



Proleevamax™ and its Role in Managing and Treating Fatigue and other Chronic Inflammatory Diseases

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Introduction

The human body has been designed to fight off all sorts of insults that it receives both from its internal and external environment. It is the effective functioning and performance of the immune system that makes it capable of keeping the body healthy and disease-free. However, with time, the body grows old with age. When this happens, the human body is bound to get affected by certain infectious agents, diseases, and other harmful stimuli that it was previously capable of fighting off very easily.

The unfortunate side of growing older and weaker with age is the very fact that at this stage, there is little that could be done to restore the youth and strength of the body like it used to be in the earlier days. Out of the many diseases and comorbidities that a person develops over time, chronic inflammation, fatigue, and inflammatory diseases affecting various regions of the body are among the ones that top the charts.

Chronic inflammation occurs when the body undergoes slow, ongoing inflammation from a very long period. The time duration could vary between months to years. Inflammation is generally considered to be a part of the body's normal defence mechanism. However, the duration for which it lasts could give indication about the cause of injury and the extent of the injury that could have caused its action to last for months to years. (1)

Similarly, chronic inflammatory diseases are considered to be the leading threats to human health in the United States. They have become so widespread and common that it is estimated that within the next 30 years, these chronic inflammatory diseases will continue to rise in incidence. A study carried out recently also revealed that 3 out of 5 people die each year as a consequence of these chronic inflammatory diseases and their complications. (2) In the increasing order of frequency, these chronic inflammatory diseases have been briefly overview as under:

Diabetes Mellitus

According to the American Diabetes Association, diabetes mellitus alone is considered to be the seventh leading cause of death among people in the United States alone. The world prevalence of diabetes mellitus was found to be 9.3% in 2019. This prevalence was markedly increased in the developing countries, and out of them, in the urban populations more than the rural ones. As a matter of fact, the incidence was, again,

found to be higher in the higher-income countries than in the lower income ones. The reasons for these could be the increased trend of adopting a sedentary lifestyle, the presence of one or more comorbidities such as having a family history of diabetes, obesity, hyperlipidemia, etc., and a habit of smoking. Although all these factors could be avoided, the inevitable ones such as family history are often the cause behind several younger people developing diabetes mellitus from a very young age. (3)

Cardiovascular Diseases

A wide range of problems could develop within the umbrella of cardiovascular diseases. The most common diseases, however, include aortic arteriosclerosis, coronary artery disease, cerebrovascular disease, and peripheral artery disease. Cardiovascular diseases, when referred to point towards a disease could refer to either one of these or all of them. These diseases have been seen to be on the rise over the past few years. It has been estimated that approximately 800,000 deaths in the United States occur due to cardiovascular diseases or their complications. Globally, more than 30% of the deaths have been found to be associated with the increasing prevalence of these cardiovascular diseases. (4)

Arthritis

It has been estimated that at a given time, at least 2 million people in the United States suffer from arthritis and other related inflammatory joint diseases. Arthritis refers to the painful inflammation of the joints anywhere in the body. It usually affects males and females in their middle ages, although the latter gender seems to be affected the most in it. Since arthritis is a systemic disease, therefore, the inflammatory symptoms manifest themselves throughout the body, affecting one region more than the other. It has been estimated that at a given time, approximately 120 to 280 patients suffer from arthritis. Out of these patients, about 50% are seen to develop rheumatoid arthritis at some points in their lives. (5)

Chronic Obstructive Pulmonary Disease (COPD)

Chronic Obstructive Pulmonary Disease refers to a restricted airflow through the lungs. It compromises the health and functioning of the lungs and makes them predisposed to harmful stimuli in the long run. COPD is seen to be another leading cause of death in the world. Cigarette smoking alone has been found to be the

leading cause of COPD worldwide. As a consequence, smokers and people who were habitually exposed to toxic fumes and harmful chemicals develop COPD in their middle ages. It has been estimated that about 3.2 million people die due to COPD annually. Its incidence is increasing day by day, with the causative agent being the increasing pollution in the environment. (6)

MANAGEMENT AND TREATMENT PROTOCOLS FOR CHRONIC INFLAMMATORY DISEASES

It is a well-established factor that chronic inflammatory diseases take their time in manifesting in the body of an individual. Therefore, when it comes to the point of addressing these diseases and the secondary complications that occur due to it, the foremost factor that is prioritised is the change of lifestyle and the modification of unhealthy habits that the affected individual may have. Changing the lifestyle and adhering to a modified one strictly can help decrease the risk of developing morbidity and mortality due to these diseases multiple folds. (7)

Chronic inflammatory diseases and the fatigue that occurs as a consequence of these diseases are seen to be reduced by the intake of a healthy and balanced diet. It is the intake of vitamins, amino acids, zinc, iron, and several other minerals and nutrients that make sure that the body is getting its much-needed fuel in the required quantities. (8)

The same applies to adopting a diet that is rich in foods with low glycemic index and dietary fibre, and is low in trans fats, saturated fats, and total fats. All these changes could help any individual make the most of the natural qualities of these beneficial food items and would result in a decrease in the intensity of the symptoms, if not eradicating it completely from the body.

