

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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PRESIDENT: Steve McNaughton ,BE (NSW)
Treasurer: Joy Sharp
Editor: Jur Plesman, BA (Sydney),
Post. Grad. Dip. Clin. Nutr.

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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.



Please send your fees for 1993 as all current memberships lapse at the 31 December this year.

The Association urgently needs this money to carry on the good works being done in providing high calibre speakers and producing the quarterly newsletters. The fees are \$15 per family or \$10 for pensioners. It is hoped that doctors and other health professionals who receive this Newsletter without any charge may find time to send in donations or contribute by submitting articles to this journal.

Our Next Meeting will be at 1PM on Saturday,
the 5th December, 1992

at the YWCA,
2 Wentworth Ave, Sydney and
our guest will speak at 2 PM

Mr Robert J Lucy

(DC, DO, ND, Dip CE Hon)

who will be speaking
on the subject

“Vitamins & Nutrients”

Mr Robert Lucy has extensive practical experience in complementary medicine. Originally trained as a chiropractor 35 year ago he believed that people needed treatments beyond just chiropractic adjustments and undertook diploma courses in osteopathy, herbalism, homeopathy and many other modalities in the natural health field. He finally studied nutritional biochemistry as it has direct application to human health. He began by having various tablets containing nutrients manufactured under contract and founded Prescribing Biochemists in 1969. Concerned about high standards he established Manucom Pty Ltd. To help health practitioners understand what the ingredients in the tablets meant he started a series of lectures. He soon realized that there was a great need to provide more detailed information and to systematically educate practitioners, such as chiropractors, osteopaths, acupuncturists, naturopaths, homeopaths and people of that ilk. So he created the College of Somatic Studies with the assistance of Dr Keightley. The courses are accepted by most Universities. The College plans to extend their course to six years by 1995.

CHRISTMAS PARTY

The next meeting on the 5 December, 1992 will start one hour earlier for our super Christmas Party. Members and friends are invited; if possible bring a plate of sugar-free foods.

Presents. The Committee asks every one to participate in the present Lucky Dip. Bring a wrapped present worth about \$5 with you, but even if you don't you won't be disappointed.

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.

Donation received from Mrs Robin Ryan

The Association wishes to thank Mrs Robin Ryan of Glen Iris, Victoria for her donation

of \$30 to the *David Mullen Memorial Fund*.

The Committee sends a big thank you to **Elaine Campbell** of Gynea for continuing to supply marvellous artwork prizes for the lucky door, including painted plates and for the brilliant surprise gift planned for our next December meeting.

Raffle & Lucky Door Tickets

Mary Grady of Reid won the raffle and Noela Strange-Mure of Waterloo won the Lucky Door price at the last public meeting on 5th September, 1992.

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).

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

FIT FOR LIFE: A Life-Time of Remedies

By
Dr George Samra

Most of this talk will be concerned with the quality of life and longevity. Reference is made to Table A. Columns 3 to 5 of that table mention foods that should be avoided or nutrients that should be supplemented.

It has often been said that people in the Western World are overfed and undernourished and that the quality of food intake is poor, in terms of vitamins, minerals and amino acids. The Western diet contains too much fat, salt, sugar, refined carbohydrates, processed food, food colourings, preservatives, potential harmful insecticide, pesticide residues, caffeine, alcohol - and may we include tobacco - and not enough fibre. The human body is a complex and surprisingly resilient biochemical machine. It functions best when given good quality nutrition, exercise, good environment including clean air, good shelter, low stress, and a balance of vitamins, minerals, amino acids and fatty acids. Table A is horizontally divided into eight age ranges

showing various common nutritional ailments.

Age 0-6 months

Babies aged 0-6 months should do well to avoid foods derived from brain, liver and cow's milk. Far too often they are given sheep's brain or liver in canned foods in the hope of making the child "brainy". However, the contents of a brain or liver are biochemically very active and often poorly understood. There is no doubt in my mind there are dangerous chemicals inside these organs. The brain was never intended in nature to be a source of food as it was encased in a skull usually impregnable to a carnivorous predator.

Mothers who are either unwilling or unable to breastfeed their babies are given infant formulae based on cow's milk. Cows are mammals like us and cow's milk contains complex proteins, similar to those of humans,

but there may be an immune confusion in the digestive system because of this similarity. Cow's proteins are foreign to humans. This can cause a potential allergic reaction in the baby, which may generalise to other sensitivities. Therefore, I would push for soya infant formulae for those babies that can not be breast fed for any reason. At this stage I would like to say that anything I say is regarded as extremely controversial by the medical fraternity.

Looking at the fifth column of table A the given supplements such as Incremen, Vitamin C, Calcium drops and Berroca should be at one quarter the normal dosage. These supplements are usually not necessary, although they can do little harm. However, they should be given only in cases when there are some problems with the baby at that tender age.

