



# Bio-Balance Newsletter

November 2007  
Serial No 5

Bio-Balance Health Association Inc  
A non-profit organisation dedicated to promoting effective techniques of biochemical treatment for mental, behavioural and autistic disorders.

## WALSH-PFEIFFER SYDNEY OUTREACH CLINIC Patient Assessment & Treatment Program 16 – 24 April 2008

Dr William Walsh, Dr Woody McGinnis & Dr Mary N Megson  
will be visiting Sydney in April  
[see Brochure attached to Newsletter for full details]

Bookings presently available for patients with  
Behavioural disorders  
Learning & attention disorders  
Autism spectrum disorders  
Depression  
Post-partum depression  
Schizophrenia  
Bipolar disorder  
Mild to moderate Alzheimer's Disease  
Parkinson's Disease

Bookings should be made as soon as possible  
so prior testing, medical examination and lab results can be completed

General information: [www.hriptic.org](http://www.hriptic.org) and [www.biobalance.org.au](http://www.biobalance.org.au)  
or phone Bio-Balance at 07 5538 7203

Detailed information and Clinic bookings from:  
Marion Redstone, Outreach Clinic Organizer  
Phone: 02 9716 6615  
E-mail: [mazzared@bigpond.net.au](mailto:mazzared@bigpond.net.au)

## President's Update

The Bio Balance AGM was held this year at a new venue in Mermaid Beach to provide more seating for a larger audience. Dr Richard Stuckey again addressed the meeting giving an update on his work including successes with Autistic patients.

The highly successful 2007 Sydney Outreach Clinic was held again in April this year and Judy Nicol has provided an excellent report in this Newsletter. DVD's from the Sydney Conference which followed this Outreach are available - see report. Bio Balance provided 9 sponsorships for attending patients from donated funds.

This year Dr Stuckey has kindly donated the speaker's fees from addresses he has made during the year to sponsor a patient to the 2008 Outreach. If any reader is aware of a Doctor who may be interested in the training or a patient who may benefit from a consultation, please refer them to Marion Redstone 02 97166615.

I would again like to thank our committee for their continued support of our organisation and our Editor for a most informative Newsletter.

*Bruce Jeanes - President*

# BIOCHEMICAL INDIVIDUALITY:

## THE POWER OF NUTRIENT THERAPY

*Report on an address by Dr William Walsh to Nutrition for Optimal Health Association (NOHA) in 2003.*

The inspiration for the founding of NOHA sprang from a class given in 1972 on the challenging book, *Nutrition Against Disease* by Roger J. Williams, PhD, which was published in 1971. [See Note at end of article – Ed.]

For many years Dr. Williams had been writing and lecturing about biochemical individuality: His book with that title was published in 1956. He explained and showed how the same organ—for instance a stomach—varies dramatically in size and shape in different people.

We know how we all look different, except for identical twins. However, this vast variation actually applies to every aspect of our bodies—including our need for particular nutrients. Depending on their genetic makeup, some people can easily get too much of certain nutrients, whereas the so-called RDA (recommended dietary allowance) of other nutrients may be far too low for them to be anything but very sick. In spite of this, we hear recommendations all the time from writers on diet and from the government (for example, the food pyramid) that one diet is great for everybody. All these years ago, Dr. Williams knew that these recommendations are wrong for most of us.

For our thirtieth anniversary celebration, we were honoured to have for our speaker another researcher, who realizes the vital importance of biochemical individuality and the power of nutrient therapy, NOHA Professional Advisory Board Member William Walsh, PhD, who is now Chief Scientist at the Pfeiffer Treatment Center in Warrenville, Illinois.

