2) fructose, 3) glucose. Glucose is needed as our brain food. We convert other forms of sugars to glucose before it can be used by the brain. Our consciousness is very much tied to the fluctuating levels of glucose to the brain. If it is too high we may feel agitated, if it is too low we may go into a coma. Therefore, it is very closely tied to our Astral Body. Without glucose we would not be able to do things and hence it is related to our will or the fiery side to do and initiate things. This is shown by the problem of tiredness which is part of the hypoglycemic syndrome. We don't seem to be able to take control of our life.

Fructose is an important source of glucose, but should be used in moderation. It is metabolized at one sixth the rate of glucose and tastes sweeter. Galactose, however, requires much more activity to break it down before we can utilize it.

By using complex carbohydrates we challenge the body to engage in higher forms of metabolism, so that the release of glucose is slower. This would benefit hypoglycemics. Hence it may be a question of balancing one's food sources.

Catabolism - the breaking down process

One of the problems in the early stages of diabetes, of which the hypoglycemic reaction is a sign, is for a catabolic process to take place. Catabolism is a term used to mean breaking down substances, whereas anabolism means to build up substances in the body.

In a healthy organism we have the ability to shift the building blocks of what we eat to where we need them. By healthy organism we include mental health as well. It seems what goes astray in the problem of hypoglycemia is catabolism. It is important to stimulate those processes. If a person is in chronic stress, it shows itself up in the Astral Body or the psychological realm. As I have said before, the Astral Body not only mediate psychological problems, but also breaking down processes with secretion of substances, in other words catabolism. Hence we have a disturbance at the level of the Astral Body. Stress is like robbing yourself of the breakdown processes. It means moving away from metabolism. The catabolic processes of the Astral Body are usurped and move into the head

region. When this happens you get coldness occurring in the lower abdomen, the wrong sort of bacteria occurring in the gut and followed by a weakening of metabolic digestion.

Breathing and Stress

There is also this connection between the breath and the air as exemplified in the practice of yoga. When we are stressed we tend to breathe up in a shallow fashion and you get more anaerobic states as well, instead of aerobic states. Sometimes stress becomes locked in some part of the body as if the Astral Body cramps in certain parts of the muscular system. The movement of our bowels changes under conditions of stress as with diarrhoea and so on. It is as if too much consciousness is occurring and that increased Astral activity stimulates the pancreas to overreact. This is just another way of looking at things. In this state there is too much release of insulin which causes reactive hypoglycemia. This is a possible way of tying together stress and hypoglycemia. We can regulate this not only by working with the higher members of consciousness, but also through the food we eat.

The awe-inspiring liver

The liver is a fascinating organ. Seeing the dissection of a liver always inspires me with awe and makes me wonder how an apparently simple looking organ can do all the things it does. It prompts me to believe that there must be some other ordering principle underpinning the liver. We are aware of the enzymes at work, but the overall co-ordination of the complexity of chemical interaction seems to be controlled by the regulation of some higher principle. This higher ordering principle of life can also be experienced when we see such apparently simple things as the leaf of a plant.

The liver is in a way like a plant organ and some of the liver remedies derive from plants for the reason that there is a strong affinity between them. The liver is the organ par excellence, where the Etheric processes occur in this biochemical region. It seems to be mediated and organised by this "invisible potter" shaping its raw substances. The first port of call in our body through the portal vein from the digestive tract is the liver. It seems that all the breakdown products during the catabolic process - substances that have virtually died - have to be transformed and brought back into life. This can then be incorporated into our living body structures. We know that if the liver is damaged, illness almost invariably results.

Many chronic illnesses are related to stress which eats away these life forces. The constant toxic load from our environment from pollution and chemicals used in the way we grow our food, also stresses our life body in the liver. When the liver is overloaded with toxins, it does not break down the poisons as they should. It seems it does not have the reserves it needs to handle the load. The storage capacity seems to be affected. We know the liver stores glycogen - a form of glucose

storage. It may be that one problem with hypoglycemia is that we do not store sufficient glycogen to provide the slow release of glucose for the proper functioning of the brain.