A sick child from 0-6 months can suffer from colic, rashes with eczema and dermatitis, respiratory problem including croup and mucous problems. The usual culprits are shown in "Food Avoidance" column, and if that does not fix it, then all solids should be avoided. It

TABLE A		FOOD AVOIDANCE		SUPPLEMENTS AND OTHER MEASURES (include homeopathy, herbal, acupuncture, weight control & exercise)
AGE	COMMON NUTRITIONAL CONDITIONS	IN GOOD HEALTH	IN BAD HEALTH	
(A) 0 to 6 Months	Colic Rashes Croup	Brain Liver Cow's Milk	Cow's Milk All solids (breast feeding best)	Incremin, Vit C, Calcium Drops Berroca
(B) 6 months to 5 years	Hyperactivity, hypoglycemia Asthma Eczema, Coeliac Stills Disease (Juvenile rheumatoid arthritis)	Sugar Brain, Liver Cow's Milk	Food colours (102) +/- gluten +/- Nightshades Fructose	As above
(C) 5 years to 10 years	See B plus Headaches	See B	See B plus Cocoa, Peanut Green Beans Peas, Orange	Vit C, Calcium Berroca Blackmore's Multi Vitamins + Minerals
(D) Puberty	See B Acne PMT Hormonal imbalance	See B plus Cocoa peanut Junk Food	See C plus Beef Junk Food	See C plus Zinc tablets PMT tablets Evening Primrose Oil Chromium
(E) Teens	See D plus growing pains Aggressive Behaviour Mood swings Tiredness	See B plus Cocoa Peanut +/- green Beans Peas +/- Orange +/- Beef	See C plus Beef +/- Mammalia Red Meat +/- Salicylates +/- Yeasts	See D Copper Aluminium Avoidance
(F) 20-40 years	See E plus Depression Fatigue Arthritis Migraine Irritable Bowel Syndrome	See E	See E plus Yeasts Salicylates +/- Mammalia red meat	Vita Glow Zinc + C 2 pd High Vita Stress 2 pd Vit C 4 gms pd Calcium tabs 1 pd Vit E 500 IU's pd
(G) 40-60 years	See F plus Asthma/Bronchitis Eczema/Dermatitis Arthritis/Diabetes Epilepsy Migraine Bowel Disorders Cancer Risks Crohn's Disease Ulcerative Colitis	Milk Dust mites Cocoa, Sugar Red Meat Cholesterol Coffee Onions	+/- Gluten +/- Yeast +/- Mammalia +/- Salicylates +/- Nightshades	See F plus Selenium Zocor Hormone Replacement Therapy
(H) 60 years plus	Alzheimer's Disease Cancer Osteoporosis Coronary Artery Disease Hypertension Palpitation	See G plus all Caffeine	See G plus Aluminium	See G plus Hair Testing for minerals Vitamin Essay

is a bit unnatural for a baby 0-6 months to consume solids as most of them in more primitive cultures would still be on the breast until maybe two to three years of age. This is also a natural form of contraception for the mother and also would be a form of good nutrition for the baby. There seems to be a competition at the baby health clinics: the more solids your baby can eat the more mothers are giving themselves medals. Babies at that age do not need lamb chops, vegemite, toast and jam. Most of the time they may have no problems tolerating these solids, but when they are having problems, then obviously go back to breast milk if possible, or if there is not enough milk perhaps soya infant formula. But stay away from cow's milk, including cheese, butter, yoghurt, cream and icecream and all cow's milk derived products. Substitutes are available for most of these. You can get soya icecream called Tofy icecream, sheep's cheese and goat's cheese, or goat's milk. But even for babies under six month I would not recommend goat's milk for exactly the same reason as cow's milk, since they are alien proteins being absorbed into a premature digestive track.

6 months -5 years

Here children become somewhat more interesting when they start to react to food. They may become hyperactive that keeps parents awake all night. This becomes also fascinating to the doctor when the child climbs on top of his wardrobe, pulls down the stethoscope and throws the syringes around the room. Other conditions indicative of food reactions are asthma, eczema, coeliac disease and Still's Disease, also known as juvenile rheumatoid arthritis. Coeliac disease is by no means restricted to childhood. Classic symptoms are diarrhoea, belly aches, bloating and vomiting. This is diagnosed by a small intestinal biopsy, which shows flat villi - the finger like intestinal protrusions that absorb nutrients. There is a gluten allergy. Doctors are in hurry to tell patients that they are cured when they have overcome their diarrhoea, belly aches and vomiting, but very often it then attacks another target organ, or part of the body. They may become asthmatics or get psoriasis.

Still's Disease - a condition of rheumatoid arthritis in children - is very debilitating and painful, often leading to deformity, whereby they don't reach their height potential. Often they are on very strong medication including steroids, such as prednisone. Steroids may make them function more normally and they may be in less pain, however the deformity continues. Steroids have serious side effects, yet sadly and fortunately Still's Disease respond to dietary manipulation. I have treated about six cases in my time and found all of them to respond to food. The most common factor in Still's Disease are the Nightshades, (also true for adult arthritis) tomatoes, potatoes, capsicum, chillies and peppers. The next most common food factors in Still's Disease are beef, veal and often the red meats and

mammal products. They also include animal dairy products; milk cheese and goat's milk and cheese. Sadly it plagues children over a lifetime, they develop to be deformed. However, the disease is very amenable to nutritional manipulation. I have a special interest in this condition and I have applied for a government grant to do more work specifically on Still's Disease.