### Beginnings

Dr. Walsh started his research on prevention of criminal violence over 30 years ago. For many years he was a scientist at Argonne National Laboratories. As a volunteer, he worked with criminals from the penitentiary. An interesting pattern became apparent in many of these criminals from studying their family history. Many came from the ideal “All American” family with a good father, a loving caring mother, and a good middle class home with at least two children. Most of the children would be “ideal,” make good grades at school, and have hardly any social problems at all, but there would be one obvious “problem child.” The parents could see differences in this one child as early as six months when, as an infant, it would push away from the mother. When only a toddler, it would torture, and often even murder, the family pet. Later, after doing terribly in school and becoming a delinquent, this problem child would end up as a criminal and in jail. Why would only this one child develop problems, when all its siblings

from the same environment, the same family, and eating the same foods, developed no problems whatsoever?

In those days, the parents (usually the mother) were blamed for the problems, since all the causes for such behavioural problems were assumed to be the environment in which the child was raised.

In 1974 a revolution was occurring in mental health. Prior to then, anyone with a mental problem was sent to a psychiatrist. Many studies were showing an inborn predisposition to problems. For example, “Bipolar” problems (mania and depression) were studied. The probability of being bipolar in the general population was 4%. If a member of a family was bipolar, the probability of another family member being bipolar jumped to 32%. This same 32% held for fraternal twins. However, in identical twins, if one was bipolar, there was over an 80% probability that the other was too. These studies suggested many definite brain/body chemical relationships.

Dr. Walsh started experimenting at Argonne National Laboratory with many criminals from the nearby penitentiary. With colleagues, they drew many blood and urine samples, but after one year they had no data of any value. One evening, Dr. Walsh happened to see on the bulletin board a notice about a talk titled, “Biochemical Individuality and Schizophrenia,” by NOHA Honorary Member Carl C. Pfeiffer, PhD, MD, whom he had never met. The lecture hall was jammed with standing room only, but Dr. Walsh was fascinated and intrigued with what Dr. Pfeiffer mentioned about his 20 years of research with schizophrenia patients. He had developed a huge body chemistry and brain chemistry database. Of his patients, 90% fell into three definite classifications, each requiring a different nutrient therapy. Dr. Walsh had no chance of speaking directly with Dr. Pfeiffer after the crowded lecture, but did arrange to meet him the next day. Dr. Pfeiffer was quite interested in Dr. Walsh’s research on all the criminals and gave him a lot of encouragement. Pfeiffer’s key suggestion was for Dr. Walsh to look at trace metals.

After Dr. Walsh started measuring trace metals in the criminals, he did find many with very extreme levels. He then did an interesting double-blind study on 24 pairs of brothers. By choosing brothers, they automatically controlled for many variables, including parents, social and physical environment, as well as food. Great care was taken in selecting these sibling pairs. Basically, one was an “All American” boy and the other was a boy from hell. If the “All American” boys had gotten into a single fist fight, they were disqualified. After the double-blind results were decoded, this research showed that all the violent brothers had extreme levels of metals.

### Collaboration with Dr Pfeiffer

Dr. Walsh did a series of other experiments with good results that soon caught the attention of Dr. Pfeiffer, who asked Dr. Walsh to give a presentation of these results at Dr. Pfeiffer’s Annual Symposium in 1981. This research created quite a great stir in the medical

community because the results were so sharp. Dr. Pfeiffer ran through all the ties between the extreme metal levels and his potential nutrient therapy.

During the many years that Dr. Walsh worked with Dr. Pfeiffer, he evaluated all of Dr. Walsh's cases free of charge. In 1982, they founded the Health Research Institute. Several cases were found with extremely low or high copper levels. Many children with extreme metal imbalance would "explode" whenever they lost their temper. They found chemical as well as trace metal imbalances. Dr. Walsh and Dr. Pfeiffer would get together for only a couple of days to evaluate 50 cases at a time at either Dr. Pfeiffer's laboratory in New Jersey or his home in Florida. Dr. Walsh greatly admired Dr. Pfeiffer. Even though Dr. Pfeiffer was 78 years old, on a given day he would keep going long after Dr. Walsh was exhausted and wanted to quit. Sixty-five percent of the patients reported good results.

For several years Dr. Pfeiffer had suggested that an outpatient clinic was needed in the Midwest. Finally, Dr. Walsh realized that Dr. Pfeiffer meant him. In 1989 Dr. Walsh quit his job at Argonne and started the Pfeiffer Clinic here. It is named after Dr. Pfeiffer, who died six months before it opened.

