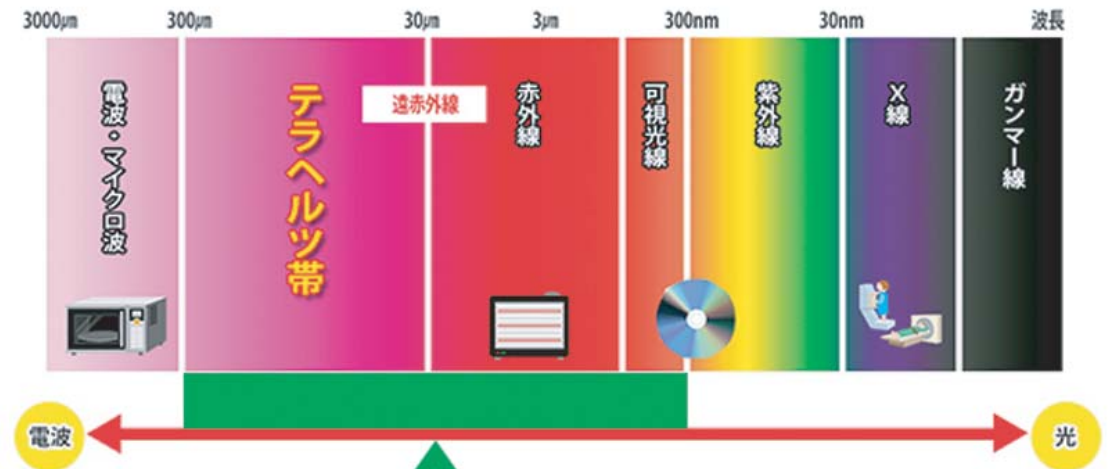


# Oxidation and Reduction Potential On TB-VCO Through Salvia ORP Meter

By Muneta and Otomo  
#155 Business Intelligence Seminar  
NOV.13, 2017

# TB—VCO

Terahertz is a unit of frequency.  
1 terahertz is 1 trillion vibration per second. In general, “Terahertz wave” Is an electro-magnetic wave having 0.1 THz to 100 THz. And it is between Radio waves and Light waves. This frequency zone includes Far Infrared Ray and Nurturing Ray.



Green zone is showing Terahertz zone.

by Hiroto Muneta

# Efficacy of TB Wave through Saliva ORP

## 1. General

Visualization of efficacy on TB Wave is a long term target. We have tried to visualize it through a simple ORP meter or Power logger or tester. But difficult to be trusted by any third party as a verification by a street inventor.

## Now it comes up.

We have got a very simple method to confirm the efficacy of TB Wave . It's method to measure the Oxidation / Reduction Potential of our Saliva. Just by seeing the Saliva RRP before / after using with / without TB wave products , the efficacy of TB Wave can be visualize through very accurate numerical data.

