HEALTH TIDBITS
Volume 9 – 2006
Candace Booth ND,PhD, CNC
cbooth@naturalhealthplus.biz

GREETINGS EVERYONE!

This month's newsletter will have a variety of topics beginning with a discussion of pain medications.

Many people seek prescription drugs or automatically go and purchase over the counter pain/inflammation medications without considering some of the wonderful natural alternatives. In addition, they are unaware of the potential harm these medications can cause. There are a bunch of natural remedies available for pain and inflammation that don't have negative side effects.

I will also be discussing a article published in the New England Journal of Medicine regarding calcium; information regarding Progersteron, Cortisol and Bones; a separate discussion about negative impacts of cortisol.

Pain Medications Can Slow The Healing Process

Pain is a mechanism our bodies use to draw attention to a problem. Pain can be your body's best friend because it alerts you that something is wrong. It is a signal for us to look for the underlying cause not just treat the symptom. Pain can also be your worst enemy if you ignore it, or mask or deaden it with drugs.

Every person feels and reacts differently to pain. It can be centered in a small location or feel systemic. Even mental stress can eventually manifest itself as physical pain.

There are different kinds of pain: physical, emotional, chronic, local, intermittent, throbbing, dull, spasmodic, sharp, shooting, etc.

Research show that painkillers and over the counter remedies such as aspirin, ibuprofen, and naproxen (including Bayer, Advil, Motrin and Aleve) suppress inflammation and local immune responses, which are essential for wound healing. Reports also show that painkillers also hinder recovery from bone fractures. Drugs can also inhibit certain mechanisms so they cannot function.

Drugs that reduce inflammation and deaden pain, don't help heal the cause of the problem and they can have many side effects.

Inflammation is not always a bad thing. It is a natural reaction to injury or infection. In fact, a low level inflammation/removal/repair process is always ongoing throughout the body because all of our tissues are, over time, broken down and regenerated as part of the normal maintenance process of the body. Without this repair process, we would quickly become dysfunctional. The key is balance because the body can overreact to damage and the inflammatory process might not be stopped when it should be, or chemicals and drugs in the body may excessively stimulate the inflammatory process.

Before going to OTC or RX drugs, you might want to try some of the natural remedies available to assist and alleviate pain and inflammation. For example, in one study of patients with ulcerative colitis (a painful, progressive inflammatory disease of the bowels, which often eventually results in the bowels being surgically removed),

simple supplementation with fish oils resulted in a dramatic 65% drop in patients' levels of inflammatory leukotrienes and a 75% decrease in their clinical symptoms. process.

Keeping free radicals down in the body is essential in reducing widespread inflammation and degeneration of tissues and organs. The most important of the inflammation quenching nutrients are the antioxidants such as Vitamin C, Grape Seed Extract, Coenzyme Q 10, Garlic, the carotenoids (red, yellow, green and orange vegetables) Gingko Gotu Kola, Glutathione, Green Tea, Melatonin,. Methionine, and Superoxide dismutase.

Herbal pain managers have much broader actions than analgesic drugs. They are more subtle and work at a deeper levels, to relax, soothe and calm the distressed area. Herb's let you use pain's information about your body, yet not be overwhelmed by the trauma to body and spirit. Constant pain over time can where out your spirit.

Some herbs that are useful for pain are:

- Kava Kava extract for stress relief
- MSM (methylsulfonylmethane) relieves pain of systemic inflammation
- Feverfew, migraine headaches
- High Potency Protease, sports injuries, surgery, wounds
- Boswellia (Ayurvedic herb) back pain, inflammation
- Lobelia drops for cramps
- Valerian/Wild lettuce extract, a sedative and anti spasmodic
- White willow, anti-inflammatory/analgesic
- Cramp Bark, cramping and spasms
- Wild Yam and Cat's Claw for inflammation
- Capsaisin cream for nerve pain
- Myrrh, analgesic
- Calendula, injury pain
- Black Cohosh and Cayenne for neck pain
- SamE—comparable to the those achieved by the NSAIDs –as an anti-inflammatory

Nutrition plays a role in controlling pain and inflammation as well. A vegetarian diet lowers acid (caffeine, animal products, salt and sugar raise acid levels) in the body. It is low in fats and high in minerals best for all kinds of pain. That is why **Juice Plus** supplements are so good for lowering inflammation as a matter of habit. They provide such a high concentration of veggie/fruit phytonutrients in a concentrated form.