In many of the patients with behaviour problems, learning problems were found as well. The nutrient therapy often improved scholastics dramatically. They soon started testing other populations. Since it was founded, the Pfeiffer Clinic's staff has grown from only three, to over sixty today.

They have conducted many outcome studies. Most doctors tend to hear only from their patients who obtained positive results. They hear nothing from the negative ones. Dr. Walsh went to considerable trouble to trace down **all** their past patients, negative as well as positive. He wanted to find out which treatments were not working as well as which ones were.

The poor results included:

- **Down's Syndrome:** the patients' blood chemistry was very abnormal, so Dr. Walsh initially had hoped to help them. A few were helped with mood improvements, but they NEVER could raise the IQ of any patient.
- **Obsessive Compulsive Disorder:** they were only able to help 15% of the patients.
- **Tourette's Syndrome:** only 10% got well.

The Good News:

- **Behaviour:** in a study of 207 patients, after three months, the number of times a patient destroyed property dropped 90%
- **Learning**
- **Depression:** 85% improved, many became totally free from all medications
- **Bipolar Disorder**
- **Schizophrenia**

Dr. Walsh often receives calls from other doctors asking "What do you do?" He usually replied vitamins, amino acids, and more, but the doctors still ask "What did you use?" They are expecting some powerful drug or medication. As soon as most of them realize that he doesn't use any, "a curtain descends over their brains" and they lose interest.

All the neurotransmitters and raw material for making the brain consist of simple, natural chemicals. Dr. Walsh has managed to make a few "medical converts," who understand and appreciate what he is doing. The Pfeiffer Clinic has one of the best chemical databases in the world with over 12,000 biochemistry records. For example, they have records on 2,000 autistic patients, and 3,200 schizophrenics. [*Foregoing statistics as at 2003: now over 20,000 biochemistry records held – Ed.*]

## Common biochemical imbalances

The most common chemical imbalances encountered include the following:

**Over-methylation:** This condition results in low levels of histamine and excessive levels of the neurotransmitters dopamine, norepinephrine, and serotonin. These patients are prone to food and chemical sensitivities. Many persons, who suffer from anxiety along with depression, are over-methylated. These persons are also often overloaded in copper and methionine.

**Under-methylation:** Many patients with obsessive-compulsive tendencies, oppositional-defiant disorder, or seasonal depression are under-methylated, which is associated with high histamine and low serotonin levels. They generally exhibit seasonal allergies, perfectionism, competitiveness, and other distinctive symptoms.

**Metal-metabolism disorder:** A common problem in ADHD, behaviour disorders, autism, and hormonal depression is a genetic inability to control copper, zinc, manganese, and other trace metals in the body, due to improper functioning of the metallothionein protein.

**Pyrrole disorder:** A common feature of many behavioural and emotional disorders is pyroluria, an inborn error of pyrrole chemistry. This results in a dramatic deficiency of zinc, vitamin B-6, and arachidonic acid (an essential long-chain, omega-6 fatty acid).

**Glucose dyscontrol:** Patients with this condition cannot tolerate large meals or quick sugars. This problem doesn't appear to be the cause of behaviour disorders, depression, etc., but instead is an aggravating factor that triggers symptoms.

**Toxic metal overload:** Persons with heavy-metal overload can have major problems. Some examples:

- A man was depressed and on medications before he went to the Pfeiffer Clinic. When they tested him, they found his blood lead level was 80 times normal.

When they called him in to report this, he was wearing old clothes that were covered with bits of paint. He had just bought a huge old house and was scraping all the old lead-based paint off and repainting. Once he realized the cause, he was fine in two weeks.

- Two kids were doing just fine in school. Suddenly their schoolwork plummeted. It was discovered that they had started melting lead to cast new toy trains and other shapes in their basement with their father. Once they dropped this new hobby, the schoolwork improved.

**Pesticides:** Many are highly methylated, which can lead to dangerously high levels of certain neurotransmitters and severe chemical sensitivity.