# Efficacy of TB Wave through Saliva ORP

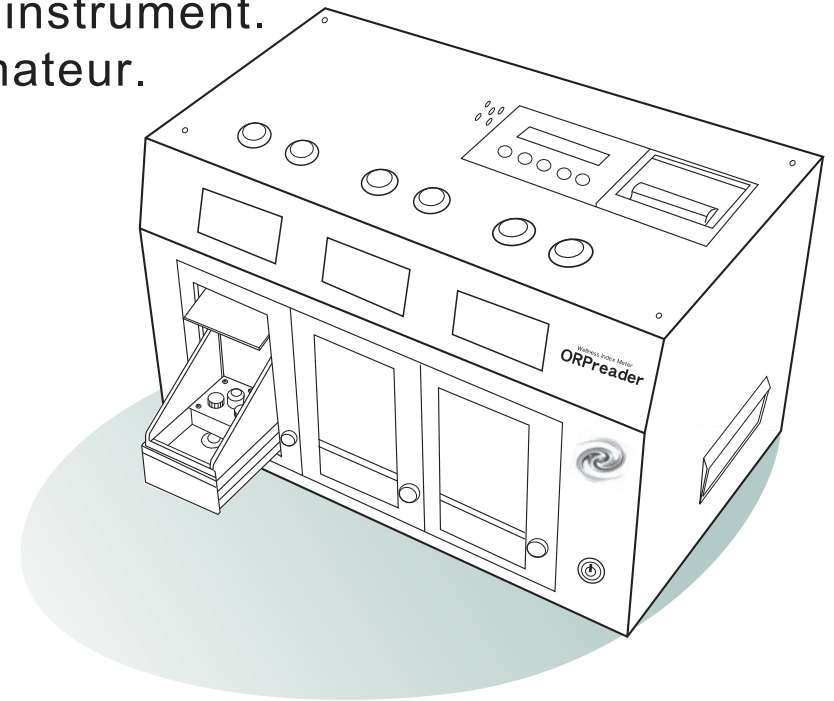
## 2. Monitoring device

Saliva ORP can be measured by a handy type monitoring device through a cotton ball moistened with Saliva.

First of all this device is certified by “Ministry of Health and Welfare, Japan “ as an advanced medical instrument.

But it can be handled easily even by an amateur.

Subjective / bodily feeling on the efficacy of TB-VCO for many years can be visualized / confirmed with Scientific / objective numerical data.





# Saliva ORP Shows the Efficacy of TB Wave

**体の酸化とは体調不良**  
 酸化=炎症・疲弊・過労・ストレス・老化要因  
 Oxidation of body indicates a poor physical condition.  
 It means overwork, stress and aging.

**体の還元とは体調良好**  
 還元=免疫力アップ・体調良好  
 Reduction of body indicates a good physical condition.  
 It means relief of fatigue and stress and stronger immune system.

Before TB Wave Exposure

ORP voltage (mV)	体調度 Physical condition	酸化と還元の状態 State of Oxidation-Reduction
+200	Oxidative <b>酸化</b> 体調不良群 Outside of healthy level group	酸化力非常に強い Extremely Oxidative
+180		
+160		
+140		
+120		
+100	体調半不良群 Bordering healthy level group	酸化力やや強い Oxidative
+80		
+60		
+50	酸化還元境界 Borderline	
+40	Healthy level group 体調良好群 Fully Healthy level group	還元力弱い Fairly Reductive
+30		
±0		
-20		
-40		
-60		
-80		
-100	還元力強い Very Reductive	
-120		
-140		
-160		
-180	還元力非常に強い Extremely Reductive	
-200		
mV	Reductive <b>還元</b>	

After TB Wave Exposure

Reduction of the Body

# Efficacy of TB Wave through Saliva ORP

## 3. Test Result

Ordinary ORP level is to be +40 ~ 50 mV.

More negative level is healthier.

(1) With a shirt irradiated by TB-Wave around the neck.

\* Before + 16 mV

\* After - 18 mV

(2) Sitting on TB Wave irradiated net

\* Before + 6 mV

\* After - 35 mV

(3) In the room with TB Wave radiation

\* Mr.M - 16 mV \* Mr. S -18mV \* MR B + 6 mV



# Efficacy of TB Wave through Saliva ORP

## 4. Consideration and Future vision

With Saliva ORP Meter, the efficacy of TB Wave and its related products can be confirmed very easily / quickly.

The result of (1) shows the quick reaction of TB Wave effect.

The result of (2) shows a part of the slow reaction of TB Wave effect.

The result of (3) shows the ORP level of all testees is much lower than ordinary ORP level. This means the inside of the room is teranized to some extent that we have expected for many years.

Now the efficacy of TB- VCO can be visualized.

The efficacy of TB wave related products like Cloths, Insole or Accessories can be visualized as well. Also Teranized Air / Electricity / Light can be visualized.

By some means or others, invisible Subjective / Bodily efficacy can be confirmed as Scientific / Objective facts.

# Visualization of Tera-Net effect

## 1. Outline

It has been said that Tera-Net for electric power saving has some special function to refresh the air in the room.

That has been based on just a personal subjective feeling.

However with Saliva ORP monitor, the Tera-Net effect can be visualized.



