

## Excellent Wisdom of the Westerners: Coffee and Cocoa Reduce the Body That has been Oxidized Through Eating Meat

Coffee is a representative beverage that will make the quality of saliva better. The saliva measurement after the consumption of coffee shows a very high reductive level. In the western countries, especially in Europe, there is a custom of having coffee or tea after every meal.

Meat eating diet has a tendency for our body to become oxidized. So, it makes sense to drink coffee after a meal. On the average, the value of saliva measurement decreases minus 30mV by drinking coffee.

Among the patients that come to my clinic, when a patient who isn't supposed to have much healthy body condition, comes to the clinic after consuming some coffee, the patient's saliva ORP will show 10~20mV range, which is lower than the average value, 40~50mV for adults. Also, coffee prevents bad breath, and helps digestion by stimulating the secretion of gastric acid, and it is believed to have other benefits as well.

There was a patient of mine, who was agonized by the pain from stomatitis. While he was in pain, he kept some black coffee inside the mouth for a while instead of drinking it and has experienced the pain subsided and felt the antioxidant action of the coffee polyphenol. To enjoy the aroma is one of the pleasures of drinking coffee but it is believed that in the aroma of the freshly brewed coffee, there are some components that have antioxidant action too. So, after you brewed a cup, don't wait too long and consume it before the oxidation start happening.

In order to make use of the reduction action of the coffee, it seems that it is better to drink it without sugar and milk. Excess consumption of sugar oxidizes blood and it is believed to be one of the causes that damage red blood cells and body cells.

Since white sugar virtually has no minerals contained, it will exhaust nutrients such as minerals and vitamin B1, and accelerates oxidation. We should by all means be careful not to have an unbalanced consumption of granulated brown sugar, granulated sugar, muscovado, honey and fructose that will turn into sugar content.

Milk also consumes enzymes of our body because it is fat. If we want the full benefit of coffee's rare reduction action, let's remember to enjoy it black without milk and sugar. If it's too strong, you can add hot water or water.

I keep a good stock of grounded coffee in my refrigerator all the time. When we choose coffee, let's choose the ones that use less agricultural chemicals and have good quality. I can guarantee that the body will always show a good healthy level reduction value when you drink coffee.

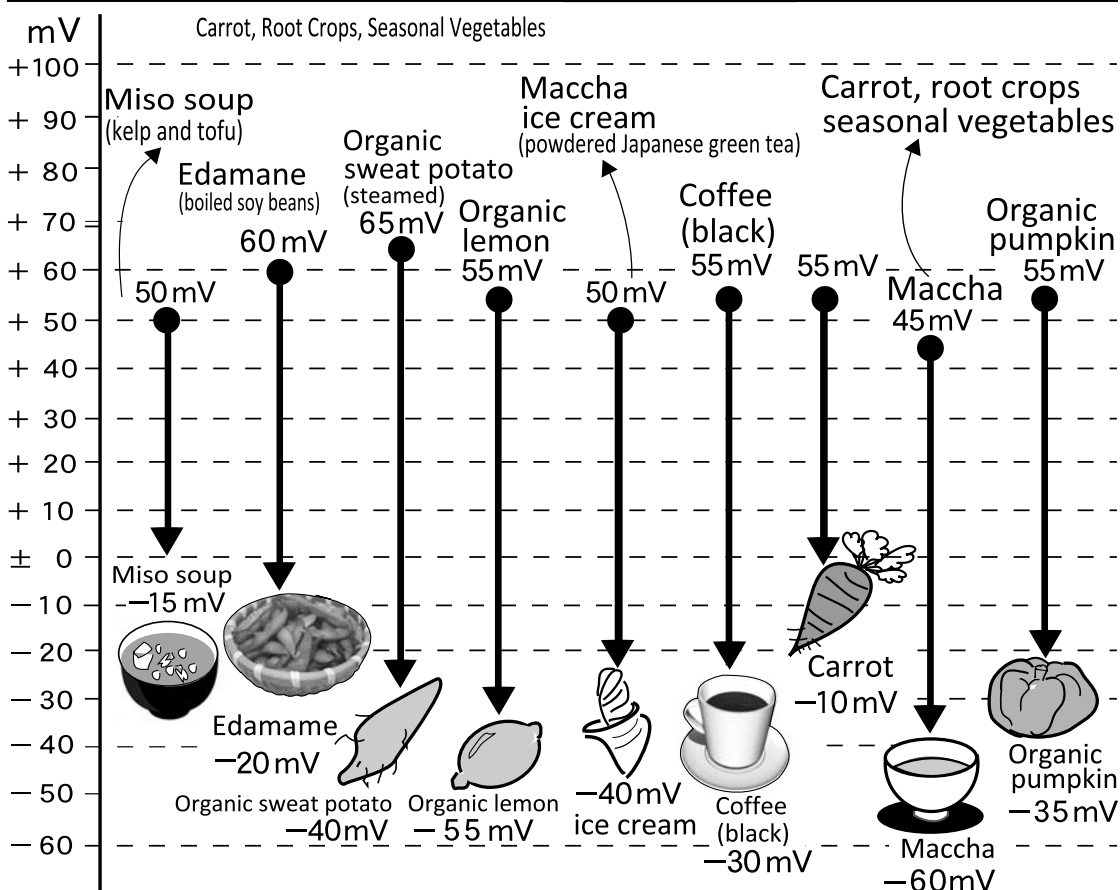
It isn't limited to coffee but I began to realized, as I continued with the research of saliva ORP values, that the customs of the world that have been passed on from long ago, for some reason, give reduction to the body. For an example, the combination of beer and *edamae* (boiled soy beans) is one. Beer, if we keep it to just one glass, will help us relax and the saliva will lead to the reduction side, but if we drink more than that, it will lean towards oxidation. However, when we eat *edamae* while we drink beer, the saliva will show reduction. Another example is green tea that is one of the typical beverages of Japan that gives us reduction.

