

The Hypoglycemic Association

NEWSLETTER

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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.



THE ANNUAL GENERAL MEETING will be held half an hour before the public lecture, that is 1.30 PM at the YWCA, 2 Wentworth Ave, Sydney. The Financial Statement and the Hon Auditor's report are on page 10. Although many members regard this meeting as of little importance we urged them to attend. The Association requires additional Committee members to help us at times when we send out the Newsletters. The work involved as a Committee member is not onerous. There are only four annual meetings.

However, it requires some dedication and reliability with some spare time on hand.

FEES: For those members who have not yet paid their membership fees, please note the expiry date in the top right hand corner of the address label. The fees are \$15 per family or \$10 for pensioners and students. Health practitioners receive this Newsletter free of charge, as part of our policy to promote complementary medicine among doctors. We hope that one day patients will be able to claim the services of these doctors and naturopaths through Medicare.

Our Next Public Meeting will be at 2 PM
on Saturday, the 4th March 1995
at the YWCA,
2 Wentworth Ave, Sydney and
our guest speaker is

Dr Chris Miliotis
who will be speaking
on the subject of

“Early Intervention of Diabetes”

Our next speaker will cover an interesting topic in medicine; namely the influence of several layers of personality upon illness. **Dr Chris Miliotis** has worked in the field of psychiatry and anthroposophical medicine over the past six years. Anthroposophical Medicine is a branch of medicine established by Dr Rudolph Steiner and Dr Ita Wegman in the early 1900's. It is based on the view of man, who is composed of 4 principal members: 1) **The Ego** - his spirituality, 2) **The Astral Body** - both a physiological and psychological function, 3) **The Etheric** or Life Body, 4) **The Physical Body**.

Stemming from this view Dr Miliotis has become interested in how chronic illnesses are influenced by the psychological aspects of the person. How is it that recurrent emotional states may contribute to chronic illness, let's say hypoglycemia or diabetes?

Yes, of course part of the illness may be determined genetically, yet stress may suddenly expose this predisposition as in hypoglycemia. In his talk he will build up this picture of how hypoglycemia may be treated from this point of view, and then go on to the therapeutic applications derived from Anthroposophical Medicine.

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.

Lorraine Winsor won the Lucky Door Prize and **Mrs Martin** won the Raffle Prize at our last public meeting on 3 December, 1994.

WHAT IS NEW IN FATIGUE THERAPY AND DIETARY MANAGEMENT OF ARTHRITIS

By Dr George Samra

from a public lecture at the Hypoglycemic Association on 3rd December 1994

I WILL begin in the reverse order starting briefly with the dietary management of arthritis and then will switch to the main thrust of the talk on human fatigue therapy and especially as to what is happening at The Royal Newcastle Hospital where doctors are conducting a major research project. I will also discuss my clinical experiences in the area of human fatigue. When you work in this field you are constantly exposed to new theories which allows you to amalgamate them or pull them to pieces and reconstruct new theories.

Management of arthritis

When a patient comes to see me with the main complaint of arthritis I advise them in the first instance to avoid four foods: tomatoes, beef, veal, potatoes and oranges for at least three weeks. See **TABLE 1** on page 3.

These include products made from the above foods; for example tomato sauce or juice made from tomatoes, chips and potato

crisps made from potatoes, and baked potatoes. All the by-products from beef and veals, such as sausages, corned beef.

This block of foods has relevance to when we come to discuss Chronic Fatigue Syndrome, as these foods are involved in aches and pains in the muscles and joints, which are also some of the symptoms among patients with Chronic Fatigue Syndrome. Thus there is an overlap between arthritis and chronic fatigue and one has to figure out which causes what in clinical practice.

About 70 percent of patients with multiple joint arthritis would benefit from this first line of attack in avoiding these foods.

In severe arthritis I give special additional supplements to these patients as shown in **Table 1**.

Cod liver oil capsules may help about 20 percent of people. My recommendation is to try a bottle of each of these supplements and stay with it when improvements are noticed.

Darby Salts are like Epsom Salts and are Magnesium Salts that you can buy from chemists associated with Grace Bros. Darby Salts were in fact invented by a Grace Bros chemist in 1927 and they may perhaps help about 20 percent of people suffering from arthritis.

New Zealand mussel, called "Seatone", celery concentrate, copper bands, Evening Primrose Oil [Fecal], salmon oil are some of the natural supplements that could help in some cases. I should emphasize though that not all of these are found to be beneficial to all patients.

If you are going to use Vitamin C or ascorbic acid for arthritis it is best to use the powder form of calcium ascorbate. You will need about two teaspoons or 8,000 mgs per day dissolved in a cold drink.

There was a study at the Newcastle Hospital by a professor of surgery who was observing patients with copper bands. The hypothesis was that copper bands were of no benefit

TABLE 1

Supplements for Arthritis - Rheumatism Patients

Cod liver Oil Capsules - 3 per day
Blackmores Multi Vitamins + Mineral Tabs - 1 daily
Vitaglow Zinc Plus C - 1 daily
HiVita Stress Formula - 1 Daily
Selenium - Sodium Selenite Solution 2 mls daily or
- Selemite-B - 1 daily (requires prescription)

**Avoidance for Mild Arthritis
3 WEEK TRIAL**

Avoid strictly for 3 weeks

- * Tomato
- * Beef, Veal
- * Potatoes
- * Oranges

AVOIDANCE for Severe Arthritis

NIGHTSHADE FAMILY

Avoid tomato, potato, tobacco, eggplant, capsicum, chilli, pepper, (DO USE sweet potato, cauliflower, pumpkin, marrow, choko, lettuce, celery and cucumber)

MAMMALIA FAMILY

Avoid all animal milks and cheeses. (USE: Soymilk, Soycheese, Ricemilk, Coconut Milk and Coconut Cream)
Avoid REDMEAT. No beef, veal, lamb, rabbit, pigmeat or their by-products. (USE: chicken, fish, seafood and vegetables)

CITRUS FAMILY

Avoid oranges, lemons, limes, grapefruit, kiwifruit and passionfruit. (USE: other fruits favouring apples, pears and bananas.)

