NUTRITION VALUE OF SESAME SEED

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ABSTRACT:

The aim of present study was to determine the nutritional value of sesame seed and from the determination it is observe that seasame is a rich source of protein it is seen that in twenty eight gram of sesame seed includes 0.7mg of manganese, 0.7 mg of copper 277 mg of copper 4.1 mg of Iron, 99.7 mg of Magnesium, 2 mg of Zinc, 3.9 g of Fiber, 0.7 mg of Thiamin, 0.2 mg of Vitamin, B6 179mg of Phosphorous and protein contain 4.7 g.
It is also seen that sesame seed contain important minerals and vitamins like, niacin, thiamin, same neutraceutical compounds such as phenolic & tocopherols having antioxidant properties which reduces blood prerure, chronic diseases degeneration of vessals.
Keywords: *antioxidant properties, regeneration of vessels, Nutritional value.*

INTRODUCTION:

Sesame seed (Sesamum indicm L.) which is also known as benniseed, gingerly, tila etc. It is one of the most important oldest oil seed crop amongst the world. It belongs to the family of pedaliaceae. It is major oil seed crop in the ancient world due to its easiness of extraction, great stability and resistance to drought. It is native from Africa it is ground in tropical and temperate zones.

The major production of sesame seed are in Asia and Africa which is constituting about 63.8%, 32.89% of the total world production apart from being an important source of edible oil sesame seeds and kernels are used for the preparation of sweets, confectionary and bakery products. Sesame seed contain 50-60% oil, 20-25% protein with antioxidants lignans such as sesame oil and sesamin which prevent rancidity and give sesame oil. The lignin's contents have useful physiological effects in human & animal health. It also contains 19-25% carbohydreates 5-6% ash, 40% oleic & 14% saturated acid. It is one of the good source of protein.

It is also seen that the seeds are rich in iron, magnesium, manganese, copper and calcium and contains vitamin B, E. It also has an anti-cancer properties amongst the edible oil from six plants sesame oil and the higher antioxidant content it also reduce the Blood Cholesterol.

These are some medicinal properties of sesame. Generally most of the sesame traded in the world is light seeded but the seed coat of the local variaties are changes from white to buff, tan, gold, brown reddish, gray and black colour the improve sesame seed varieties were developed through researches that have good disease resistance improve yield different oil composition size of colour.

As the sesame seed is nutritionally important in the world. Some report were

documented about, size, oil content, colour, and oil characteristic so the limited scientific research has been done the present study gives the scientific information of nutritional value of sesame seed and its functional properties, which give the important input for production marketing food industry human nutrition, and particularly benefits of sesame growing area. So the objectives of this study were to investigate the Nutritional value of sesame seed.

MATERIAL & METHOD

Sample Collection:

Sesame (Sesamum indicum) sample of three verities are collected for this investigation the verities are adi, bawnji & T – 85. Were collected from the Agricultural Research centre of Hydrabad the sesame seed are cleaned to remove foreign matter & damaged seed. After that the clean seed were sorted out & from these seed 1000 seeds counted were measured on electronic balance.

RESULT AND DISCUSSIONS:

From the investigation it is seen that diffeant varieties of sesame seed show different physical properties, mineral composition there is significant difference in all varieties weight of 1000 seed & Varity adi & T-85 not snow more difference. The height of adi varity was seen that lowest the density also show the verities. Which is larger in Bawnji the highest protein content was snown by T-85 as compared to Adi & Bawnji the carbohydrate content was higher as cmpaced to the T -85 the calcium and iron content & Adi give more result than, T -85 and Bawnji & the zinc was recorded higher in T – 85.

Thus the following table shows the appronimale value & all componants of sesame seed in three varieties i.e. Adi, Bawnji & T -85

Physical Properties mineral composition & Pronimale composition & sesame seed varieties.

Variety	Adi	Bawnji	T - 85
Colour	White	White	Dull white
1000 seed weight	3.12 ± 0.08	2.68±0.14	2.99±0.9
True density	1186.38±0.29	1265.52±0.83	1238.18±0.42
Moisture	2.89±0.06	3.42±0.03	4.01±0.15
Crude fibre	6.29±0.13	5.86±0.06	6.05±0.08
Total ash	4.98±0.01	4.38±0.09	5.96±0.07
Fat	52.87±0.32	49.18±0.277	35.21
Protein	24.63±0.17	21.31±0.19	28.18±0.41
Carbohyd	11.89±0.33	11.32±0.63	7.98±0.28
Ca	1098.68±0.23	1162.38±0.32	1128.81±0.55
Zn	4.32±0.01	4.18±0.05	4.58±0.01
Fe	9.96±0.0	9.86±0.04	10.71±0.07

CONCLUSION:

The present study invertigats the nutritional value of sesame seed. Which shows highest result in protein it also a rich source of crude fibre, carbohydrates, minarals, calcium, crude fat. T – 85 varity shows good protein mineral antioxidant composition as compared to other variaties.

But more research is required for finding out seed utilized nutrients. It is concluded that a better understanding of nutritional value of sesame seed variates is important for production, nutrition and maximum utilization.

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