Add anthocyanin foods like cherries and berries as anti-inflammatories (often up to 10 times more effective than aspirin).

Calcium is a nervine and mixed with magnesium relaxes muscle spasms.

The Calcium Paradox

I've written on this topic before but thought you needed an update since the disturbing news published by the New England Journal of Medicine involving 36,282 women ages 50-79. These women were given either a daily placebo or 1000 milligrams of calcium (plus 400 IU of Vitamin D to help absorption). After 7 years the calcium

takers only experienced a slight increase in bone density…but no reduction in bone fractures.

These same results were reproduced in studies done by the National Academy of Sciences and Harvard.

In fact, even though the American Dairy Council would have you believe otherwise, those women drinking two or more glasses of milk per day actually had a *greater* risk of hip fracture than those who drank no milk. Milk is a poor source of calcium because it lacks the magnesium necessary to get it into the bone.

So….do we need to reexamine the idea that a high calcium diet and calcium supplements build strong bones?????

Chinese women, who eat little or no dairy, compared to American women who consume milk, eat yogurt and cheese and take calcium, suffer hardly any hip fractures. People in China, Peru, and Africa maintain healthy bones on 400-500 mgs per day while many in our country develop brittle bones on 1500 mgs of calcium per day. WHY IS THIS?

The key difference is the delicate balance between acid and alkaline foods. For the bones to stay healthy the blood cannot be too acidic or alkaline. *When the blood gets too acidic, the body releases alkaline calcium compounds from bone to neutralize it.* The western diet is HIGH in acidic foods.

High protein diets flood the blood with acid forming sulfurous amino acids. *Unless the diet is offset by a diet rich in alkaline forming plant foods, the body neutralizes the acid by releasing calcium from bone.*

So…if you eat a typical American diet which is high in animal protein (meat and dairy), you will lose more bone. Add to that our high salt, sugary, diet soda ridden addictions, etc, you are doomed to have more acid leaching calcium from your bones.

Adding 700-800 IU daily of vitamin D reduces hip fracture risk by 26% . Nature's Sunshine Calcium is mixed just right with 2:1:1 phosphorous and magnesium and vitamin D.

Of course we know the importance of weight bearing exercise – at least 30 minutes per day. Resistance exercises strengthen bones and improve muscle mass.

A diet high in fruits and vegetables helps keep the blood alkaline. Again, I want to promote adding the supplement **Juice Plus** to your diet if you are having a difficult time getting a high intake of fruits and vegetables in your daily diet. This is not a vitamin – it is a whole foods supplement.

Don't forget the importance of calcium in decreasing the risk of high blood pressure, a key factor in heart attack and stroke. And some studies show that daily calcium reduces the recurrence of precancerous polyps in the intestinal tract. And…calcium is involved in every muscle movement. Your muscles cannot contract without it.

In spite of the results of their study the National Academy of Science still recommends that women and men ages 19-50 consume 1000 mgs of calcium a day, while people 51 and over need 1200 mgs a day. If you are eating fewer animal foods because of their animal proteins, you may need to take supplements. Calcium citrate is recommended over calcium carbonate because it is better absorbed and does NOT contain mercury.

PROGESTERONE, CORTISOL AND BONES

Cortiosol, a hormone supplied by the adrenal system, and progesterone, a hormone supplied by the reproductive system, compete with each other for receptor sites. Their molecular structures are very similar and both can occupy and thus compete for the same receptors in *osteoblasts – the bone building cells in bone.*

The message of progesterone to osteoblasts is to *stimulate* them, whereas the message of glucocorticoids to osteroblasts is to *inhibit* them from making new bone.

Thus progesterone helps prevent osteoporosis and too much cortisol can cause osteoporosis. An excess of cortisol that block's progesterone's action causes a progesterone deficiency. This is already a problem in post menopausal women who no longer manaufacture progesterone and who, are more than likely, estrogen dominant.

Then add to that the problem of being prescribed a synthetic progesterone like compound called *progestin* which will also occupy the osteoblast progesterone receptor sites. These progestins are less potent than progesterone in promoting new bone formation.—regardless of what your physician may be telling you. Being foreign to the usual metabolic pathways through which hormones move, synthetic progestins are more tenacious in the occupancy of these receptors and thus inhibit the message of progesterone *even at low doses!!!*

Understand that progesterone manufactured in the laboratory has the identical molecular configuration of the progesterone that your body makes. But…Provera, has a different molecular configuration that is not identical to anything found in nature. What makes something "synthetic" or "natural" is whether it can be found in nature and whether it is natural to the human body.

