# GINSENG – Why And How It Is

USED

**Note:** This document is not intended as an endorsement for ginseng. Rather, it is a review of literature for clarification as to how ginseng is used and why.

#### Introduction

This document will discuss both American and Asian ginseng together as they are used as similar yet complementary medicinal/herbal products. Ginseng is often consumed simply as a herbal tea, it is also a good tonic and is used in many traditional Chinese medicinal formulas. Ginseng is a very versatile plant and is consumed by more people and in greater quantities than any other single herb.

To understand the botanical aspects of ginseng, refer to a companion document of this one called "Ginseng—What it is and Isn't." It discusses the commercial ginseng (Panax) group, (three species), plus other ginseng species, plants related to ginseng and many of the impostors known to this author. Impostors are plants using 'ginseng' in their common name that don't have Panax as the genus

portion of the Latin name, i.e. American Ginseng is *Panax quinquefolius*, Asian ginseng is *Panax ginseng* while poor man's ginseng is *Codonopsis pilosula*, an impostor.

#### **Chemical Differences**

The differences between Asian and American ginseng is chemical rather than physical. They look very similar when growing, but produce slightly different chemistry which is stored in their roots. The chemicals specific to ginseng are called ginsenocides, a group of closely related saponins. Some basic differences between Asian and American are: for example; the ginsenocide Rb<sub>1</sub> is greater in American ginseng, Rg<sub>1</sub> is greater in Asian, Rf is basically non-existent in American ginseng and American ginseng has approximately twice the amount of total ginsenocides. There are over 25 ginsenocides identified but only six or seven are of any significance. Along with these special chemicals, ginseng contains protein, carbohydrate, sugar, vitamins and minerals in varying amounts, as they do in all vegetables.





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# **Choosing the Product (species)**

When deciding which type of ginseng (American or Asian) you should take, there are some minor differences you need to understand. Asian ginseng is considered a yang product or one that is heat producing or stimulating, especially the 'red' ginseng products (described later). It is taken by the elderly, the ill, and in cooler seasons.

American ginseng is considered a Yin product or one that is cooling or non-stimulating. It would be used by the young and middle aged, for stress and in warmer seasons.

**Note:** These above are only guidelines, as some find the Asian product stimulating in any season, and American ginseng can be taken all year.

In available literature, ginseng is said to treat many conditions or to influence many body functions to keep you healthy. One statement was that ginseng caused the person to feel better, have more energy, be more alert and to sleep less. In this sense, ginseng is seen as a tonic, where you would take a little bit every day for the cumulative effects.

One of the new buzzwords used in the last few years and being attached to ginseng is "adaptogen". This word means the product helps the whole body adapt to the stresses of life, which may be external, internal, physical or mental. The word adaptogen can only be applied to a herbal product if it is:

- " non-toxic
- " non-specific and
- " producing a normalizing effect

# **Daily Consumption**

The amounts prescribed for daily consumption vary considerably according to age, body size, temperament and health. As a tonic or adaptogen, the general amount recommended varies from .5 – 1 gms per day. This would be for example, one to four 500 mg capsules/day, or when consuming tea and using a 2 gm tea bag, one to two times/day. Combination of ginseng products is quite acceptable.

For medicinal use for short periods, from 2-4 gms/day might be used. This amount is not recommended over the long term and would also be quite expensive.

**Note:** If you are taking other medications, have any extreme health conditions, or are pregnant, don't take ginseng or any other herbal products without the full knowledge and consent of your regular doctor.

Ginseng comes with few warnings about possible negative effects. These include:

- " May alter menstral cycles if taken in large amounts
- " May increase menstral flow if taken in large amounts
- " May not be of any benefit if the user is obese

**Note:** Ginseng, like any substance, may cause adverse reactions in some people, but this is quite rare. If this happens, do not continue. Make sure you are taking a true ginseng product. (See Ginseng—What It Is and Isn't.)

# **Purchasing Information**

When you purchase ginseng, the following points may be helpful.

- 1. Older ginseng roots have more potency but are also more expensive.
- 2. Wild roots or woods grown will be more expensive and generally more potent as they usually are harvested as older roots.
- 3. Whole root products have more benefit over ones made only from hair roots and larger fibre roots. The whole root according to many, has a synergistic effect, i.e. where the whole works better than any one part, as it includes all the ginsenocides, and all other constituents.
- 4. Ginseng, like many other products, can be adulterated or mixed with fillers to stretch the ginseng. Look for 100 percent ginseng products.
- 5. The word 'ginseng' on the label does not assure you are getting American or Asian ginseng. It could be, and often is, Siberian ginseng, a related but different plant and can also be any one of a number of plants (see "Ginseng—What it Is and Isn't", Ginseng Factsheet 97-01).

- 6. You should know your source, quality and age of the product you use. Ginseng has a good shelf life if handled and stored well but root over three years from harvest is questionable.
- 7. There are 'guaranteed potency' products on the market, which are chemically enhanced and guaranteed to be a certain percent ginsenocide. These are good products if you are buying ginsenocides but may have less than 100 percent ginseng in them, i.e., not a whole root product as you can extract, then add ginsenocides to many things.
- 8. In the Asian market, the shape of the root is important and is one of the subjective criterion for purchase. The common name 'Man Root' implies that if a root has a particular shape it is better. Asians typically purchase identifiable root products.
- 9. 'Red' ginseng is a processed product, made by steaming ginseng roots for eight ten hours. It is **not** a separate species of ginseng. Red ginseng products are usually made from Asian ginseng.

