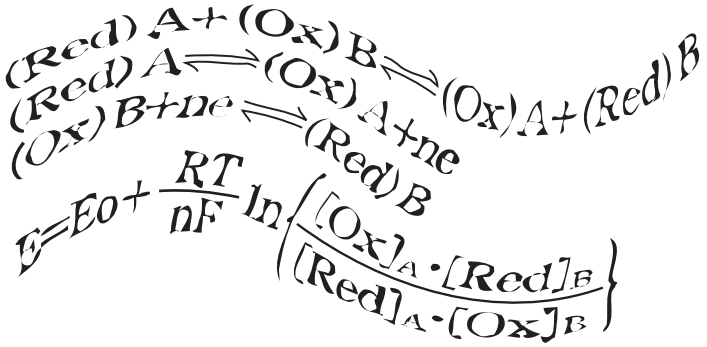
Heavenly Providence

Chapter 2

Reunited With My Research Theme



Saliva Measurement Gives Inference of Things to Come and Not the Result

From urine test, we can observe the result of the present condition of the body, but, from saliva testing, we can have the inference of the abnormal condition of the body that is to come in real time.

From this, I believe that the truths that are hidden in the saliva information can become the indicator of pre-disease management for the medical personnels and the general public.

You may not have realized this but our body secretes one liter to 1.5 liter of saliva everyday. This is said to be the same amount of urine that a healthy person would discharge per day. However, the saliva is not just "water" that helps us swallow food.

As a matter of fact, this saliva is actually building our human body, soul, and future.

99.5% of saliva is water but there are many other substances that are included in it.

It is said that saliva is made from the blood but its formation mechanism is complex, and it is loaded with the information that is in the blood that is circulating in the body.

(1) It is possible to know whether the body is a healthy one or if it's approaching diabetes by taking a measurement of saliva glucose level using a precision medical measuring device.

(2) If you examine the associated gene products of cancer, it is even possible to prognosis cancer in the early stages.

(3) By looking at the presence of the antibody, Helicobacter pylori, it is possible to make judgment on the possibility of stomach ulcer.

(4) For the conditions of Alzheimer's disease and dementia, it is possible to test the antibodies such as, immunoglobulin antibody and the antibody called anti-ALZAS.

(5) If a substance called cotinine shows up, you can tell that the person smokes tobacco, and by checking the ethanol, it is possible to determine the possibility of alcoholic dependency.

(6) It is even possible to know a person's psychological condition from the saliva. From the detection concentration of the immunoglobulin A antibody (s-lgA) and cortisol, it is possible to check how much of stress the subject is being exposed. There are medical devices that are developed for this purpose. This is done according to a special laboratory procedure done by the specialists.

(7) In the cases of emotional instability as it is evident with the people who have the tendency of social withdrawal, a biologically active substance called prostaglandin is tested.

However, the judgment by using these measuring devices can only be done by the medical specialists.

The saliva measurement device that I will be referring to in this book has a feature that makes it possible for the general pubic to use it and confirm their body's condition, and in turn gives the ability to respond promptly.

Even if you acquire a testing result of the specimen liquid from few hours ago or few days ago, since human body is changing every moment, there is no time to lose when you are dealing with nursing babies, elderlies, and critically ill patients.

After the intake of air, water and food in all kinds of situations and under all kinds of circumstances, and in different life styles, such as athletic and recreational, the ability to be able to confirm the oxidative condition of present condition of our body in real time is important although we're not able to specify the name of the disease.

With the measurement of saliva that we are going to mention in this book, it is possible to know the condition of our body in quantitative values. This present age is the age of digitization and visualization, which is to show it with data, results, etc.

Furthermore, the saliva has a 100% accuracy to anticipate the "future" of what will happen in our body.

The representative testing methods to find out about the health condition of the body besides blood test is the urine test. But, since urine is the liquid that has gone through the body, even though it is possible to speculate the result of what had happened in the body, it is difficult to use it to guess the possibility of becoming sick in the future.

And with saliva, it is not about the result of something that happened but it is about the ability to infer whether the food that was consumed about a minute ago is a good one that would bring our body into reductive condition or a bad one that would bring our body into oxidative condition.

We can grasp "the sign of an onset" at the pre-symptomatic stage that tells us what is going to happen to the body.

The reason, as I have mentioned before, is because the saliva is produced through the precious blood that carries the nutrition throughout the body to build up a human body.

We can understand many things from the saliva measurement.

