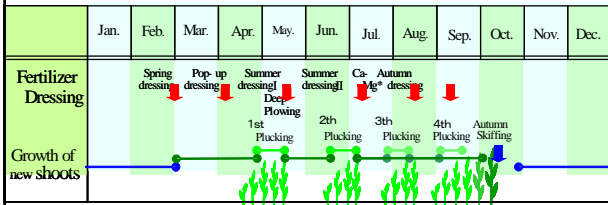


Cultivation of Japanese Green Tea



Time of fertilizer application in Shizuoka Prefecture



Plucking Methods of New Shoots



Hand plucking



Hand-shear plucking

Plucking efficiency	
Methods	The amount of new shoots per day per person
Hand plucking	10 ~ 15 kg
Hand-shear plucking	100 ~ 200
Mechanical plucking	
Portable machine for two persons	700 ~ 1,000
Riding machine	4,000 ~ 5,000
Self-rail-tracking machine	2,000 ~ 3,000



Portable machine for two persons

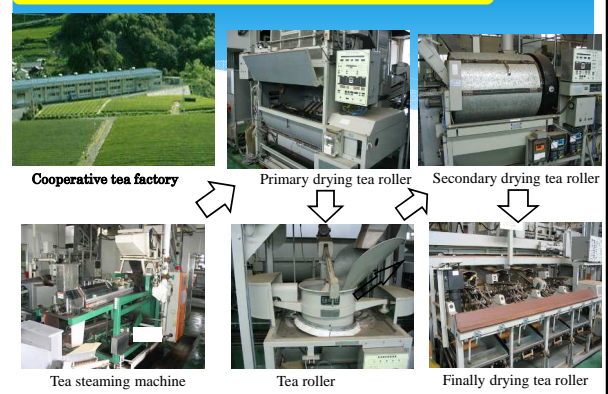


Riding-type plucking machine

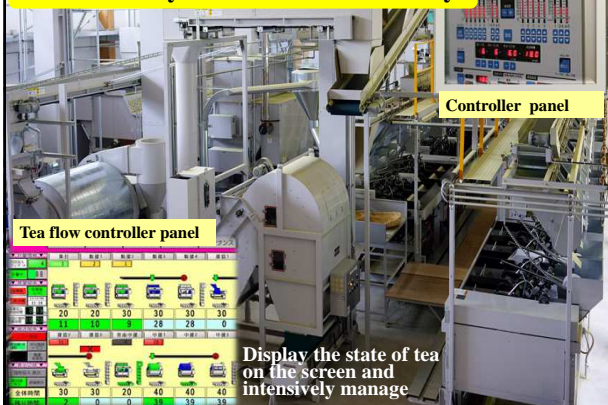
Recently it is often Plucked up by Machine



