

## **Inflammation**

### **An Introduction to pro and anti-inflammatory foods**

Inflammation has both positive and negative effects on your body. When the body has been injured a sequence of events is initiated that leads to the eventual repair of the injury. The first stage of this healing process is inflammation, the body's natural response immediately after tissue damage.

The main functions of inflammation are to defend the body against harmful substances, dispose of dead or dying tissue and to promote the renewal of normal tissue. This reaction is usually characterised by five distinct signs which are pain, swelling, redness, heat and loss of function (due to increased pain and swelling)

However, if your immunity is compromised and your body is constantly stressed, you might experience chronic low-grade inflammation that leaves you more susceptible to illness and disease. In fact, chronic low-grade inflammation is thought to be one of the leading causes of disease, premature ageing and illness.

You can help your body fight inflammation by reducing stress, eliminating sugar and processed foods and getting plenty of sunshine. Below is how to look at improving your diet you help you fight inflammation.

See table below for full list of anti-inflammatory foods

#### **Pro-inflammatory** – (limit these foods)

- Dairy – live bio-yoghurt being the exception to the rule, use dairy alternatives (goat, sheep, soya, rice and oat milk)
- Red meat – lean red meat twice per week is fine but no more than that
- Saturated fats
- Salt
- Colas, sugar, white flour products and junk foods

#### **Anti-inflammatory** – (include plenty of these foods)

- Foods high in flavonoids – powerful antioxidants found in spinach, blueberries, strawberries
- Quercetin found in onions is also excellent for inflammation
- Include plenty of raw foods in your diet
- Fresh papaya contains papain and pineapple contain bromelain which are both enzymes known to reduce inflammation. Bromelain is also available in capsule form.
- Oily fish – packed with essential fatty acids – herring, mackerel, salmon and sardines.
- Seeds such as pumpkin, sesame and sunflower are also a good source of essential fatty acids

#### **Herbs, spices, vitamins and minerals**

**Turmeric** - contains a compound called curcumin, a powerful anti-inflammatory. It also contains cancer-fighting compounds and acts as an antioxidant as well.

**Ginger** - has long been known for its anti-inflammatory properties. Ginger contains very potent anti-inflammatory compounds called gingerols. This is thought to be the reason why so many people see pain relief from osteoarthritis and rheumatoid arthritis after taking ginger.



**Vitamin E** - The body's principal fat-soluble antioxidant is also an anti-inflammatory nutrient. Inflammation studies have found that natural vitamin E supplements can significantly lower blood levels of C-reactive protein, a substance that both promotes inflammation and reflects the body's overall inflammatory state.

**Vitamin C** - This antioxidant and anti-inflammatory nutrient also helps rebuild tissue to replace what has been injured. The body needs vitamin C to make collagen, a key protein forming tissue, and cartilage, which makes up the pads cushioning joints from impact.

**B-complex vitamins** - Many of the B-complex vitamins are essential for normal nerve function, and have been reported to have an analgesic effect. Research has described how a combination of vitamins B1, B6, and B12 reduced musculoskeletal pain and enhanced the effects of NSAIDS, which means a person can likely use less of these drugs for pain relief.

**S-adenosyl-L-methionine (S-AdoMet)** is a natural byproduct of protein and contributes sulfur to many of the body's chemical reactions. S-AdoMet plays a central role in building molecules involved in curbing inflammation and pain and stimulating tissue repair and growth.

**Methylsulfonylmethane (MSM)** is well known for its ability to ease musculoskeletal pain

<b>List of anti-inflammatory foods</b>	
<b>Vegetables</b>	<b>Fruits</b>
Bell peppers Bok choy Broccoli Brussels sprouts Cabbage Cauliflower Chard Collards Fennel bulb Garlic Green beans Green onions/spring onions Kale Leeks Olives Spinach Sweet potatoes	Acerola cherries Apples Avocados Blackcurrants Blueberries Fresh pineapple Guava Kiwifruit Lemons Limes Oranges Papaya Raspberries Rhubarb Strawberries Tomatoes
<b>Herbs and spices</b>	<b>Nuts and seeds</b>
Basil Cayenne peppers/chilli peppers Cinnamon Cloves Cocoa (at least 70% cocoa chocolate) Licorice Mint Oregano Parsley Rosemary Thyme Turmeric	Almonds Flaxseed/linseed Hazelnuts Sunflower seeds Walnuts
<b>Fish</b>	<b>Oils</b>
Cold Halibut Herring Oysters Rainbow trout Salmon Sardines Snapper Fish Striped Bass Tuna Whitefish	Avocado oil Extra virgin olive oil
<b>Drinks</b>	
Green tea White tea	