**Malabsorption:** Most autistics exhibit this problem. The consequences can include nutrient deficiencies, irritation of the intestinal tract, candida, and mental health problems, along with impulsivity and underachievement.

**Essential fatty acids:** There are four that make up 90% of the fatty acids in the brain: DHA (docosahexaenoic acid), EPA (eicosapentaenoic acid), AA (arachidonic acid), and DGLA (dihomogammalinolenic acid). The first two are omega 3s and the latter two omega 6s. These fatty substances fulfil exceedingly important brain functions. Typical American diets usually result in insufficient omega-3 and excessive omega-6 fats. However, biochemical individuality also exists with oils and certain persons are innately low in omega-6 oils.

Chemical imbalances can be mild, moderate, or severe. A mild condition can often be overcome by good parenting, but moderate and severe conditions need biochemical and nutrient treatment.

The main conclusion from all this is **biochemical individuality**. No single herb, vitamin or drug medication will be good for everybody. Other than identical twins, there is almost no chance at all that even any two siblings will be genetically identical. These days when there is so much hype for particular diets—each promoted to help everyone—there is a much greater danger from vitamin or trace metal overload. For many people, who already have too much of certain vitamins or minerals, many of these multiple vitamin/mineral pills would be virtually poison.

Finding each individual's needs requires much careful testing, plus attention to their history and their pattern of symptoms, which can be particularly illuminating. We all should remember and adhere to **Pfeiffer's Law**: "For every drug medication that benefits a person, there is a natural substance that can produce the same result."

Article from *NOHA NEWS*, Vol. XXVIII, No. 1, Winter 2003, pages 2-4  
[www.nutrition4health.org](http://www.nutrition4health.org)

[NOTE: Roger J Williams: *Nutrition Against Disease: Environmental Protection*, Pitman, 1971, Bantam Pocketbook 1973]

Men ought to know that from the brain and from the brain only arise our pleasures, joys, delights, laughter and jests, as well as our sorrows, pains, griefs and tears.... It is the same thing which makes us mad or delirious, inspires us with dread and fear, whether by night or by day, brings us sleeplessness, inopportune mistakes, aimless anxieties, absent-mindedness and acts that are contrary to habit....

Hippocrates (460 – 370BC)

## National Institute of Complementary Medicine Established in Australia

A National Institute of Complementary Medicine (NICM) was established at the University of Western Sydney's Campbelltown campus in June 2007 with initial funding of \$4 million from the Commonwealth Government, supplemented by \$600,000 from the NSW Government.

The NICM initiative complements the announcement in late 2006 of \$5 million in National Health and Medical Research Council Special Initiative Research Grants for complementary medicine and the inclusion of complementary medicine in the new National Health and Medical Research Council (NHMRC) triennial strategic plan.

NICM will focus on four core areas of activity:

- Articulating national priorities for research themes and activities
- Coordinating national collaboration across these themes and activities and coordination of shared infrastructure
- Supporting capacity building through postdoctoral training – creating the research workers able to support the industry's research needs as it expands nationally and internationally
- Disseminating research findings to medical and health practitioners as well as the general public.

The main ways in which NICM will pursue its mission will be through

- Articulating national priorities for research themes and activities – both basic and applied
- Coordinating national collaboration across these themes and activities and coordination of shared infrastructure
- Provision of complementary medicine researchers with professional support to further methodological research in complementary medicine and to focus research into areas of identified priority.
- Facilitating a process to develop strategic priorities for complementary medicine to guide research activities nationally.
- Provision of publicly accessible information and a reference point for complementary medicine in Australia.

# Report on 2007 Pfeiffer Outreach Clinic, Training Initiative & Conference

Dr William Walsh and Dr Allen Lewis from the Pfeiffer Treatment Centre in Illinois USA again visited Sydney in April 2007 to train Australian and New Zealand medical practitioners in Pfeiffer techniques for assessment and treatment of mental illnesses, behaviour and learning disorders, autism spectrum disorders and Alzheimer's Disease and to conduct consultations with patients with these disorders.

