

# Chronic inflammation: An understanding and management.

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## Abstract

**Inflammation is a natural defense mechanism that also aids in the healing process. When the body identifies a foreign particle, it initiates a series of reactions to eliminate it. A foreign body may be a thorn, an irritation, a disease, or could be the aggressor. The body sometimes misinterprets its own cells or tissues as hazardous and autoimmune disorders can result from this reaction. Inflammation, according to experts, may play a role in a variety of chronic diseases. Metabolic syndrome, which encompasses type 2 diabetes, heart disease, and obesity, is an example. Inflammatory markers are frequently elevated in the bodies of people who suffer from these illnesses. Inflammation are of two major types; acute and chronic.**

**Keywords:**Metabolic syndrome, Obesity, Breathing.

## Introduction

Acute or short-term inflammation can occur as a result of an injury or illness [1,2]. Acute inflammation manifests itself in five ways:

1. Pain may be present all of the time or only when a person touches the affected area.
2. The blood supply to the capillaries in the area has increased, resulting in redness.
3. Loss of function; when you have trouble in moving a joint, breathing, smelling, etc.
4. Swelling; if fluid builds up in the body, a condition known as edoema can develop.
5. Heat due to the increased blood flow, the affected area may feel warm to the touch.

These indicators do not always appear. Inflammation can be "silent," causing no symptoms. A person may also experience fatigue, general malaise, and a fever. Acute inflammation symptoms last a few days. The duration of subacute inflammation is 15-60 days [3]. Chronic inflammation occurs when inflammation is turned up too high and lasts a long period, and the immune system keeps pumping out white blood cells and chemical messengers to prolong the process. When this happens, white blood cells may attack healthy tissues and organs in the area. If you're overweight and have more visceral fat cells - the deep form of fat that surrounds your organs - your immune system may perceive them as a threat and attack them with white blood cells. The longer you are overweight, the longer you may expect your body to be inflamed [3].

Symptoms of chronic inflammation are usually considerably more modest. As a result, they are simple to overlook. Chronic

inflammation can cause a variety of symptoms, including:

- Fatigue
- Body ache
- Anxiety or depression
- Difficulties in the digestive system (diarrhea or constipation)
- Gaining weight
- Slimming down
- Infections that are persistent

## Causes

Chronic inflammation can develop if a person has one or more of the following conditions:

- Sensitivity: When the body detects something it shouldn't, inflammation occurs.
- Chronic inflammation can arise from long-term, low-level exposure to an irritant, such as an industrial chemical.
- Psoriasis is an example of an autoimmune illness in which the immune system mistakenly targets typical healthy tissue.
- Autoimmune disorders (AI): A genetic component As in Behçet's disease, Trusted Source has an effect on the immune system.
- Acute inflammation that persists: A person may not entirely heal from acute inflammation in some instances.
- Chronic inflammation can be triggered by a number of factors.

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- Obesity in senior people, according to a reliable source
- a diet high in unhealthy fats and added sugars

If you have prolonged inflammation, your body's inflammatory response may eventually harm healthy cells, tissues, and organs. This can cause DNA damage, tissue death, and interior scarring over time [4,5].

## Conclusion

All of these have been connected to the onset of a number of disorders, including; cancer; illness of the heart; Type 2 diabetes; rheumatoid arthritis; obesity; asthma; Dementia and cognitive decline, etc.

Inflammation is a common side effect of the healing process. When it becomes chronic, though, it's critical to try to bring it under control to avoid long-term damage. Nonsteroidal Anti-Inflammatory Medicines (NSAIDs), steroids, vitamins, and lifestyle changes are some of the alternatives for treating inflammation that have been investigated.

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