Fig.1A FATIGUE HEALTH MODEL

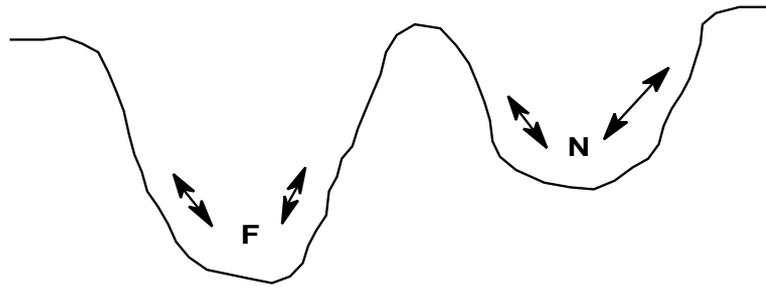


Fig. 1B THERAPY RECOVERY MODEL

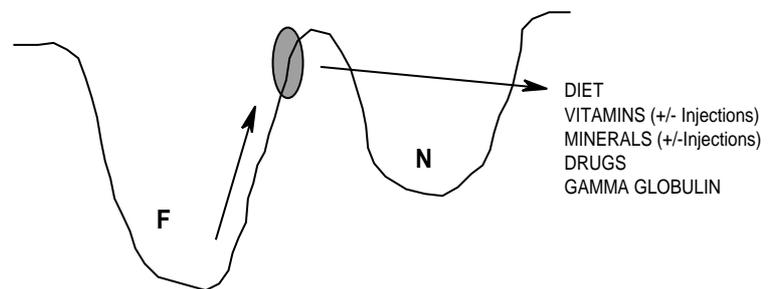
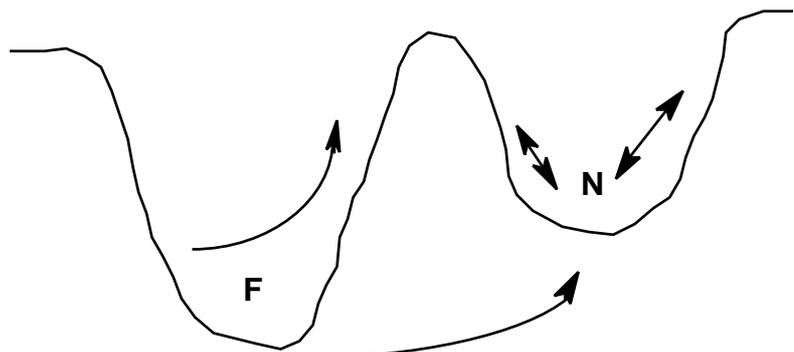


Fig. 1C SPONTANEOUS RECOVERY MODEL



at all, but it showed and confirmed what we have suspected all along that all of these natural remedies works in about 20 percent of patients and that is significant. But no therapy works for every body. These natural supplements are harmless and have few side effects, which is more than what can be said of medical drugs used in arthritis.

I have recommended Blackmores Multi Vitamins + Mineral Tabs, mainly to ensure that a good range of minerals be supplemented.

Vitaglow Zinc Plus C contains B3, B6, B5, zinc and C which are not only involved in the energy pathway but play a role in overall metabolism. The stress formula consists of high dose B-complex. Selenium is about the most powerful antioxidant we have, but requires a prescription from your doctor.

Antioxidants are believed to play an important role in arthritis in repairing the synovial membrane - or the living cells that line the joints - in mopping up peroxide radicals and

hydrogen peroxide. If you put hydrogen peroxide [H₂O₂] on your skin it bubbles and burns. The job of the antioxidant is to neutralise the H₂O₂ and convert it to water [H₂O] and oxygen. Thus antioxidants can *prevent* free radical damage. There are some people who believe that antioxidant can prolong life and perhaps there may be some truth in this as free radicals are implicated in accelerating ageing.

The avoidances in severe arthritis take into consideration two families. Tomatoes and

potatoes belong to the Nightshade family of plants and these include tobacco, eggplant, capsicum, chilli and pepper. A patient with rheumatoid arthritis told me that when her husband smokes in the car her joints start aching for the next day and a half, and now she knows why. He does not smoke in the car now and at home he now smokes only on the balcony.

The **Nightshade family** happens to be the most potent family of foods, associated with arthritic phenomenon. Yet we are not sure how this comes about. One theory claims that in arthritis you get small sand-like particles of antigen and antibody complexes in the joints. In tomatoes, and potatoes the solanates have been shown to be responsible for depositing these sand-like particles in the joints and actually attacking the synovium, which in theory eventually causes the erosion of the lining due to friction.

In **TABLE 1** I have included those foods that substitute for the offending foods. Potatoes can be replaced with sweet potatoes. Corn chips replace potato chips and so on.

The Mammalian Food Sources

In the case of the multiple joint arthritis foods of animal origin - especially the mammalian family - seem to be implicated. Again the

mechanism is still unclear, but it seems from a theoretical point of view that whenever we eat proteins from animals that are similar to ourselves - that is mammal - our body may trigger an autoimmune response. This is an auto-allergic phenomenon such as Reiter's Syndrome¹, Sjogren's Syndrome² which can cause a dryness in the mouth with perhaps arthritis and kidney problems. To avoid mammalian animal proteins one must avoid red meat such as beef, veal, lamb, rabbit, pigmeat and their by-products as well as animal milks and cheeses. Use instead chicken, fish, seafood and vegetables. For example you can have chicken sausages or turkey slices.

Thus in the more severe cases of arthritis one has to go a step further and avoid the whole food families as enumerated in **TABLE 1**. For example in mild arthritis we should avoid oranges, but in severe arthritis we should avoid the citrus family of oranges, lemons, limes, grapefruit, kiwifruit and passionfruit, although apples, pears and bananas are acceptable alternatives.

Some nutritional doctors advise patients on their first visit to avoid gluten, although I tend to wait before I tell people with arthritis to avoid gluten. In my opinion only 10 percent of arthritic patients have a coeliac reaction.

Chronic Fatigue Syndrome

Chronic Fatigue Syndrome patients and arthritic patients tend to overlap. Most would have some muscle and joint pains but only 10-15 percent would have bad muscle and joint pains. The Newcastle research team are trying to identify factors in the Chronic Fatigue Syndrome patients who have these pains.

