InterClinical Laboratories **Newsletter**

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Dear Practitioners and Friends,
Happy holidays!
All the staff at InterClinical Laboratories would like to wish you and your family a very happy and safe holiday season.

News, Products and Upcoming Events

Highlights 2004

In August this year we hosted international guest speaker Dr David Watts' visit to Australia and New Zealand. Dr Watts is one of the world's leading researchers in the field of tissue mineral analysis and nutritional medicine. He gave two sell-out seminars in Sydney and Auckland on Hair Tissue Mineral Analysis (HTMA) and the influence of nutrition on disease process, prevention and therapy. The seminars were a great success – we received so many enthusiastic phone calls from delegates afterwards. Thank you to everyone who attended and made these seminars possible. We look forward to Dr Watts' next visit!

New products InterClinical Laboratories is pleased to announce two new products:

MeMax Extra Strength Bacopa

MeMax is a powerful nerve and brain tonic that aids memory, concentration and mental clarity, making it a perfect remedy for students, the elderly and children with concentration difficulties. MeMax also boosts mental processes while calming the nerves and reducing stress. Each tablet contains a pure botanical extract of Bacopa monnieri (Brahmi), equivalent to 8g dried whole plant. (See enclosed practitioner information sheet.)

MolyZinc Molybdenum Supplement

The latest addition to the Trace Nutrients elemental mineral range is MolyZinc, a synergistic blend of molybdenum, zinc and vitamin C. Molybdenum is a vital cofactor in many of the body's enzyme systems, and can be used to help treat sulfite sensitivity, alcohol detoxification, copper toxicity, dental cavities and asthma. Each tablet contains molybdenum trioxide 125mcg, vitamin C (sodium ascorbate) 30mg and zinc (amino acid chelate) 5mg.

CLINICAL UPDATES for the Health Care Professional

By Dr David Watts, Director of Research See page 3

Improved products

This year we have improved some of our most popular Trace Nutrients products. Unfortunately it took a while to get these products back on the shelves. But they are here at last and available for ordering.

Para-Pack V

Para-Pack Vegan is now called Para-Pack V, but it remains an unparalleled multinutrient supplement for parasympathetic dominant individuals or slow metabolisers.

We've added selenium, a powerful antioxidant, and replaced the botanical extract *Ginkgo biloba* (Ginkgo) with *Zingiber officinale* (Ginger) to provide circulatory and digestive stimulation. We've also replaced Vitamin A with natural betacarotene (in mixed carotenoids derived from *Dunaliella salina*), to provide a more controlled source of vitamin A and for its antioxidant and free radical scavenging properties.

Sym-Pack V

Sym-Pack V (was Sym-Pack Vegan) has a new name and a modified formula. We've replaced the botanical extract *Panax quinquefolium* (American Ginseng) with *Withania somnifera* (Winter Cherry), to provide greater adrenal and nervous system support for sympathetic dominant individuals. The rest of this unique multinutrient formula for fast metabolisers remains the same.

Aden Complex

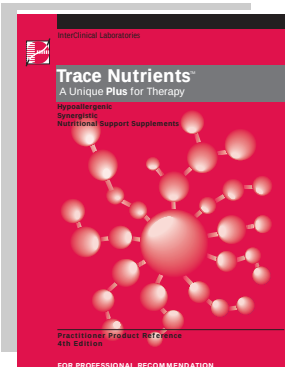
Aden Complex is one of our most popular products. The new Aden Complex formulation contains botanical extract *Glycyrrhiza glabra* (Licorice root), a well-known adrenal tonic particularly beneficial in times of stress, overwork, exhaustion or 'burnout'. We've also replaced Vitamin A with natural betacarotene (in mixed carotenoids derived from *Dunaliella salina*), to provide a more controlled source of vitamin A.

Thimax

In the new Thimax formulation, botanical extract *Commiphora molmol* (Myrrh) has been replaced by *Tabebuia avellanedae* (Pau d'arco). Pau d'arco is a traditional South American remedy used for infections, skin diseases and degenerative disorders. Recent scientific studies have shown that it has powerful immune enhancing, antimicrobial and antiparasitic properties.

Thimax now provides an improved form of natural betacarotene containing both cis- and trans- isomers (instead of trans- isomers only) in a mixed carotenoid base derived from *Dunaliella salina.* Natural betacarotene combined with Echinacea, Pau d'arco, Poke Root and nutrients such as vitamins B5, B6, C, D, E and magnesium, make this an ideal immune boosting formula.

New 4th Edition Trace Nutrients Practitioner Product Manual



A new edition of the Trace Nutrients product manual has been published, containing everything you need to know about our new products and formulations, as well as the familiar ones.
Contact InterClinical or your local distributor for your copy.

Travelling this Christmas?