Another note about Cortisol -- Supplemental hormones by the bucketful won't bring your body back into balance if you're chronically exposed to stress, toxins, or a poor diet. That is why in my field we constantly talk about balance – nutritionally, emotionally, spiritually, physically, etc.

IMPACT OF STRESS & CORTISOL

This is a tough one – talking about the importance of lowering the impact of stress on the body . For some it feels like an impossible task. I think most of us know from all the information we are flooded with via TV, magazines, internet that stress exerts a disruptive influence on the body. One of these is the increase in the release of Cortisol. Cortisol is a steroid hormone produced by the adrenal glands in response to stress.

There is huge difference between an individual's ability to tolerate stress. Some people can simply "take" a greater load than others before they feel the effects of it. But eventually, given a certain amount of continued stress over time, everyone has a breaking point.

Even athletes must have a balance of training and recovery for maximizing performance and preventing injury. A phenomenon known as *overtraining* has been linked to chronic cortisol exposure.

To give you a brief physiological explanation of how cortisol affects us without getting too complicated:

- Stress occurs → causing the hypothalamus in the brain to secrete CRH (corticotrophin-releasing hormone) → CRH

travels to the pituitary gland and causes secretion of ACTH (adrenocorticotropic hormone) into the blood → ACTH reaches the adrenal glands (above the kidneys) and causes secretion of CORTISOL (the stress hormone)

- CORTISOL → chronically elevated cortisol levels lead to adverse effects on the body including muscle and bone loss; fat gain; elevated blood sugar levels; high blood pressure, suppressed immune function and changes in memory and mood.

Under normal circumstances, the body does a pretty good job of regulating cortisol levels in the bloodstream. Normal cortisol metabolism follows a circadian rhythm – meaning that levels tend to follow a 24 hour cycle – with the highest levels typically observed in the early morning (6:00 to 8:00 am) and the lowest levels in the wee hours of the morning (12 midnight to 2am). Cortisol levels usually show a rapid drop between (8 am and 11 am) and a continued gradually decline throughout the day. From those lowest levels around 2am, cortisol again begins to rise to help us wake up and prepare for another stressful day.

When a stress occurs, cortisol springs into action to increase levels of fat and sugar into the bloodstream to be used by the brain and muscles to deal with the stress. Normally, crotisol levels are quickly depleted following the response. But the stresses of the modern world are causing most people to be exposed to much longer and larger amounts of cortisol than their bodies can handle. This means the body cannot deplete the stores of this stress hormone and means an even more pronounced secretion of cortisol.

I hope by informing you of this little piddle of information regarding stress and the release of cortisol in your bodies, you might have more awareness and be able to take some kind of positive action to cause more relaxation in your life. Perhaps you can concentrate on methods that may help you not to have such intense reactions to stress or not as frequent. In lieu of that I'd like to recommend a couple of supplements that can help your body not have such a strong physiological reaction even if the stress cannot be changed.

1. KAVA KAVA: - effectively reduces anxiety, restlessness and insomnia. In Germany, this remedy is commonly prescribed as an alternative to anxiety drugs and is listed as a safe remedy for anxiety. This herb induces relaxation by affecting GABA receptors in the brain; kava lactones appear to act on the limbic system of the brain; powerful skeletal muscle relaxant; can change brain activity without causing sedation.

2. NUTRICALM- provides nutrients that support the nervous system and adrenal glands; reduces the effects of stress on the body; enhances the body's ability to adapt to hormonal fluctuations, nervousness, anxiety and insomnia.

3. **ADRENAL SUPPORT**- for healthy adrenal gland function. Provides important vitamins, essential nutrients and adaptongenic herbs that help improve the body's ability to handle stress.

There are many more natural remedies that work very well for stress, but I just realized how long this newsletter has become so I am going to shut this one down. If you want to know more about natural remedies for stress, give me a call. They will be far healthier and provide no horrible side effects.

I will be in Tallahassee June 21,22,23 and am booking appointments now for consutations.

I will be doing a lecture on the Importance of Enzymes and their role in health. If you want to attend, please contact Debi Kiernan at 850-933-9349 to book your spot. We will have limited seating for this topic, so call early.

I will look for a location and a date to bring this lecture to Mt Dora as well. Let me know if you are interested in attending.

Thanks for all your support.

Candace