### **Ginseng Products Available**

Ginseng has an unfamiliar, bitter/sweet/earthy flavour, quite unlike most foods we consume in the west. Typically, in North America, we consume ginseng in ways that hide the taste by encapsulating them and 'swallowing the pill'. About one in 15 people enjoy the taste and many acquire a taste for the many ginseng products available like tea, ginseng flavoured candy, chewable tablets, tinctures or some regularly chew a piece of dried root.

Ginseng for export is traditionally selected according to age, colour, texture, shape, moisture content, freedom from visual defects and size (big is not always better). This is changing somewhat, especially for the North America market where the consumer is more interested in chemistry, thus the new 'guaranteed potency' products.

Probably the most effective way to consume ginseng

is by slowly chewing and dissolving a piece of root in your mouth. You really need to like the taste to do this but for overall value there is no equal.

The next best way to consume ginseng is by capsule. The root is ground, put into a gelatin capsule and is readily available in the stomach as soon as the capsule dissolves. This method circumvents the mouth so no initial absorption takes place there. There is also a tablet form and a chewable tablet but the taste is a factor in the latter. Look for a whole root product.

Tea, if you like the taste, has some of the chemistry dissolved into the hot water which is instantly available in the mouth and throat. To get the full effect of the whole root product you must eat the contents of the tea bag at the end of your tea time. One 2 gm tea bag will make at least two cups of tea. There is an instant tea product available but this only gives you chemistry with added carriers and/or sweeteners, not a whole ginseng product.

Tinctures are suitable if you require chemistry but they contain no root mass for the synergistic effect mentioned earlier. There are some good tinctures on the market and they make a good 'instant' tea. You can add sweeteners if desired.

Ginseng can also be bought in slices for cooking although not popular in this form beyond Asian communities. Recipes are becoming available for using ginseng, some are quite good and add a different flavour to salads for example (when used fresh).

## Why Ginseng is Used

The aphrodisiac question must be addressed. Users and practitioners will say 'if you are healthier because you consume ginseng you probably are sexier' but this is not necessarily so. Bluntly, ginseng is not an aphrodisiac.

Probably the most common usage of ginseng today in North America is for the stress of everyday life. Stress causes the body to release extra hormones and the claim is that ginseng helps to control the systems that produce these hormones thus helping to alleviate at least some of the stress factor.

**Note:** With the following list, no recommendations or guarantees are implied. Ginseng has no known side effects when used at recommended rates. If nothing else, it has food value in the carbohydrates and protein alone, albeit from an expensive source.

As an 'Elixir of Life' ginseng is said to act as an adaptogen to (not in order of importance):

- " reduce stress
- " enhance blood flow
- " help control blood sugar
- " help control cholesterol levels
- " help regulate blood pressure
- " strengthens the metabolism
- " stimulate the immune system
- " vitalise glandular functions
- " slow degeneration of cells
- " increase longevity
- " act as an antioxidant
- " increase memory
- " increase endurance
- " help with radiation damage
- " benefit insomnia and sleep disturbance
- " inhibit blood coagulation
- " increase overall vitality
- " help body function optimally
- " improve vision and hearing
- " strengthen nervous system
- " be used in treatment of impotence
- " be used in menstrual disorders
- " benefit menopausal stages
- " benefit females with removed ovaries
- " work as a general stimulant
- " aid in convalescence from surgery and diseases
- " help to remove toxins from the body
- " harmonise and adjusts body functions
- " increase concentration

#### **Conclusion**

Having listed all the above, one source of information suggested ginseng was the single and most useful tonic available! If it did all the above it certainly would be. On the other hand it has been used for over 3,000 years in China and as one older gentleman from Hong Kong related "I use it because it works". It would be expected that ginseng would affect everyone in some way to improve their "chi" which translated from Chinese means 'vital energy'.

If you decide to take ginseng, choose a high-quality product and take it for a minimum of 90 days. If you don't feel better even in some subtle way then it may not be for you.

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#### **References:**

- Facts About Ginseng, the elixir of life, by Florence C. Lee. Hollympub
- Ginseng Production guide for Commercial Growers,
  B.C. Ministry of Agriculture and Food, and The
  Associated Ginseng Growers of BC, 1998.
- 3. Proceedings from IGC'94, The Challenges of the 21st Century, Bailey, Whitehead, proctor and Kyle editors
- 4. Ginseng a Concise Handbook, James A. Duke, 1989, Reference Publications Inc.
- 5. The Ginsengs...A Users Guide, Christopher Hobbs, Botanica press
- 6. Asian and American Ginseng—A Review, Dr. Thomas S.C. Li, Agriculture and Agri-Food Canada
- 7. Planetary Herbology, Michael Tierra, Lotus Press
- 8. Next Generation Herbal Medicine, Daniel B. Mowrey, Keats pub.
- 9. Various articles in papers, publications and discussions with individuals in the "world of ginseng"

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