The definition I use for Chronic Fatigue Syndrome patients is: *a pathological fatigue lasting longer than six months in the absence of other disease states*. Fatigue is weariness caused by over-exertion or lack of sleep, but in Chronic Fatigue Syndrome it occurs in the absence of over-exertion or lack of sleep. Most doctors leave out the word "pathological" which is my own addition to the usual definition.

The "fatigue" aspect of the disorder would of course be recognised by members of the Hypoglycemic Association. Hypoglycemia is

being secreted at the wrong time. This is usually followed by a subsequent adrenaline stimulation. Hypoglycemia may run in families and can include diabetes, alcoholism, Attention Deficit Disorders, Hyperactivity, Drug Abuse and Behaviour Disorders.

Figures 1(A-C) on page 3 explain these differences more graphically. **Figure 1A** is *The Fatigue Health Model* which shows the deeper trough of fatigue on the left as compared to a 'normal' fatigue curve on the right. *The Therapy Recovery Model* as represented in **Figure 1B** shows how a Chronic Fatigue patient can recover from their illness by doing the right thing at the right time, such as avoiding certain allergies, perfumes, odours; by paying attention to and changing the diet, by injections of vitamins and minerals, drugs and Gamma Globulin³ injections. As a result they drift into the good health well in a much shorter time. Some articles on Chronic Fatigue Syndrome say that

some patients spontaneously recover in a time span of fifteen years. We cannot wait fifteen years to function and we can help people to reach the normal health well by appropriate treatment. Some people require magnesium injections, B12 injections and certainly the right diet.

Chronic Fatigue Syndrome patient should be on a hypoglycemic diet, even if they don't show a hypoglycemic glucose tolerance curve. The hypoglycemic

diet is a brain-feeding diet, simple and pure. The diet keeps the blood sugar level on an even keel. This basic brain-feeding diet also helps epileptic patients, although they may not have all the hypoglycemic features. My clinical experience has shown that these patients do remarkably well on this brain-feeding diet.

Figure 1C represents *The Spontaneous Recovery Model* whereby people seem to recover spontaneously from the Chronic Fatigue well on the left to the normal curve on the right.

Causes of Chronic Fatigue Syndrome

It is not clear how Chronic Fatigue develops. It often happens after a germ including *Candida Albicans*, Glandular Fever⁴, toxoplasmosis⁵ or Ross River Fever⁶. The normal scenario is that people get sick from a bacterial or viral infection, recover to some degree and then develop Chronic Fatigue Syndrome. The Viral Residual Theory postulates that a virus stays behind in the neurological system in a way analogous to shingles. If one had chickenpox as a child one can get shingles as an adult when the immune system is down. If one has never had chicken-pox one cannot get shingles.

Week No	No. of 5 Minute Baths per day	Water Temperature Degrees in Celsius
1	1	20
2	2	19
3	2	18 Complete immersion
4	3	17 (Face out of water)
5	4	16 Ditto

still poorly understood by most doctors. Half of the patients referred to me for Chronic Fatigue Syndrome would be patients with reactive hypoglycemia as their main diagnosis. They are not really regarded by me as Chronic Fatigue Syndrome patients. They usually have a condition that could be treated by most doctors if only they knew how to deal better with nutrition. In my experience most patients with Chronic Fatigue Syndrome have an abnormal sugar curve. Therefore, they need to be placed on the 'Hypoglycemic Diet', that is avoid sugar, honey and glucose, have six snacks a day, with a protein breakfast consisting of fish, chicken, meat or eggs - whatever is preferred - with a good vitamins and minerals supplementation. A protein breakfast sets one up for a good start to the day. These patients get better very quickly.

Fatigue versus Chronic Fatigue Syndrome

The difference between the two is that people can be tired when they have a pathological organism in their system as in tuberculosis, or other hormonal condition such as thyroid dysfunction. Hypoglycemia is a hormonal disease - essentially the opposite to diabetes - when you have too much insulin

How the environment cause 'new diseases'.

The reason why Chronic Fatigue Syndrome and hypoglycemia are modern diseases appears to be related to the changing environment of modern man. In the case of hypoglycemia the greater consumption of sugar and sugary foods is clearly responsible for this pancreatic disorder. There is an increased consumption of yeasty or mouldy foods. Not long ago when the cave-man drank old milk or ate meat that was a week old he risked dying. Yoghurt has a natural acidophilus and other germs friendly to the intestines. Other "good" moulds make good wines. Nevertheless, some people are very sensitive to these germs, even the safe ones!

Germs all make poisons, called toxins, and some people are sensitive even to 'safe toxins'. They may become tired and depressed by eating yoghurt, cheese, vinegar and vegemite. Therefore avoiding those foods may be useful to some Chronic Fatigue Syndrome patients.

Another source of modern diseases is pollution: we live in a dirty world of petrochemicals. High lead exposure has never been experienced before, except in Ancient Rome where the aqueducts were lead-lined. It is said that is why Rome became a lazy society, which may have contributed to its down-fall. We tend to be a high level lead society with a "normal range" of between 1-2 ppm. We are actually accumulating lead into our system. I expect future archaeologists will be able to date where a person came from by means of a lead hair analysis and conclude that he came from the late twentieth century.

Some people are more sensitive to lead in the air or mercury in their teeth than others.

Immune System Subject to Evolution

In the twentieth century we have become more anti-Darwinian. We have a lot of weak human beings surviving now that would not have survived in previous centuries or even just fifty years ago. Nowadays in Australia, about one percent of children that are born don't reach the age of five, compared to the old days with more than fifty percent child mortality. Antibiotics are given for pneumonia and we have very clever paediatric cardiac surgery. Everybody would agree that this is desirable, however, we are perpetuating a species with a weak immune system and this may be another explanation why we have Chronic Fatigue Syndrome patients. A weakened human species cannot handle the environmental insults to the body as well as others.

TRHT - THERMOREGULATORY HYDROTHERAPY METHOD

As pointed out Chronic Fatigue Syndrome patients should be placed on a hypoglycemic diet, avoid their allergies and pollutants, be given their injections of vitamins and minerals, where needed, and may be prescribed drugs including gamma globulin injections.

