

Mustard seed

mustard seed, yellow



Nutritional value per 100 g (3.5 oz)

Energy	1,964 kJ (469 kcal)
Carbohydrates	34.94 g
Sugars	6.89 g
Dietary fiber	14.7 g
Fat	28.76 g
Saturated	1.46 g
Monounsaturated	19.83 g
Polyunsaturated	5.39 g
Protein	24.94 g
Vitamins	
Vitamin A equiv.	(0%) 3 µg
Thiamine (B1)	(47%) 0.543 mg
Riboflavin (B2)	(32%) 0.381 mg
Niacin (B3)	(53%) 7.890 mg
Vitamin B6	(33%) 0.43 mg
Folate (B9)	(19%) 76 µg
Vitamin B12	(0%) 0 µg
Vitamin C	(4%) 3 mg
Vitamin E	(19%) 2.89 mg

Vitamin K	(5%) 5.4 µg
Trace metals	
Calcium	(52%) 521 mg
Iron	(77%) 9.98 mg
Magnesium	(84%) 298 mg
Phosphorus	(120%) 841 mg
Potassium	(15%) 682 mg
Sodium	(0%) 5 mg
Zinc	(60%) 5.7 mg
Other constituents	
Water	6.86 g
•	Units
•	µg = micrograms • mg = milligrams
•	IU = International units
Percentages are roughly approximated using US recommendations for adults. Source: USDA Nutrient Database ^[1]	

Mustard seeds are the small round seeds of various mustard plants. The seeds are usually about 1 or 2 mm in diameter. Mustard seeds may be colored from yellowish white to black. They are important spices in many regional foods. The seeds can come from three different plants: black mustard (*Brassica nigra*), brown Indian mustard (*B. juncea*), and white mustard (*B. hirta/Sinapis alba*).

History

In the New Testament of the Christian Bible, the mustard seed is used by Jesus in the parable of the Mustard Seed as a model for the kingdom of God which initially starts small but grows to be the biggest of all garden plants. Faith is also spoken about in the context of a mustard seed.

The earliest reference to mustard is in India from a story of Gautama Buddha in the 5th century BCE. Gautama Buddha told the story of the grieving mother (Kisa Gotami) and the mustard seed. When a mother loses her only son, she takes his body to the Buddha to find a cure. The Buddha asks her to bring a handful of mustard seeds from a family that has never lost a child, husband, parent or friend. When the mother is unable to find such a house in her village, she realizes that death is common to all, and she cannot be selfish in her grief.^{[2][3]} The Buddha stated that if an individual were to pick a single mustard seed every hundred years from a seven-mile cube worth of mustard seeds, then by the time the last seed is picked, the age of the world cycle would still continue. (If a mustard seed is 3 mm in diameter, then taking one seed every 100 years from a seven-mile cube of seeds, would take 936 quintillion years, 68 billion times the age of the universe.)

Jewish texts compare the knowable universe to the size of a mustard seed to demonstrate the world's insignificance and to teach humility.^[4] The Jewish philosopher Nahmanides mentions the universe expanded from the time of its creation, in which it was the size of a mustard seed.

Regional usage

Mohari (Marathi: मोहरी), *Avalu* (Telugu: ఆవులు), *kadugu* (Tamil: கடடுகடு), or *sasive* (Kannada:ಸಾಸಿವೆ), "Kadugu" (Malayalam: കടുകൂ) variety of Indian pickle consisting mainly of mangoes, red chilli powder and *aavaa pindi* (powdered mustard seed) preserved in mustard oil, is popular in Southern India with its origin in Andhra Pradesh. These mustard seeds are known in Hindi/Urdu as *sarson* (indian colza, *Brassica rapa* subsp. *trilocularis*, syn. *Brassica campestris* var. *sarson*)^[5] and in Punjabi as *sarron*. These are used as a spice in Northern India and Nepal. The seeds are usually roasted until they pop. They are also planted to grow *saag* (greens) which are stir-fried and eaten as a vegetable preparation, *sarson ka saag* (*sarron da saag* in Punjabi).

In Maharashtra, it is called as *mohari*, and is used frequently in Maharanees' recipes.

Sarson ka tel (mustard oil) is used for body massage during extreme winters, as it is assumed to keep the body warm and moist.

Cultivation

Mustard seeds generally take three to ten days to germinate if placed under the proper conditions, which include a cold atmosphere and relatively moist soil. Mature mustard plants grow into shrubs.

Mustard grows well in temperate regions. Major producers of mustard seeds include Canada, Hungary, Great Britain, India, Pakistan and the United States. Brown and black mustard seeds return higher yields than their yellow counterparts.

In Pakistan, rapeseed-mustard is the second most important source of oil, after cotton. It is cultivated over an area of 307,000 hectares with annual production of 233,000 tonnes and contributes about 17% to the domestic production of edible oil.

Mustard seed is a rich source of oil and protein. The seed has oil as high as 46-48 percent, whole seed meal has 43.6 percent protein.

Production

Top 10 mustard seed producers in 2010		
Country	Production (tonnes)	Footnote
 Canada	186,400	
 Nepal	149,625	
 Ukraine	64,400	
 Burma	58,300	Im
 Russia	36,410	
 United States	18,990	
 China	17,600	Im
 Czech Republic	15,586	Im
 France	8,500	Im
 Romania	6,739	

World	586,397	A
* = Unofficial figure [] = Official data A = May include official, semi-official or estimated data F = FAO estimate Im = FAO data based on imputation methodology M = Data not available <i>Source: UN Food & Agriculture Organisation (FAO)</i>		

References

- [1] <http://ndb.nal.usda.gov/ndb/search/list>
- [2] Sharman, Shreshtha, Neeta Sharma - Together with English Language & Literature (Term II)(page 222) (<http://books.google.co.uk/books?id=vCCxP388oygC&pg=PA223&lpg=PA223>) retrieved 2011-11-06
- [3] Buddhaghosa - Buddhist legends, Volume 28 (published 1921) (<http://books.google.co.uk/books?id=16GJdvuhhLMC&q=Kisa+Gotami>)
- [4] also *verification* at about jay michaelson (http://learnkabbalah.com/about_jay_michaelson/)
- [5] Indian Food Packer ([http://books.google.fr/books?ei=NNc1UtLoB4nB0gWFm4DAAQ&hl=fr&id=v9NAAAAYAAJ&dq=Saaron+Ka+Saag+Brassica+campestris+var.+sarson&q=sarson+ka+saag"#search_anchor](http://books.google.fr/books?ei=NNc1UtLoB4nB0gWFm4DAAQ&hl=fr&id=v9NAAAAYAAJ&dq=Saaron+Ka+Saag+Brassica+campestris+var.+sarson&q=sarson+ka+saag)), All India Food Preservers' Association., vol. 36, 1982, p.91

External links

- [Homecooking.about.com \(http://homecooking.about.com/od/foodhistory/a/mustardhistory.htm\)](http://homecooking.about.com/od/foodhistory/a/mustardhistory.htm)
- [McCormick.com.au \(http://www.mccormick.com.au/keens/history/mustard-history.aspx\)](http://www.mccormick.com.au/keens/history/mustard-history.aspx)

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