Making Process of Japanese Green Tea

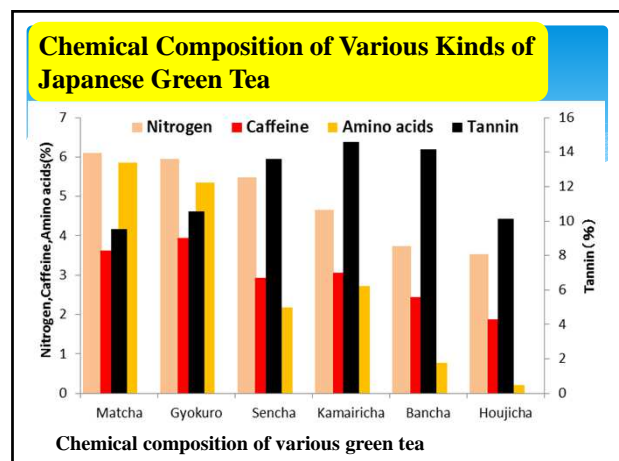
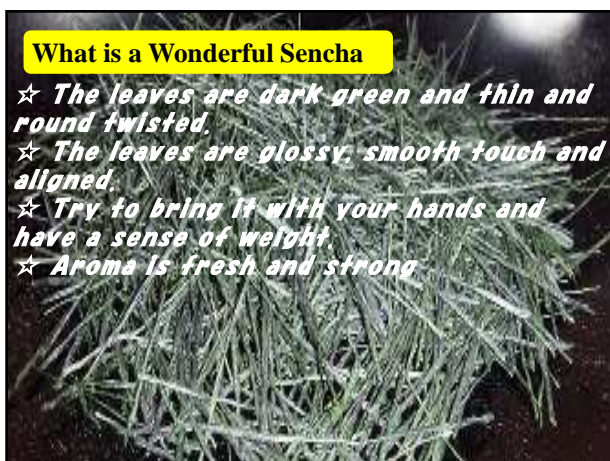
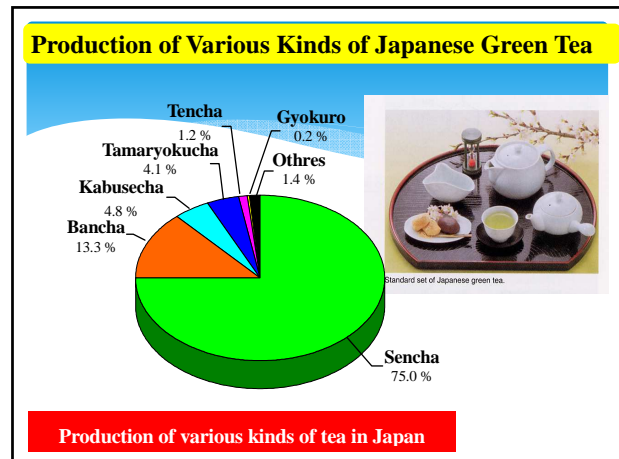
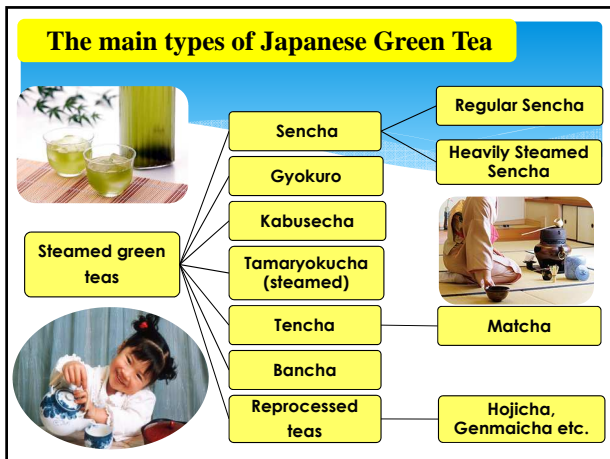


Automatically Controlled Tea Factory



Refining Process is Important for Japanese Green Tea





Major Components of Tea and its Taste



The major component and the taste of tea

Amino Acids	Theanine	Sweet, Umami
	Gultamic acid	Umami, acidity
Catechins	Epicatechin	Bitter
	Epigallocatechin	Bitter
	Epicatechin gallate	Astringent, Bitter
	Epigallo catechin gallate	Astringent, Bitter
	Caffeine	Bitter

Storage Method is Important for Japanese Green Tea

Oxidation progresses due to inappropriate storage, color turns reddish



Fresh Japanese green tea

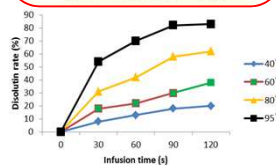
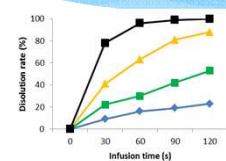
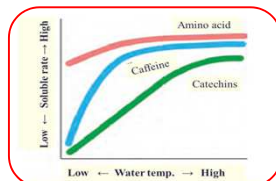
Light, temperature, humidity, oxygen are enemies for storage.

So, it is important to subdivide every 10 days and use it.

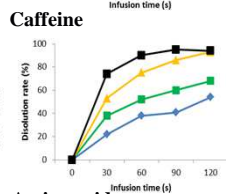


Bad storage Japanese green tea

The Soluble rate of Chemical Components in Different Water Temp.



Tannin (Catechine)



Amino acids

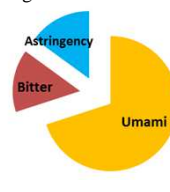
Changes the Taste by the Ifusion Temperature

Japanese tea can change the taste by the temperature of hot water

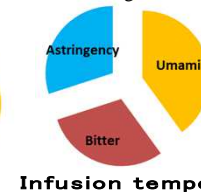
When tea with strong umami is good

When tea with a well-balanced between umami and refreshing

When refreshing feeling strong tea is good

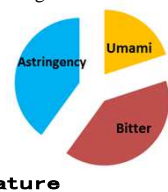


Low 50°C



Infusion temperature

Moderate 70°C



High 90°C

How to Brew Japanese Green Tea ?

Sencha (Gyokuro)

1

Cool down by pouring the boiled water into tea cups. (About 5 °C is cooled by this method)



2

Place the tea leaves into the tea pot. 6-10 g for 3-5 people



3

Pour the cooled down water into the tea pot. Water temp. 70-90 °C. Steeping time 60-120 sec.



