

Papaya

Parts Used: Fruit, leaves, flowers, latex, and seeds.

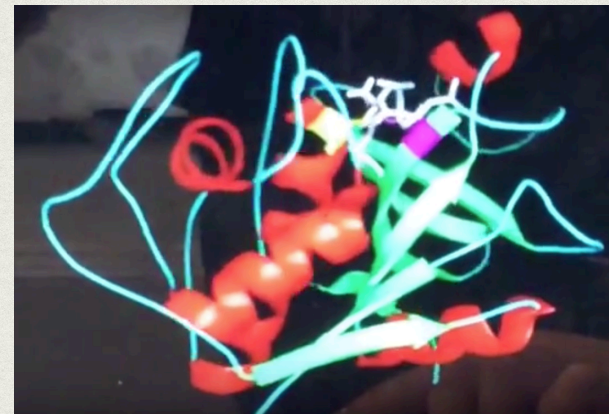
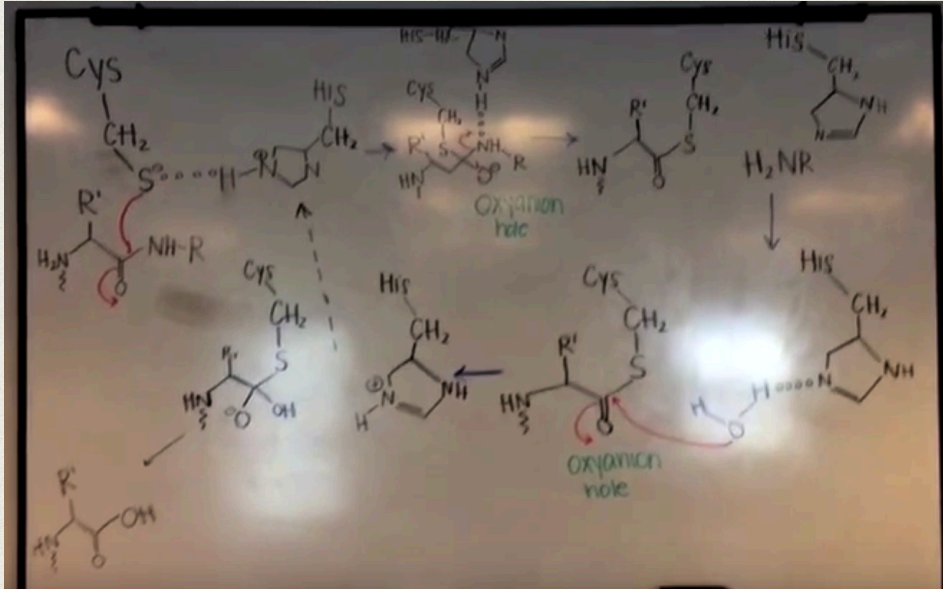
Medicinal Constituent: Vitamins A, C, E, B5, B6, B12 and K. Zeaxanthin, potassium, choline, beta-carotene, selenium, and magnesium. Bioflavonoids and enzyme (papain), fiber, and sugars.

Anti-allergy, antibacterial, antioxidant, and detoxifying.

Note: see Table 2 for papaya enzyme.

TABLE-2 PAPAYA (PAPAIN)

The Chemical Structure of Papain and How it Works in our body



[https://www.youtube.com/watch?](https://www.youtube.com/watch?v=tOzougkY9jM&index=4&list=PLEyjQEDYgSEcLVDYaqw6k_kFD6b5MsAy5)

[v=tOzougkY9jM&index=4&list=PLEyjQEDYgSEcLVDYaqw6k_kFD6b5MsAy5](https://www.youtube.com/watch?v=tOzougkY9jM&index=4&list=PLEyjQEDYgSEcLVDYaqw6k_kFD6b5MsAy5)

Papaya

Therapeutic Properties: Macular degeneration, asthma, digestion, heart disease, inflammation, hair and skin health, worms, colon cancer, abortifacient, and Dengue fever.

Minimizes the exposure to allergens (eggs, fish, shellfish, nuts and dairy), by strengthening and detoxifying the immune system.