The Class of 2007 comprised 27 doctors from Australia and New Zealand who converged on Sydney for seven days of intensive training with patients. The group included 16 doctors new to the training and 11 doctors returning for refresher training and to learn to apply the latest HRI-Pfeiffer research on post-partum depression and Alzheimer's.

These enthusiastic doctors declared that it was one of the most stimulating training experiences they had ever attended. Many of the doctors had previously done ACNEM training in nutritional and environmental medicine.

The consultation program was again highly successful. Consultations were conducted with 94 patients during the period of the Clinic (16-24 April).

A Conference was held with keynote speakers on Autism, Post-Partum Depression, Alzheimer's Disease, Gut-Bowel Syndrome and related topics, as well as two brief personal presentations - one by a young man with bipolar disorder who, with complementary Pfeiffer treatment, now has a job and feels so much more in control of his life [see testimonial below]; the other by a young mother whose autistic child is now recovering with Pfeiffer treatment.

Once again Marion Redstone performed a sterling job organizing the Outreach training, consultation and conference program. Her work was greatly appreciated by practitioners, patients and families alike.

A DVD of the Conference is available from Marion Redstone at 02 9716 6615 or e-mail at [mazzared@bigpond.net.au](mailto:mazzared@bigpond.net.au)

The latest research by Dr Walsh and a list of all Pfeiffer trained Australian and New Zealand doctors are available at [www.biobalance.org.au](http://www.biobalance.org.au)

Dr Mary Megson, an acknowledged expert on autism spectrum disorder from the Pediatric & Adolescent Ability Center at Richmond, Virginia USA was originally scheduled to participate in the April 2007 Outreach Clinic consultation and professional training program but was unable to do so due to illness. However, Dr Megson's visit was re-scheduled and she later conducted clinical consultations with 46 autism spectrum

disorder patients at Gold Coast, Sydney and Melbourne locations during June.

There have already been expressions of interest from several doctors to undertake the 2008 training and further applications are welcome. We are especially interested in applications from doctors in North Queensland, Western Australia, Tasmania and the Northern Territory because none from these areas have yet undertaken Pfeiffer training and there is a demand from patients in these areas.

The Walsh-Pfeiffer Sydney Outreach 2008 will once again have Dr Bill Walsh training medical practitioners and assessing mental illness, behaviour and learning disorder and Alzheimer's patients. Dr Mary Megson and Dr Woody McGinnis will be training medical practitioners and assessing autism spectrum disorder patients.

The 2008 Walsh-Pfeiffer Sydney Outreach Conference will be held on Saturday 19<sup>th</sup> April at the North Shore Christian Centre, Chatswood. Further details of this conference will be available at a later date. Inquiries are welcome from medical practitioners interested in undertaking the training program and from patients interested in attending the 2008 Outreach Clinic. Please contact Marion Redstone, Outreach Clinic Organizer: Phone: 02 9716 6615 Email: [mazzared@bigpond.net.au](mailto:mazzared@bigpond.net.au)

## Testimonial

*[Delivered at 2007 Pfeiffer Outreach Conference]*

My name is Shane. My experience with Pfeiffer treatment began about 10 months ago. I've been taking Vitamin B6 and Zinc supplements for the last 10 months or so and I've noticed radical improvement. So have my family and friends.

My biggest improvement has been my memory. Also a calmness, a drop in anxiety, and many other improvements: an ability to relate well to people, and things like that.

I had my first psychotic episode back in 2003. I was diagnosed with bipolar disorder. I was on medication for bipolar disorder from the time I was diagnosed and I experienced all the ups and downs of having that illness. I was in a lot different condition back then than I am now. I had terrible mood swings, anxiety, panic attacks and paranoia. I definitely considered committing suicide.

I had Pfeiffer testing in 2005 and was assessed as pyroluric. Since taking the B6 and Zinc supplements I'm here to tell you I'm very glad I didn't attempt suicide. Ever since taking the supplements, it has been incredible: it has changed my life. I'm very grateful I found the work that's been done in America at Pfeiffer Treatment Centre and I'm glad it has been brought to Australia because if it hadn't, I don't think I would have been able to hang in much longer. Thank you and I hope you'll all help to spread the word.