We need to pay much attention to the health of the liver and I think there are many ways of doing this. I would like to make a plug for organically, or even better, biodynamically grown food. It is important to be aware where and by whom the food is grown and whether farmers have used any poisonous chemicals in the production.

The power of the Mediterranean wine leaf

One of the remedies for stressed livers that helps in the storage of glycogen is called *hepatadoron*, a remedy put forward by Rudolf Steiner. He observed that many people in Southern Europe ate vine leaves. Grapes have the highest concentration of fructose - a sugar. Steiner looked at the way the plant manufactures fructose. It comes through the roots taking up the various nutrients used. It then goes into the leaves, from whence the fruit is produced. Steiner said that if you eat the vine leaf, it helps the liver in its capacity to store nutrients. The vine leaf is the organ of the plant where the fruit is produced or just before the location where the fructifying process is going on. Many of my patients have benefited from *hepatadoron* which is given in the form of tablets. It improves people's sleep, and they seem to be less restless as a result of the overactive Astral Body. It is like nurturing the liver. Unlike so many chemical drugs used in the treatment of the liver there are negligible side effects. Steiner also advocated the use of strawberry leaves because of its high level of proteins. This encourages the liver in its anabolic (the building-up) processes. It can build up glycogen for release when needed. This is especially so when there is a lack of energy after three o'clock in the afternoon when the liver is in the anabolic mode. The body in sleep is building up substances and in waking consciousness is breaking down substances.

Tin silicate

Another remedy that I use is *Arandasit*, which contains tin silicate. I also use homeopathics which may be looked upon as a process, rather than using material substances. Hence using tin silicate is more like using a tin process, rather than a tin replacement.

Tin is of course used in the packaging industry. I am making a lot of logical jumps here when I talk of tin processes. But tin has this enfolding quality. If the liver processes are well enfolded through using the tin process, it makes it more able to do all the things it has to do. If it is not bombarded by toxins or stress from outside, and if it is enfolded and allowed to do its work and to house its life processes properly then it keeps the nutrients in the right form.

The silicate process is interesting because silica in the body is concentrated in the skin, sensory organs and the eye. The silicate process is involved in the nerve sense system, thus

effecting the sensing of the world around us. Hence it makes sense to say that by increasing silica, one increases the "watchful eye" of the liver. In the case of a glucose overload there will be a better balance in the liver regulated by that watchful eye. This is mediated through tin silicate and can improve the capacity of the liver to see the nutrient stream and respond accordingly. Thus it will not overreact or underreact. Tin silicate is administered in the form of drops in the anthroposophical armory.

Harmony of Life Bodies

My view is that if the spiritual and psychological states are in harmony the body will mirror this. If we live a life that is too much stressed, too much working with head forces, we remove the catabolic processes from our metabolism and shift them into our head. Our digestion becomes weaker. We need sometimes to stimulate that digestion through bitter herbs, thereby pulling us back into our metabolism. One of the virtues of the high protein and complex carbohydrates diet used by hypoglycemics is that it makes us go back from the head down to the belly. It engages the body to work more in the catabolic process, the breaking down of substances thus preventing us from breaking down thoughts all the time.

Exercise

Exercise will help to overcome the fluctuation of the blood sugar levels and it is amazing how the old Greeks used exercise, not so much to compete, but rather to promote gracious movements. Nowadays, tai chi is practised to produced balance and sensitivity in movement, which will also encourage movement in the metabolic realm. This is encouraged by the warmth and rhythm of movement.

Culture and the Ego

Looking at the changing of lifestyle we need to look at the diabetogenic aspect of our culture. This is not only the fast-food aspect and the television, that remove us from active movement, but rather the preoccupation with thinking and worrying about life and not enjoying or laughing.

The Ego, the fiery process, also mediates glucose metabolism, especially in the mediation of warmth. Life and warmth are somehow connected in love and enthusiasm. Without warmth conditions are created that would be the starting-point for degenerative disease, of which hypoglycemia is one. The personality that withdraws under a cloud of stress has an Ego that cannot engage metabolism properly. It is often said you are what you eat, but we don't look like a banana because we eat them. There are quite a few processes before parts of the banana go into us. Substances need to be individualised, and they are a keystone to allergens as well. Substances go through a death process in the catabolism and then are built up in the anabolic process. If the Ego withdraws from the metabolic regions, substances cannot be individualised. They are then treated by the body as something foreign

and the allergy state comes into play. Thus it is common to find in the hypoglycemic syndrome that many patients suffer from allergies as well.