In addition, the latest form of treatment for Chronic Fatigue is TRHT - *Thermoregulatory Hydrotherapy*, which originated with the English surgeon Dr Vijay Kakkar. I simply call it *The Cold Bath Therapy*. There is some anecdotal evidence of the benefits of this therapy, notably by the Australian motorcyclist Barry Sheene who had been stricken with Chronic Fatigue Syndrome. It drained him physically and mentally for four years. The beauty of this treatment is that it does not cost anything. Many treatments are expensive, others are not

only expensive but useless. At least, the Cold Bath Therapy would not do any harm.

Theory of how TRHT works

Dr Vijay Kakkar explains his theory in terms of reflexology principles. I will follow with my own theory later on.

The skin of the feet has a large number of nerve endings and is quite sensitive to touch, pressure and pain. The so-called "reflexology" of aiding relaxation is based on stimulating receptors in the skin. The same principle is used by walking in cold water for three to five minutes. The nerve impulses generated in this way prime the body thermostat (hypothalamus).

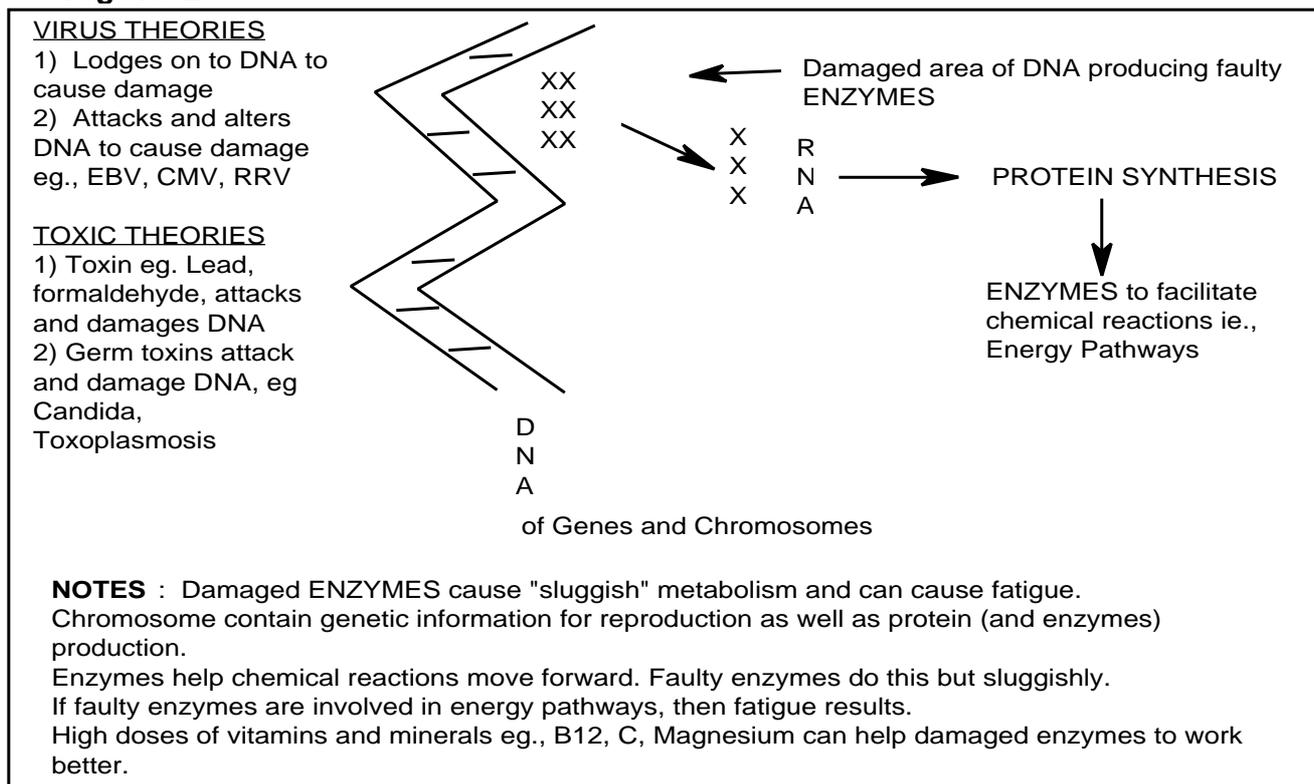
Adrenal Shut-down Theory

It is thought that many people with Chronic Fatigue Syndrome and anxiety conditions possess adrenal glands that secrete excessive amount of adrenaline which cause symptoms of edginess, restlessness and malaise. These glands have lost their proportionality of response to crises secreting equally large amounts of adrenaline in response to minor or major crises.

When the body registers hypothermia automatic reflexes occur, aimed at protecting one's life. These include a redistribution of blood away from unimportant tissues such as the arms and legs towards the vital organs including the heart, lungs and brain. At the same time the body takes measures to stop energy wasting metabolic reactions and so slows down the heart rate but also *stops the adrenal glands secreting adrenaline*.

The TRHT method can be seen in this light as an adrenal gland training programme, much

Figure 2



the same way a dog is trained to sit and obey commands, the adrenal gland is taught to stop its excessive secretions. Subsequently, a sense of well-being occurs, as the adrenal glands return to more normal functioning.

Warning

If you are suffering from well established heart disease, high blood pressure or other chronic medical illness which requires medication, do not attempt TRHT without first consulting your doctor.

Do not be tempted to speed up the training programme by increasing the duration of the therapy or suddenly lowering the temperature of water recommended at each stage.

TRHT is not recommended for children below the age of 13. However, if practised, it must be under strict medical supervision.

Do not attempt to rapidly warm the body after therapy by taking a hot bath or shower. The best way to warm is to dress quickly and take a hot drink and something to eat.

I have adapted the TRHT method or the Cold Bath Therapy and this has been set out in **TABLE 2** on page 4. **Five minute baths** are preferred but total bath time can be achieved with longer baths. For example, fifteen minute bath time on one day can be achieved with two 7 1/2 minute baths in a day or 3 five minute baths.