# Metal Metabolism and Human Functioning

William J. Walsh PhD  
Pfeiffer Treatment Center

## 1. Introduction

Several dozen metallic elements have an important influence on human biochemistry and brain chemistry. The most important nutrient metals include zinc, copper, calcium, magnesium, iron, selenium, lithium, cobalt, manganese, and phosphorus and the electrolytes sodium and potassium. In addition, toxic heavy metals such as lead, cadmium and mercury can disrupt brain chemistry and human functioning.

Serious problems can result if abnormal levels of any of the above metals are present. The body has several mechanisms that regulate and control these metal concentrations and cope with fluctuations in dietary intake. For example, proper calcium levels are critically important for heart functioning, skeletal structure, and the calcium energy pump. Blood levels of calcium are so well controlled that it is quite rare to find a patient with out-of-range levels, even in cases of serious calcium deficiency.

Divalent metals such as copper, zinc, and manganese would be very toxic to cells in elemental or ionic form. These metals are "enveloped" or "bound" to a small linear protein (61 amino acids) called metallothionein (MT), which supervises and regulates metal levels in blood, brain and the periphery.

The various metals in the body compete with each other for participation in chemical reactions and can displace each other depending on local concentration and their relative position in the chemical activity series. Thus, an overload or deficiency of one metal can alter the concentration and functioning of other metals.

## 2. Absorption

The stomach and intestines represent a highly efficient system for processing metal constituents in food. For example, dietary zinc is absorbed into the portal blood stream with an average efficiency of 38%. This zinc initially binds to albumin, globulin, or histidine for transport to the liver, where it is converted to zinc metallothionein and sent to every cell in the body. Absorption can be inhibited by certain medications, by foods rich in trace metals or by phytates (such as cereals) and by a variety of digestive disorders.

## 3. Copper/Zinc Imbalance

Genetic errors and environmental insults can result in abnormal metal levels and cause problems ranging from poor immune function to mental illness. The large HRI database suggests that copper overload and zinc depletion are the most common metal-metabolism

abnormalities in behaviour, ADHD, autism, depression, bipolar disorders, and schizophrenia.

Zinc and copper are present in high concentrations in brain hippocampus, which is involved in mood regulation, short-term memory, and behaviour control. In most cases, this chemical imbalance appears to be genetic in nature and related to MT dysfunction. This condition may be seriously aggravated by a poor diet, malabsorption, emotional stress, physical injury, or exposure to environmental sources of copper or toxic heavy metals.

Most children with elevated Cu/Zn ratios exhibit hyperactivity, attention deficit disorder, and/or poor behaviour control. In addition they are unusually sensitive to lead, cadmium, mercury and other toxic metals, which they tend to accumulate rather than eliminate. Puberty is an especially difficult time for children with Cu/Zn imbalance since (a) copper levels are sensitive to estrogen levels, which increase during puberty, and (b) zinc is depleted by the rapid cell divisions that occur during the puberty growth spurt.

Many adult males with Cu/Zn imbalance become "late bloomers" who surprise friends and relatives with striking improvements in intellectual capability and behaviour control after the age of 20. This may be due to the fact that they have stopped growing, in effect reducing the severity of the Cu/Zn imbalance.

Adult females with Cu/Zn imbalances benefit from the cessation of growth but are prone to severe depression and irritability if estrogen levels become elevated. Their depression can be aggravated by (a) estrogen medications, (b) birth of a child, (c) a hysterectomy, (d) menopause, or (e) environmental exposures to copper. A Cu/Zn elevation is associated with many cases of PMS.

The primary environmental sources of copper are impurities in the water supply, "enriched" foods and nutritional supplements, mining operations, welding, brazing and other metal-joining processes, and swimming pools and jacuzzis using copper sulphate for algae control. Foods rich in copper include chocolate and carob. Also, certain food dyes and colourings have a high hydrazine content, which causes zinc depletion. Persons with the Cu/Zn chemical imbalance need to be vigilant in limiting sources of copper exposure.

