

Neutraceuticals

(Herbs as health food)



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Content

- ✓ Alfaalfa
- ✓ Chicory
- ✓ Ginger
- ✓ Fenugreek
- ✓ Garlic
- ✓ Honey
- ✓ Amla
- ✓ Ginseng
- ✓ Ashwagandha
- ✓ Spirulina



Alfaalfa

Synonym: Pirale

Biological source:

It is entire plant of *Medicago sativa*

Family: Fabaceae

Chemical constituents:

| | |
|----------------------------------|--|
| Leaves, sprouts & seeds contain: | One cup of sprouts contain 1gm of proteins & carbohydrates |
| Vitamin-K, | Also contain high content of bioactive compounds like |
| Vitamin-C, | Saponins, |
| Copper, | Coumarins, |
| Magnanese, | Flavonoids, |
| Folate, | Phytosterols, |
| Thiamine, | Phytoestrogens, |
| Riboflavin, | Alkaloids |
| Magnesium, | |
| Iron | |





Uses:

- ✓ Anemia
- ✓ Fatigue
- ✓ Impotency
- ✓ Kidney
- ✓ Weight loss
- ✓ Eye
- ✓ Hair loss
- ✓ Liver
- ✓ Thyroid
- ✓ Diuretic
- ✓ Antioxidant
- ✓ Anti hypertensive
- ✓ Antidiabetic



Chicory

- **Biological source:**

Obtained from the plant of *Cichorium intybus*

Family: Asteraceae

- **Chemical constituents:**

- ✓ Carbohydrates,
- ✓ Proteins,
- ✓ Vitamines,
- ✓ Minerals,
- ✓ Fibers,
- ✓ Phenolics,
- ✓ Inulin,
- ✓ Coumarins,
- ✓ Tannins,
- ✓ Monomeric flavonoids





Chicory

Uses:

- Roots are used as substitute and additive for coffee
- High blood pressure
- Heart failures
- Loss of appetite
- Stomach upset
- Constipation
- Cancer
- Liver disorders
- Inflammation
- Hepatic toxicity



Ginger

Synonym: Zingiber, Zingiberis, Sunthi

Biological source:

It consists of whole or cut dried scrapped or unscrapped rhizomes of *Zingiber officinale* Roscoe

Family Zingiberaceae.

Chemical constituents:

- Volatile oils
- Resin
- Starch
- Fibre
- Zingiberine
- Bisabolone
- Farnesene
- Gingerols
- Shogaols
- Zingerone





Uses:

- ✓ Antiemetic
- ✓ Carminative
- ✓ Condiment
- ✓ Stomachic
- ✓ Aromatic
- ✓ Stimulant
- ✓ Flavouring agent
- ✓ Oil is used in Mouth washes, Liquors



Fenugreek

Synonym: Methi

Biological source

Seeds of the plant *Trigonella foenum-graecum*

Family: Leguminosae

• Chemical Constituents:

- Alkaloids - Gentiamine, Trigonelline
- Flavonoids
- Comarins
- Proteins
- Amino acids
- Steroidal saponin
- Carbohydrates
- Dietary fibers
- Fat
- Protiens
- Vitamins
- Bitter fixed oil





Uses:

- ✓ Demulcent
- ✓ Laxative
- ✓ Nutritive
- ✓ Expectorant
- ✓ Anorexia
- ✓ Dyspepsia
- ✓ Gastritis
- ✓ Diabetes
- ✓ High cholesterol



Garlic

Biological source:

Dried bulbs of *Allium sativum*

Family: Liliaceae

Chemical constituents:

- Carbohydrates
- Proteins
- Fats
- Mucilage
- Minerals
 - Phosphorous
 - Iron
 - Copper
- Volatile oils:
 - Allicin
 - Allyl propyl disulfide
 - Diallyl disulfide





Garlic



Garlic

- Uses:
 - Carminative
 - Aphrodisiac
 - Expectorant
 - Stimulant
 - Disinfectant
 - Anthelmintics
 - Antibacterial
 - Antihypertensive



Honey



- B.S.:

Sugar like secretion deposited in Honey comb by the bees *Apis mellifera*, *Apis dorsota* & other species of *Apis*

Family: Apidae

- Chemical Constituents:

- Glucose
- Fructose
- Sucrose



Honey

- Uses:
 - Demulcent
 - Sweetening agent
 - Nutrient
 - Antiseptic
 - Expectorant



Amla



- B.S.:
It consists of fruits of the plant *Emblica officinalis* & *Phyllanthus emblica*
Family: Euphorbiaceae
- Chemical constituents:
 - Vitamin C
 - Calcium
 - Iron
 - Phosphorous



Amla

- Uses:
 - Diuretic
 - Laxative
 - Anaemia
 - Diarrhoea
 - Jaundice

- Synonym:
- B.S.:
 - It consists of roots of the plant *Panax ginseng* and other species of *Panax*
 - Family: Araliaceae
- Chemical constituents:
 - Saponins
 - Glycosides
 - Volatile oils
 - Sterols





Ginseng

- Polysaccharides
- Minerals
- Vitamins
- Pantothenic acid
- Biotin

Uses:

- It relieves stress and fatigue
- Used in hypertension
- Diabetes
- Child psychiatric disorders



- Synonym:
- B.S.:
 - It consists of dried roots and stem bases of the plant *Withania somnifera*
 - Family: Solanaceae
- Chemical constituents
 - Alkaloids – withanine, somniferine somnine, tropine
 - Steroidal lactones



Ashwagandha

- Uses:
 - Sedative
 - Hypnotic
 - Hypotensive
 - Respiratory stimulant
 - Anti stress agent
 - Anti arthritic



- B.S.:
 - It is blue green algae obtained from *Spirulina maxima* or *Spirulina platensis*
 - Family: Oscillatoriaceae
- Chemical constituents:
 - Proteins (50-70%)
 - Lipids (5-6%) – essential fatty acids linoleic acid, oleic acid, palmitic acid.
 - Vitamins like B1, B2, B3, B6, B12 & E3
 - Iron
 - Enzyme superoxide dismutase



Spirulina

- Uses:
 - Immune stimulant
 - Anticancer
 - Antiviral
 - Appetite stimulant
 - Arthritis
 - Diabetes
 - Cataract
 - Stress
 - Aging

Enzyme used in