You need a thermometer plus clock or stop watch and of course a bath. Suitable thermometers are sold in swimming pool shops and pet shops.

Table 2 shows that you start the first week with one five minute bath per day at a water temperature of 20 degrees Celsius. You can modify this by starting with a five minute bath in 22 degree Celsius.

Week number 2 shows two five minute baths per day with a water temperature of 19 degrees Celsius and so on. In week number 3, you have two five minute baths per day with a water temperature of 18 degrees Celsius and there should be complete immersion in the water with just the face out of water. Follow the instructions as per Table 2 until you reach week five with four five minute bath per day and a water temperature of 16 degrees Celsius. Ongoing as per week 3. This is my own adaptation to Dr Kakkar's TRHT and which I call the *Cold Bath Therapy*.

Some people have problems achieving the low temperature in the bath, especially in the hot Australian climate. You can overcome the problem by throwing a few frozen plastic bottles with water in the bath and then measure the temperature. When you have reached the desired temperature you can return the bottles to the freezer.

Many patients benefit from this therapy and there are no reasons why arthritic patients would not benefit.

Newcastle Research Group

The Newcastle Multi Disciplinary group

consist of a group of doctors all specialists in their own fields. They include Associate Professor Tim Roberts, Dr Hugh Dunstan, Dr Neil McGregor, Dr Mark Donohoe and so on.

They studied a group of patients with Chronic Fatigue Syndrome and analysed urine and blood samples comparing these to control groups.

1) The multipeak analytic spectrophotometer (called GCMS) is an instrument that is able to record deflections from molecules and project it on to a monitor. Using this instrument they found an abnormal peak present in Chronic Fatigue Syndrome patient's urine, and less often present in controls (normal) and called it "**CFSUM-1**" a "marker". Thus it appears that we have a diagnostic urinary test for Chronic Fatigue Syndrome being 77 percent specific. It is believed to be a product of metabolic obstruction - to ATP production⁷. The question is whether a vaccine may be found to block the obstruction to the ATP metabolic pathway and make Chronic Fatigue Syndrome patients more energetic.

2) Drs Dunstan and Donohoe have found evidence that Chronic Fatigue Syndrome patient have high blood levels of poisons such as organochlorines, dieldrin, hexachlor, heptachlor, (and even higher levels in fatty tissues).

3) Doctors found that Chronic Fatigue Syndrome patients experiencing muscle pains showed greater levels of toxins from Staphylococcus (28 out of 44 grew staph, only 1 out of 8 in control group). The control group is somewhat too small, but nevertheless, it can be concluded on available evidence so far that;

- a) Chronic Fatigue Syndrome patients are more likely to have toxin production

staph colonise their tissues,

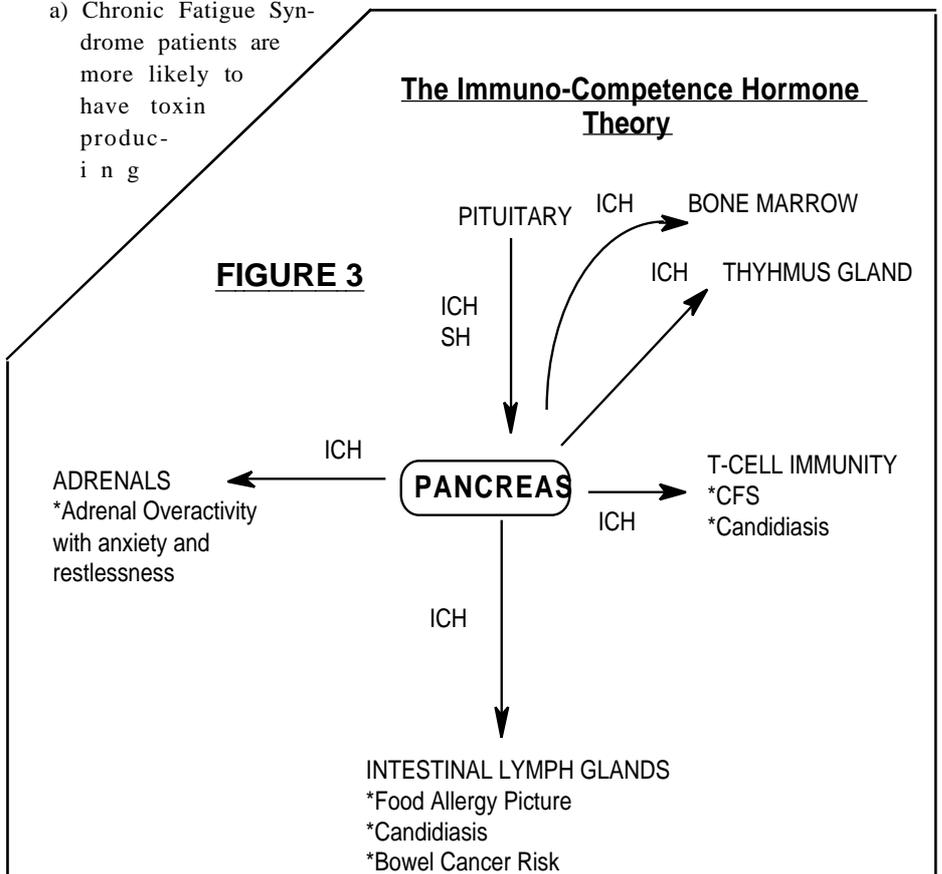
- b) Chronic Fatigue Syndrome patients have different responses to toxin challenges,
- c) Chronic Fatigue Syndrome patients with muscle pain (and staph colonisation) show different patterns of amino acid excretion in urine, in particular an increase in beta-alanine and increase in tyrosine.

The above may eventually lead to new treatment modalities:

- 1) **CFSUM-1** - proper identification of this molecular structure may be useful in future management eg., vaccine to block CFSUM-1, drugs to alter metabolism of CFSUM-1.
- 2) **Detoxification of organochlorines** role in Chronic Fatigue Syndrome; Role of Intravenous injection - Vitamin C, Intravenous injection - EDTA, Oxygen therapy.
- 3) **Staphylococcus Toxins** role of germ balancing, Candida significance, antibiotic role in management, acidophilus, future anti-toxin vaccine, healthy germ transplant.