Treatment for this imbalance centres on stimulation of MT protein with divalent metals (such as Zn and Mn) that are in depletion and by providing cysteine, serine, and other constituents of MT. In addition, vitamins B-6, C, and E are helpful in correcting this chemical imbalance. This treatment should be gradual during the first 4 weeks of treatment to avoid rapid release of copper from tissues, which could cause a sudden worsening of symptoms.

[ continued next page]

## 4. Heavy Metal Toxics

The adverse effects of heavy metal toxics are well documented in the scientific literature. Persons with a metal-metabolism disorder can be especially at risk since they may tend to accumulate, rather than eliminate, these toxics. A sibling study of violent boys showed dramatically higher lead and cadmium levels than was observed for their well-behaved brothers living in the same environment.

Heavy-metal overloads can effectively be treated using oral supplements of zinc, manganese, cysteine, serine, and vitamins B-6, C, and E. The initial treatment must be gradual to avoid a sudden dumping of metal toxics from tissues that could cause kidney damage and a worsening of symptoms.

Many heavy metals are "bone seekers" and treatment is prolonged due to the slow kinetics of metal transport out

of bone. For example, about 95% of long term lead in the body is stored in bone and the half-life for lead elimination is about 22 years, which is somewhat typical of the heavy metals. We prefer oral nutrient therapy to intravenous chelation, which (a) is more invasive, (b) disrupts the levels of zinc, calcium and other essential metals, and (c) must be continued for years to maintain toxic levels at acceptable levels.

Heavy-metal toxics can cause dramatic problems in physical health and brain function. High levels of lead in brain have been associated with (a) disruption of the calcium ion channel, (b) altered levels of essential trace metals, especially in hippocampus, (c) disruption of neurotransmitter synthesis, and (d) disruption of nerve transmission in the myelin sheath. The half-life of lead in the brain is measured in weeks, and nutrient treatment can be effective within that time frame. However, treatment must be continued for years to cope with lead, which will gradually diffuse out of the skeletal structure.

## Twelve Months with Pfeiffer

[continued from Sept 2006 Newsletter]

The September 2006 Newsletter (pages 7–9) featured a selection of Pfeiffer treatment case studies from the address by Dr Richard Stuckey at the BioConcepts International Mental Health Conference in Sydney in February 2006 and published as part of the Bio-Balance submission to the Senate Select Committee on Mental Health Inquiry.

This material aroused considerable interest, so we have decided to include further cases from that series in this Newsletter. [NOTE: complete presentation available at: [www.biobalance.org.au/downloads](http://www.biobalance.org.au/downloads)]

## CASE STUDIES

### CASE HISTORY 1: Schizophrenia

#### Characteristics

- ◆ Male, aged 26
- ◆ Average scholar, average at sport, did not try hard to improve either
- ◆ Attended TAFE and worked in bank
- ◆ Regular marijuana user from age 18
- ◆ Psychotic breakdowns age 23 & 24, hospitalised both times
- ◆ Clinical characteristics: Overmethylation
- ◆ Biochemistry: Normal methylation

#### Progress

##### 6 months later:

- ◆ No difficulty with supplements
- ◆ Prescription medication unchanged
- ◆ Family notices big improvement
- ◆ Major improvements: head clearer, thinking better, more alert, no voices, reacting better

##### 12 months later:

- ◆ Continued clinical improvement
- ◆ Reduced prescription medication
- ◆ Reduced nutritional supplement dose
- ◆ Has again enrolled at University to complete his study.