\*[Graph 13] Saliva ORP Before and After of Consumption of Food and Beverage  
 (Publishing Source: from a visual presentation presented by Yoshitaka Otomo at the 9th General Assembly of Japanese Society of Anti-aging Medicine)

ORP of Before and After of Consumption of Food and Beverage  
 Measuring Consumption of Categories  
 Average ORP of 10 People From Each Category

(unit: mV)

Category	Before Eating	40 min. After Eating	Average Reduction (Towards Reduction)
Miso Soup (kelp and tofu)	50mV	-15mV	-65mV
Edamane (boiled soy beans)	60mV	-20mV	-80mV
Organic Sweet Potato Steamed	65mV	-40mV	-105mV
Organic Lemon (Produce of Japan)	55mV	-55mV	-110mV
Maccha Iced Tea and Ice Cream	50mV	-40mV	-90mV
Coffee (black)	55mV	-30mV	-85mV
Carrot, Root Crops, Seasonal Vegetables	55mV	-10mV	-65mV
Maccha Tea	45mV	-60mV	-105mV
Organic Pumpkin	55mV	-35mV	-90mV



Amazed by the Reduction Action of Sweet Potato

Many health methods that we hear about disapprove eating snacks between meals. It gives you an impression that not eating as much as you can is the key to health but holding back too much rather makes the saliva oxidative. So here is the number one recommendation I can give you when you feel like eating something sweet: dried sweet potato.

On one occasion, I was checking the saliva of the nurses that work in a hospital. What I found out was that the average value for all of them was rather good. I was surprised by it so I asked, "Did you eat or drink something? Then, they told me that they ate dried sweet potatoes during the break as snack.

The sundried sweet potato that has the skin of purple pigment is a natural food with high reductive action. It is an ideal snack that contains richly with vitamin B, vitamin C, vitamin E, and minerals such as potassium, and dietary fiber. Because it is slightly sweet and has a chewy texture, you'll be satisfied without eating a lot. And obviously, it has a very high reduction action.

There was a food shortage era during the wartime, and I believe that many people remember about eating a lot of sweet potatoes. I was one of them. I had sweet potato everyday in my lunch box. But, reaping the benefit of eating this high reductive food frequently, those who were able to survive the era are still healthy and have been contributing to the longevity of the Japanese people.

Konyo Aoki, who has endeavored to spread sweet potato during Edo era, probably knew already that this food has high reduction action. I am grateful for his contribution in spreading this vegetable to the world.

Additionally, foods such as dried shiitake mushroom that were dried as preserved food in general give high reduction action. The saliva also shows an amazing reductive value after eating dried fruit such as raisin too.

By the way, one of the reasons why, I think, the foods that have been dried with the ultraviolet ray of the natural sunlight in general have high reduction action is because of gravity.