The Faulty Enzyme Theory

I favour this theory which says that a virus lodges on to DNA to cause damage to that part of DNA (*deoxyribonucleic acid*) responsible



for the production of enzymes. Reference is made to **FIGURE 2** on page 5. These enzymes are protein units which are involved in chemical reactions. Faulty DNA then produces faulty RNA (*ribonucleic acid*) or messenger proteins, which carry information to the mitochondria (*power house*) within the cells. RNA has the code to manufacture the proteins - the enzymes involved in chemical reactions in the body. If one has a virus living in parts of the genes, then one will have faulty RNA and faulty enzymes. If those enzymes are involved in energy pathways (in the production of energy), then the person is tired all the time.

This model is attractive as it is possible to help people with Chronic Fatigue Syndrome by giving them extra co-enzymes; vitamins like B12, vitamin C, zinc and so on. High doses of vitamins and minerals are preferable to drugs, which have inevitably many side-effects.

Chronic Fatigue and Psychiatric Illness

Doctors often confuse the symptoms of Chronic Fatigue Syndrome with some forms of psychiatric illness and then treat them accordingly. There is a rule of medicine which says that if all tests are negative, the patients need to be referred to a psychiatrist. However, Chronic Fatigue Syndrome patients for the most part are rational and retain a good sense of reality. Their depressions are not psychotic depressions, but rather signs of frustration, being bed-ridden, tired and beyond control of their lives.

Chronic Fatigue Syndrome Research Funding

The Royal North Shore Hospital will also be undertaking an extensive and expensive research project involving 400 Chronic Fatigue Syndrome patients and an equal number of controls.

Treatment approach for

The general treatment approach for CFS has been fully discussed in my previous article "New Theories of Chronic Fatigue Syndrome" published in the Hypoglycemic Newsletter of March 1994 pp 2-5 and may be summarised here:

- Exclude the possibility of any other diseases that may be responsible for the symptoms.
- Exclude the possibility of a hypoglycemic condition as the major contributory features of symptoms of patients. Ninety percent of patient show that CFS patients mishandle sugar.
- Even if a Glucose Tolerance Test is negative, place patient on a hypoglycemic diet.
- Test patients for **Candidiasis**.

- Test patient for allergies, airborne pollution, sensitivity to petrochemicals, dust mites, air moulds, perfumes, cleaning agents, formaldehydes and so on.
- Test patients for levels of **T-lymphocytes**. If helper T-cells (CD4) are found to be low and/or the suppressor T-cell (CD8) are high, than this would be consistent with the finding of CFS.
- The **EEG Test** (Electroencephalogram) may be useful in detecting abnormal brain waves and could be useful in diagnosing subclinical epilepsy. I suspect that CFS patients may show abnormal EEG test in sleep or exercise states.

Useful supplements

- 1) Vitamin B-Complex including parenteral injections.
- 2) Minerals: Zinc, Calcium, Magnesium, Multiminerals.
- 3) Natural supplements: Royal Jelly, Coenzyme Q10, Evening Primrose Oil (EPO), Hi Vita Stress, Nature's Way Peak Performance. Only 20 percent of patients may benefit.
- 4) Avoidances: Sugars, moulds, allergy foods, petrochemicals
- 5) Drugs: **Catovit** (a combination of B vitamins and prolintane), **Prothiaden** (*dothiepin*) an antidepressant, **Aurorix** (*moclobemide*) - however blood pressure needs to be monitored, **Nardil** (*phenelzine*) a MAOI antidepressant but with many side-effects and a list of foods to be avoided, **Dilantin** (*phenytoin*) and **Epilim** (*valproic acid*), now used by many psychiatrists and found to be useful. Drugs that control muscle cramps. **Prozac** (*fluoxetine*) and **Aropax** (*Paroxetine HCL*) prevents the re-uptake of serotonin, which affects appetite and moods, and **Analgesics** have all been found to be useful in some cases.
- 6) Herbs **Valerian** and **Acupuncture**.
- 7) Exposure to **sunlight** (and white candle-lights) stimulates the pineal gland to produce more serotonin.
- 8) Last but not least **Cold Bath Therapy**.

Immuno-Competence Hormone Theory

I'd like to finish with a completely new idea or theory, that could possibly explain the puzzles that have surfaced in both hypoglycemia and Chronic Fatigue Syndrome.

In an attempt to explain the presence of Reactive Hypoglycemia or glucose mishan-

dling in many fatigue disorder states, I have postulated the existence of **Immuno-Competence Hormone (ICH)**, as an as yet undiscovered pancreatic hormone. The role of the pancreas and the hormones insulin and glucagon in diabetes has only been understood in the last 50-60 years. Much needs to be learned yet about the pancreas. We know it makes proteolytic (protein splitting) enzymes, amylase, that breaks down carbohydrates and many other molecules.

I am suggesting that we still don't know enough about this clever organ. I speculate another hormonal function "ICH" to explain the prevalence of Reactive Hypoglycemia in patients with Chronic Fatigue Syndrome, Adrenaline Hypersecretion disorder, Candidiasis and Multiple Food Allergy states. These are prevalent among hypoglycemic patients. The ICH theory endeavours to tie together the various symptoms of hypoglycemic and Chronic Fatigue Syndrome patients, which all seem to point to the pancreas. It could well be that more than one ICH may exist, possibly one for each target organ. Failure of adequate ICH may lead to a predisposition for conditions listed with an asterisk in **FIGURE 3** on page 6.

Somehow the ICH - or Immuno-Competence Hormone - may go to the bone marrow to produce B-lymphocytes, or to the thymus gland to produce T-cells. An inadequate amount of ICH may make the T-cell immunity incompetent and cause CFS and Candidiasis as shown in figure 3. The pancreas may also send the ICH to the intestinal lymph glands and somehow make these glands learn not to attack foods. The intestinal lymph glands constitute the major lymph glands in the body and forms the biggest immune organ. When they are incompetent they may cause food allergies, Candidiasis and be responsible for an increased risk of bowel cancer.