Air-con unit with Tera-Net  
(White Net at the center)

# Visualization of Tera-Net effect

## 2. Comparison test

The saliva ORP was measured in the room with Tera-Net and without Tera-Net for the comparison of the efficacy.



Air-con unit with Tera-Net  
(White Net at the center)

# Visualization of Tera-Net effect

## 3. Result on Comparison Test

Date : SEP.8 ~ SEP. 13     Testee : Male, Age 70  
Test procedure : to measure Saliva ORP  
with / without Tera-Net at the Air-con unit.



Air-con unit with Tera-Net  
(White Net at the center)

Date	With/Without Tera-Net	ORP	Health condition
SEP. 9	without	55mV	Not so good
SEP.10	without	46mV	Not so good
SEP.11	with	2mV	Good
SEP.8	with	9mV	Good
SEP.12	with	-21mV	Very good
SEP.13	with	2mV	good

# Visualization of Tera-Net effect

## 4. Consideration

By attaching the Tera-Net to the blowing vent of the air-con, it clearly shows that the saliva ORP becomes 30mV-70mV more on the reduction side than the room without Tera-Net.

It proves that the room is filled with the air that gives reduction to the body.



Air-con unit with Tera-Net  
(White Net at the center)

# Visualization of Tera-Net effect

## 5. Application

We can make a whole house Teranize by irradiating TB Waves to wall paper, flooring and ceiling.

If we apply this Net to Filter part of a refrigerator / freezer, aside from power saving, we can expect to refresh the air inside and keep freshness of foods.

And if we apply this net to a part of back pain / shoulder stiffness, pain will be released very quickly.



Air-con unit with Tera-Net  
(White Net at the center)



# TB Wave and Oxidation / Reduction

日本ケアフィット共育機構 リセットボールにテラヘルツ粒入りスティック 摂取後の唾液ORP測定結果 単位(mV)

対象者	年代	性別	摂取前	摂取後1分以内	30分後	40分後	50分後	60分後	90分後
Aさん	30	男	71	-34	83	62	58	50	49
Bさん	40	男	54	-3	57	41	33	36	34
Cさん	20	男	35	-14	40	33	30	26	25
Dさん	10	女	50	-18	60	39	41	40	37
Eさん	50	女	67	-5	69	53	48	43	41
Fさん	20	女	62	-34	50	44	43	46	42
Gさん	70	男	50	-21	38	32	26	22	24
Hさん	60	女	50	-18	37	30	33	30	28

●検証時の藤沢の水道水は+208mVで、「リセットボールにテラヘルツ粒入りスティック」を、2リットル容器に水道水を12時間浸水させ生成した水で還元検証を実施した。還元検証を実施した12時間経過後の浸水は-13mVの強い還元数値を示しました。

●水道水であってもテラヘルツのリセットボールを浸した水そのものの酸化還元電位(ORP)は、マイナス数値を示し摂取する前の水そのものがマイナスの電位を示したことで、水道水の塩素消毒その他の体調を危惧する方々にとって大変な朗報となると考察できます。

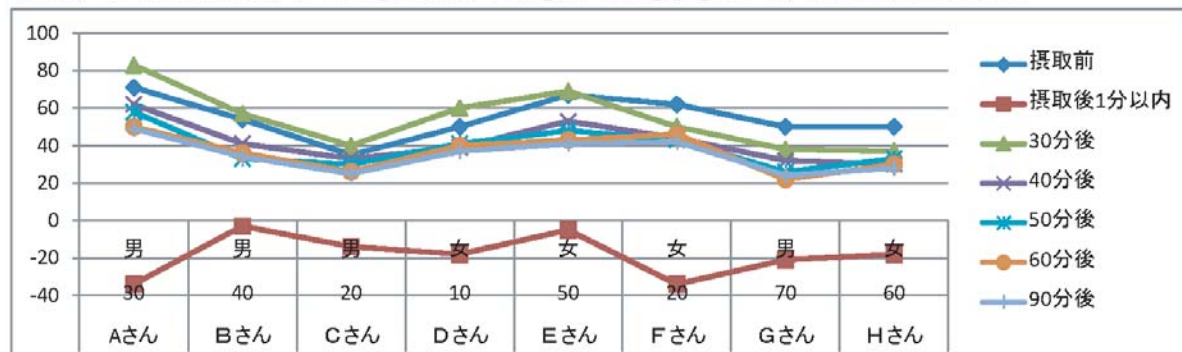
●モニター各人は、還元検証とする水を、各人200cc摂取して還元検証を実施しました。