Nursing Babies Don't Complain With Words

On one occasion, there was a mother who brought her baby to my clinic for vaccination. The baby didn't have any fever, and as far as I could see, the overall examination looked like there wasn't any problem, but when I took the saliva ORP measurement, it showed a high value of oxidation. So, I asked them to go home for that day.

Later, there was a call from the mother saying, "I'm glad my baby didn't take the immune shot. After I went home, my baby had a fever."

Also, for another example, there was a two months old baby that was crying very loudly in the waiting room, so I measured the baby's saliva ORP right away.

The reading had a high oxidative value for a baby; we were suspecting that the baby was hungry so we were waiting and see as the mother was breast-feeding, and very quickly, it showed a satisfactory reduction value. With this, I learned about the mechanism of how babies complain about their hunger by crying.

It wasn't just once or twice that I was able to anticipate bad health conditions from saliva.

Because of the relation with the enzymes content in saliva, the saliva's nature changes easily when it is in contact with the air. However, the saliva measurements are done easily by holding the cotton swab in the mouth.

For the babies that cannot communicate well, the samples can be acquired even from their drool, and for the people who are bedridden with speech impediment, this method makes it able to infer the physical condition of the body in real time, so pro-active measures can be taken.

When we felt that there's something wrong after testing the saliva, we have not failed with the prediction.

＊[Graph 2] Catching the Indications Before Fever Developed
Publishing Source: from Igaku-shoin Ltd. July 2009 issue; Paper Presentation by Dr. Mieko Okazawa, "Confirmation of Physical Wellness by Limiting the ORP Value of Saliva."

The saliva does not lie.
The saliva shows all the changes that happen in the human body.

Catching the Indications Before Fever Developed

Subject	Age	Sex	No Subjective Symptoms (2-3 days before) Body Temperature/ ORP (mV)	No Subjective Symptoms Body Temperature/ ORP (mV)	A Week after Recovery	Medical Condition-ICD Code
A	80	F	36.3℃/ +88	38.5℃/ +111	+61	J10-J00
B	36	M	36.2℃/ +60	37.4℃/ +60	+34	J10-J00
C	68	F	36.6℃/ +63	38.4℃/ +72	+37	J10-J00
D	22	F	36.2℃/ +67	37.8℃/ +74	+30	J10-J101
E	50	F	36.5℃/ +56	38.0℃/ +66	+39	J10-J00
F	60	M	36.7℃/ +53	38.2℃/ +78	+21	J10-J00
G	8	F	36.7℃/ +53	37.9℃/ +68	+37	J10-J00
H	88	M	36.2℃/ +66	38.0℃/ +85	+47	J10-J00
I	1	M	36.4℃/ +63	38.0℃/ +87	+27	J10-J00
J	52	F	36.0℃/ +77	39.0℃/ +101	+46	J10-J00
K	61	M	36.9℃/ +64	37.5℃/ +74	+51	J10-J00
L	56	M	36.6℃/ +59	38.2℃/ +81	+43	J10-J00
M	44	M	36.6℃/ +59	38.7℃/ +79	+45	J10-J00
N	51	M	36.0℃/ +63	38.9℃/ +73	+50	J10-J00
O	18	F	35.9℃/ +65	39.1℃/ +74	+31	J10-J00
P	9	M	35.0℃/ +78	37.7℃/ +85	+27	J10-J00
Q	7	F	36.6℃/ +80	37.4℃/ +88	+17	J10-J00
R	26	M	36.3℃/ +72	37.3℃/ +75	+35	J10-J00
S	77	F	36.8℃/ +66	38.0℃/ +70	+48	J10-J00
T	54	F	36.6℃/ +63	37.4℃/ +72	+44	J10-J00

Why Does the Oxidation/Reduction Potential of Saliva Draw Attention?

I am a physician that practice pediatrics and internal medicine in Yokohama City. For more than 18 years at the location, upon obtaining consent to agree to the purpose from the

patients that come to my clinic for ordinary cares, they have been cooperating with me so that I could continue with the clinical investigation and research of saliva.

Not all the people I have collected samples for the clinical trials had bad condition. Some were children who came to the clinic for health examination and vaccination and their mothers, and the elderlies who came for health examination and even the people who were well, and the total samples that I have collected for the clinical trials were over 8000.

The oxidation/reduction potential measurement device for saliva that I am using for investigation and research at my clinic is the only device that is approved by the Ministry of Health, Labor and Welfare as a medical device, to check and confirm the physical condition of the body exclusively for the human saliva.