In the normal 6 month- 5 year old child I am suggesting avoidance of foods in column three. They should avoid sugar, lamb's brain, liver, cow's milk and caffeine. In an unhealthy 6 month - 5 year old child I would suggest to avoid additionally those foods listed in column 4. Colourings, especially in hyperactivity and if behavioural manifestations are evident. In case of coeliac disease they should be off gluten, which is the main protein in grain, such as wheat, rye, barley and malt. A gluten free diet is usually a diet high in rice products. There are a lot of different rice products on the market including rice bread, rice cakes, rice noodles, rice crackers, rice flour, rice cereals and so on. There is also gluten free grain in buckwheat and millet. Preservatives are known to affect children with behavioural problems, including asthmatic children and often the nightshades are incriminated in some conditions (the potato and tomato family). Fructose could also affect a hyperactive child, perhaps a child with a nutritional condition. This list of foods to be avoided should only apply to the unhealthy child, whereas healthy children of the age 6 months-5 years should avoid the list of food in the third column.

There has been an arguments whether food supplements are useful. Calcium helps bone growth, and vitamin B complex have been shown to be harmless. Vitamin C is protective against colds and helps your white blood cells work better, and helps your heal better in case of injury.

5 years to 10 years

Nutritional conditions are the same as in the second column of the previous age range, but we have added headache as this is becoming more prevalent in this age group. The avoidances for these children are the same as the previous group. With headache we are getting into a new area of allergens where the legume family are incriminated. These are cocoa, cocoa beans, chocolate and cola drinks, green beans and peas; peanuts and other nuts. The safest nut is pine nut which is not a legume and carob can quite safely be used by children getting headaches, but very often oranges and other citrons are incriminated in headaches and migraines.

In this period of the child's fast growth there is a good argument for starting these children on a multivitamin and mineral supplementation, having regard to the fact that most of our food source come from leached soils, depleted of most minerals and replaced by only super phosphate. I feel Blackmore's is a good brand.

Puberty

Most of the nutritional disorders mentioned before continue to present themselves, but at this age particularly we see acne, pre-menstrual tension, hormonal imbalances. These may manifest themselves in different ways, such as in behaviour, aggression sometimes in painful ways hemorrhages and excessive bleeding. At this age children become most vulnerable to cocoa, peanuts and peanut butter. You can use cashew paste as a substitute. The nutritional problems in puberty is confounded by psychological factors. They are growing fast and want to be independent and they love their junk food, but unfortunately their junk food often make them sick and unbalanced. At this age vitamin C tablets and additional zinc tablets would be very helpful. PMT tablets is recommended in case of hormonal imbalances. Evening Primrose Oil supplementation is generally advised against allergies but particularly wonderful for girls who suffer from premenstrual pains and these supplements as shown in column 5 are very safe and non-toxic.

Teens

The nutritional problems of childhood and puberty continue to manifest themselves but there may be more aggressive behaviour and signs of mood swings and tiredness. Growing pains may be nutritional in origin. The avoidances (in column 3) are the junk food, cocoa and peanuts and milk and caffeine for the normal child in otherwise good health. Beans and peas, oranges and beef may be causing them problems. Note that beef and veal is the animal that makes cow's milk and cow's milk is the most common allergy in human beings. It may affect 20 per cent of the population. It affects 80 per cent of black people, thus they are more vulnerable to cow's milk than the whites. Beef, that produces that milk has similar proteins to cow's milk, and so when you are allergic to one aspect you may be allergic to other aspects of beef as well. These recommendations apply to the "healthy" child.

When it comes to the sickly child the banned foods of column 4 level C apply, but in addition all mammalian meat products should be avoided, such as lamb, pork, sausages, corn beef and Devon, ham, bacon and salami. Quite often salicylates are incriminated at this stage. Although a big word, they are in fact natural aspirins in our food. The highest contents are in dried fruits, like raisins and sultana, apricots and plums, and they are particularly high in all of the grape family, citrus, orange, lemons, grape fruit, stone fruits, and berries, such as strawberries. Tomatoes are high in salicylates. Low salicylate foods are peeled pears, bananas without the strings, pawpaw, gold and delicious apples. Salicylates cause a chemical sensitivity rather than a food allergy. It is actually a non-protein intolerance, rather than a protein mediated allergy mechanism. But often salicylates are incriminated in conditions like asthma, urticaria or red skin rash, cystitis or recurrent bladder infections, ulcer-

ative colitis, arthritis. The latter is quite a paradox as natural aspirins can make arthritis much worse, whereas often aspirin is given for arthritis. For a complete list of foods containing salicylates see The Hypoglycemic Newsletter, June 1990, page 10.

20-40 years

In addition to the above nutritional conditions, other signs become prominent. These are depression, fatigue, arthritis, migraine headache, Irritable Bowel Syndrome, Crohn's Disease and ulcerative colitis, all of which respond to nutritional treatment in this age group. In case of depression, of course, hypoglycemia, Candidiasis and Chronic Fatigue Syndrome can be underlying factors, and fortunately these conditions are nutritionally responsive. Amino acids are useful in treating depression, such as tryptophan and tyrosine because of their involvement with neurotransmitters. They could be called "happy hormones". Amino acids used in treatment are regarded as non-toxic. There has been a backlash against tryptophan which was previously freely available on the market, but is now available only on prescription. I regard tryptophan as non-toxic. Unfortunately, our Government is rather quick to slam nutritional supplements, which are less toxic than 99.99% of the items in the doctor's MIM's book.