●摂取前の数値は摂取直後1分以内においては瞬時に、口腔内の唾液と「リセットボールにテラヘルツ粒入りスティック水」が混合され、モニター全員の瞬時の反応は強いマイナスの還元方向が示唆されました。

●引き続き、摂取したものが血液を通して唾液に反映される最短の30分~50分の経過観察では、一時的にデドックス作用とみられる体内負荷が酸化方向が示唆された。しかしながら、引き続き60~90分後における長時間の経時変化は、摂取前の数値に戻ることなく体内が還元作用に導かれていることが明確に示されました。

●摂取前の酸化傾向が強いモニターほど、摂取直後の還元作用は強く示され、身体が瞬時に喜んで受け入れていることが示唆されたのです。

よって、「リセットボールにテラヘルツ粒入りスティック」を、「還元検証」を付与するものと決定しました。



「リセットボール」で生成した水の波動測定結果は、健康の保持・維持に効果があるとされる+11~15の測定値です。健康維持の還元水ができます。

リセットボールは水道水と共振共鳴し還元水に変身!

還元水をゴクゴク飲みましょう!!

使用期間 3年間

還元検証票  
リセットボール  
還元検証

還元検証票とは酸化している身体を還元する事ができる商品だけに与えられるものです。

# H+ Effect of TB-VCO

TB-VCO can generate and preserve H<sup>+</sup> stably by means of TB Waves and bacteria, *Rhodospseudomonas Plusuris* and absorbed by a various part of our body. With the Reductive function of TB-VCO and TB Wave of 35 THz radiated from oil molecules absorbed by our body can reduce OH<sup>-</sup> radical very quickly. And it can work on cancer cells or diseases very quickly / effectively.

Radio active ray or PM2.5 reacts to our body liquid and generate OH radical Directly without intermideating O<sub>3</sub> or H<sub>2</sub>O<sub>2</sub>. That's the reason why Radio active ray or PM2.5 cause cancer or other incurable diseases.

By drinking / applying TB-VCO commonly, we can increase H<sup>+</sup> in our body. It's quite effective as a preventive medicine and to remedy any disease.





# H+ Effect of TB-VCO

Through TB-VCO production, TB Wave and R-palustris bacteria can break hydrogen bonds of various materials by resonance energy. And from the hydrogen bond, H<sup>+</sup> and electron vibrated with resonated frequency will be emitted.

H<sup>+</sup> and electron resonated with 35 THz electro-magnetic waves can be dissolved by the water which has finer cluster through breaking hydrogen bonds. (Not easy to return to longer cluster)

When these H<sup>+</sup> will be absorbed by our body, they will be dispersed in our body very quickly and reduce OH<sup>-</sup> radicals which are the main reason of our incurable diseases by making lipid peroxidation.

Since there is no enzyme in our body which can reduce OH radical, we have to get something from outside. As Vitamin C or any other anti-oxidative supplement cannot cope with quick reaction speed of OH radical (nano second), they don't have any effect.



# FIR Effect on Mg Battery

## 1. Test procedure

Mg battery can discharge electricity through oxidation of Mg by dipping it in water. We measured discharge efficiency of the battery by wrapping it with TB tape. We made a comparison test of brightness of LED and life span of the batteries with / without TB-Tape around the batteries.

