

Metabolic News

The Newsletter of Metabolic Nutrition

October 2006

No Tricks, Just Treats

Treats for Fall often include baked goodies from the kitchen. This year why not try incorporating Xylitol as a healthy sweet substitute, and adding coconut flour for more fiber, in your baking? Ask us for recipes and samples!

Xylitol crystals in the bulk 2.2 pound bag, and Coconut Flour, also in a 2.2 pound bag are on **SALE** in October and November. Enjoy 20% off and some guilt free sweet treats.

Metabolic Nutrition Clinic hours are Monday through Friday
7:30AM — 4:30PM
Saturdays and extended hours by appointment, please call
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Strengthening Your Immune System

By Christine N. Hardy, MA,CNE

Our immune system is a complex organization of biochemical responses designed to free our systems of potentially dangerous substances: viruses, bacteria, parasites, chemical and environmental poisons, free radicals and industrial pollutants. In its simplest form, the immune system is a system of **barriers** to pathogens or irritations, **detection** of invaders and our **adaptive response** to dis-ease. We have learned more in the last 25 years about infectious disease and the function of our immune systems than in all of previously recorded history. That's reassuring since there are more insults to our immunity from the modern world than ever before. Nutrition continues to be a critical determinant of immune system function and malnutrition remains the most common cause of immunodeficiencies. Chronic and/or acute disease and degeneration is the inevitable result of a compromised immune system.

The thymus gland is the centerpiece of the immune system protecting against immune system suppression. It also performs endocrine system functions, is actively involved in lymphatic drainage, and is the first organ to be affected by mental attitude. Located in the upper thorax, behind the sternum and below the thyroid gland, the thymus reaches its maximum size by age two, while it plays a crucial role in the development of the immune system. By age 50, the thymus gland has decreased in size and functionality and is no longer capable of producing sufficient quantities of a critical thymic protein needed to "jump start" an immune response. The ability of the immune system to respond to pathogens and to immunizations is therefore, diminished in both the very young and the elderly.

Immune dysfunction also includes overactive immune responses such as the auto immune disorders: allergies, hypersensitivities, asthma, lupus, arthritis, and cancers of the immune system. The immune system can be manipulated to suppress unwanted responses; immunizations being the deliberate induction of an immune response. Other important manipulations include immunosuppression for transplant rejection and severe allergic reactions. The most commonly

...Strengthening Your Immune System

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used medications include the anti-inflammatory Corticosteroids including prednisone. While these medications can be life-saving, they can also have many toxic side effects.

Strengthening the immune system through good nutrition and eating for your metabolic type, exercise, and supplementing deficiencies is a prescription for good health. Metabolic Nutrition offers the following supplements to enhance and protect the immune system.



Our innate immunity includes the systems we are born with, including our all important skin barrier. Skin, tears, mucus, saliva and other secretions are all “first defense” immune barriers. Regular hand washing is as central to good health as is the maintenance of healthy gut flora. Boost your immune system the easy way; wash your hands frequently, especially before eating.

· *Supplements mentioned in this newsletter are **20% off** in October and November.*

· **Same day shipping**

· **Free shipping and handling for orders over \$200**

PRO-BOOST or Thymic Protein A is a naturally occurring product described as an immune modulator and anti-viral agent. **PRO-BOOST** Thymic Protein A was originally sourced from stored frozen cells from the thymus gland of one calf, sacrificed eleven years ago; no other animals have been or will be sacrificed to make TPA. Through a patented process, it is cell cultured, highly purified, freeze-dried and contains the same protein produced by our own thymus gland which acts to activate the helper T-4 cells and stimulate an immune response. **PRO-BOOST** comes in individual dose packets to be administered under the tongue— allow to dissolve 1-3 minutes before swallowing. Pro-Boost should be taken one hour before or after a meal; the usual dose being one packet every three days. Thymic Protein A can be used by those who just want to keep their immune system strong, and to maximize the quality and longevity of their life. Chronic or acute conditions that may arise from poor immune function can benefit from one packet taken three times per day. 30 packets.....\$65.95

Bio C I and Bio C II

Depending on your metabolic type, vitamin C as ascorbic acid or sodium ascorbate (with co-factors including bioflavonoids and resveratrol) can help to prevent, eliminate or shorten the duration of many illnesses. Vitamin C is a powerful antioxidant, antimutagenic and anti inflammatory, an important defense against colds and flu.

Bio C I/90 caps.....\$16

Bio C II/90 caps.....\$20

Russian Choice Immune Complex

Russian Choice is a preparation of lactobacillus cell wall fragments shown to stimulate the innate and adaptive immune systems. It also may activate and regulate the common mucosal immune apparatus, however, it is not meant to directly supplement the local live gut flora. Russian scientists developed Russian Choice Immune Complex in the 1980's and it has been used throughout Europe as an immune stimulator, enhancing repair mechanisms of intestinal villi cells, and supporting adhesion and growth of friendly bacteria.