In ill-health at this age one might consider the exclusion of yeasts in treatment of depression, malaise and fatigue. Yeast is often a dominant allergen these days. Yeasts are introduced into modern foods. They are moulds or fungi, that is germs added to our foods and like all germs and moulds they produce toxins and poisons that help them to take over their hosts. Yeast is a great decomposer, it is in the air, it brings dusts back to dusts so to speak. Yeasts in our food include yeast in bread, vegemite, mushrooms, alcohol, mature cheeses, malts, vinegar, and so on. Yeast avoidance should be tried if someone gets depressions, fatigue and general malaise. One should replace the yeast containing foods with rye-vita, non-yeast spreads like Tahini, weight watcher's jam instead of sugar jam.

Looking at the supplements in the 20-40 years old, I feel that every person in that age group should have additional zinc and not only hypoglycemics. I usually prescribe Vita Glow Zinc + C when it is tolerated. Other zinc supplements such as Zinc Goa are quite satisfactory. Zinc as a micronutrient is the most important mineral; it is the one in the highest level in your body. It is not structural like calcium and phosphorous in the bone. Potassium and sodium are structural in your body fluids. Iron is structural in your blood cells. Zinc on the other hand is there to help chemical reactions to take place. Vitamin C should be taken at 4 grams per day, it helps us to live in a polluted world. It detoxifies harmful chemicals in the liver, it helps your healing rate, when the body is injured, and it helps to fight off germs in illness by fortifying white blood cells in their attack against bacteria and virus-

es.

Calcium tablets should be taken once a day, especially for women to protect against osteoporosis, which occur in menopause. It is claimed that osteoporosis or the softening of the bone starts at an earlier age. Vitamin E plus vitamin C is regarded as protective against circulatory diseases, coronary arteries and blood circulation in general. There is an old formula called Dr Rinse's heart breakfast, which he used himself in his treatment of coronary artery disease. He used high doses of vitamin E, C, lecithin and safflower oil. Most nutritional doctors believe that the vitamin C and E are the active ingredients of his cocktail.

We live now in stressful cities where productivity and economic growth is always stressed, and to cope with these stresses it might be helpful to take B-complex in the form of High Vita Stress tablets twice a day.

40-60 Years

In this age group the following disorders become more prevalent; asthma, bronchitis, eczema, dermatitis, arthritis, diabetes, epilepsy, bowel disorders, cancer risks, Crohn's Disease and ulcerative colitis.

Again food avoidance as mentioned earlier need to be maintained, as well as some others. We will discuss some of these in detail. In case of asthma and bronchitis milk plays an important causative role. Sometimes other animal milk can keep the mucus active. Dust mites are the most common airborne allergies affecting this condition. There are special pillow cases by Aller-Search and there special mattress covers also. Dust mite is a microscopic insect.

The animal that makes milk may also be responsible such as beef, and perhaps lamb meat may be a good substitute for asthmatics. However, we have to remember that an allergic person is unique, for instance the Asthmatic Foundation recognises metabisulphite as being a trigger to asthma. This is a preservative used in wine now because it is a cheap in the market place.

In **eczema and dermatitis** the most common food allergens incriminated are (in order) cow's milk, cocoa in chocolate and cola drinks - carob is a good substitute - diet lemonade is a good substitute for diet coke, oranges including orange juice, mandarines, tropical fruit juices and salads and so on. Peanuts, including peanut butter and sate sauce and peanut oil. Cashew paste is a good substitute for peanut butter. Other nuts can be substituted for peanuts. Green beans and peas should also be avoided.

In **arthritis** the incriminating foods are; tomatoes, beef and veal, and sadly potatoes too. But all the nightshade are suspect, like capsicum and eggplant, chilli and peppers in addition to potatoes and tomatoes. Most arthritic patients should be tried for the big three; tomatoes, beef/veal and potatoes. In diabetes - and I suppose we can include hypoglycemia in this - sugars should be avoided. Eating right is important for a diabetic, six small meals is correct for both diabetes and hypoglycemia.

Often diabetics have digestive problems as the pancreas is in an advanced stage of malfunctioning and the pancreatic hormones are often deficient as well. So digestive enzymes are useful for diabetics.

Regarding **epilepsy**, it is my experience that these patients respond well to a hypoglycemic diet with allergies removed as well. That is six small meals a day, no honey or glucose, a good quality breakfast with grade one proteins, such as chicken and meat. A hypoglycemic diet seems to be a brain stabilising diet putting the blood sugar levels on an even keel and this may be the explanation for the remarkable improvement among epileptics. I do not encourage patients to suspend their medications.

The most common incriminating foods in **migraine** are cocoa, citrus, oranges, peanuts, beans, peas as well as idiosyncratic foods. With migraine sufferers I order allergy tests, especially when avoidance of the top suspected allergies don't do the trick. Some unusual allergies are corn or perhaps tomato.

In **Bowels Disorders** the common problem foods are onions, including shallot, chives and leeks, fizzy drinks, leafy green vegetables such as spinach, brussels sprout and broccoli, green beans and peas, peanuts and often other nuts are incriminated. Pine nuts are the lowest allergy nuts and you can make a pine nut paste with a blender and some vegetable oil. Nuts can have a mechanical irritating effect on the bowel acting like a gravel, rather than being a true allergy.

