

When the body forgets to heal – **Chronic** inflammation

Inflammation – essential for good health

Inflammation is your body's method of protecting and healing itself after infection, irritation, or injury. Symptoms of inflammation include: redness, swelling, pain, local sensitivity, stiffness, and lost movement or function. Inflammation may also be associated with general "flu-like" symptoms, caused by immune chemicals called cytokines, including: fever, chills, fatigue, headaches, and feeling unwell.

Inflammation is an essential part of your immune system, where the body releases a cascade of biochemical reactions to improve blood flow and nerve cells and other cells at the site of injury or infection send out signalling molecules and other chemicals to recruit white blood cells to fight off foreign bodies. This is the start of the healing response. This is ACUTE inflammation and this is essential for good health.

Chronic Inflammation – not so good

There is another type of inflammation – CHRONIC inflammation, which is associated with a low grade, systematic inflammation. It appears to play a role in asthma, inflammatory bowel disease, allergy, some cancers, and diabetes. Heart disease itself seems to be an inflammation reaction, in response to risk factors such as smoking, high blood pressure, high cholesterol and obesity. In fact research is beginning to suggest that obesity is associated with "sick" fat cells, which can lead to low grade inflammation.

Chronic inflammation is also associated with autoimmune disorders such as Rheumatoid arthritis, and Multiple Sclerosis. This type of inflammation may possibly be associated with chronic tendinitis, bursitis and some other chronic musculoskeletal disorders.

Unlike acute inflammation, chronic inflammation is not healthy, and appears to be a situation where the body is unable to "turn off" the inflammation response, or is continually exposed to something which sustains the response. For example, some dentists feel that gum disease can lead to local and systematic inflammation – the link between mouth and body. Poor diet and lifestyle also seem to be strongly linked to chronic inflammation. Poor dietary and lifestyle factors can promote chronic inflammation.

Reducing Chronic Inflammation

- Watch for triggers in your diet often called Pro-inflammatory foods. These can include Trans fats in processed foods, saturated fat, sugars, other processed foods, possibly night shades (such as potatoes, tomatoes, eggplants) for some people, and other foods which cause individual stress , such as food intolerances you may have.
- Watch out for poor GUT health, where the imbalance between good and bad bacteria may also influence chronic inflammation.
- A diet high in antioxidants may help, as anti-oxidants help reduce free radicals, which may contribute to chronic inflammation. An easy way to get anti-oxidants is to choose fresh fruit and vegetables with lots of different colours.
- Improve the balance between Omega 3 (not enough) and Omega 6 (too much) essential fatty acids. Increase Anti-inflammatory Omega 3 such as Flax seed oil, walnuts, pumpkin seeds, canola oil and oily freshwater fish. Reduce corn, safflower, sunflower, soya oils. *See a naturopath or nutritionist for guidance.*
- There are some powerful anti-inflammatory foods. The yellow colouring in curry called turmeric is a powerful anti-inflammatory. Ginger in the same family is also helpful. Try preparing turmeric in milk – 1 teaspoon of fresh turmeric powder (it needs to be fresh with good aroma) to 1 cup of milk boiled together for 5 mins. There are also a number of herbal products available now with turmeric in them.
- If you have problems with anti-inflammatory Medications you could also try a homeopathic approach such as TRAUMEEL (German product).
- Inflammation and pain is made worse by chronic STRESS. Manage your stress in 3 ways:
 - Change the stressing situations you can change
 - Change your attitude to the stressing situations you can't change
 - Reduce the stress effects with regular yoga, long slow deep breathing, and relaxation.Interestingly yoga itself may help reduce chronic inflammation. One study has found some reduction in inflammation with regular practice. Future research may tell us more.
- Fat itself can cause inflammation - especially around your waist. If you are male and your waist is above 94 cm, or female and your waist is above 80 cm, aim to reduce your waist size, even if only by a couple of centimetres. In a recent Choice (article July 2010) they found via survey 6 key factors which relate to a healthy weight

- Reduce food portion size
 - Limit fat
 - Eat fruit and vegetables
 - Choose whole grains over refined
 - Eat at home
 - Regular vigorous exercise
- Get the correct amount of sleep – research suggests about 7 to 8 hours is healthy.
 - Get the right amount of physical activity – too much or too little can influence inflammation. Keep Active within the confines of the problem – yes, the right exercise helps reduce inflammation, but modify your activity if the condition is acute – *see your physio for guidance*. CARE - NEVER stress/exercise a HOT, SWOLLEN, PAINFUL joint or body area. Seek professional advice from your health practitioner.
 - AVOID smoking – it can increase inflammation.

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