



Mustard Seeds in Ayurvedic Medicine



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Abstract

Mustard seeds commonly called as Rai, Sarso etc is scientifically known by the name of Brassica Juncea. Different varieties of mustard seeds have been cultivated in countries like Asia, India, United States, Eastern Meditarrian, Hungary, Britain, Europe, Greece, Rome, Canada and in the Middle East. Besides being used in culinary it was once considered as an important natural remedy for gastric discomferts. With the passage of time numerous health benefits of mustard seeds have been explored which will be valuable for the development of novel drugs.

Keywords: Oxalates; Goitrogens; Respiratory congestion; Selenium; Omega fatty acids

Introduction

Mustard seeds commonly called as Rai, Sarso, Shorshe, Kadugu in different languages is scientifically known by the name of Brassica juncea of the family Brassicaceae [1]. Different varieties of mustard seeds such as Brassica alba (White), Brassica juncea (brown) and Brassica nigra (black), seeds are extensively cultivated in countries like Asia, India, United States, Eastern Meditarrian, Hungary, Britain,

Europe, Greece, Rome, Canada and in the Middle East where it is used in cooking for its sharp aroma and in traditional medicine [2,3]. Mustard seeds were once considered as an important natural remedy for relieving stomach distress such as flatulence or cramps [4-24]. With recent studies multitude of its medicinal potential was explored which is briefly outlined in the table below (Table 1).

Table 1

S.no	Medicinal Potential	
1	Inhibits cancer formation	Presence of selenium, mirosinase, glucosinolates etc impedes cancer cell growth and development and acts as an anti-oxidant [5]
2	Treatment of Rheumatic Arthritis and Migraine	Magnesium and selenium content aids in providing relief from its associated symptoms [6]
3	Treatment of Respiratory Congestion	It clears the mucus in the respiratory tract to treat bronchitis/asthma and promotes easy breathing [7].
4	Treatment of Constipation	Aids in easy bowel movements to keep the colon healthy [8].
5	Treatment of High Blood Pressure and Menopausal associated problems	Copper, magnesium, iron, and selenium in mustard seeds reduces high blood pressure and conditions like osteoporosis in menopausal women [9,10].
6	Treatment of Dermal problems	Carotene, vitamins, sulphur and lutein in mustard seeds exhibits antioxidant and antifungal property therefore use as a natural scrub to hydrate skin and fight off fungal infections from the skin [11,12]
7	Treatment of Hair problems	Mustard seed oil is an excellent source of vitamins, proteins and fattyacids which is required for healthy hair growth and reduces hair fall [13]
8	Treats Back Pain	It also helps in relieving spasms, backbone pain and other muscular aches [14]

9	Treatment of Cold/fever	Relieve congestion and aids in removal of toxins from the body [15]
10	Develops Cardiovascular Health	Alleviates chest pain, cardiac arrhythmia rate, risk of thrombosis, arterial blockages, high cholesterol level and ventricular enlargement due to the presence of omega fatty acids in mustard seeds [16-18]
11	Poison Repulsion	Mustard seeds aids in cleansing the body especially from alcohol, narcotics etc [19]
12	Treats Ringworm	Effective in treating ringworm associated lesions [20]
13	Healing Effect on Nerves	Reduce nerve damage by stimulating nerve impulses to initiate healing effect [21]
14	Treatment of Diabetes	It neutralizes the effect of free radicals to protect against oxidative stress. It also lowers lipid peroxidation, level of glycosylated proteins and glucose in the serum to stimulate glucose metabolism [22,23]
15	Treatment of Gastric Discomforts	Presence of myrosinase enzyme in mustard seed breaks down glucosinolates in to isothiocyanate which exhibits anticancer property and lowers the risk of colorectal and gastrointestinal tract cancer formation [24]

Storage of mustard seeds

Mustard seeds either whole or grounded form can easily be stored in a dry airtight jar for approximately six to eight months [25].

Side effects of over consumption of mustard seeds

Over consumption of mustard seeds might result in the following side effects:

- A. Development of allergic reactions such as hypersensitivity [26].
- B. Skin irritation [27]
- C. Raw mustard seeds contain goitrogens, a compound which interferes with the normal functioning of thyroid gland [28]
- D. Presence of oxalates in mustard seeds interfere with the normal absorption of calcium in the body. Therefore, could be problematic for kidney stones patients [29].

Conclusion

Thus, mustard seeds possess numerous therapeutic agents that could be used for the treatment of number of health-related problems.

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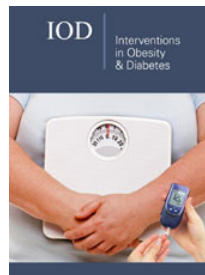
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