

What is Needat?

Needat is a new generation flax ingredient that is concentrated in lignans. Flaxseed (*Linum usitatissimum* L.) is the richest plant source of lignans. However, before Needat, flax ingredients available to manufacturers have been limited to flax oil and whole or milled flaxseed. There has never been a standardized source of flax lignans.

Flax (*Linum usitatissimum* L.) has been valued for centuries for its good flavor and nutritional properties. Recent studies have also shown that flaxseed is rich in lignans, substances which act as antioxidants and are capable of balancing natural hormone levels.

Lignans are especially researched for their properties on prostate health and against hair loss.

Needat is the first highly concentrated and standardized source of flax lignans, providing 10-30 times more than traditional flax ingredients. With Needat, you can add the benefits of lignans to your products in a convenient manner – and guarantee the lignan concentration on your labels.

What are lignans?

Lignans are phytoestrogens, which naturally occur in flax and unrefined grains. Being phytoestrogens, lignans may help balance hormone levels in the blood. For example, lignans can weakly bind to estrogen receptors and interfere positively with enzymes involved in hormone metabolism.

In addition, lignans are powerful antioxidants and have been shown to exert anti-inflammatory actions. It is through these actions that lignans contribute to health in both men and women.

The main lignan in flax is secoisolariciresinol diglucoside, or SDG. When ingested, microorganisms in the colon convert SDG into enterodiols and enterolactone, the mammalian lignans. These are the body's active form of lignans.

Health benefits

- **Prostate health**
- **Bone health**
- **Women's health**
- **Acne**
- **Heart health**
- **Hair loss**
- **Antioxidant activity**

Men's health

Lignans in Needat can help balance the conversion of testosterone to DHT, the more potent form of testosterone. Elevated levels of DHT are suggested to contribute to abnormal prostate growth, leading to Benign Prostatic Hyperplasia(BPH). BPH regularly occurs in aging men, leading to symptoms like painful and difficult urination.

Unique properties for prostate health:

Most ingredients currently sold for prostate health bring relief to urinary discomforts associated with BPH. However, this does not address the cause of the problem, the enlarged prostate. Flax lignans are different in this aspect. Lignans can help relieve the inconveniences related to urinary flow, but may also help reduce the size of the enlarged prostate.

Hair loss, acne and more

Androgenetic alopecia(AGA) is the most common type of hair loss in men and women. AGA is generally accepted to be a DHT dependent process, where elevated levels of DHT can cause miniaturization of the hair root and follicle. Acne is another process that can be initiated by an overproduction of DHT. Because lignans can interfere with DHT production, they may help prevent these processes. As antioxidants, lignans can also help support a healthy heart.

Women's health

Being phytoestrogens, lignans can help balance estrogen metabolism in women. During menopause, lignans may help relieve menopause symptoms and support bone health. In addition, clinical studies have shown that women with a high urinary excretion of lignans, meaning increased intake, have healthy breast tissue compared to those who consume little to no lignans.