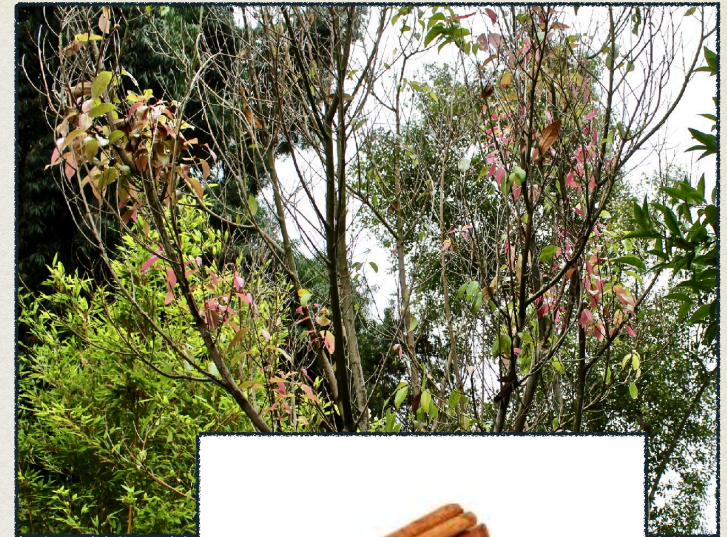
Forms: Pills, capsules, wine, or consume fresh (fruit, seeds, leaves, roots, tea).

Cinnamon

Cinnamomum cassia

Lauraceae

- **Plant Type:** Evergreen tree. A spice is produced from the inner bark of the Chinese or Ceylon cinnamon tree. Cassia cinnamon tree is native to China.
- **Historical Background:** Has been used for centuries by Chinese medical practitioners to treat a wide range of conditions.



Chinese Cinnamon
Cinnamomum cassia
Laurel Family—Lauraceae
Southern China
The aromatic bark is used
as cinnamon. It is also
used in Chinese medicine.

Cinnamon

Parts Used: Bark, twigs, seeds, flowers, and leaves to make essential oil.

Medicinal Constituents: Volatile oils and cinnamaldehyde to counteract bacteria, fungi, and viruses.

Cinnamon

Therapeutic Properties: An anti-inflammatory, antioxidant, antiseptic, antibacterial, and antimicrobial.

Supports weight loss, improves brain health, and circulation. It is used to treat anorexia, common cold, menstrual problems, and diarrhea, as well as diabetes, obesity, and high cholesterol.

May reduce ADHD and anxiety/frustration.

Forms: Powder, sticks of the bark, capsules, and oil (twigs and leaves contain one to two percent essential oils).

* see table -1

TABLE-1 HOW TO CHOOSE CINNAMON



Ceylon cinnamon	Cassia cinnamon
More expensive, as the price may spike 10 times more than Cassia cinnamon	Commonly available and very cheap
Tan brown color	Reddish, dark brown color
Thin and paper-like textured bark that forms multiple layers when rolled up	Uneven and thick bark that forms only a few layers when rolled up
Fragile and easily broken	Tough, difficult and if not, impossible to grind to a powder
Delicate and sweet scent with subtle notes of clove	Pungent and full-bodied taste

7 Key Differences Between Ceylon Cinnamon and Cassia Cinnamon

Ceylon Cinnamon	Cassia/Chinese Cinnamon
A highly valued culinary and medicinal spice. Price can be up to 10 times more than the Cassia/Chinese cinnamon.	Commonly available and very cheap. You get a bag of the sticks for less than a dollar.
Contains a small, negligible amount of coumarin, a naturally occurring blood-thinning substance. Recommended for regular use, eg for correcting blood sugar level.	Contains a high level of coumarin content which can be harmful for the liver and kidney when consumed daily or regularly. Not a concern for occasional use. (Note: Saigon Cinnamon, a type of cinnamon from Vietnam that shares a similar appearance with Cassia, also contains a relatively high level of Coumarin.)
Tan brown in colour.	Reddish dark brown.
Thin and paper-like textured bark that forms multiple layers when rolled up.	Uneven thick bark that forms only a few layers when rolled up.
Fragile, easily broken.	Tough, difficult (if not impossible) to grind to powder with an electric home kitchen grinder.
Delicate, sweet with subtle notes of clove. Creates an excellent flavor profile for pastries, cakes and desserts.	Pungent, full-bodied taste. Suitable for Chinese braised meat recipes.
Mostly originated from Sri Lanka and used in most part of Europe.	Primarily sourced from China and supplied to the USA and Asia.