Cancer Risks is a big topic. Foods that are regarded as cancer risks include mammalia and coffee. Mammalia provides, of course, a wide range of food sources, mainly from animals that are like ourselves, including milk, goat's and sheep's milk, and animal cheeses. I have patients, although not suffering from cancer, who come to me for prevention for high-cancer risk. These include members of a family where the males tend to die from cancer at the age of 20. They are off mammalia, but the proof of the pudding will be in the time. Curiously enough, when they have a nibble of ham or red meat they get sick and it could well be that I have done them a disservice. Most of the milks and cheeses can be replaced by soya products or coconut creams. Rice milk is another new milk product made from rice and nothing else. It is quite palatable, but expensive.

The proteins contained in the mammalia are like our own proteins and hence cause an immune confusion underlying cancer. Cancer has been correlated to red meat consumption and other meat sources. The least carcinogenic are the white meats such as chicken and fish. Chicken skin is not carcinogenic but can be full of hormones, toxic chemicals and cholesterol and should be removed before cooking. Thus fish, chicken and vegetables are the foods to eat if you want to prevent cancer as we get older when the risks increase. Cancer in general can be seen as the disease of older

people.

Looking at the column of supplements I have mentioned selenium, which is an excellent antioxidant. Antioxidants are substances that stop peroxides, hydrogenperoxides and activated oxygen molecules doing damage to the internal organelles of body cells. Thus antioxidants protect the inside of cells from aging and from damage. Selenium is not available freely over the counter. A prescription is needed.

ZOCOR is a medical drug which lowers cholesterol. It has very low toxicity and is well tolerated. There may be a futuristic debate about ZOCOR, for patients with high cholesterol there is no debate as it is well tolerated. In normal people - that is with normal cholesterol levels - it could well be argued that there is an enormous cost benefit ratio to take this drug to stop people having by-pass surgery or having their arteries blocked. We are talking about longevity and quality of life and we don't want to walk around with angina at a later age. Thus there is a debate looming among the medical profession, whether in fact people with "normal" cholesterol level should be prescribed a drug such as ZOCOR.

Hormone Replacement Therapy has become very popular among the medical profession. In the olden days the menopause was seen as a natural part of life, but nowadays it is seen as a deficiency state. Thus a menopausal lady is regarded as a patient who needs to be given hormones. As an alternative estrogen hormone production stimulants such as phenylalanine and vitamin B5 (pantothenic acid) were often prescribed by nutritional doctors. The debate is still going on, but female hormones do make a woman feel and look younger. Taking the right balance of female hormone does not increase cancer risk. The most important issue with hormone replacement therapy is osteoporosis or the loss of bone substance. The use of hormone replacement therapy is aimed at preventing this affliction. This would probably support the argument in favour of hormone replacement therapy as a

matter of lifestyle. Benefits are stronger bones, stronger skin, better sex drive and better vaginal lining.

60 plus age group

In this age group we find Alzheimer's Disease, Cancer, Osteoporosis, Coronary Artery Disease, hypertension, palpitations, flushing. Again follow the previous avoidances as shown in Table A. In Alzheimer's Disease it is usually not foods that are incriminated but rather minerals and especially aluminium has been implicated. Aluminium is a modern mineral; it was never found in the Egyptian mummy hair. Surprisingly, little lead was found in Egyptian mummy hair as well. Aluminium can be found in aluminium foil, in the frying pan and in cookware. It is found in underarm deodorant in the form of aluminium tetrachloride, which is absorbed into the skin. You can replace that with Impulse Cologne. The antacids such as Quickeze, Mylanta are all aluminium based. There is a strong case for doing hair testing for minerals in Alzheimer's Disease.

After cancer surgery, patients should go on the no-mammalia diet. There is a correlation between breast cancer and coffee consumption, although the actual mechanism is still a mystery. The problem with so-called epidemiological studies - population studies - is that correlation can be found between the various populations without pointing to a causative factor. In one country it could be shown that eating rice is associated with longevity, whereas in an other it could be correlated to a shorter life span as in the latter, people may be at war. Computers are so sophisticated now, that we can come up with thousands of parameters among a group of people and correlate them with any other. Thus eating fish could be correlated with becoming taller as is the case of the young generation of Japanese.

The development of **Coronary Artery Disease** can be retarded by supplementation, such as Vitamin B3 in the form of nicotinic acid. It makes you flush but definitely helps lower cholesterol. Vitamin C in high dosage in

the order of 10,000 mgs per day will also lower cholesterol. A high bran diet - a high oat bran diet in particular - lowers cholesterol. But the most powerful cholesterol lowering agent that I have seen is ZOCOR which does not seem to have side-effects. If cholesterol needs to be lowered urgently I would go for the drug, especially in the case of a family history of heart disease.

It is important that older people do not use caffeine as it may prevent them from sleeping. Zinc is protective to high aluminium levels and if you want to keep your brain working efficiently at the older age it is advisable to take zinc tablets each day. Multivitamins and minerals are necessary as we must understand that older people have a digestive track where the absorption of minerals - the transport mechanism across membranes - is much poorer, and that is irrespective as to how good their diet is.