### CASE HISTORY 4: Depression

#### Characteristics

- ◆ Male, age 39
- ◆ Many years of relapsing depression, anxiety and lack of energy
- ◆ Had not worked for 2 years
- ◆ Clinical characteristics: Undermethylation
- ◆ Biochemistry: Zinc deplete, high normal methylation

#### Progress

- ◆ Initial treatment as Zinc deplete: no change in 3 months
- ◆ Switched to overmethylation protocol which led to steady improvement
- ◆ **12 months later:**
- ◆ In work 6 months in own water purification business
- ◆ Gradually increased hours working to 8 hours a day
- ◆ Aropax dose and nutrient dose halved
- ◆ Clinical control maintained

### CASE HISTORY 5: ODD (Oppositional Defiant Disorder)

#### Characteristics

- ◆ Female, aged 11
- ◆ Normal birth and neonatal period
- ◆ Abnormal tantrums age 2 and explosive temper ever since

- ◆ “Dysfunctional” family. Parents split and alternated care of child. Mother could no longer cope with the anger so child cared for by grandmother with parents having access alternate weekends
- ◆ Multiple attempts at behaviour therapy and extensive counselling failed
- ◆ Clinical characteristics: Pyrroluria
- ◆ Biochemistry: Undermethylation and Pyrroluria

### Progress

#### 6 months later:

- ◆ Clear change in first 2 months
- ◆ Trying to be a better person
- ◆ Does not yell or shout at grandmother
- ◆ Cleans room
- ◆ Doing better at school
- ◆ Regresses at weekends with either parent, father feels she does not need supplements

#### 12 months later:

- ◆ Much the same as at 6 months
- ◆ Behaviour clearly different if taking the supplements and in grandmother’s care

## CASE HISTORY 6: Aggression

### Characteristics

- Male, 11 years
- Expelled from 3 schools – daily fights and bullying
- Poor attention, poor academic performance
- Had insight into his behaviour but could not explain his outbursts
- Clinical characteristics: Pyrroluria
- Biochemistry: Under-methylation

### Progress

#### 4 months later:

- No fights
- Walked away from confrontation
- Less victimization by teachers
- Grades improved from C/D to B/A
- Showed affection to mother

#### 12 months later:

- Normal child
- Above average scholar
- Nil aggression
- Supplement dose reduced
- Clinical improvement maintained

## CASE HISTORY 7: Anxiety State

### Characteristics

- ◆ Male, age 26
- ◆ Prader-Willi Syndrome
- ◆ Delayed mental development
- ◆ Severe anxiety, temper and intermittent aggression
- ◆ Clinical characteristics: Pyrroluria
- ◆ Biochemistry: Pyrroluria

### Progress

#### 6 months later:

- ◆ Happier, calmer, less anxiety and aggression
- ◆ Psychiatrist comment: “Is this the same patient?”

#### 12 months later:

- ◆ “Different person”
- ◆ Minimal anxiety
- ◆ Nutrient supplement dose reduced
- ◆ Clinical control maintained

## CASE HISTORY 9: Anxiety State

### Characteristics

- ◆ Female, age 44
- ◆ Many years of anxiety, stress, pessimism and worry
- ◆ Biochemistry: Undermethylated

### Progress

#### 12 months later

- ◆ Internal anxiety reduced a lot
- ◆ Stress level down, less worried
- ◆ Happier, calmer, optimistic

## CASE HISTORY 13: Autism

### Characteristics

- ◆ Male, age 6
- ◆ Normal physical development, virtually mute, panic in close situations
- ◆ Biochemistry: Undermethylation, Pyrroluria

### Progress

#### 8 weeks later

- ◆ Quieter, more relaxed
- ◆ Said more words in 4 weeks than he had in 4 years

#### 12 months later

- ◆ Steady increase in vocabulary
- ◆ Some short sentences, better comprehension
- ◆ Less anxiety
- ◆ Able to sit in consultation room with doors closed
- ◆ Repetitive, obsessive behaviour persists

## Books by Dr Carl Pfeiffer

[Most available in paperback from Amazon or other Internet booksellers]

***Mental and Elemental Nutrients: A Physician’s Guide to Nutrition and Health Care.*** Keats Publishing, 1975

***Zinc and Other Micro-Nutrients.*** Keats Publishing, 1975

***Nutrition and Mental Illness: An Orthomolecular Approach to Balancing Body Chemistry.*** Healing Arts Press, 1987

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