Don't forget to carry a pack of Parazyne AntiParasit. Parazyne is a powerful herbal remedy containing *Artemisia annua* for mild gastrointestinal disturbances, traveller's diarrhoea and fevers.
A must for every traveller's first aid kit.

Australia and New Zealand

2005 SEMINAR TOUR: Immunity and Degenerative Disease

Speaker Zack Bobrov

Technical Director InterClinical Laboratories

Book your seat early for our national seminar tour next year, in which we present the latest developments, protocols and products in immunity and degenerative disease therapy. We will explore some new approaches to stimulating and rebalancing immunity, including chelating copper toxicity, a new ground breaking superfood, carotenoids and mushroom therapy.

By popular request, the seminar will include an advanced workshop on Hair Tissue Mineral Analysis. The workshop will focus on report interpretation, understanding metabolic typing, significant mineral ratios and their relationship to the endocrine system.

The seminars start in April 2005 and will include major capital cities in Australia and New Zealand. See the back of this newsletter for a seminar outline and proposed dates.

Clinical Updates for the Healthcare Professional

By Dr David Watts, Director of Research

Dietary selenium intake reflected in hair mineral analysis

Studies of hair tissue mineral analysis (HTMA) were carried out on individuals living in high and low selenium areas of Punjab, India. Foods were also analysed for selenium content. The studies include 80 men and 80 women. Results of the study showed that selenium intake in the high selenium areas was nine times the intake of those living in low selenium regions. Hair selenium content was ten times higher in those living in high selenium regions than in those from lower selenium regions. This study shows the direct relationship between diet and hair mineral content.

Hira CK, et al. (2004). Dietary selenium intake by men and women in high and low selenium areas of Punjab. Pub Hlth Nutr *7, 1*.

Hair zinc levels of patients with prostate disorders

Hair mineral tests were performed on healthy subjects and compared to results of a group of patients with benign prostate hypertrophy and a group with prostate cancer. Zinc levels in patients with carcinoma were significantly lower than found in those with hypertrophy, and normal controls.

Ouyang SY, Li SL (2000). Investigation of trace elements in hair of patients with prostate carcinoma, benign prostate hypertrophy, and normal controls. Junan Yi Ke Da Xue Bao *25, 3*.

Zinc supplementation helps children with severe pneumonia

Pneumonia is a major cause of death in children less than five years of age. A double-blind placebo-controlled clinical trial of 270 children found that zinc supplementation in the amount of 20 milligrams per day resulted in accelerated recovery from pneumonia. The mineral zinc also helped to reduce antimicrobial resistance and decrease multiple antibiotic exposure as well as reduce complications and deaths.

Brooks, et al. (2004). Zinc for severe pneumonia in very young children: double-blind placebo-controlled trial. Lancet, *363*.

Magnesium deficiency and diabetes risk

Researchers at Harvard University performed studies on the effect of magnesium intake and diabetes. They found a significant inverse association between dietary magnesium intake and diabetes risk. Double-blind placebo-controlled trials of patients with Type 2 diabetes found that oral magnesium supplementation improved insulin sensitivity and metabolic glucose control. Based upon this study and many others, the following conclusion was reached: 'It's important for health professionals to recognize that magnesium may be a factor affecting diabetes risk, and they should, at least, assess magnesium intake (perform magnesium tests) to make sure their patients are getting the recommended level.'

Mitka M (2004). Researchers examine effects of dietary magnesium on Type 2 diabetes risk. JAMA *291, 9*.

Through HTMA studies we have found that magnesium requirements are increased in both Type 1 and Type 2 diabetes conditions. Individuals with other types of diabetes such as gestational diabetes, and iron-induced diabetes also have an increase in magnesium requirements as well as magnesium co-factors, such as vitamin B6, vitamin E, zinc, chromium, etc.

Subclinical hypothyroidism

Overt hypothyroidism affects 1 to 4 percent of the population, but the prevalence of subclinical hypothyroidism affects 5 to 10 percent of the population. Subclinical hypothyroidism is defined as a symptom-free or minimally symptomatic state, characterised by abnormally elevated serum levels of TSH (thyroid stimulating hormone) with normal serum concentrations of free thyroxine. It is caused by the same disorders of the thyroid gland as those that cause overt hypothyroidism including autoimmune thyroiditis, use of antithyroid drugs, etc. Patients with subclinical hypothyroidism have higher total cholesterol, LDL, triglyceride, apo B levels, LDL/HDL ratio compared to control groups.

Cabral MD, et al. (2004). Lipid profile alterations in subclinical hypothyroidism. Endocrinol *14, 3*.

