



Luo Han Guo *Sweet Fruit Used as Sugar Substitute and Medicinal Herb*

Type of Plant/Fruit:

- Luo Han Guo is collected as a round green fruit that turns brown upon drying. It is well-known for its sweet taste which comes primarily from mogrosides, a group of terpene glycosides, present at the level of about 1% of the fleshy part of the fruit. Mogrosides, which as it happens, are about 300 times sweeter than table sugar (sucrose).
- Luo Han Guo is a rare wild plant that is primarily grown in the mountains of southern China, in an area called Guilin. They presently have 4,000-acres for growing Luo Han Guo, which produces 10,000 pieces of fruit annually.

Origin and Native Uses:

- Luo Han Guo has been used as a medicinal herb for supporting the reduction of coughs and sore throats, and is popularly considered in southern China to be a longevity aid. There are descriptions of its cultivation dating back to 1813.
- The best depictions of Luo Han Guo's medicinal uses in southern China during the 20th century were given by Dai and Liu in their book "Fruit as Medicine". This book was published in Chinese in 1982 and in English in 1986... Here is their description:
 - "Dried fruit may be bought in the city markets. The outer surface of the dried fruit is round and smooth, dusty yellow-brown or dusty green-brown. It is covered with fine, soft hair. The fruit is covered by a hard but thin shell. Inside is a partly dry, flexible substance containing the juice, as well as a large number of seeds. The skin, juicy part, and seeds all have a good sweet flavor. Its nature is cool, and the fruit has no poison. The fruit helps relieve sunstroke, moisten the lungs, eliminate phlegm, stop cough, and promote bowel movements."
 - "Applications:
 - 1. Heat stroke with thirst: Take one fruit, break it open and stir into boiled water. Drink the liquid in place of tea.
 - 2. Acute or chronic throat inflammation; aphonia. Take half a fruit and 3-5 seeds of sterculia. Cover with water and simmer, then swallow very slowly.
 - 3. Chronic cough. Take 1 piece of fruit, cover with water, simmer, and drink the liquid. Do this twice each day.
 - 4. Constipation in the aged. Take 2 pieces of fruit, obtain the juicy part and the seed (put the shell aside for other uses), break apart, cover with water, and simmer. Drink before going to bed."

Form Used in Chiropractor's Choice:

- 100%, pure Luo Han Guo extract loaded with mogrosides and obtained directly from plants in Southern China.

Primary Ingredients and Benefits:

- More recently, Luo Han Guo has been developed into a non-caloric sweetener to compete with other herbal sweeteners such as stevioside from the unrelated Stevia leaf.
- Recent work on Luo Han Guo includes investigation of the antioxidant activity of the mogrosides.
- Mogrosides belong to a group of compounds called triterpene glycosides. Though glycosides tickle our sweet taste buds, the body handles them differently from carbohydrates: Insulin levels do not rise in response to their consumption; they are not broken apart to produce energy and thus do not cause a weight increase reaction.
- Because it can be used as a substitute for sugar, the use of Luo Han Guo may help manage the support of normal blood sugar levels.

References:

1. Dai Yinfang and Liu Chengjun, *Fruit as Medicine*, 1986 The Ram's Skull Press, Kuranda, Australia.
2. Kinghorn AD and Soejarto DD, *Discovery of terpenoid and phenolic sweeteners from plants*, *Pure Applied Chemistry* 2002; 74(7): 1169-1179.
3. Lee CH., *Intense sweetener from Lo Han Kuo*, *Experientia* 1975, 31(5): 533-534.
4. Akihisa T, Hayakawa Y, Tokuda H, Banno N, Shimizu N, Suzuki T, Kimura Y. *Cucurbitane Glycosides from the Fruits of Siraitia grosvenorii and Their Inhibitory Effects on Epstein-Barr Virus Activation*. *J Nat Prod*. 2007 May 25;70(5):783-788. Epub 2007.
5. Konoshima T and Takasaki M, *Cancer-chemopreventive effects of natural sweeteners and related compounds*, *Pure Applied Chemistry* 2002; 74(7): 1309-1316.

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