Exercise

My thoughts on exercise are based on the concept of natural man who was a hunter and gatherer of food and who got plenty of exercise compared to the modern city man who is sedentary. Seeing the body as a well-oiled machine, it is important to use that machine with moderate exercise. Exercise should be enjoyable as it is more likely then to become part of a lifetime habit. When starting to exercise, begin gently. Exercise helps overcome obesity or overweight, depression, heart disease and sleep disorders. Exercise trigger off hormones such as endorphins - morphine-like substances that give you a buzz when you do your exercises. Exercises keep your blood circulation going, makes your arteries and veins work, and helps your heart to cope with just a little more than the routine activities.

Changes in your lifestyle including food avoidances, supplementation with vitamins and minerals, adequate exercise and advice given here could make a worthwhile improvement to one's quality of life.

BOOK REVIEW

THE CHOLESTEROL MYTH

By Dr Robert Buist

Remember the days when we were told not to eat eggs and to avoid all animal food.

That's all changed now. And if you get impatient with nutritionists telling us to start a new diet yet again, you are forgiven. However, the knowledge of nutrition and its relationship to our health, and especially to the deadly heart disease, is such a rapidly growing science, that it is hard to keep up with the latest worldwide developments. This is exactly what Robert Buist did in his latest book **THE CHO-**

LESTEROL MYTH, Pan Macmillan Publishers Australia Pty. Ltd. in which he presents an up-to-date picture of all available data concerning coronary heart disease (CHD) and cardiovascular disease (CVD). This is still the major killer in Western society.

Cholesterol production in the liver

The starting point of Robert Buist's book is cholesterol which has been blamed for clogging up blood vessels, affecting not only the heart but the vessels leading to the brain. Cholesterol is the forerunner of many important hormones, among them the sex hormones, bile, cortisone, testosterone and estrogens and so on. It is in fact so important that the body increases its manufacture in the liver, when the diet is deprived of cholesterol. Hence a low

cholesterol diet - so popularised by past experts - merely has the effect of triggering the liver to produce more of it. One wonders whether the liver is perhaps more effective in keeping up cholesterol levels. Dr Buist, in fact, suggests on the basis of experiments done that consumption of one boiled egg a day - a source of dietary cholesterol - will shut down the internal manufacturing plant. Provided other sources of saturated fats are reduced this would benefit people with high cholesterol levels (hypercholesterolaemia).

It was generally accepted that a low cholesterol diet would decrease the mortality rate from heart disease, and although this may be partially true it has now been found that a low cholesterol diet may well be one of the causative factors in a slight but significant increase

in the death rate from causes other than heart disease among those people that had adopted a low cholesterol diet. For instance, scientists have found a positive correlation between increased risk of cancer and low cholesterol diet, meaning that dietary cholesterol may be protective against cancer. Among the elderly cholesterol could even prolong life.

Oxidised cholesterol the real killers

The latest research as reported in Robert Buist's book give us a clearer picture of how cholesterol is involved in the formation of 'cholesterol plaques' in the artery walls. Cholesterol is carried around the body by two types of carriers; low density lipoproteins (LDL) and high density lipoproteins (HDL). LDL cholesterol is deposited in artery walls, whereas HDL cholesterol is removed from the walls and carried to the liver for redistribution in the body. Hence, LDL's are the baddies and HDL's are the goodies in this story. Thus people with high blood cholesterol levels may have a reasonable chance of avoiding heart disease so long as their HDL levels are high compared to the LDL levels. However, the real killers appear to be oxidised cholesterol or oxysterols and oxidised linoleic acid or linoleic hydroperoxide. Linoleic acid is a major component of vegetable oils. These oils and fats can become rancid when exposed to light, heat and air, forming compounds destructive of the blood vessel walls. Inside the body these same compounds are formed in the absence of antioxidants, such as vitamins C, E, A, carotene and selenium.

Endothelium or inner blood vessel wall

Robert Buist describes the inner wall of the blood vessel - the endothelium - as a series of cells playing an important physiological role maintaining blood vessel tone and permeability. This endothelium can be damaged by environmentally derived free radicals - cigarette smoke, car fumes and toxic chemicals - or oxidised dietary lipids, by-products of rancid fats and oils.

Thus damage is not so much the result of cholesterol as it is of hydroperoxides (rancid vegetable oils) and oxidised cholesterol deposited in the inner wall of the blood vessel by the low density lipoproteins (LDL). Thus oxidised LDL enters the artery wall, where it is attacked by white blood cells - the monocytes - forming dead cells or so called foam cells. This thickens the endothelium leading to atherosclerosis.

It seems that once hydroperoxides and oxysterols have damaged the vessel wall ordinary cholesterol will accumulate in blood vessel walls.

Hence, Robert Buist sees slightly rancid oils used in the food manufacturing and fast food industries, restaurants and other commercial outlets, such as fish and chips as the major sources of hydroperoxides. Oxysterols are found in animal food sources such as bacon, pork, salami, butter, cheese, egg prod-

ucts, irradiated foods (with gamma irradiation) and powdered milk. Whenever exposure to heat and air in the manufacturing process is involved there is danger of free radical or oxysterol attack of the inner vessel wall.

