Kakegawa, Green Tea Producing Center of the World with Pride

Green tea farmers' handwork to produce better tea is awarded the top class green tea in the world. Kakegawa is extremely valuable farming area where coexistence of agricultural activities and dynamic biodiversity are preserved.



Globally Important Agricultural Heritage Systems Traditional Tea-grass Integrated System in Shizuoka (Chagusaba)

Chagusaba Farming Method is a traditional agricultural technique in this area. It maintains grasslands around tea fields to supply mulch and improve the quality of tea. Green tea farmers cut the grass in late autumn. Then they dry and cut them to cast in between the tea bush farrows. This time and labor consuming process is added to regular green tea farming to produce high quality green tea leaves. The decreasing number of plant species in Japan such as Sasayuri (Lilium Japonicum) and Kawaranadeshiko (Dianthus Superbus) grow in this area. You can also find many animals and insects including grasshoppers called Kakegawa fukibatta which are indigenous species in Shizuoka. This farming method has preserved the coexistence of agricultural activities and biodiversity. *Chagusaba Farming Method in Shizuoka was designated as Globally Important Agricultural Heritage System(GIAHS) in 2013.



GIAHS

GIAHS is the acronym of the official term, Globally Important Agricultural Heritage Systems, a program established in 2002 with the purpose of conserving and sustaining traditional agricultures and cultures as well as landscapes that are in decline due to the effects of globalization, deterioration of the environment, and increasing populations. The Food and Agriculture Organization of the United Nations (FAO), an international organization aiming at ensuring food safety, established GIAHS with the purpose of passing down to future generations not only globally important agricultures and land usage, but also cultural elements related to agriculture, including ecology systems, landscapes, customs, and traditional cultures.





Agricultural Heritage System Fraditional Tea-grass Integrated



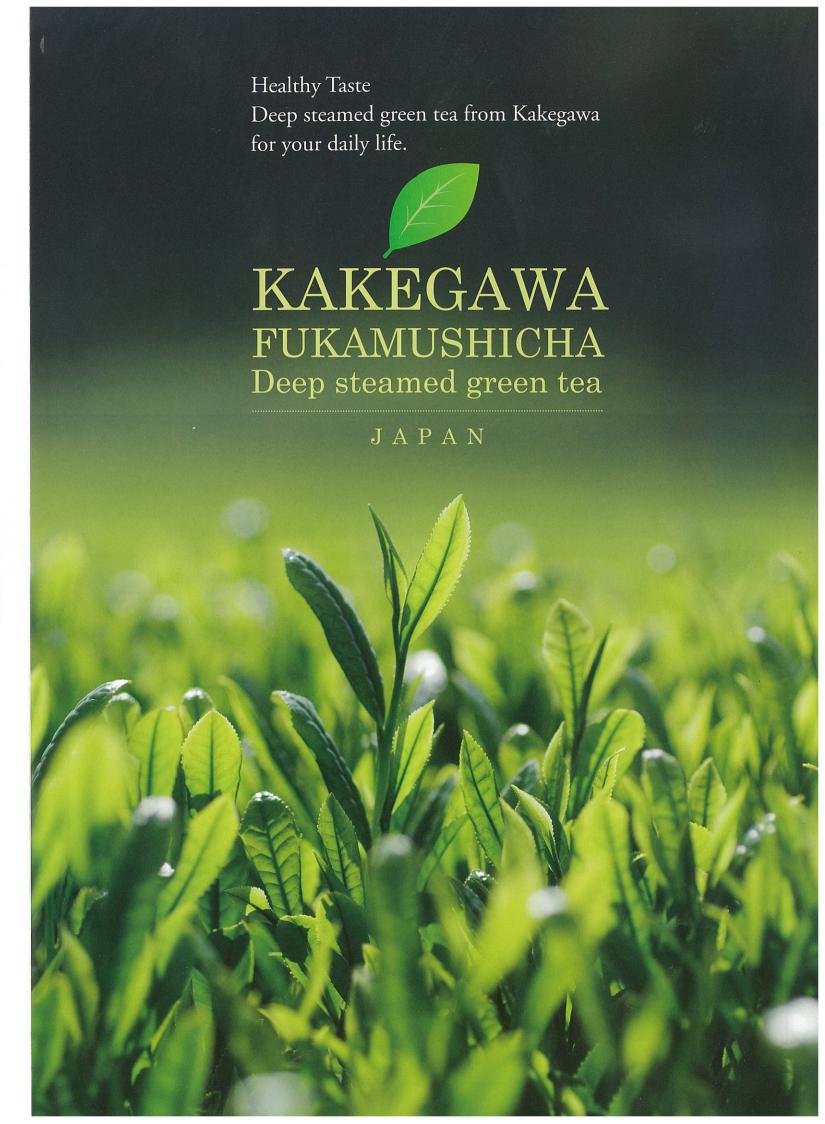


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Daily life with Kakegawa green tea.

Kakegawa city is one of the top green tea producing centers in Japan where the climate is perfect for growing green tea and nature is abundant. You can enjoy the deep green color and natural sweet taste.

After being basked fully in the sun while growing, tea leaves are steamed

for a longer period than the typical green tea during manufacturing Fukamushicha.

This extra steaming breaks down the fibers furthermore resulting

to easily extract ingredients such as beta-carotene, vitamin E, Chlorophyll in addition to catechin and theanine.

They are known to have preventive effects on lifestyle-related diseases

Include Kakegawa deep steamed green tea in your daily meals for your healthy long life just like people in Kakegawa.