Rosemary and hypoglycemia

A remedy we use in the treatment for hypoglycemia is rosemary. When we think of rosemary, we think of aromatic oils. It is grown in the Mediterranean region, in an area where there is a lot of light. Thus it grows in light-filled areas, and hence it has much warmth in it. The use of rosemary has this warming effect and lighting or radiating process. It encourages the circulation when applied to the skin. Warmth is used to encourage the Ego, the fiery process, which also mediates the glucose metabolism being regulated again. We also use rosemary in the form of homoeopathic injections, which is very safe. We have

had good results with rosemary and noticed that people have started to lose weight. They look more enlightened and look more optimistic.

Copper

Another substance used is copper given in a homoeopathic form. In a metabolic disorder we use it in a low potency form. Copper helps communication as it does when we are talking to one another over the phone through copper wires. Copper absorbs warmth and will affect the metabolism. This encourages the Ego to step into the metabolism. It also helps to overcome the over-reactivity of the Astral Body. Allergy may be seen as an excessive stimulation of the immune system, and hypoglycemia may be an overreaction of the pancreas. Thus by introducing a regulator of the Astral Body in the form of copper, you may prevent the excess secretions taking place.

Another related substance is copper sulphuric acid or copper sulphate. Nature uses sulphur in homoeopathic strength, as it were, to ripen fruit and hence it makes sense that if you use copper sulphate you get the warming process, but you also encourages the fruiting or ripening process in the metabolism.

It also has a loosening effect when used in a bath. It promotes relaxation and restful sleep.

Conclusion

I hope to have shown that by bringing about a balance between the various systems operating within our body and environment we can improve our health and may prevent degenerative diseases. This is generally the message from anthroposophy and forms my contribution to the debate in complementary medicine.

Fish and Oil

By CSIRO Division of Human Nutrition

Produced by J Stokes

For a long time we have been urged to eat more fish for our health's sake and the reasons for doing this are becoming clearer.

Research into fish consuming Eskimo and Japanese populations highlighted the low prevalence of heart disease. This observation led to many studies investigating the effect of fish oil extracts on the prevention of heart disease. The fish oils are a concentrated source of omega (or N-3) fatty acids.

Which fish oil should I eat?

Fish can be broadly classified (see table on this page). Fish tend to be higher in polyunsaturated fats than most land animals. A variety of fish can be included in the diet, with some restrictions placed on crustaceans because of their high cholesterol content.

By eating the low fat fish, you will be reducing the total fat in your diet, and by eating the moderate high fat fish you will be consuming more omega-3 fatty acids. Both modifications are beneficial.

What are Omega-3 Fatty Acids?

These are polyunsaturated fats most readily found in fish and fish oils. Small amounts, but of a different kind, are also found in

Continued on page 6

Table of Fish Types	
TYPE	COMMENT
MOLLUSCS	
Mussels	low fat, low cholesterol, some omega-3
Oysters	
Squid*	
CRUSTACEANS	
Prawns*	low fat, high cholesterol, some omega-3 (crabs or lobster tend to be lower in cholesterol)
Shrimp*	
Crabs	
Lobster	
FIN FISH -Low fat	
Whiting	Low fat, low cholesterol, some omega-3
barramundi	
trevally	
flake, flounder	
FIN FISH - Moderate to high fat	
Sardines (in sild oil)	Moderate to high fat, Moderate cholesterol, good source of omega-3
Ocean trout	
Atlantic salmon	
Tuna, Herring	
Mackerel	(*High in cholesterol)

linseed oil, soya beans oil and canola oil.

What do Omega-3 Fatty Acids do?

The omega-3 fatty acids feed into various biochemical pathways in the human body with widespread effects. Omega-3 fatty acids have been shown to:

- reduce blood triglyceride levels (triglycerides are a type of blood fat that plays some role in the development of heart disease);
- have anti-coagulant properties thereby helping to prevent blood clots from forming too readily and so possibly reduce the risk of heart attacks;
- reduce the effects of inflammation and may therefore be useful in combating arthritis and rheumatism for example;
- reduce blood pressure and potentially protect against heart rhythm disturbances.