Ginger

Zingiber officinale
Zingiberaceae

- **Plant Type:** Herbaceous perennial native to Asia.
- **Historical Background:** Long history in China, Taiwan, and India; introduced to medieval Europe 2,000 years ago as a spice, food, and medicine.



Ginger

Parts used: Rhizome/roots.

Medicinal constituents: Dozens of substances-volatile oils, gingerol, and more. Ginger root contain 0.25 to 3.3 percent volatile oil.

Ginger

Therapeutic Properties: Anti-inflammatory, circulatory stimulant to reduce high blood pressure, digestive remedy to reduce motion sickness, indigestion, etc. Anticoagulant: salicylate.

Detoxifies: fresh ginger juice with vinegar can be used as an antidote in fish or crabmeat poisoning.

Note: Pregnant women should avoid eating ginger.

Forms: Capsules, essential oil, tea (dried or fresh), dry, powder, or fresh.

APPENDIX-I

Common Name	Scientific Name	Family Name	Location in SDBG
Turmeric	<i>Curcuma longa</i>	Zingiberaceae	Herb Garden
Corn	<i>Corn</i>	Corn	Hamiltom Children Garden
Fo-Ti	<i>Polygonum multiflorum</i>	Polygonaceae	Herb Garden
Za Baobab	<i>Adansonia za</i>	Bombaceae	Old World Garden
Saw Palmetto	<i>Serenoa repens</i>	Arecaceae	Passed Lawn House
Papaya	<i>Carica papaya</i>	Caricaceae	Subtropical Garden
Blue Elderberry	<i>Sambucus nigra</i>	Caprifoliaceae	California Garden
California Sagebrush	<i>Artemisia californica</i>	Asteraceae	Herb Garden
Black Sage	<i>Salvia mellifera</i>	Lamiaceae	Herb Garden
Feverfew	<i>Tanacetum parthenium</i>	Asteraceae	Herb Garden
Cinnamon (Chinese)	<i>Cinnamomum cassia</i>	Lauraceae	Herb Garden
Yerba Santa	<i>Eriodictyon crassifolium</i>	Boraginaceae	Herb Garden

APPENDIX-II

Common Name	Scientific Name	Family Name	Location in the Garden
African Bulbine	<i>Bulbine frutescens</i>	Asphodelaceae	Herb Garden
Stinging Nettle	<i>Urtica dioica</i>	Urticaceae	Herb Garden
Ginger	<i>Zingiber officinale</i>	Zingiberaceae	Herb Garden
California Sagebrush	<i>Artemisia californica</i>	Asteraceae	Herb Garden

REFERENCES-I

- Blumenthal, M. 2004. The ABC Clinical Guide to Herbs. The American Botanical Council, Austin, TX.
- Buchanan, B.B., W. Gruissem, and R.L. Jones. 2000. Biochemistry and Molecular Biology of Plants. American Society of Plant Physiologists. Rockville, MD.
- Buronzo, Alessandra Moro & Brette, Isbelle. 2011. Food Healing. Alpen Editions, Albert ll.
- Castleman, Michael. 2001. The New Healing Herbs. Rodale Inc. Charlebois, D. 2007. Elderberry as a Medicinal Plant. *In* J. Janick and A. Whipkey (eds.) New Crops and New Uses. ASHS Press, Alexandria, VA.
- Castleman, Michael. 2009. The New Healing Herbs. Rodale Inc. New York, NY.
- Charlebois, D. 2007. Elderberry as a Medicinal Plant. *In* J. Janick and A. Whipkey (eds.) New Crops and New Uses. ASHS Press, Alexandria, VA.
- Chevallier, A. 1996. Encyclopedia of Medicinal Plants. DK Publishing, Inc., New York, NY.