Hypoglycemic people tend to have more allergies. Perhaps with the overproduction of insulin, the blood sugar level crashes and is interfering with the ICH for some people and they develop allergies. Hypoglycemics tend to over-produce adrenaline as a result of the sudden descent of blood sugar levels and perhaps adequate ICH to the adrenal glands will protect one from over-stimulation of the adrenal glands. When we look at figure 3 we see **ICH-SH** coming from the pituitary gland to the pancreas. "SH" stands for Stimulating Hormone and it may well be that the ICH from the pancreas which control various organs in the body is, in turn, controlled by the ICH-SH from the pituitary gland in the brain.

This is merely my attempt to try to piece together all these parts of the puzzle concerning hypoglycemia and Chronic Fatigue Syndrome. If there is a hormone that the pancreas makes and we don't know about it, it would be possible to synthesize that hormone and may be inject it or make it into a pill. The only thing we have that come close to it are steroids which are nasty drugs. But perhaps we may

stimulate the production of this unknown hormone through nutrition in the future.

Footnotes

- 1 Reiter's Syndrome is a condition of unknown cause in which urethritis, polyarthritis and conjunctivitis occur.
- 2 Sjogren's Syndrome: deficient secretion from lacrimal (relating to tears), salivary and other glands, mostly in postmenopausal women, with dry mouth, hoarse voice. Also called keratoconjunctivitis.
- 3 Gammaglobulin - a chemically extracted protein fraction of human plasma, rich in specific antibodies

against a variety of viruses.

- 4 Glandular Fever also known as Infective Mononucleosis is caused by the infection with a herpes virus, the Epstein-Barr virus, characterized by enlargement of glands, sometimes skin eruption. In the blood mononuclear cells dominate. It is common among young adults. Mode of transmission is thought to be by droplets. Sometimes called "kissing disease". Treatment is symptomatic.
- 5 Toxoplasmosis - Infection by toxoplasma parasites which, commonly occurring in mammals and birds, may infect man. Some may result in en-

cephalitis, convulsions, hydrocephalus ('water on the brain') and eye diseases in infants. In adults; pneumonia, nephritis, skin rashes.

- 6 Ross River Fever is caused by an arbovirus [from arthropod borne] responsible for many viral infections and transmitted in this case by a mosquito which may potentially lead to encephalitis.
- 7 ATP (Adenosine triphosphate) a nucleotide of fundamental importance as a carrier of chemical energy in all living organisms. The problem is why is it found in the urine? Is there an obstruction in the metabolic pathway?

Evening Primrose Oil and Breast Pain

By Gately CA, Miers M, Mansel RE, Hughes LE, from "Drug Treatment for Mastalgia: 17 Years experience in the Cardiff mastalgia clinic", Soc Med B5:12-15 1992

AROUND 20% of all women experience severe breast pain (mastalgia). This may be related to the menstrual cycle, occurring principally during the last two weeks of the cycle, or alternatively the pain may occur randomly with no apparent relationship to the cycle.

In general, only half of these women will seek medical advice and of these 15% will have much severe pain that their quality of life is significantly affected and they require drug treatment.

A clinic in Wales was set up 17 years ago,

specifically to examine the problem of breast pain and to compare drug treatments for this condition. Three treatments were used: 2 prescription drugs, danazol¹ and bromocriptine² and one dietary therapy, evening primrose oil (EPO).

Patients were allocated to one of the 3 treatments and reviewed 2 months after starting therapy to assess their response. If no improvement was recorded, the patients were swapped to one of the remaining therapies. In the case of EPO, therapy was allowed to continue for four months before patients received alternative therapy as EPO can take longer to show effects.

Of 324 patients with cyclical mastalgia, 85 received EPO and of these 58% obtained a good response. A good response was also seen in the bromocriptine group (54% response rate). The danazol treatment group recorded the best results seen in 79% of the treated patients.

In the women with non-cyclical mastalgia, the response rate was lower, with all treatments appearing equally effective: EPO 38% response rate; danazol 40% and bromocriptine

33%.

EPO was definitely superior when the level of side effects was considered. In the other treatment groups, 30-35% of the patients complained of significant side effects with approximately half of these patients having to stop treatment. However, in the EPO group, only 4% of patients complained of side effects.

The authors concluded that all 3 treatments were active in managing breast pain but maintain that EPO is the treatment of choice because of the low incidence of side effects associated with its use. Only in circumstances where a rapid response was required would they suggest one of the alternative treatments. The low level of side effects associated with the use of EPO also allows EPO to be used more than one course of treatment if breast pain recurs.

- 1 Danazol is a male sex hormone. (Editor: May increase catabolism of Vit K dependent clotting factor)
- 2 Bromocriptine inhibits the production of prolactin from the pituitary gland.

EGGS are an excellent low fat source of protein, vitamins and minerals. However, the cholesterol content of eggs has often been given as a cause of concern in relation to the control of blood cholesterol levels. Although eggs contribute about a quarter of the cholesterol in our daily diet, they are not the only source.

Cholesterol in your food can affect plasma cholesterol, but saturated fat in your diet is more important. Foods such as fatty meats and full fat dairy products have a much greater impact on our health and heart risk. One average egg contains 250 milligrams of cholesterol and only 6 grams of fat, all of which is confined to the yolk.

Studies carried out at the Division show that a modest consumption of eggs (one or two per day) whilst raising the blood cholesterol in some people, does not affect blood cholesterol in most people. This was shown in an experimental dietary trial carried out using the Division's Nutrition Clinic, on a group of volunteers with normal blood cholesterol levels.

Egg Facts by CSIRO

Division of Human Nutrition
Produced by: J Stokes

After four weeks on one diet with a cholesterol supplement (egg yolk) the volunteers crossed over to the alternate diet (a cholesterol-free supplement). The results showed that the average serum or blood cholesterol level for each group was the same at the end of each four-week dietary period, whether the diet was high or low in egg cholesterol.

The experiment was repeated, this time with a group of volunteers who registered high blood cholesterol levels. There was a significant rise in blood cholesterol in these subjects when they were placed on a diet with

a cholesterol-enriched supplement.

Thus, while it is probably safe for most people to consume eggs in moderation, those with high blood cholesterol levels need to restrict egg intake.