4

Serve equally into each tea cup until the final drop is poured. Serving temp. 50-65 °C



How to Brew Japanese Green Tea ?

Bancha, Houjicha

1

Place the tea leaves into the tea pot. About 15 g for 5 people



2

Pour the proper quantity of boiled water and leave it steeping for about 30 sec. Be sure to use boiled water.



3

Serve into each tea cup equally until the final drop is poured. Serving temp. 75 °C

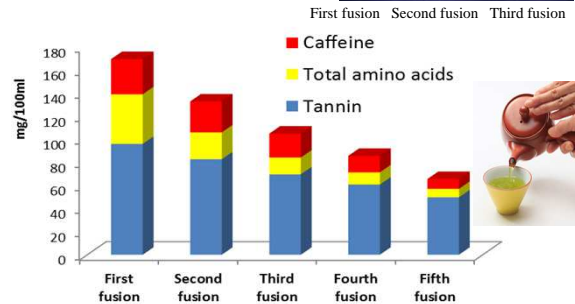
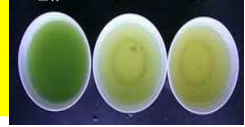


Standard Brewing Method for Japanese Green Tea



		Number of persons served	Volume of teacup	Volume of tea	Temperaure of hot water	Volume of hot water	Infusion time
		persons	ml	g	°C	ml	seconds
Gyokuro	High grade	3	40	10	50	60	150
	Middle grad	3	40	10	60	60	120
Sencha	High grade	3	100	6	70	170	120
	Middle grad	5	150	10	90	430	60
Houjicha		5	240	15	100	650	30
Bancha		5	240	15	100	650	30

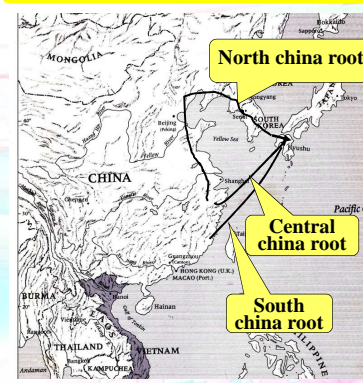
Changes in the Fractionation Components of Japanese Green Tea during Fusion



Excellent Character of Japanese Green Tea

1. Have a long history
2. Culturally rich
3. Superior cultivar
4. Beautiful tea field
5. High technology
6. Steaming method
7. Tea look a needle
8. Color is green
9. Umami is strong
10. V.C content is high
11. Good for the body
12. Matcha is super

1. The Introduction of Tea into Japan



North-china root
North china⇒ Korea⇒ Japan
Oldest root (about A.D.600)

Central china root
Introduction of the cake tea, powder tea (About A.D.1100)

South china root
Introduce of pour tea (About A.D.1600)

2. Establishment of Tea Ceremony "Chanoyu / Sado"

Peace of the world from one bowl

The Book of Tea



Chanoyu is often called a multiple art. Exquisite traditional arts and craft such as tea bowls, hanging scrolls, flowers, tea room and garden are all essential parts of the ceremony



Spirits of "Chanoyu / Sado"

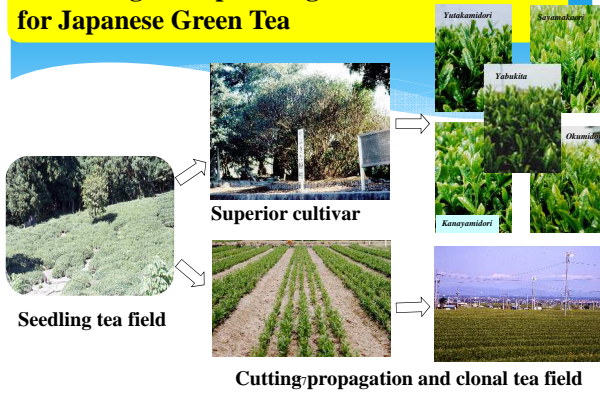
In chanoyu, through exchanges of hospitality and appreciation, the host and guests can share a quite, heartwarming, peaceful time and reach a state of spiritual enlightenment so called Wa-Kei-Sei-Jyaku.



Wa-Kei-Sei-Jyaku (和敬清寂)
"Wa" : open each other's heart.
"Kei" : respect each other.
"Sei" : purify your surrounding and your spirit.
"Jyaku" : maintain a spirit of quietness



3. Breeding and Spreading Cultivar Suitable for Japanese Green Tea



4. Beautiful Tea Fields Blended into Life



5. High-yield and Quality Tea Field by High Technology



6. The Only Steaming Process in the World

The oxidizing enzymes contained in the fresh leaves are stopped by the steam-heat. By steaming the leaves it becomes the aroma and taste exceptional to Japanese tea.