Kakegawa rates the lowest percentage of death by cancer among cities

with population more than 100 thousand in Japan. The city spends 20% less

than national average on medical expense for elderly people. People in Kakegawa die

of heart disease 15 % less than Shizuoka prefectural average,

and 30% less on cerebrovascular diseases.

Hereference: Special Hepotr on Demographic Statistics of Ministry of Welfare and Report by Cancer Policy Information Center of Japan Health and Global Policy Institute

*Reference: Kakegawa Study (June, 2009 - March 2012, Commissioned project by Kakegawa city from the Ministry o Agriculture, Forestry and Fisheries)



Classification of green tea and their characteristics

by method Sencha Common green tea which the leaves are steamed in the regular way.





Konacha

by cultivation and processing method



Gyokuro • Kabusecha





Matcha (Tencha) Powdered green tea from the tea plant shaded from the



by the harvesting time Bancha



coarse leaves harvested



by form or part of the leaves





Kukicha



Orange-crimson colored

completely fermented

by processing method



Steamed (Japanese method)

Hojicha

Aromatic green strong fire.

Genmaicha Green tea with

Explained above is general classification and introduction of each There are more kinds of tea and different ways of explanation according to variety, origin of the products. harvesting time, processing method. form of the leaves, and etc. ...



(iln-dried tea (Chinese tea)





Oolong tea





(oxidized by enzyme)

Ingredients and Physiological Effects of Green Tea

Explanation of the Ingredients and Physiological Effect of Green Tea

Insoluble Components 70~80%

- Dietary fiber (30~40%)
- ⇒Prevent constipation, colon cancer, heart diseases
- Protein (glutelin) (24%)
- Beta-Carotene (13~29mg%)
- Provitamin A Antioxidant Anticancer Help prevent heart disease, cataract, and etc. Reinforce immunocompetence

Soluble Components 20~30%

- Catechin-type (10~18%)
- Antioxidant Antimutation Anticancer Inhibit blood cholesterol to rise. Inhibit blood pressure to rise
- Compound Tannin (0.4%)
- Antioxidant Anticancer
- Flavonoid (0.6~0.7%)
- Strengthen vessel wall Antioxidant Anticancer Prevent coronary-artery disease Deodorization etc.
- Caffeine (3~4%)
- Stimulate central nervous system Prevent sleepiness
- Conjugated Polysaccharide (0.6%) ⇒Inhibit blood pressure to rise
- Vitamin C(150~250mg%)
- Anti-scurvy Antioxidant Inhibit production of nitrosamines Anticancer Prevent cold Antiallergic Reinforce immune system

- Vitamin E(25~70mg%)
- Antioxidant Suppress production of nitrosamine Anticancer Help prevent diabetes, heart disease, cataract, and etc. Reinforce immunocompetence
- Chlorophyll (0.6~1.0%)
- ⇒Prevent cancer Antimutation Antiulcer
- Minerals (insoluble) (2~3%)
- Vitamin B2(1.4mg%)
- ⇒Prevent angular stomatitis Antioxidant
- Theanine $(0.6 \sim 2\%)$
- >Hypotension Coordinate brain and neurological function
- Gamma-Aminobutyric Acid $(Gaba)(0.1\sim0.2\%)$
- ⇒Hypotension Inhibitory neurotransmitter
- Saponin (0.1%)
- Anti-asthma Anti-bacterial Hypotension
- Aromatic Components (1~2mg%) ⇒Aromatherapeutic effect
- Dietary fiber (Pectin) (soluable) (3~6%) ⇒Promote bile acid excretion Lower blood cholesterol
- Minerals (3~4%)
- ⇒Fluorine: prevent tooth decay Zinc, manganese, copper and selenium: Antioxidant Anticancer

Functionality of Green Tea

Introduction of functionality of green tea researched and announced medically.

- Effective to prevent cancer.
- Green tea catechin suppresses growth of carcinogenic substances very effectively in human cells.
- Prevent arteriosclerosis and stroke. Promote hypotension.
- Green tea provides inhibitory action for substances rising in blood. Green tea promotes enhancing the rate of HDL known as a good cholesterol and prevents arteriosclerosis. Green tea that contains high rate of gamma-aminobutyric acid promotes hypotension.(Proven by Kakegawa Study)*
- Lower blood glucose level. Polysaccharide helps to prevent diabetes.
- Prevent teeth decay. Restrain breath odor. Catechin and fluorine help to prevent teeth decay. Flavone helps to restrain breath odor.
- Prevent food poisoning. Sterilizing power of green tea is effective against



- Improve intellectual activity and exercise capacity.
- Caffeine stimulates central nerves in cerebrum and improves intellectual activity and exercise capacity. Also caffein is known to provide cardiotonic action, diuretic effect and spiritually calming effect.
- Prevent aging.
- Green tea can suppress production of free radicals and lipid peroxide in our bodies and prevent aging. Green tea is more effective than vitamin E and can strongly suppress mutation and have anti-oxidative effect.
- Beauty and Heath.
- Vitamin C in green tea is relatively resistant to heat and can preserve for a long time. Taking abundant vitamin C increases resistance against infection of viruses and is effective to prevent many kinds of sicknesses. Vitamin C also works to build skin elasticity and helps to retain moisture in skin. It also prevents forming melanin pigment which creates blotchy complexion.
- Calories and Abundant Minerals. Green tea is high in alkalinity and has many kinds of minerals to prevent acidification of our bodies. Green tea has no calories.