I have been fortunate to be collaborating in investigation and research to develop this device, but this device has been used by many medical institutions and by ordinary people with high health consciousness.

The difference of oxidation and reduction of biological fluid (saliva and blood) is called oxidation/ reduction potential. The range of saliva oxidation and reduction value between negative 250mV to positive 250mV is measured.

I would like to talk about the oxidation/reduction potential of saliva, which is the main theme here. The scale to measure the strength of oxidation and reduction is called Oxidation Reduction Potential (ORP).

For all the things in the world, it is said that each thing has a characteristic oxidation and reduction potential; and we have come to know that the oxygen molecules have the strongest oxidizability and the hydrogen molecules have the strongest reducibility.

The oxidation of the body from the saliva measurement perspective is the cell damage. It means ill health and the rusting of the body, the factor for inflammation, overstrain, stress and aging.

Unlike the invasive blood collector, with this method, since the wellness can be measured from saliva, I can say that we have come to the era where the ordinary people can individually confirm the condition of their body.

In regards to the measurement of biological fluid oxidation/reduction potential, and in the case of saliva, it was formerly considered as impossible in the world of chemistry because it is easily affected by the buffering action when it is in contact with the air and hence falls in the unstable region.

The encounter with this saliva oxidation/reduction potential meter that cleared these problems made me able to continue with the investigation and research of saliva that I have desired for long time.

I have said to the developer that unless the oxidation/reduction potential meter, exclusive for measuring human saliva that can calculate up to 1,000th of 1mV, has the accuracy of plus or minus 5mV, I will not be able to take measurement of patient's saliva upon their consent because it cannot be used for clinical data.

I was concerned whether this device can measure oxidation/reduction potential of saliva because even getting a stable reading of water was difficult.

However, by the meter that has the repeatability of ±5mV of measuring saliva, we were able to calculate, from the 3,500 cases, the oxidation and reduction region based on the human saliva ORP quantitative limitations.

Easter Island Was the Origin of Idea: Oxidation/Reduction Potential Measurement Device

Recently, the Easter Island[4] in the South Pacific Ocean is frequently introduced even on TV and magazines. Ordinary people travel there of course, but recently, there are many couples traveling there for honeymoon. 30 years ago when it was rare for the Japanese to be visiting there, the developer of the oxidation/reduction potential measuring device travelled to the Easter Island for an adventurous trip to collect materials for his oil paintings and there he was led to recognize the importance of oxidation and reduction, which triggered the whole idea of the ORP project.

Actually Rapamycin, a compound that gives coronary artery restenoisis protective effect when the intravascular stents are used for treatments, such as angina pectoris and myocardial infarction, that was produced from Streptomyces hygroscopicus, a type of actinomycetes in the Streptomycetaceas family, was discovered by the Brazilian research team in 1965 from the soil of the Easter Island.

The name, Rapamycin was coined from a combination of Rapa Nui, Polynesian name of the island, and a suffix, "mycin" that means antibiotics derived from fungus. The known efficacies of Rapamycin besides immunosuppression are, namely, vascular smooth muscle cell proliferation inhibiting action and anticancer effect, and life extending effect.

As far as vascular smooth muscle cell proliferation inhibiting action is concerned, intravascular stents, that were combined with Rapamycin were manufactured for the purpose of coronary artery restenosis protective effect in the treatments of angina pectoris and myocardial infarction, are used for cardiac catheter.

＊4 – Easter Island became a territory of Chile in 1888. It is called Isla de Pascua in Spanish, and the people of the island call it Rapa Nui in the Polynesian language. Besides Rapa Nui, Te Pito O Te Henua, *the Navel of the World,* and Mata Ki Te Rangi, a romantic name, *Eyes Looking to the Sky,* are the names given to the island. Easter Island is a 5 hours flight from Santiago, the capital of Chile, and it is a triangular lone island in the South Pacific Ocean. It has an area of 175 square kilometers. On the island, you will find giant statues called, Moai. About 1,000 bodies that were produced and lay opened around the island. The largest of them is over 24 meters high and weighing more than 100 tons. The name, Moai, have an implied meaning of *"Living for the Future."* In May 2013, a Moai statue was presented to Minami Sanriku-Cho, Miyagi-Ken, Japan from the Republic of Chile as a symbol of Great East Japan Earthquake recovery. (Cited from Photo Collection of Yoshitaka Otomo)

＊[Graph 3] Discovering the Importance of Oxidation and Reduction on the Easter Island
(Publishing Source: 1993; from Photo Collection of Easter Island by Yoshitaka Otomo)