REFERENCES-II

- Dunmire, W.W., and G.D. Tierney. 1997. Wild Plants and Native Peoples of the Four Corners. Museum of New Mexico Press, Santa Fe, NM.
- Foret, Rosalee, De La R. 2017. Alchemy of Herbs. Hay House, Inc. Carlsbad, CA.
- Gupta, S.C., S. Patchva, B.B. Aggarwal. 2013. Therapeutic roles of curcumin: Lessons learned from clinical trials. American Association of Pharmaceutical Scientists; AAPSJ 15(1): 195-218.
- HerbalGram, the Journal of the American Botanical Council. Number 115, Aug-Oct 2017.
- Herbwisdom.com Newsletter.
- Hou, Joseph P., Jin, Youyu MD, (2005), The Healing Power of Chinese Herbs and Medicinal Recipes.

REFERENCES-III

- Hartvig, Kirsten. 2012, Eat to Boost Your Immunity. New York, NY.
- Koch, E. and W.S. Arzneimittel. 2001. Extracts from fruits of Saw Palmetto (*Sabal serrulata*) and roots of Stinging Nettle (*Urtica dioica*): Viable alternatives in the medical treatment of benign prostatic hyperplasia and associated lower urinary tracts symptoms. *Planta Med* 2001:67(6):489-500.
- Lightner, J. 2011. San Diego County Native Plants. San Diego Flora, San Diego, CA.
- Manuchair, Ebadi. 2007. Pharmacodynamic Basis of Herbal Medicine 2nd edition. Taylor & Francis Group, LLC.
- Moore, M. 1989. Medicinal Plants of the Desert and Canyon West. Museum of New Mexico Press, Santa Fe, NM.

REFERENCES-IV

- Muniyappa R, Hall G, Kolodziej TL, et al (2008;88(6):1685–1696, Cocoa consumption for 2 wk enhances insulin-mediated vasodilatation without improving blood pressure or insulin resistance in essential hypertension. . American Journal of Clinical Nutrition.
- Pareek, A., M.Suthar, G.S. Rathore, and V. Bansal. 2011. Feverfew (Tanacetum parthenium L.): A systematic review. Pharmacogn Rev. vol. 5(9): 103-110.
- Roberto Chiej, 1984. The MacDonald Encyclopedia of Medicinal Plants.

REFERENCES-V

- Wilken-Robertson, M. 2018. Kumeyaay Ethnobotany. Sunbelt Publications, Inc. San Diego, CA.

REFERENCE: WEBSITE-I

<https://www.drweil.com/health-wellness/body-mind-spirit/heart/is-there-a-natural-alternative-to-coumadin/>

<http://naturalbloodthinners.org/ginger-blood-thinner-properties/>

<http://www.umm.edu/health/medical/altmed/herb/ginger>

<https://www.peashealth.com/top-25-health-benefits-of-honey-and-cinnamon/>

<http://www.benefits-of-honey.com/ceylon-cinnamon.html>

https://plants.usda.gov/plantguide/pdf/cs_erca6.pdf

<https://theconversation.com/baobab-trees-trace-the-african-diaspora-across-the-indian-ocean-47467>

REFERENCE: WEBSITE-II

www.cms.herbalgram.org C. Yearsley. 2016. Artemisinin: A nobel prize winning antimalarial from traditional Chinese medicine. Issue 110, page 50-61.

www.cms.herbalgram.org G. Engels. 2016. Stinging Nettle: *Urtica dioica*, *U. urens* Family: Urticaceae. Issue 110, page 8-16.

www.cms.herbalgram.org A. Keller. 2016. European Elderberry reduces duration and symptoms of the common cold in air travelers. Issue 111, page 34.

www.cms.herbalgram.org S. Jackson. 2015. Baobab: The tree of life-An ethnopharmacological review. Issue 108, page 42-53.

www.cms.herbalgram.org J. Brinkmann. 2013. European Elder. Issue 97, page 1-7.
<http://cms.herbalgram.org/herbalgram/issue97/hg97-herbpro.html?ts=1512338484&signature=f6e15ef7defdcbb0ef42712e3ddfcdf>

REFERENCE: YOUTUBE-I

https://www.youtube.com/watch?v=tOzougkY9jM&index=4&list=PLEyjqEDYgSEcLVDYaQw6k_kFD6b5MsAy5