Fish or Fish Oil?

Fish oils are a concentrated extract and the long term effects have not been fully investi-

gated. The minimum effective dose of fish oil is not yet determined. One to two grams of omega-3 fatty acids approximates the amount consumed per day by several populations whose diet is rich in fish.

How much Fish?

Three to five meals a week of a variety of fish should provide a useful amount of omega-3. Low fat cooking methods such as grilling, baking, and BBQs are preferable to frying.

Is Tinned Fish Beneficial?

Tinned fish is a suitable alternative especially the products which are labelled "low salt" rather than tinned fish in brine. Tuna, sardines, herring and salmon are rich in omega-3 fatty acids.

Should Supplements be Taken?

Supplements should only be taken on medical advice. It is better to replace some meals with fish, rather than add supplements to your total diet.

Extracts from

Good Food Show Cookbook CSIRO 1989
"Fish are also rich sources of several nutrients: quality protein, iodine and selenium, calcium (especially sardines) and vitamins D

and A (in oily fish). It is important when cooking fish, not to add unnecessary fat. Deep-fried fish in batter destroys one of the advantages of eating fish."

References for further reading

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Whey protein

New Uses for an Old Waste

by the CSIRO
Division of Human Nutrition

Contact: Dr Graeme McIntosh
(08) 303 8884

For too long whey, a by-product of cheese-making, has been devalued and even thrown away. Whey proteins represent the major proteins in human (breast) milk, in contrast to that of cow's milk where casein is the major protein. Dairy proteins represent one of the richest sources of sulphur amino acids in the human diet, and it is not uncommon for these amino acids to be deficient. We have been examining the claim that the quantity of protein in the diet, not the quality of protein, is the important issue where diet influences the risk of colon cancer.

Our recent experiment refutes this claim. We have shown that while feeding a constant level of protein to the rat, we can vary the incidence of intestinal cancer from 30 to 60% by substituting whey protein for soybean protein, and with all other food components being kept constant. Cysteine and methionine (sulphur amino acids) were increased by 3.3 and 1.6 times respectively. There is increasing evidence that these sulphur amino acids play

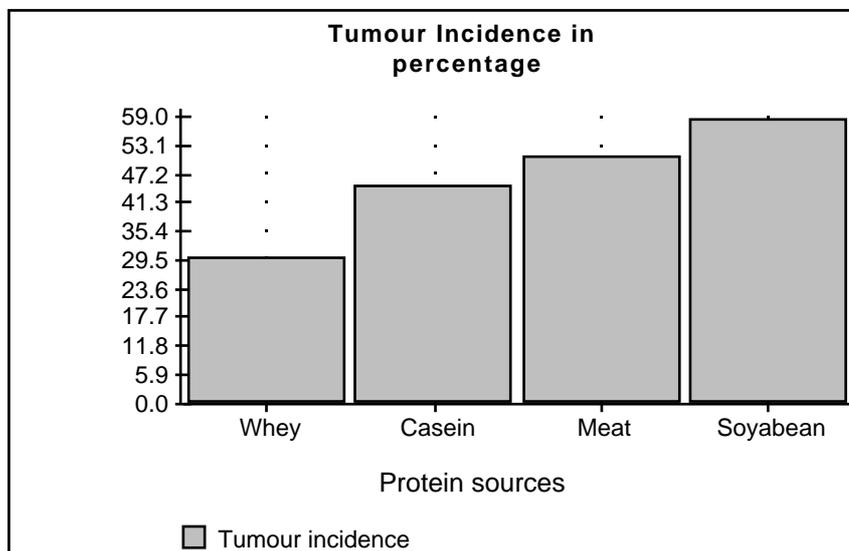
a crucial role in the protection of DNA by reducing the risk of mutation (mutation being one of the steps towards increasing the risk of cancer).

Other mechanisms also influenced by quality of protein in the diet are glutathione concentration (an important cellular antioxidant), immune status and the level and nature of fat in the hindgut which can lead to toxic damage.