Antioxidant protection

If this sounds depressing the hopeful message in Robert Buist's book is that we can take simple means to prevent most of the damaging effects of free radicals, by increasing the natural defenses that the body uses for protection. These are the antioxidants; vitamins C, E, A and carotene. Studies have shown that the body uses these nutrients as protection in the order given. Thus the protective role of vitamin C is taken over by E, when the body runs out of vitamin C and so on. Dietary fats and oils should be fresh, minimally heated and stored in dark small containers.

Lean meat back on the menu

Meat consumption has traditionally been associated with higher cholesterol levels, because of its association with fat. Dr Buist refers to a team of investigators from the Department of Human Nutrition, Deakin University (Dr Kerin O'Dea and coworkers) showing that lean meat can be included in a cholesterol-lowering diet, provided it is free of all visible fat.

Vegetable oils

We have heard for many years that we should avoid saturated fats and increase polyunsaturated fats such as contained in vegetable oils. This is basically still the case, however Dr Buist has a closer look at the latest research. Vegetable oils contain linoleic acid - the so-called omega-6 fatty acid - obtained in safflower, sunflower, corn and soya bean oils. The problem is that whilst we are endeavouring to increase HDL's and lower the LDL's both of these fall when increasing polyunsaturated oils. However, one study showed that LDL-cholesterol levels were lowered to a greater extent by corn oil than by sunflower oil, indicating that some oils were more effective than others, although they belong to the same class of omega-6 linoleic acid.

Linoleic acid in vegetable oils are precursors to prostaglandins responsible for increased excretion of sodium and water through the kidneys and hence important in lowering blood pressure. They also help to prevent damage to the retina of the eye (retinopathy) of diabetics.

Monounsaturates - oleic acid

Aiming at lowering LDL's and elevating HDL's, the use of polyunsaturated fats are now being questioned. Robert Buist mentions that excessive use of polyunsaturated fats may even be associated with increased cancer and suppression of the immune system. He now believes on the basis of studies that monounsaturated fats, such as oleic acid found in olive oil and stearic acid - a saturated fat found in meat - are rapidly converted to oleic

acid. These may fit the bill in neither raising LDL cholesterol nor lowering the HDL. He quotes : "Hence a solid food diet rich in monounsaturated fatty acids is equivalent to a low-fat, high carbohydrate diet in terms of cholesterol lowering but does not reduce the protective HDL-cholesterol level."

Olive oil becomes first choice

After looking at comparative studies using polyunsaturated versus monounsaturated acids, Dr Buist declares olive oil as the winner: "olive oil is possibly the best oil for heart patients and potential heart patients." It is most resistant to heat and oxidation. It can be heated without burning and most importantly does not lower HDL cholesterol. Also he mentions that stearic acid in meat, normally considered a saturated fat, does not increase plasma cholesterol levels and he recommends that "margarine manufactured with a stearic acid content might not only taste more like butter but may also not lower HDL levels and be better at lowering cholesterol than margarines currently containing linoleic acid."(P44)

Fish oils

Dr Buist gives a clear description of fish oils which contain the omega-3 fatty acids called eicosapentaenoic acid (EPA), docosapentaenoic acid (DPA) and docosahexaenoic acid (DHA). These are consumed in relatively large quantities by traditional Eskimos who are virtually free of heart disease. Populations with an ample consumption of fish in their diet, such as the Japanese, also have a lower incidence of heart disease, atherosclerosis and high blood pressure. Omega-3 fatty acids have the effects of thinning the blood - thus preventing clot formation - but also extending bleeding time. Fish oils may increase the ability of red blood cells to change their shape and squeeze through narrow 3-micron-diameter capillaries, thereby supplying oxygen to the various tissues.

Omega-3 oils in the diet have the ability to decrease the very low density lipoprotein triglycerides (VLDL) carrying packages and hence so lower the blood triglyceride levels.

Dr Buist explains the importance of fish oils by comparing them with the actions of the vegetable oils. The linoleic acid in vegetable oils are converted to thromboxane 2 (blood clotting agent) and prostacyclin 2 (prevents blood clotting) via arachidonic acid. These are converted inside small white blood cells, called platelets and in the blood vessel wall respectively. The EPA in fish oil plays a similar role as arachidonic acid in land-based food sources (both plant and animal) producing similar substances as thromboxane 2 and prostacyclin 2, however they cause less inflammatory actions. They are called thromboxane 3 and prostacyclin 3. The latter derived from EPA tend to reduce blood clotting and hence their importance in the treatment of cardiovascular disorders. They promote the flexibility not only of the red blood cells, but also blood

vessels themselves. They become of crucial importance to people suffering from diabetes as they improve oxygen supply to the peripheral areas of the body (extremities). However, fish oils are highly unstable polyunsaturated molecules and vulnerable to free radical attack. Therefore, they require higher doses of antioxidants and Dr Buist recommends an increased vitamin E intake when supplementing with fish oils.

