

## Multitasker Peppermint In Promoting Good Health

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### To Cite this Article

D.B. Shinde and Snehal Mahesh Jadhav, "Multitasker Peppermint In Promoting Good Health", Journal of Science and Technology, Vol. 06, Issue 01, Jan-February 2021, pp97-100

### Article Info

Received: 22-08-2020

Revised: 10-12-2020

Accepted: 14-12-2020

Published: 18-12-2020

**Abstract:** Peppermint is a most common Indian herb which also known as *M.balsamea wild* or *mentha piperita*. This peppermint is a hybrid plant which derived from doing cross between watermint and spearmint species of mint plant. Mainly we can say Europe and middle east areas are those where this plant can be seen frequently but now a days due to so much of awareness about this plants positive health benefits this one can be seen throughout the world. Main and most concentrated content of the peppermint is a methanol. Also some of menthone, methyl acetate and methyl esters can be seen in the same. Some of volatile oils such as 1,8 cineol, pulegone, pinene, limonene are also present within dry peppermint leaf. According to findings of genmen commission of emonographs we can say, peppermint oil as well as peppermint leaf can be used as Antispasmodic due presence of power to treat irritable bowel syndrome in human beings. Also effective measure to reduces or avoid oral mucosal inflammation along with catarrh of respiratory tract when taken internally by a person in prescribed format. Also we can use externally peppermint oil to treat neuralgia and myalgia. This super powerful oil can act as a secretolytic, carminative, cholagogue and antibacterial also with most positive part as a having cooling action within it. Now a days peppermint oil capsules been seen in a market which are mostly used to treat colonoscopy.

**Keywords:** *mentha piperita*, mint, herb, health benefits

### I. Introduction

Mint comes under genus *Mentha* spp with family *Labiatae* or *lamiaceae*. Worldwide more than 25 different types of mints can be seen but most common among them are peppermint, curled mint, Korean mint, American mint, wild mint and spearmint namely. This plants are known to grow in temperate cultivating zones such as africa. Peppermint oil has sharp but fresh menthol smell with pale yellow to clear colour shade. It has viscosity same as water. Peppermints one of the most important constituent, namely menthol is seen to used in many manufacturer industries such as toothpaste, different kind of pain reducing balms, cold-cough balms, lozenges and coughdrops too. This peppermint oil has proved to be helpful to reduce stomach disorders such as certain gas problems related to indigestion, acidity etc. Reduction of colonic spasm or increasing endoscopist satisfaction with reduction in procedure time of colonoscopy can be achieved with oral supplementation of peppermint oil capsules externally during colonoscopy. this oil reduces abdominal pain, nausea, cold in small children.

Table 1.1: chemical constituents of peppermint

Compound	Amount
Menthol	55%
Menthone	14.0% - 32.05%
Pulegone	4.0%
Cineole	3.05% - 14.0%

Methyl acetate	2.08% - 10.0%
Isomenthone	1.05% -10.0%
Limonene	1% -5%
Menthofuran	1% - 9%
Carvone	1%
Isopulegol	0.2%

Table 1.2 Nutrients content per kg of peppermint

Nutrients	Amount per kg of peppermint
Retinol equivalent	940-1016g per 100g of beta carotene
K	33g/kg
Mg	5.8g/kg
Ca	15.3g/kg
Zn	51mg/kg
Fe	239mg/kg
Mn	188mg/kg
Cu	12mg/kg

**Cardiovascular health benefit of peppermint**

Peppermint have some vasodialating properties in them hence can be used as a rubefacient agent from ancient times Has capacity to reduce increased heart rate by decreasing systolic pressure of heart (**Hawthorn et al., 2018**). Some amount of peppermint oil gives relaxation effect on bronchial muscles and simultaneously increases ventilation in the body of an individual (**Robbers, et al., 2016**).

**Gastrointestinal benefits of peppermint**

Post operative conditions when person is having very sensitive gas reflexes they may suffer from nausea, in that case we can use peppermint oil as a antiemetic agent (**Gardiner et al., 2002**) Also non obstructive dyspepsia can be treated with application of the same Person with constipation can be given peppermint oil supplementation due to it’s capacity to induce increased gastric emptying rate.

**Pulmonary health benefits of peppermint**

Peppermint oil when we use for the inhalation that can increase amount of nasal air force there by increasing the supply of air towards the lungs of an individual, making lungs surfactant with improved healthy pulmonary functioningIt increases breathing of a person and lowers the carbon dioxide tension in the body. Muscles involved in inspiration seen with increased strength after the application of peppermint oil into an individual. Reflex inhibition during respiration can be stimulated by menthol along with improved nasal breathing capacity.

**Improvement of dental health due to peppermint**

As we all know peppermint is very know to keep bad breath away and induces freshness in mouth due to presence of menthol. This quality of peppermint being used in production of certain oral dentifrices. Also it kills the bacterial growth in mouth.

**Neuropsychiatric effect of peppermint**

Peppermint can act as a central nervous system stimulant. Aroma of it’s oil is known to induce cognitive performance along with reduction in pain response in brain. Also in some studies is seen to stimulate endocrine secretions as well. (**Robbers, 2012**)

### ***Immune modulation due to peppermint***

It can decrease antigen induced allergies with application of peppermint oil internally. Hence it claims to have anti-inflammatory properties. Menthol can inhibit cutaneous anaphylaxis which is mediated by IgE antibody in inflammatory conditions.

### ***Benefit to skin and mucosal muscle***

Peppermint acts as a coolant as well as analgesic to the skin. It dilates the blood vessels and stimulate cold receptors on skin. Thus causing cold sensation. Menthol also when applied on skin surface can triggers the rate of absorption of any medicine applied on skin (**El-Kady IA, El-Maraghy SSM et al.,2003**) Amount of menthol determines it's activity such as when applied in low amount it induces cooling sensation but when used in more amount can induce irritation along with itching. Hence modulation during use should be kept.

### ***Antimicrobial effect of peppermint***

Menthol can act as a fungicide against aspergillus albus and dematophytic fungi which is harmful in nature. Also can reduce the inflammation done due to some bacteria such as staphylococcus pyogenes, streptococcus and E.coli hence it's also named as antibacterial too (**Moleyar et al., 2012**)It has antibacterial effect on both gram positive as well as gram negative bacteria. Herpes and influenza kind of viral infections can also be treated with application of peppermint oil.

### ***Antispasmodic effect via application of peppermint oil***

Peppermint oil gives muscle relaxation with reduction in pain and fatigue when applied externally. Hence can be called as painkilling natural herb. It also posses antioxidant effect with decongestant mechanism as follows, this increases pain threshold hence extend resistance to pain (**De Cort S et al.,2001**) In some studies we see that aroma of peppermint oil can reduce anxiety. Injection of peppermint oil in patients going through colonoscopy can decrease colonic muscle motor activity by making patient spasm free along with reduction of headaches which occur normally during medical treatment.

## **II. Conclusion**

Mint is a very very popular kitchen herb which is readily available in many countries around the world. Now from this review of peppermint we can see that there are many healthy benefits of this small herb. Some life threating physical problems such as cardiovascular diseases and cancers can be prevented and till certain extent can be cured by the application of this mint. Hence we should consider this peppermint use more and more in our daily life style to ensure the whole benefit of this herb.

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