We are doing a detailed study of the mechanisms underlying colon cancer. Besides helping to identify the important factors in the diet which can significantly alter the incidence and number of tumours that occur in this region, we hope to be able to provide a better under-

standing of why the incidence of cancer has increased in our westernised culture. We now recognise that whey proteins generally, are a valuable component of our diet and may offer protection against colon cancer.

Whey proteins should not be wasted, but incorporated more extensively into our diet. Ricotta cheese (which include whey proteins) and unprocessed milk products are examples of foods which are most desirable, now that such dairy products are low in fat and readily available.



SUGAR AND HYPERACTIVITY

an article reproduced from
The Journal of the Australian
College of
NUTRITIONAL AND ENVIRONMENTAL MEDICINE, July 1994
p26
Compiled by Daan Spijjer,
Subeditor

The following is a letter to the editor of the NEW ENGLAND JOURNAL OF MEDICINE, but was not published. It was in answer to the article in the NEJM entitled "Effect of Diets High in Sucrose or Aspartane¹ on the Behaviour and Cognitive Performance of Children" - Feb 3, 1994; 330(5): 301-307. The article has been widely quoted in the press in Australia as have comments from members of the Australian medical profession as showing that sugar does not cause hyperactivity. The letter, written by Dr Doris Rapp MD, a paediatric allergist, appeared in CLINICAL PEARLS, July 1994; Vol 4, No.7; 49.

The recent study in the February 3, 1994 issue of the *New England Journal of Medicine* that states that hyperactivity and learning problems are not related to the ingestion of sugar or aspartane is truly surprising. The study is flawed in innumerable ways by confounding variables that admittedly difficult to control. The selection of patients was faulty. Parents often suspect that sweets cause hyperactivity, but they usually cannot differentiate which component in the candy is causing difficulty. Corn syrup, nuts, wheat, eggs and milk are all known to cause hyperactivity. A valid study would check into these variables. In this study, a preliminary evaluation should have been done to be sure that sugar and aspartane did cause hyperactivity and that saccharin did not. If you have five nails in your shoe and you take one out, you still limp. To further complicate this issue, there is evidence that dust, molds and chemicals can cause hyperactivity and behavioural problems.

During a scientific study, one should compare a known with an unknown. For example, suppose a child is truly hyperactive from sugar. One should then feed the child sugar, and on another occasion, some substitute which looks and taste like sugar is eaten in such a manner that the child does not know which is being tested. If the child reacts to sugar but not to the sugar substitute, that suggests that sugar is causing hyperactivity.

In this study, 3 diets were used. One contained a large amount of sugar, another aspartane and the last one saccharin. It is not how much, but how sensitive that determines if someone reacts to some item.... Once again, if you partially remove a nail from a shoe, you will still limp.

One more problem was the observation
The Hypoglycemic Health Newsletter

portion of the study. Children who react to foods usually change within 15 minutes to an hour after eating, which lasts for an hour or two. The scientists monitored the children once a week and could easily have missed cause and effect relationships.

The bibliography lacked the American and foreign controlled or blinded studies indicating that sugar could cause hyperactivity. None of these "forgotten" studies were funded by the food industry (O'Shea Egger, Weiss and Rapp).

The bottom line is how can a mother tell if sugar is a problem for a child? Here is a fast, inexpensive, albeit unscientific way to find a practical answer. If a child is a "perfect angel" when a food is not ingested, suspect a food-related problem. If your child is an impossible Dr Jekyll/Mr Hyde after parties...may be sugar is a problem. Have a child write his name or read and notice the child's activity level and behaviour before and again after eating about 6 to 8 sugar cubes. There should be no other food eaten at least 4 days prior to this challenge. Watch the child carefully for the next hour. Does the writing or ability to read change? Does the child suddenly develop red earlobes and become very hyperactive or nasty? This certainly suggests that sugar might be a problem. For more information repeat the above several times and, if some changes occur repeatedly, you will be able to tell if sugar is truly a problem or not.

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1) Throughout this article aspartame is written as "aspartane".

EVERY LITTLE DROP COUNTS

by Editor

We are all feeling the pinch from lack of rain. Water restrictions are in force in Sydney and here are a few hints to help preserve our cities' water supplies.