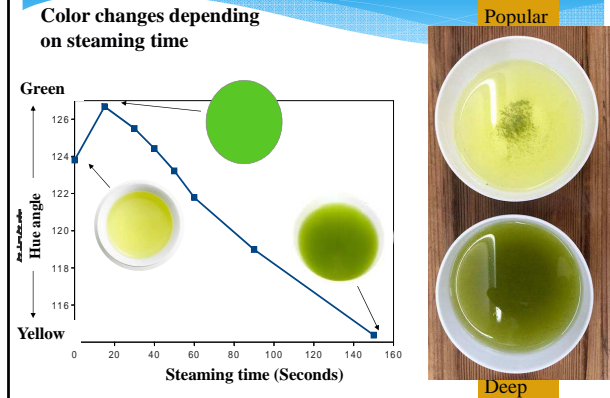
7. Japanese Green Tea is a Sharp tea like a Needle

Needle type tea can only be done by steaming



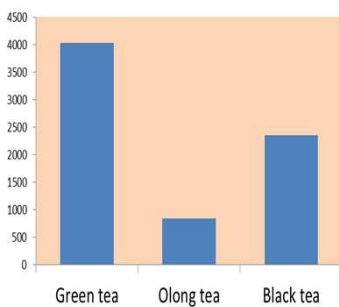
8. Japanese Green Tea Infusion is Green Color

Color changes depending on steaming time



9. Japanese Green Tea has a High Amino acid

mg/100g

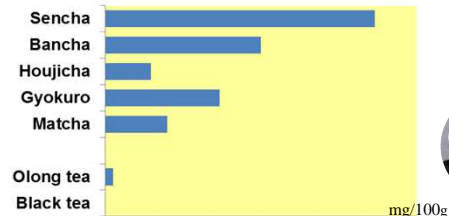


Japanese green tea have a strong umami

Amino acid contents of various kinds of tea

10. Japanese Green Tea Contains a High Amount of Vitamin C

The level of vitamin C which has been shown to prevent scurvy and the common cold, is decreased during the fermentation stage.



50mg/100g



6mg/cup

Vitamin C content of various tea

11. A Research on the Functionality of Green Tea is Initiated from Japan

Green Tea Components	Contents	Functions
Catechins	10~18%	Anti-oxidative, radioprotective, Anti-mutagenic, Anti-tumor, Enzyme inhibitory, Anti-hypercholesterolemic, Anti-hyperglycemic, Fat reducing, Anti-hypertensive, Anti-ulcer, Anti-bacterial etc.
Caffeine	3~4%	Removal of fatigue, Sleepy feeling, Diuretic etc.
Vitamin C	150~250mg%	Removal of stress, Cold prevention
Vitamin B	1.4mg%	Excitometabolic action of carbohydrates and amino acids
Vitamin E	25~70mg%	Anti oxidative, Aging prevention
γ amino butyric acid	0.1~0.2%	Anti hypertensive
Flavonoids	0.6~0.7%	Halitosis prevention
Theanine	0.6~2%	Anti hypertensive

12. Matcha is Super Food



Matcha.

It is possible to consume vitamin A (beta carotene), vitamin E (tocopherol), dietary fiber etc which can not be ingested with tea brewed in teapot.



☆Matcha is delicious

☆When brewed with teapot, about 40% of catechin remains in the tea shell, in Matcha all can be ingested.

☆Green color of matcha is beautiful. It is also used for sweets such as cakes and foods.

Cultivation of Tencha (Matcha)



Matcha

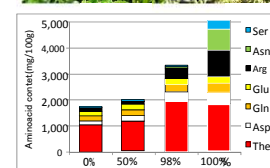
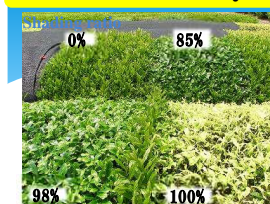


Direct covering by shading

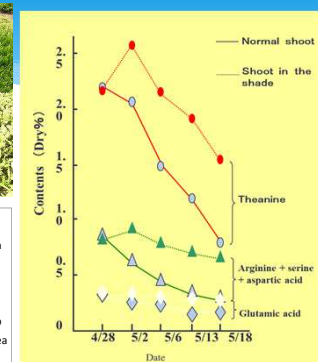


Matcha
Tencha, which are known as the finest tea in Japan, is made from the leaves grown under the ceiling-shelf covering.

Umami increases by Covering Culture



Influence of difference in shading ratio on amino acid content



Changes in theanine content by shading cultivation