USING PROLEEVAMAX™ AS A SUPPLEMENTARY OPTION TO MANAGE CHRONIC INFLAMMATORY DISEASES

Many physicians prescribe medications that help optimise the state of an individual once it has been exposed to various external insults and harmful stimuli. Although these medicines help decrease the risk of complications, they might also subject the individual to develop a myriad of adverse effects in case they are not well-suited to their bodies. (9)

In such a situation, there are several supplements available in the markets that help cope up with the deficiency of various multivitamins and nutrients in an individual's body. PROLEEVAMAX™ is one of such supplements that not only claims, but has also been found to be of great help in managing symptoms of chronic inflammatory diseases, several metabolic disorders, and fatigue that results as a consequence of these disorders. (10)

The invention of PROLEEVAMAX™ is based on the principle of 'Medical Food' that was put forward by the FDA in words that, 'it is a substance that is required to meet or complete the nutritional requirements needed to fight off a disease or condition'. PROLEEVAMAX™ is a pure vegetarian capsule that is capable of meeting the daily requirements of an individual's supply of amino acids, vitamins, and other important nutrients. It helps people with chronic inflammatory conditions to tackle their diseases with an improved immune system and a nutritionally stronger body.

Dietary Ingredients

From a dietary perspective, PROLEEVAMAX™ is seen to be composed of a formulation based upon different components. This proprietary blend consists of 5-HTP, Choline L-Bitartrate, Gamma-Aminobutyric Acid (GABA), L-Arginine HCl, L-Glutamine, L-Serine, Black Pepper Extract 95%, Boswellia Extract (Boswellia serrata), 65% Boswellic Acid, Curcumin 95%, Grape Seed Extract, Matcha Green Tea Powder, Panax Ginseng Root Powder, Vitamin B6 (Pyridoxine HCl).

PROLEEVAMAX™ is also seen to contain a few inactive ingredients apart from the above-mentioned active ones. These inactive ingredients consist of Microcrystalline Cellulose, Stearic Acid, Dicalcium Phosphate, Croscarmellose Sodium, Magnesium Stearate, and Silicon Dioxide.

Mechanism of Action

PROLEEVAMAX™, known to be a dietary supplement, exerts its mechanism of action by acting upon the neurotransmitter present in the brain. It works to restore and maintain the normal balance of the neurotransmitters such as GABA, serotonin, acetylcholine, and nitric oxide. These neurotransmitters might get out of balance or reduced in the presence of certain chronic inflammatory conditions.

This imbalance also explains the feeling of fatigue, weakness, and dullness that a person experiences in the presence of other pre-existing diseases. In this manner, PROLEEVAMAX™ helps deal with pain, inflammation, and fatigue present in the body to a greater extent.

Metabolism and Excretion

All the amino acids present in one capsule of PROLEEVAMAX™ are seen to get easily absorbed by the stomach and small intestines. The cells easily metabolise these amino acids contained in the capsule. If at any time the effects of PROLEEVAMAX™ are to be noted, it could be achieved easily by determining the circulating levels of arginine, choline, and tryptophan. These levels indicate the presence of nitric oxide, serotonin, and acetylcholine in the brain.

As far as the excretion of PROLEEVAMAX™ is concerned, it is not an inhibitor of cytochrome P450 1A2, 2C9, 2C19, 2D6, or 3A4. These isoenzymes are principally responsible for 95% of all detoxifications of drugs, with CYP3A4 being responsible for detoxification of roughly 50% of drugs.

Dosage

PROLEEVAMAX™ comes in a bottle containing 120 capsules each. For the management and supplementation in certain metabolic disorders that are associated with pain and other inflammatory conditions, it has been recommended that at least four capsules are to be taken daily. This dose can also be divided into two capsules per twelve hours each. Food and water have been shown to have little to no effect on the absorption of this drug.

Side Effects

PROLEEVAMAX™ has little to no side effects on the body of an individual. It is a safe and effective drug. However, in some people who took high doses of PROLEEVAMAX™ all at once, it was seen that they experienced heartburn, nausea, vomiting, diarrhea, and stomach pain. However, all these symptoms were transient and resolved after some time. It has been recommended to avoid taking the supplement if a patient has Reye's syndrome, cancer, or liver or kidney diseases. A physician can always guide better regarding how to adjust the dose in case of side effects.

Conclusion

Chronic Inflammatory conditions are long-term inflammatory changes that occur in the body of an individual. These diseases and conditions predispose the individual to a variety of harmful stimuli that affect the health of a person.

Apart from practicing dietary changes and lifestyle modifications, many dietary supplements also help take care of the body of such individuals.

PROLEEVAMAX™ is one such supplement that helps people meet their daily requirements of multivitamins and other nutrients. It helps restore the balance of neurotransmitters in the brain and makes the body strong enough to fight off pain and metabolic disorders. It is a safe and effective supplement and is recommended to be taken daily for optimal results.

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