

# FLAXSEED: A HEALTHIER FOOD

Khushal Solanki and Arunkumar H.

<sup>1</sup>Ph.D, Dept. Department of Dairy Technology, DSC, KVAFSU, Bengaluru

<sup>2</sup>Head and Professor, Department of Dairy Technology, DSC, KVAFSU, Bengaluru

## INTRODUCTION

Flaxseed (*Linum usitatissimum* L.) is an annual plant belonging to the *Linaceae* own family, extensively distributed in the temperate weather zone. Local to West Asia and the Mediterranean, it's been grown and harvested seeing that ancient times for its fiber and seeds. These days, flaxseed continues to be widely grown for oil, fiber, and food. It's far the third largest natural fiber crop and one of the five principal oil crops within the global. Flaxseed is setting up significance in the global's food chain as a practical meals. Functional food can be described because the food or meals ingredients that may offer physiological benefits and enables in stopping and/or curing of illnesses.

Flaxseed oil is low in saturated fatty acids (9 %), mild in monosaturated fatty acids (18 %) and rich in polyunsaturated fatty acid (73 %). Of all lipids in flaxseed oil,  $\alpha$ -linolenic acid (ALA) is the most important fatty acid ranging from 39.00 to 60.42 %, which affords a great omega-6:omega-3 fatty acid ratio of approximately 0.3:1. Despite the fact that flaxseed oil is evidently high in anti-oxidant like tocopherols and betacarotene, traditional flaxseed oil gets effortlessly oxidized after being extracted and purified.



Table 1: Nutritional composition of flaxseed

Nutrients	Amount (%)
Moisture	4-8
Protein	20-25
Fat	30-40
Minerals	3-4
Total dietary fiber	10-15
Carbohydrates	18-20

Table 2: Fatty acid composition of flaxseed

Fatty acid	Amount (%)
Alpha linolenic acid	22.80
Linolenic acid	5.90
Oliec acid	7.90
Stearic acid	1.30
Palmitic acid	2.10

# THERAPEUTIC BENEFITS OF FLAXSEED

Flaxseed are proper source of dietary fiber specifically lignan, which has the belongings of lowering breast cancer and prostate cancers. The lignan element of specific interest in flaxseed is secoisolariciresinol diglucoside (SDG) due to its abundance in flaxseed and its health benefits related to its estrogen-like movements in animals and human beings. Flaxseed consists of each soluble and insoluble fiber. About one-third of the overall fiber is soluble. Research have found that the soluble fiber within the flaxseed is just like that in oat bran and fruit pectin which could assist to lower cholesterol. Soluble fiber additionally has been observed to alter blood sugar levels. The final two-thirds of the fiber within the flaxseed is insoluble. Insoluble fiber aids in digestion with the aid of increasing bulk, decreasing the time that waste stays in the body and stopping constipation. Nutritional fibers, lignans, and omega-3 fatty acids, present in flaxseed have a protective impact in opposition to diabetes danger. Flaxseed contains bioactive peptides, together with cyclolinopeptide A, which have strong immunosuppressive and antimalarial activities, inhibiting the human malarial parasite Plasmodium falciparum in tradition. Flax protein conatins plentiful arginine and and glutamine, which might be very essential in the prevention and treatment of heart sickness. Nutritional flaxseed may additionally offer protection towards ischemic heart ailment through enhancing vascular relaxation responses and with the aid of inhibiting the incidence of ventricular traumatic inflammation

## CONCLUSION

Flaxseed is a good source of fibre and omega-3 fatty acid which can helps to reduce the cholestrol, blood sugar level and heart problems. The protein content is also better from other plant so it can helps to muscle growth.