If you wish to know whether or not you are likely to have a rise in your blood cholesterol level from eating eggs, you should first have your blood cholesterol level measured. These days it is quite painless to have a cholesterol check - the new machines only require a finger prick of blood. Check with your local doctor or Community Health Centre for information on where to have a blood cholesterol check carried out.

If your blood cholesterol is within the normal range then it probably does not matter if you eat eggs in moderation. If your blood cholesterol reading is high then it is suggested that you keep a careful check on the amount of foods eaten which contain high levels of di-

Common drug groups and drugs that may cause nutrient depletion and nutritional deficiencies from D.A.Roe (1989), DIET AND DRUG INTERACTIONS, An AVI Book, Van Nostrand Reinhold, NY, Page 85.

Drug Group	Drug	Deficiency
Antacids	Sodium bicarbonate,	Folate, phosphate, calcium, copper
Anticonvulsants	Aluminium hydroxide Phenytoin, phenobarbital, primidone,	Vitamins D and K Carnitine
Anticonvulsants	Valproic acid	Calcium
Antibiotics	Tetracycline, Gentamycin Neomycin	Potassium, magnesium Fat, nitrogen, lactose, sucrose; sodium, potassium, iron calcium, lowers pancreatic lipase
Antibacterial agents	Boric acid Trimethoprim Isoniazid	Riboflavin Folate Vitamin B6, niacin, Vitamin D
Anti-inflammatory agents	Sulphasalazine Aspirin Colchicine	Folate Vitamin C, Folate, iron. Fat, Vitamin B12, carotene, sodium, potassium, enzyme damage, inhibits cell division, structural defect
Anticancer drugs	Prednisone Methotrexate Cisplatin	Calcium Folate, calcium Magnesium
Anticoagulants	Warfarin	Vitamin K.
Antihypertensive	Hydralazine Methyldopa	Vitamin B6 Vitamin B12, folate, iron
Antimalarials	Pyrimethamine	Folate
Antituberculosis	Para-aminosalicylic acid	Fat, folate, Vitamin B12, blocks mucosal uptake of B12
Diuretics	Thiazides Furosemide Triamterene	Potassium Potassium, calcium, magnesium Folate H2 receptor antagonists
Hypocholesterolemic	Cimetidine Ranitidine Cholestyramine Colestipol	Vitamin B12 Vitamin B12 Fat, Vitamins A, D, K, B12, iron Vitamin K, Vitamin A, folate, Vitamin B12
Laxatives	Mineral oil Phenolphthalein	Carotene, retinol, Vitamins D, K. Calcium, potassium, vitamin D
Potassium replacement	Senna Potassium chloride	Fat, calcium Vitamin B12, Lowered ilial pH
Contraceptive		Vitamin B6, folate, Vitamin C.
Tranquilizers	Chlorpromazine	Riboflavin

EGG FACTS

- It is probably safe for most people with **normal** blood cholesterol levels to eat eggs in moderation
- People with **high** blood cholesterol levels should restrict egg consumption
 - All of the fat and cholesterol in an egg is confined to the yolk
 - An average egg contains 250 milligrams of cholesterol
 - The colour of the shell does not affect the egg's flavour or nutrient value
 - Yolk colour is caused by pigments in the hen's diet, hence maize (corn), clover or grass may produce a richer orange coloured yolk

etary cholesterol (for example fatty meat, full fat dairy products, eggs, brains and offal). These measures will also reduce intake of saturated fats which is the main dietary factor to raise blood cholesterol.

Choosing lean meat, low fat dairy products and alternative egg products will help lower the amount of dietary cholesterol, which in turn reduces associated risks.

For people with high blood cholesterol levels there are some new developments in the egg world. In Australia, Good Food Products has released "Scramblers", a low cholesterol product made from egg whites, polyunsaturated vegetable oil and skim milk powder. This is available from some supermarkets.

"Yolk Free" from Sunny Queen Egg Farms, is a low cholesterol replacement for eggs in most dishes. It contains egg white, sunflower oil, skim milk, emulsifier and beta-carotene and can be stored frozen for up to 12 months. One day low-cholesterol eggs may be available. Researchers are working on adapting cholesterol-removing technology to egg yolks. The first product to be marketed using this refining technique will probably be a "scrambled egg" product or an egg base for packet cake mixes.

Further reading:

- 1) Nestel PJ ed. **Diet, health and disease in Australia.** Sydney
- 2) Saxelby, C. **Food what's in it.** Frenchs Forest, NSW Reed Books, 1989, pages 40-41
- 3) Contact your state egg marketing body for - **The incredible egg** and other information sheets and egg-based recipes.

THE HYPOGLYCEMIC ASSOCIATION
STATEMENT OF INCOME AND EXPENDITURE
FOR THE YEAR ENDED 31ST DECEMBER 1994

INCOME		
Membership Fees		2,737.50
Donations		77.50
Books		20.00
Meeting Fees		275.20
Interest		37.91
		<u>3,148.11</u>
EXPENDITURE		
Hall Hire		246.00
Printing		1,138.00
Postage		932.90
Stationary		79.63
Secretaries Expenses		146.02
Editors Expenses		738.90
P.O. Box Rental		39.00
Bank Fees		19.05
Guest Speaker presentations		61.91
Meeting Costs		58.58
		<u>3,459.99</u>
EXCESS OF EXPENDITURE OVER INCOME		311.88
Opening Balance	- Bank	3,167.99
	- Petty Cash	73.16
		<u>3,241.15</u>
		<u>2,929.27</u>
REPRESENTED BY		
	- BANK	2,889.68
	- PETTY CASH	39.59
		<u>2,929.27</u>

HONORARY AUDITOR'S REPORT

I hereby certify that I have examined the books and accounting records of The Hypoglycemic Association for the year ended 31 st December 1994 and report that the above Statement of Income and Expenditure represents a true and fair view of the Income and Expenditure of the Association for the said year.

**21 Memorial Avenue,
 LIVERPOOL NSW 2170
 Tel; 821-2399**

**HUGH D.
 MACFARLANE
 CHARTERED
 ACCOUNTANT**

1995 MEETING DATES

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