From the above report we can see that subclinical hypothyroidism is a very prevalent condition that can lead to a number of metabolic consequences, particularly coronary heart disease, and is often overlooked in patients. The widespread recommendation for the use of cholesterol-lowering statin drugs seems to be aimed at treating the symptoms related to the potential development of atherosclerosis rather than treatment of the individual. Determining and treating this common condition could reduce the incidence of atherosclerosis by correcting the underlying cause or mechanism instead of resorting to symptomatic treatment with the use of statin drug.

Obesity: an endocrine problem

A paper by Kikkoris et al. (2003) discussed the development of obesity being related to endocrine abnormalities. They discuss some endocrine diseases that include obesity as one of their clinical manifestations, such as hypothyroidism, Cushing's disease, testosterone and growth hormone deficiency, polycystic ovarian syndrome, insulinoma, hypothalamic lesions and genetic syndromes. However, milder endocrine disorders may also contribute to obesity in many people. For example, T3 levels are usually elevated in obese individuals, total testosterone and SHBG levels are usually low in men, estrogen levels are elevated in women, norepinephrine levels are elevated and epinephrine levels are low, aldosterone is elevated as well as parathyroid hormone levels.

Kokkoris P, et al. (2003). Obesity and endocrine disease. Endocrinol Metab Clin North Am *32, 4*.

While obesity is typically viewed as an issue of diet, exercise and overeating, it is obvious that there are other underlying neuroendocrine factors associated with this growing problem. Assessment of the individual and targeting their individual neuroendocrine and nutritional imbalances is necessary in bringing this epidemic under control rather than just emphasising a diet for the masses.

ONE DAY SEMINARS

with Zack Bobrov Technical Director InterClinical Laboratories

Seminar Series 2005: Immunity and Degenerative Disease

SEMINAR OUTLINE

Advanced Hair Tissue Mineral Analysis

Workshop includes: report interpretation, understanding metabolic typing, nutrient and toxic mineral ratios and their relationship to the endocrine system, vitamin and mineral relationships, clinical case studies and practical applications of HTMA.

Recent Developments

- *Bacopa monnieri* (Brahmi): divine medicine

Brahmi is a traditional Ayurvedic nerve and brain tonic that improves memory and cognitive function and helps repair and stimulate nerve function. We look at how this 'divine medicine' can be used to treat memory, concentration and cognitive problems, including ADHD.

- Molybdenum v copper: reducing toxicity with mineral antagonism

The link between copper toxicity and bacterial and fungal infections, and the use of antagonistic minerals such as molybdenum and zinc to reduce serious chronic infection.

- Monobasic calcium phosphate and cancer

The Proceedings from the 2004 31st Annual meeting of the Clinical Oncology Association of Australia present Dr Leonid Shafransky's studies on the use of monobasic calcium phosphate in treating cancer and in improving regeneration of normal bone and other tissues. We look at his groundbreaking studies in detail.

- The world's new superfood *Dunaliella salina*

Whole microalgae *Dunaliella salina* provides the earth's richest source of natural betacarotene plus a wide spectrum of carotenoids and other nutrients. *D. salina* is set to take over from Spirulina as the real new 'super food'.

- Natural carotenoids: immune boosters and antioxidants

The role of carotenoids in degenerative disease prevention through immune support and antioxidant protection. Natural versus synthetic betacarotene, and the use of natural betacarotene and mixed carotenoids in clinical practice.

- Medicinal mushrooms and broken shell spore powder

Explores new research on the benefits of broken shell spore Reishi powder, and the use of different mushrooms species for stimulating and rebalancing immune function, including *Ganoderma lucidum* (Reishi), *Lentinus edodes* (Shitake), *Cordyceps sinensis*, *Coriolus versicolor*, *Poria cocos*, *Polyporus umbellatus* and *Tremella fuciformis*.

- Artemisia annua: killing those bad bugs

Artemisia has broad-spectrum antiparasitic, antifungal, antibacterial and immune supportive actions. It has been researched for its use in malaria, cancer, fevers and other immune conditions.

2005 SEMINAR DATES

AUSTRALIA

Canberra	Tuesday	26 April	❊
Newcastle	Tuesday	3 May	❊
Brisbane	Sunday	8 May	+
Byron Bay	Monday	9 May	❊
Coffs Harbour	Tuesday	10 May	❊
Sydney	Sunday	15 May	+
Wollongong	Tuesday	17 May	❊
Melbourne	Sunday	22 May	+
Hobart	Monday	23 May	❊
Adelaide	Tuesday	21 June	❊
Perth	Saturday	25 June	+
Darwin	Monday	27 June	❊

NEW ZEALAND

Auckland	Sunday	3 April	+
Wellington	Monday	4 April	❊
Christchurch	Wednesday	6 April	❊

+ Day Seminar 10am to 5pm
❊ Evening Seminar 5pm to 10.30pm

Confirmed dates, venues and seminar information will be available early in 2005.

Please register your interest now, for super-early bird discounts:

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