60 capsules.....\$35

Candida and Fungal Invaders

Under normal conditions *Candida Albicans* is a yeast fungi that lives naturally at a low level in our digestive systems. Probiotics (beneficial bacteria) help keep a healthy balance of microorganisms in the gut that promote good health. When under stress, the aging process, digestive difficulties (such as food remaining in the digestive tract too long, lack of adequate stomach acid, treatment with antibiotics, and other conditions), *Candida* and other fungi can rapidly over-produce causing discomfort and other health problems.

Leaky gut syndrome and other bowel problems can allow *Candida* and other fungi to enter the blood stream through the walls of the intestine and spread to other parts of the body. *Candida* overgrowth is more common today than ever before. Immune compromised individuals: diabetics, chemotherapy patients, HIV and AIDS patients, organ transplant patients, those who have taken repeated courses of antibiotics and even those recently hospitalized have a greater chance of developing a fungal overgrowth or superinfection.

Antibiotics in particular are indiscriminate eradicators of healthy bacteria, killing off both pathogenic and beneficial bacteria, making the intestinal lining more susceptible to bacterial and fungal invasion, impacting the health of the colon cells and the immune system. *Candida* overgrowth symptoms can include: swollen lymph nodes, allergies, depression, insomnia, carbohydrate cravings, abnormal fatigue, mood swings, skin infections, oral or vaginal thrush, intestinal gas and mucosal deposits in the nose, lungs and throat.

A healthy functioning digestive tract is the body's main defense against *Candida* overgrowth. Besides consuming enough beneficial probiotics capable of crowding out pathogens and boosting the immune system a diet rich in fiber and enough water is crucial for good bowel health. Probiotics may be taken in supplement form or consumed in such foods as unsweetened yogurt, kefir, tempeh, miso, some cultured cheeses, cultured buttermilk, sour cream, and unpasteurized sauerkraut. Yogurt containing acidophilus is the most commonly known and eaten fermented food in the United States. When choosing a yogurt, make sure yogurt contains both active and live cultures; frozen yogurt contains no live organisms at all.

Yeast thrives on sugar and refined carbohydrate consumption hampers the immune system's defense system. Refined carbohydrates including white flour processed products, fruit juices and other sugar sweetened beverages and foods made with yeast such as bread and beer, encourage the overgrowth of harmful bacteria. B vitamins, antioxidants, omega-3 rich foods, raw vegetables, and gamma linoleic acid support the immune system and discourage yeast outbreaks.

Mainstream medicine has had a difficult time treating and devising solutions for recurrent health concerns such as *Candida*. As fungal and yeast infections become more resistant to drugs, complimentary alternative treatments are becoming invaluable. *Candida* specific supplements at Metabolic Nutrition:

Culturelle

Good bacteria is our first line of defense against foreign invaders. They work to flush out toxic build up, infection and fungal overgrowth. Friendly bacteria is essential to maintaining proper pH balance, regulate bowel movements, ensure absorption of nutrients and strengthen intestinal walls. Culturelle also contains a fiber called chicory inulin, a plant fiber specifically helpful in reducing insulin resistance.

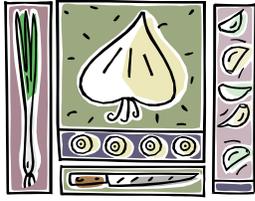
30 capsules.....\$29

Candex

Candex helps to alleviate *Candida* overgrowth by providing enzymes specific to aid in the digestion of the cell wall of the *Candida* organism. Candex helps the bowel system gently process the *Candida* avoiding the toxic "die-off" effect.

40 capsules.....\$25

Therapeutic Immune Support



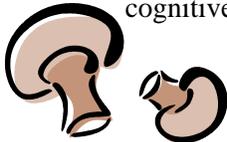
Alli-tru contains the very potent active constituent of garlic, allicin. When fresh garlic is chopped or crushed, the enzyme alliinase acts on the chemical alliin, converting it into allicin, however, the allicin in fresh garlic is not a stable compound, degrading slowly upon standing and rapidly destroyed by cooking.

Alli-tru offers a stabilized form of allicin with anti-bacterial, anti-viral, anti-parasitic and anti-fungal properties. Allicin supports heart function, promotes efficient circulation, fights arteriosclerosis and strengthens the immune system by attacking bacteria, virus, fungi and parasites. **Alli-tru** has been found to be particularly effective in treating upper respiratory infections and bronchitis.....90 capsules.....\$40

Olive leaf extract contains oleuropein, a phytochemical which appears to have powerful anti-bacterial and anti-viral properties. Middle Eastern cultures have used olive leaf tea for centuries to treat disorders such as coughs, sore throat, cystitis and fever, and infusions were also made to treat skin problems, boils, rashes and warts. **Olive leaf extract** has been reported to boost energy levels, assist with chronic fatigue and allergies, and be of significant benefit when included as a part of an immune system enhancement program.....90 capsules.....\$25



Ten Mushroom Formula from active constituents of beneficial mushrooms for general immune enhancement and overall health. Stimulates cell and interferon production, supports detoxification, cognitive, digestive and cardiovascular systems...120 capsules.....\$39



ImmPower A hybrid extract of mushrooms used in Japanese healing supports immune Natural Killer Cell function, t-cell and macrophage activity.

Japan's best selling immune enhancing supplement....30 capsules.....\$60



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Dedicated to the memory of Dr. Harold J. Kristal