

MATCHA: YUNOMI EXPERIENCE

1. How do producers process matcha? How do they get from leaves to powder?

Cultivation: leaves used for quality matcha are fertilized more heavily for stronger flavor, lower quality fertilizer less. Synthetic fertilizers result in stronger flavor which is why they say organic matcha is not as good as conventional matcha. This occurs several months before harvest allowing the plant to take in the nutrients to grow leaves.

Higher quality matcha is grown on leaves that are handpicked so that requires canopy shading. The highest quality uses natural material, generally straw and reeds on bamboo scaffolding. You can also use plastic shading material. If the material covers the plants directly (which is easiest) then machine harvesting is generally used and that lowers quality a little.

The main difference with other green teas is that the leaf is shaded 30-40 days for higher quality less for lower quality (which also means leaf grown for kabusecha (shaded two weeks) and gyokuro (shaded 3 weeks) could theoretically be used)

The processing is the main difference between other shaded leaves (kabusecha and gyokuro). For matcha you steam and dry the leaf without rolling. This means the cell membranes are non broken down as you would in rolling the leaf and results in matcha' unique flavors. This non-rolled leaf is called Tencha. The drying requires special drying equipment, a "Tencha oven" and since matcha is so popular, actually there is a technique to produce a leaf (mogacha) using light rolling. This leaf can be ground into a powder that tastes like lower grade matcha. Since there is no definition of matcha officially, many companies use this method to produce cheap matcha for industrial use from mogacha instead of Tencha.

All of this happens at the farm / farm's processing factories (or communal factories used by farms in a region).

The next step is refinement of the dry leaf (pre-refined leaf is called aracha or "rough leaf"). In this step the aracha Tencha or rough Tencha is defined by removing leaf stems and veins, leaf dust and chopping the leaf into small bits (around 5 mm in size) so that they can be ground up more easily.

This can happen at a refinement factory, which is often a production side wholesaler.

Finally the Tencha is ground into matcha at a matcha grinding factory. Traditional method uses a electric operated stone mill that is around 30kg (as opposed to the hand operated stone mills we sell which is 10kg). The heavy weight of commercial stone mills, the consistency of the automatic grinding, of course temperature and humidity controlled environments contribute to high quality.

The other methods involve pulverization in large quantities. Ball mill grinding is most common but jet air pulverization is also used. In these cases a lot of heat from friction builds up and that destroys the aroma of the matcha. Certain tricks in operating this type of machine can allow a producer to also produced high quality matcha in large volumes for low prices but those techniques are secret ;)

The most important thing is to grind the matcha right before sale. So the inventory is kept as Tencha until ordered. Tencha can also be aged a few months to allow the bitterness to degrade producing a higher quality (sweeter) matcha.

Each of the three factories above can be operated by three different companies or by the same company or any combination. So in the longest supply chain you could have a farmer, a processing factory, refinement factory, matcha grinding factory, brokers between each factory, and finally the retail brand that is actually selling the matcha. In the shortest chain a farm will have all the equipment necessary but that is quite rare.

2. What kind of problems or diseases could occur in tea gardens or during matcha processing?

Lots...diseases, insect infestation (particularly for highly fertilized leaves which are delicious!), and during processing humidity is often the biggest problem.

3. Do producers need a specific cultivar?

You don't need a specific cultivar but cultivars that have more umami like Uji Midori, goopy, Okumidori are favored.

4. What are the main differences between cooking matcha and different qualities of matcha?

There are no grading in Japan like ceremony, latte, cooking...matcha is generally graded by price in Japan. Retail brands then decide how they want to sell it and label it for a certain purpose. Unfortunately since this is arbitrary you get a lot of companies using cheap matcha and selling it at high quality price points.

In general, a fine grain is appropriate for drinking straight. High quality should have a high strength of flavor and strong aroma, and should be a deep and bright green color. The flavor itself is generally very strong in umami but depending on taste preference may have little bitterness or very strong bitterness.

For lower quality matcha the umami flavor is weak but a strong bitterness is better because it helps the matcha flavor stand out against other flavors like milk, sugar, chocolate, etc.

5. How can we understand if the matcha we are buying is good or not?

Color is the most obvious indicator. If you have a chance to taste, it should have strong aroma and umami flavor and should not taste grainy. If you see matcha "smoke" as a merchant opens a bag, that is an indicator that the grains are so fine they will float into the air (makes packing really difficult too).

6. How do you prepared your cup of matcha? What mistakes can we make at home?

I like to prep it by mixing a little bit of hot water into the matcha and making it into a paste first. A bamboo whisk helps a lot in this case. Proper tea ceremony techniques often say that it is inappropriate to touch the side of the bowl with the whisk, but you end up not smashing all the clumps (tea ceremony can be thought of as a form of interactive meditation between host and guest so the main purpose is not to create a perfect cup of matcha...or you might say that an imperfect cup is perfect...anyway a conversation for another time).