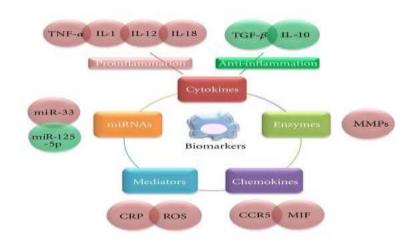


Research has shown that yoga can have beneficial effects on reducing inflammation, which is associated with a variety of chronic conditions such as heart disease, diabetes, and certain cancers. Here are some key findings from studies on the relationship between yoga and inflammation

### Reduction in Pro-Inflammatory Markers

Several studies have found that regular yoga practice can reduce levels of pro-inflammatory cytokines, such as interleukin-6 (IL-6) and C-reactive protein (CRP). These markers are often elevated in chronic inflammation.



#### Stress Reduction

Yoga is well-known for its stress-reducing effects. Chronic stress is a significant contributor to inflammation. Yoga practices that incorporate meditation and deep breathing can activate the parasympathetic nervous system, reducing stress and inflammation



#### Improvement in Immune Function

Yoga has been shown to enhance immune function, which can help regulate inflammatory responses. This is partly due to the reduction in stress hormones like cortisol, when chronically elevated, can suppress the immune system and promote inflammation.



## Anti-Inflammatory Pathways

some research suggests that yoga might influence certain molecular pathways related to inflammation. For example, yoga may increase the activity of anti-inflammatory genes[TNF (Tumor Necrosis Factor),IL1B (Interleukin 1 Beta),IL6 (Interleukin 6),IL8 (Interleukin 8) ]and decrease the expression of pro-inflammatory genes.



### Chronic Disease Management

For individuals with chronic diseases, yoga can help manage symptoms and improve quality of life by reducing inflammation. Conditions like arthritis, cardiovascular diseases, and metabolic syndrome have shown improvement with regular yoga practice.

#### **CHRONIC DISEASES**























# Psychological Benefits

Mental health benefits of yoga, such as reduced anxiety and depression, also play a role in reducing inflammation. Psychological stress is a known trigger for inflammatory processes in the body.



# **Key Studies**

A 2014 study published in-Psychoneuroendocrinology: This study found that participants who engaged in a three-month yoga and meditation retreat, had significantly lower levels of pro-inflammatory cytokines compared to a control group.

A 2017 meta-analysis in-Frontiers in Human Neuroscience: This analysis reviewed multiple studies and concluded that yoga can significantly reduce levels of CRP and IL-6, indicating a reduction in inflammation.

A 2010 study in-Psychosomatic Medicine: This study found that women who practiced yoga regularly had lower levels of inflammatory markers compared to those who did not practice yoga.

Overall, the evidence suggests that yoga can be a valuable complementary approach to managing inflammation and promoting overall health. Regular practice, including a combination of physical postures, breathing exercises, and meditation, appears to be the most effective way to achieve these benefits.