



Herbal Supplements During Inflammation

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ABSTRACT

The process by which the body's white blood cells and the other criteria's that make us protect from infection from external agencies such as bacteria and viruses are defined as Inflammation. Various symptoms will arise due to the inflammation and different types of herbal supplements are also there for treating inflammation naturally.

Keywords: Inflammation, herbal supplements

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INTRODUCTION

The process by which the body's white blood cells and the other criteria's that make us protect from infection from external agencies such as bacteria and viruses are defined as Inflammation. Inflammation can be included under two headings:

- i. Short-lived (Acute) Inflammation: Acute inflammation will go away within hours or days.
- ii. Long-lasting (Chronic) Inflammation: Chronic inflammation can continue for months or years. Chronic inflammation are connected with different conditions like:
 1. Cancer
 2. Heart disease
 3. Diabetes
 4. Asthma
 5. Alzheimer's disease [1]

When inflammation tend to occur, the chemicals from the white blood cells of our body will invade inside the blood or tissues to protect our body from external agencies such as bacteria and virus. This will raise the flow of blood to the place of injury or infection. Mainly it will lead to redness and warmth in the place of injury or infection. This in turn will lead to the leakage of fluid into your tissues by the effect of chemicals resulting in swelling. This process of protective attitude may trigger nerves and causes pain [2].

Various Signs of Acute Inflammation

There are different signs affected with acute inflammation includes:

1. Pain: Pain may be continuous. Otherwise it will be felt only once a person touches the affected area.
2. Redness: Redness occurs due to the increased flow of blood to the capillaries in the area where it is affected.
3. Loss of function in affected area: This can be felt with difficulty in moving the joints, breathing difficulties, sensation of smell.
4. Swelling: Oedema will be developed due to the accumulation of body fluids.
5. Hotness: Due to the increased flow of blood will make the affected area warm for touching the site [3].

Chronic inflammation: Chronic Inflammation can be continued for either months or years. It is associated with various diseases such as:

- Cardio Vascular Diseases
- Arthritis and different joint disorders like Rheumatoid Arthritis
- Different forms of Allergies

- Chronic Obstructive Pulmonary Disease (COPD)
- Psoriasis
- Diabetes Mellitus [4]

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1) Ginger: This is very effective for Menstrual cramps. Intake of ginger during the starting of a menstrual cycle is good for reducing painful menstrual periods. The action is as effective like different pain medications, like ibuprofen, mefenamic acid, or Novafen. Intake of ginger will reduce pain associated with osteoarthritis [5].



Fig 1 : Ginger Plant with rhizomes (Source: Google Images)

2) Turmeric:

SL.NO	CONTENTS	PERCENTAGE
1	Carbohydrates	60–70%
2	Water	6–13%
3	Proteins	6–8%
4	Fat	5–10%
5	Dietary Minerals	3–7%
6	Essential Oils	3–7%
7	Dietary Fiber	2–7%
8	Curcuminoids	1–6%

Turmeric consists of Phytochemical component like diarylheptanoids, which contains numerous curcuminoids like curcumin, demethoxycurcumin and bisdemethoxycurcumin⁶. Intake of Turmeric extracts either alone or in combined form by adding other herbal ingredients will be helpful for reducing pain in patients affected with knee osteoarthritis [6].



Fig 2 : Turmeric Plant with rhizomes (Source: Google Images)

3) Cardamom: Cardamom possess Anti microbial property. It is good for Metabolic Syndrome, Diabetes etc. In a study where the researchers fed one group of rats with a diet high in carbohydrate and fat and other group with cardamom powder. The group provided with cardamom powder had lower weight and better cholesterol when compared with other group which did not receive this supplement [7]. A double-blind trial found that cardamom helps in improving certain biomarkers that can cause inflammation [8].



Fig 3 : Cardamom Fruits (Source: Google Images)

4) Black Pepper

Research suggests that black pepper and its main active compound piperine may play a role in reducing inflammation in the body [9,10]. In animals with arthritis, piperine helped reduce joint swelling and inflammation markers, such as IL-1 β , TNF- α , and prostaglandin E₂ (PGE₂) [11,12].



Fig 4 : Black Peppers (Source: Google Images)

Conclusion

Inflammation can be either short-lived (acute) or long-lasting (chronic). Acute inflammation goes away within hours or days, different types of herbal supplements can be used treating inflammation naturally.

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