It makes me think that when you hang something to dry, the reaction power that works against the earth gravity causes to add more sweetness and also causes saliva to have more reduction action.

The birds peck on the ripen persimmon and tree fruits but, we know that they would never eat the ones that went on the ground. Perhaps, the birds instinctively know that the fruits that fell on the ground don't have reduction action.

Previously mentioned, Mr. Yoshitaka Otomo had done an experiment using two most vulnerable types of fruits, cherry and peach. He placed the two fruits in different places. Some were put on the ground, some on the floor, some were placed about 1 meter from the floor, some were placed on the ceiling, and some were hanged. He checked how long the fruits in 5 different places lasted, and found that the fruits that were hanged the highest, that received the repulsion against the gravity the most, lasted the longest.

Dried bonito shavings and smoked meat, dried shiitake mushrooms, raisin and dried persimmon are all made by either hanging them or putting them in woven shelves, so that they will repulse against the gravity from the ground. Each time I find these phenomena as I study saliva, I cannot help but be amazed by the power and the greatness of the nature and earth.

## What is By Far the Best Tropical Fruit With the Highest Reduction Action?

Until now, I have been measuring, with the cooperation of others, to find what kind of food and beverage can improve the quality of saliva and lead the humans to health. As I was doing

that, I found some examples of food that showed by far the highest reduction action. They are tropical fruits, like mangoes and papayas.

When a person eats something that is considered to be good to our body, such as vegetables, although there are differences depending on the people, in the average, the values drop down 40~60mV to the reduction side from the previous value. However, after consumption of tropical fruits, the difference of the saliva before and after the consumption gets better, off by a digit. In the experiment with apple mango, it was minus175mV; with papaya, it was minus121mV; with avocado, it was minus 105mV; with watermelon, it was minus 80mV; with honeydew melon, it was minus 71mV and etc., all of them showed a high reductive value than the average.

Why do tropical fruits have such a remarkable reduction action compared to the fruits that were grown in the cooler environments? I think it is because the tropical fruits, which grow in the region with strong ultraviolet ray, need to have their own anti-oxidative potency in order to survive.

It's often said as a secret to health, that it is recommended to eat mainly from the products that were grown in the land that you were born and raised, but as far as the raising the quality of saliva is concerned, nothing can beat the tropical fruits.

Mango became a boom among young women, and although sweets are sold in various forms, choose one of the tropical fruits for snack because the body will have reduction. However, even it's good for your body, don't overeat. If you eat a lot, excess amount of enzymes are going to be used for digestion and it will generate reactive oxygen. And in rare cases these fruits may not match to some people depending on their body's constitution, so, if that's the case, since it doesn't mean that other fruits have low reduction action, you should try other fruits that are tasty to you.

## Good Water and Bad Water That Affect Health

Even in Japan, it has become quite normal to buy bottled water for drinking rather than drinking the tap water.

Speaking of PET bottle water, there are various types but when we choose, it is important to choose the one that taste good to you when you first drank it. If it tasted nasty, bitter, or if you've said, "What's this?" and felt negative about it, drinking it will always lean your saliva to oxidative side. When you force yourself to drink it just because it is said to be good for your health, it will work against you.

And when you dare to choose one, for Japanese people, who commonly believed to have a longer intestine than the western people, we prefer soft water because it has less stimulation and it goes well with the mild tasting Japanese cuisine.

The hard water takes time to be digested, and many of the water that claim to have different ingredients that are good for the body are not always what they say. Among these kinds of water, there is considerable number of water that the ingredients printed on the bottle wasn't in them originally but later added to them.

When you add something artificially, the total balance collapses and it will not give good influence to the body. Even though the ingredients that benefit health are said to be included in the water, let us be mindful to choose water that are not artificially manipulated.

Trying to lean excessively to the alkaline side or the water that has been treated artificially with electrolysis are the same. When you measure the condition of saliva after drinking this kind of water, you will have a stress burden on the body and the value will always be bad.

I think it is very important to choose one among the unprocessed natural water, and when you choose, purify the tip of your tongue and taste it because this is the part that is sensitive to the taste.

## Brewing of Rice Wine is Fastidious About the High Quality of Water and Raw Material

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Many times, even with the things that are said to be good or bad for the body, when the saliva measurements were taken, the results come out differently. One of those items is sake, Japanese rice wine. Since alcohol burdens the liver, we are told to consume it in moderation but sake, when consumed in proper quantity will make the saliva lean towards the reduction side. Then, what is good sake to drink ?