Dr Robert Buist's book covers a whole range of other topics of importance in the prevention of not only cardiovascular disorders but also other degenerative diseases. He mentions for instance the beneficial actions of Ginkgo Biloba in dilating blood vessels to the brain and how ginger helps control platelet stickiness and hence thrombosis. He discuss-

es how filtered coffee instead of boiled coffee avoids the coffee oil that seems to be responsible for the increase in blood cholesterol level. He provides lists of food sources for antioxidants. The book reflects his holistic approach to health by a special chapter devoted to stress management highlighting the psychological aspect of health. He gives 53 pages of recipes on "protective foods in action" with its own index. His book contains a glossary of terms used and their definitions. Each chapter is thoroughly referenced for further study if so desired. One criticism though is that the book lacks an index, so that it is somewhat difficult to look up a topic.

Despite this, Dr Robert Buist's book is a valuable addition to one's home library, and is "a must" for those people who suffer from a cardiovascular disorder. He brings a message

of hope to those that have been told for so many years that you cannot eat this or that. In fact his book should be described as a revolutionary new approach to the dreaded disease of the heart. Jur Plesman

75% of glucose required by the brain.

"The daily glucose requirement of the brain in a typical adult is about 120g, which accounts for most of the 160g of glucose needed by the whole body. The amount of glucose present in body fluids is about 20g, and that readily available from glycogen, a storage form of glucose, is approximately 190g." Lubert Stryer (1988), **Biochemistry**, W H Freeman and Co, NY, p 438.

**COMPANY DRUG
PUSHERS**

*By Dr Ian Brighthope
from*

The Journal of
Nutritional and Environmental Medicine, May 1992, 4

An article appeared in the Melbourne Age of the 2nd February 1992, titled **Move to limit Company Drug Pushers**. It stated that the Federal Health Department has accused drug companies of spending up to \$37 million per year, promoting drugs that damage health and/or cost tax payers unnecessary millions of dollars. The Department stated that drug manufacturers were encouraging the prescription of expensive drugs when cheaper equivalents would do the job. The promotion and use of new antibiotics, in preference to effective established products, was producing resistant strains of bacteria too quickly and making it harder to treat newer infections. It has been estimated that pharmaceutical companies in Australia spend \$200 million per annum promoting their products. The department considered that one quarter of this money was going towards promotions that are inappropriate, expensive or conducive to poor medical practice. The working party to the Trade Practices Commission enquiry into promotion and advertising of therapeutic goods is considering ways of persuading doctors to resist the influence of drug advertising and keep down the cost of their prescriptions. The possibilities that are being considered by the working party include;

* Australian College of Nutritional and Environmental Medicine

- 1 A levy on drug sales or advertisements, similar to the Victorian tobacco tax, which would be used for the promotion of non-drug therapies or cheaper drug alternatives. The ACNEM* is well placed to offer advice on non-drug therapies, but neither the working party nor the Health Department have made any form of contact with the College;
- 2 A limit to the percentage of sales which drug companies are allowed to spend on promotion. In the United Kingdom, promotions are limited to 10% of sales;
- 3 A larger budget for the Health Department's promotion of rational prescribing.

Doctors receive an unbalanced message about which drugs to prescribe due to the sheer volume of drug promotion. The key drugs of concern were those of antibiotics, anti-rheumatic drugs, sedatives and lipid-lowering agents. For example, an antibiotic called Norfloxacin, is promoted and over-used as a first line of treatment for urinary tract infections. This drug is 3 times the cost of traditional treatments. After having restricted this drug to 'authority to prescribe' in late 1990, its usage fell by 75%.

The powerful influence of drug promotions is illustrated by the fact that, although all medical students are taught to prescribe generically (that is by drug name, not brand name), 5 years after graduation, less than 5% of doctors were resisting the pressure from drug companies to order by brand name. The Trade Practices Commission has found that doctors could be pressured into irrational pre-

scribing because pharmaceutical companies were the major source of post-graduate information on new drugs. The report found large quantities of free samples were a problem. A free sample given to a doctor would be given to a patient who would expect to continue the treatment with that particular drug. There may be cheaper alternatives on the market. Inducements and hospitality are given to doctors also. However, there is no evidence that these are persuasive in prescribing inappropriately.

There is a growing number of doctors interested in alternative nontoxic medicines, and the investigation and evaluation of patients for the real cause of their problems.. This will not only make it harder for drug companies, but it will, in the long term, foster a healthier patient population and possibly help with the health dollar. Drug technologies are essential for the practice of modern medicine and are often life-saving. The concomitant use of diet and nutritional supplementation augments toximolecular drug therapies and within the next decade, will become an accepted part of prescribing practices.

Epinephrine increases blood sugar level.

"High levels of insulin in the blood signal the fed state, whereas low levels signal the fasted state. Much more is known about the mode of action of epinephrine and glucagon, which have effects opposite to those of insulin. Muscular activity or its anticipation leads to the release of epinephrine by the adrenal medulla. Epinephrine markedly stimulates glycogen breakdown in muscle and, to a lesser extent, in liver. The liver is more responsive to glucagon, a polypeptide hormone that is secreted by the β -cells of the pancreas when the blood sugar is low. This hormone increases the blood sugar level by stimulating the breakdown of glycogen in the liver." Lubert Stryer (1988), **Biochemistry**, W H Freeman and Co, NY, p 458.

1992 MEETING DATES

7th MARCH - 6th JUNE - 5th SEPTEMBER - 5th DECEMBER