- 1) We city folks are in the habit to let the water tap run when we are cleaning our teeth. Country folks fill a glass of water, dip their tooth brush and toothpaste in it and clean their teeth. If everybody would do the same we would save 70 Olympic swimming pools of fresh, clean water every day!
- 2) Convert your toilet to a dual flush system or put a weighted plastic bottle full of water in the cistern (being careful not to compromise its workings). About 13 litres of water are used with every flush and much of that is wasted.

WATER HEATERS AND HEALTH RISKS

By Editor

In NSW about 600 children are admitted to hospitals with bath scalds each year. Councils have been suggesting that water in the hot water units in homes should be reduced from 60 degree Celsius to 50 degree C. Water at 60 degrees causes severe burns in 1 second, whereas it would take five seconds for a similar burn at 50 degrees C.

The catch 22 situation is that by lowering the temperature we are also increasing the risk of harbouring the deadly legionnaires bug, which is said to lurk in 30 per cent of hot water systems in homes. It is claimed that this does not pose a health risk at present, but that lowering the temperature would allow the bacteria to multiply rapidly. Thus lowering the temperature of water may prevent burns, but it could also endanger the lives of older people and people with lung complaints.

In September 1994 an elderly couple contracted a fatal infection of legionnaires disease from a Queensland resort hotel spa bath. The Australian Lung Foundation has suggested that the temperature of hot water should remain at 60 degree at the point of delivery. Under the National Health and Medical Research Council guidelines, hospitals and nursing homes are required to keep temperatures above 60 degree Celsius.

Rich sources of iron:

Organ meats and meats, lean meats, tongue, liver, eggs, fish, poultry, blackstrap molasses, cherry juice, green leafy vegetables, beans, clams, dried fruits, peaches, poor in dairy products, Desiccated liver. [Ferrous sulphate or gluconate 300mg orally tid].*

- 3) Take shorter showers or consider installing a water-saver style shower rose. Every minute of average showering takes 19 litres, or nearly three buckets of water. Also use your dishwasher or washing machine when it is full.
- 4) Use good mulch in the garden and in pot plants. Consider installing a drip irrigation system or an in-ground soaker system for watering common gardens. It may be worthwhile to ask your Local Council whether you it would allow you to install a rain water tank. Be careful not to drink that water!
- 5) Sweep footpaths and driveways and only wash your car using a bucket of water. If possible wash cars on lawns, and not in driveways, and don't leave the water running in between the rinses.

NUTRITIONAL DEDICATION TO WEIGHT LOSS (WEIGHT METABOLIZERS)

by Steven Langer

from Better Nutrition for Today's Living
October 1994 p38

There's one basic problem with almost all weight-loss diets - they don't work!

The National Institutes of Health report that almost 95 per cent of dieters regain all of their lost weight within 12 to 36 months after their diet's end. Sadly, more than two-thirds of all Americans are overweight, and most dieters rely on the help of weight control programs that are not based on scientific facts, starving their bodies of needed calories and essential nutrients, and all to no avail. Most overweight people make the mistake of trying to undo in weeks what has taken months or years to accumulate. They slash their calories drastically, exercise for four to six times weekly and pay attention only to the quantity of food, rather than the quality. Consequently, the pounds refuse to drop away fast enough and, soon, discouragement sets in. Then overwhelming food cravings and hunger pains undermine what little willpower is left. However, there are solid answers to this all-too-familiar dilemma. Weight control can be easier and more successful if one turns to proven optimal nutrition and uses readily available nutritional weight metabolizers - as proper metabolism is the key to all weight concerns.

From a food intake standpoint, leading authorities have proved scientifically the value of cutting dietary fat intake to 20 per cent of total calories and eating about 65 per cent of all calories such as high-fiber veggies, grains and legumes. The remaining 15 per cent should be of high biological quality protein, such as lean meat, white meat poultry or fish. Provided that the calorie intake is a moderate 1,500 calories or less, such a regimen would begin to melt off excess poundage.

The latest nutritional research indicates that the formation of new fat can be minimized by eating foods with a low glycemic factor; these foods keep the body's sugar levels stable, and, therefore, help to prevent hypoglycemic reactions that trigger binge eating; cracked or sprouted whole grains, highbran cereals, non-instant oatmeal, pastas and starchy vegetables, legumes, non-fat dairy products, almost all vegetables and many fruits - excluding tropical fruits such as pineapple, mango, papayas and bananas - white meat poultry and low-fat fish.

