

When does too much of a good thing become bad?

Today we are going to discuss something that often is misperceived as "bad," but actually, is necessary and when occurring in the right amount, does "good." We are talking about inflammation.

Inflammation is the body's own reaction to fight off infection or to repair or get rid of damaged tissue. For example, you notice that when you cut your finger or scrape your knee that the wound becomes red, somewhat inflamed, maybe slightly feverish. The body soon sends in immune cells and some of these send signals via hormonelike substances to signal more immune cells to come to the location of the injury. B immune



cells come to the location and recognize that the foreign invader is not supposed to be there. They label these foreign invaders so that other phagocyte cells (cells that protect the body) will know to come engulf and digest them within the larger cell. The same type of thing happens when a bruise occurs; however, the immune cells will clean up the dead cells that were created by the trauma to the tissue. Similar things happen when you sprain an ankle, distort the muscles of the back, or injure a nerve. This inflammatory process occurs to help your body recover.

If your immune system is healthy, the damage is cleaned up and the repair mechanisms function to rebuild the tissue.

Other types of inflammation occur when an injury is experienced on the inside of the body, such as the blood vessels and arteries. A nick can occur on a blood vessel due to plaque formation of oxidized cholesterol and fat deposits. The inflammatory cascade occurs here as well and many Immune cells are activated to come to the location to help repair and clean up the damage.

Inflammation is basically a natural and protective response to something within or outside of the body that requires repair.

However, over the last decade scientists and physicians are now realizing that sometimes the immune response does not "turn off" when the tissue is repaired and keeps sending signals to bring the clean-up cells to the location. This results in a situation whereby the immune system is responding but the trauma or injury is over or can't be resolved. For example, if the plaque in the artery cannot be resolved, the immune system will still send out signals. The "oversignaling" and build up of immune cells in the region then becomes a problem. Without a way to stop the response or "resolve" it, chronic inflammatory conditions arise. These can turn into constant painful inflammation as seen in many chronic diseases in humans. Scientists are now calling these biochemical solutions to these types of chronic inflammation, resolution-promoting activities.

HOW CAN INFLAMMATION BE HELPED WITH DIETARY SUPPLEMENTS?

In addition, the body needs to be able to control the extent and duration of inflammation to avoid chronic inflammatory disease when the initial stimulus that triggered the inflammation is long gone.



Being able to initiate an inflammatory response is essential for good health, because without it we would rapidly succumb to bacterial, fungal and viral infections and we would be incapable of starting to restore injured tissue.

It has now been discovered that some resolution-promoting activities can be formed by the enzymes within all tissues of the body, when the body has an adequate supply of the omega-3 fatty acids, DHA and EPA from fish oil. The omega fatty acids have been shown to help turn off the overstimulation of the immune responses, which cause chronic inflammation. This is a recent and important discovery for fish oil fatty acids — that their dietary sufficiency is critical for attaining and maintaining good health. For example, if you experience sciatica, joint pain in the neck, shoulders and knees, swollen nerves and so forth, take omega fatty acids for a period time and you may notice a decrease in soreness.



These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

REFERENCES

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