I can imagine that the people who love to drink sake want to know the answer, but the sake that were made fastidiously according to each type, with the right water and raw materials, and with great care, are pricey. However, if you feel that certain sake is delicious, and as long as you're drinking it little at a time savoring the taste, the body by no means oxidized.

Red wine shows an anti-oxidative action due to the polyphenol that is in the purple pigment, and whether it's sake or wine, it all depends on the materials that are used. If the maker paid attention to use organic materials that are free from agricultural chemicals, then the reduction action will be good.

In addition to that, in case of beer and whiskey, paying attention to the raw material is obviously an important factor, but as in the case of green tea in the PET bottles, there are big differences in the way the oxidation and reduction potential values result when we are dealing with things that are depended highly on water.

Incidentally, the standard right amount of consumption of alcohol, from the standpoint of oxidation and reduction: for beer is 1~2 cups; for red wine is 1~2 glasses; for Japanese rice wine is 360cc (12oz). It all depends on the individual but through the investigation and research of the saliva clinical study, and the saliva measurements that were taken before and after the consumption of alcoholic beverages indicate that they give the body a reductive condition when the consumption is appropriate.

In any event, smaller quantity will give reduction action but overdrinking consumes a large amount of body oxygen to burn and causes oxygen deficiency, and will make saliva oxidized, and cause hangovers.

Like other activities in life, if you drink alcohol out of obligation, or if you reluctantly drink the type of liquor that you don't like, the saliva will get oxidized. If you're going to have a drink, let it be the liquor that is tasteful to you, and have it with the friends that you can enjoy conversing with, along with some appetizers and food that have high reduction action.

Also, from long time ago in Japan, we say that *edamae* goes well with beer, and in Europe, they say that olive goes well with wine; these are the side dishes that makes a lot of sense because these combinations give the reduction of the body.

The vegetables that are garnished on the side of meat, and *wasabi* (horseradish) and pickled ginger root combination for sushi will also prevent us from oxidation.

We shouldn't think that they are only garnishes or just a side dish, please try to eat them all, and if drinking alcohol takes away the stress and gives you vitality for the next day, it could be better for you if you do it in moderation.

## Adequate Supply of Water Will Prevent Saliva From Oxidation

Beer and alcohol beverages are mostly water but since it has diuretic effect, unless you hydrate yourself after a drink, you will definitely become dehydrated and make the saliva oxidized.

Alcohol uses a large amount of body's oxygen for combustion, so the body will be oxygen deficient; dehydration and oxygen deficiency are the cause for oxidized saliva.

There are people who drink beer instead of water to ease the thirst while drinking whiskey but this is a terrible thing to do because even if the thirst might get quenched at that time, the body becomes more dehydrated and it goes into a bad cycle of drinking more beer that makes you more thirsty.

After you had a drink, let's not forget to hydrate yourself with not just one cup of water but with plenty of water.

Part of alcohol content will be discharged as urine and sweat but the rest will be broken down in liver: the breakdown process of alcohol is said to take about 16 hours.

The people with liver that has a weaker decomposition function have a tendency to get hangovers because they consume a lot of oxygen, so this is why adequate rehydration is very important.

When drinking alcohol, if you take fluid together, this can suppress the rise of the alcohol concentration in the blood and will prevent you from suddenly getting drunk, and because it also makes your stomach full, it can help you decrease the amount of alcohol.

Even if you don't drink liquor, by taking enough water, fluid will mix together with blood and accomplish a very important function to carry nutrients and oxygen to cells in every corner of our body including brain through capillaries.

The quality rehydration of rich blessings of nature from the standpoint of preventive medicine can dissolve the condition of thick blood and makes your body to have saliva that is in the reductive condition.

One of the reasons why elderly fall in the bathroom is believed to happen when the blood pressure changes drastically when there is a difference of temperature between the bathroom itself and the changing room, but more than that, it is actually the dehydration that happens from sweating a large amount when a person dips himself up to the neck for a long time in a tub with fairly hot water in it. This is very dangerous.

And because the body temperature is rising too, the blood vessels will be expanded and together with the decrease of blood quantity from dehydration, the blood will become thick and causes the blood pressure to rise. This will put an excessive stress on the heart and make the thick blood become partly concentrated and coagulated, and this creates thrombus that can cause the myocardial infarction when it reaches the heart.