Over and above the glycemic factor is the proper function of neurotransmitters, the

chemical messengers between the cells. These conduct the message telling us when we're full and help stop our craving for more food. In addition, they help our bodies burn the maximum amount of our fat, rather than turn down our metabolic machinery to conserve weight, as so often happens when we're merely counting calories.

Several amino acids - often absent from many individuals' diets - are also essential in this process. L-phenylalanine (LPA), working with vitamins C and B6 aids in the natural production of the neurotransmitters norepinephrine and dopamine, which help to control appetite. Additionally, LPA contributes to the production of thyroxine from the thyroid gland, which acts as a metabolic carburetor for every cell in our body. Tyrosine, too, plays a role in appetite suppression and in the production of thyroxine.

A person's good health, coupled with supplementation of tyrosine, a non-essential amino acid, as well as an adequate intake of iodine, may increase thyroid levels and increase fat burning. L-tyrosine also helps the body to cope with stress and to renew its natural store of adrenaline.

L-carnitine, another non-essential amino acid, is important for converting stores of fat into energy. By increasing the rate at which fat is burned, it is possible to exercise longer without fatigue, improving a person's ability to lose weight. Low serum levels of carnitine are often found in cases of hypothyroidism (low thyroid function). Some researchers state that the effect of thyroid hormones may, in part, be mediated by L-carnitine.

The amino acid L-ornithine and L-arginine are also reputed to help normal amounts of any single amino acid, it is important, first, consult with a skilled nutritional professional, because, as with trace minerals and fat-soluble vitamins, too much of a good thing may be harmful to one's health in certain circumstances.

Another word of warning: supplements with certain amino acids should be avoided by people with pre-existing clinical conditions. For example, L-phenylalanine should never be taken by someone with hypertension, phenylketonuria (PKU) or anyone taking certain antidepressants. PKU is a genetic disorder in which the patient has trouble metabolizing phenylalanine. If untreated, it causes severe mental problems in infants due to an accumulation of toxic metabolic substances.

GTF-chromium can also help in weight control by increasing the efficiency of insulin, helping dieters to decrease their sugar craving, regulating blood sugar and helping metabolism. It can also promote the insulin-

stimulating uptake of the essential amino acid tryptophan, which is converted to serotonin, a key neurotransmitter involved in controlling the desire for sweets. Best food sources of tryptophan include turkey, chicken, beef and milk.

Two recent scientific studies at major universities confirm that bio-active chromium helps people lose fat, while sparing muscle tissue.

The essential fatty acid gammalinolenic acid (GLA), available as a supplement (evening primrose oil, borage oil and black currant oil), has proven a life-saver for many dieters, and it is safe. Numerous studies show that GLA activates a special kind of fat, brown fat, which controls the metabolic activity of the tissue in which most of our excess white fat is stored. Inasmuch as most diets are deficient in essential fatty acids (EFAs), I recommend that my patients routinely take GLA supplement.

So that the body can use these versatile EFAs efficiently, it needs optimal amounts of the vitamins C, B2, B3, B6, as well as the minerals zinc and magnesium, which I also recommend to my patients in the form of a high potency vitamin-mineral supplement.

Certain herbs can be important to weight loss, too. Several herbal products gently stimulate the body's metabolism: ma huan, gotu cola, guarana and caffeine. They are usually taken in very small amounts with other nutrients in order to unleash their maximum power. People with chronic health problems should probably consult with a health practitioner before taking herbs on an ongoing basis.

The most proven metabolic stimulant is good, routine aerobic exercise. I recommend that my patients exercise aerobically for 40 to 60 minutes at least four times a week - that is, if their physical condition permits. If they're not in good physical shape, they should start slowly and gradually work up to this program. Brisk walking, bicycle riding and jogging are excellent exercises and well worth consideration as part of anyone's weight reduction plan.

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1995 MEETING DATES

4th MARCH - 3rd JUNE - 2nd SEPTEMBER - 2nd DECEMBER
