

PAIN & INFLAMMATION



Pain is experienced when the brain receives signals transmitted by specialized nerves. These ‘pain’ nerves transmit signals when they are irritated physically (i.e. by pinching, cutting or stretching), thermally (i.e. by heat or cold), or chemically (i.e. by tissue damage or inflammation).

Pain signals can also stimulate the transmission of other nerve signals, for example, causing muscle spasm, nausea, rapid heart rate and increased blood pressure. Pain may be the result of injury or illness, although the absence of pain does not mean the absence of an injury or illness.

Inflammation can occur when chemicals are released by damaged tissues. The release of these chemicals can cause pain, redness and swelling, but it also initiates the healing process. The healing or inflammatory process is similar to the process of repairing a home damaged by a storm. First, the damaged portion of the structure has to be removed. Next, the framework has to be assembled for support and protection. Finally, other building materials are gradually incorporated into the reconstruction to complete the repair.

Consider what happens when the body is damaged by illness or injury. The damaged tissue is removed and a framework of connective tissue (e.g. scar tissue) is assembled. The pain and swelling may subside within a short period of time, but the framework of connective tissue is still vulnerable to re-injury until tissue reconstruction (healing) is complete. Some tissue can take weeks or months for healing to occur. Other tissue may never completely heal and may be frequently re-injured.

Inflammation may also occur as a result of poor diet and environmental toxins. Byproducts of impaired digestion or dysfunctional cellular metabolism can accumulate in the body and cause chronic inflammatory conditions, such as joint/muscle pain, as well as other disease processes.

Long term use of certain drugs (e.g. NSAIDS) that decrease inflammation and pain may actually interfere with the healing process and increase the risk of re-injury. Pain and inflammation may be effectively and safely relieved by the use of nutritional supplements, electrical stimulation, meditation, acupuncture, massage and chiropractic manipulative therapy.