## 2. Test result

(1) DEC.6  
17:50



Right without TB Tape  
Left with TB Tape

(2) DEC.7  
9:30



Right without TB Tape  
Left with TB Tape

(3) DEC.7  
17:50



Right without TB Tape  
Left with TB Tape

(4) DEC.8  
9:15



Right without TB Tape  
Left with TB Tape

(5) DEC.9  
9:26



Right without TB Tape  
Left with TB Tape

(6) DEC.9  
16:06



Right without TB Tape  
Left with TB Tape

## 3. Conclusion

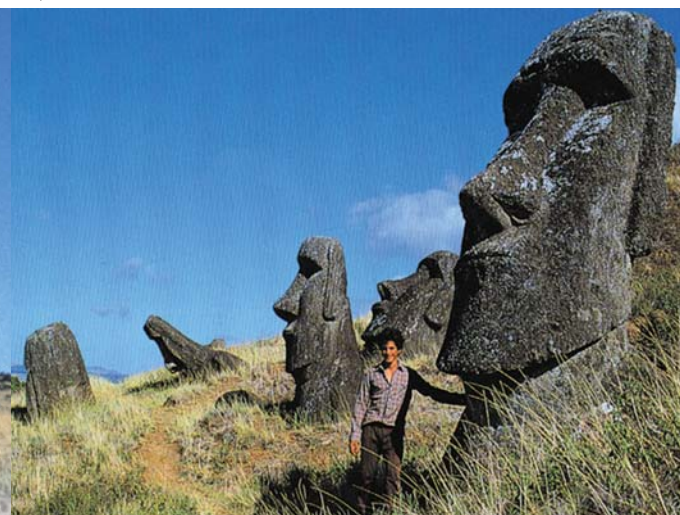
Obviously, TB Tape can extend the endurance of the Mg battery and provide bigger power. This means TB Tape can generate more electrons and activate electrons with higher speed.

# Oxidation and Reduction On Easter Island, Chile

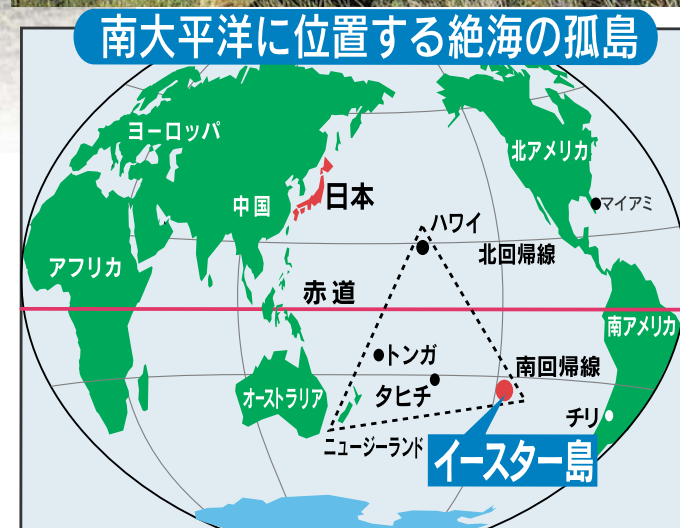


by Yoshitaka Otomo

# Discovery of ORP Measuring Concept On Easter Island, Chile



- From long before, it has been said that a year with many thunderbolt results in a bumper crop. The bigger positive potential on the globe surface causes the stronger thunderbolts/ rain since the negative potential at the higher layer of the atmosphere is extracted by the positive potential.
- In spite of its poor environmental condition of Easter Island, I realized that the plants and flowers were growing powerfully and how both plants and people were kept alive under the providence of the nature. After this realization, I strongly felt the importance of looking into this precious starting point of how plants and people live in the repetition of daily natural providence and arrived at the theme of oxidation and reduction.





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No-1

# EASTER ISLAND, CHILE

Yoshitaka Otomo Oil-Painting





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No-2

# EASTER ISLAND, CHILE

Yoshitaka Otomo Oil-Painting





# EASTER ISLAND, CHILE

Yoshitaka Otomo Oil-Painting



# Clinical Report on Saliva ORP by Dr. Mieko Okazawa

To confirm the health condition  
by checking Saliva ORP level.

The report was published  
on “Igaku Shoin (Medical magazine)” issued on JUL. 2009.

Clinical report 53(7), 767-777, 2009-07  
published internationally

In cooperation with Okazawa Clinic, Dr. Okazawa  
measured Saliva ORP of the testee by moistening a cotton  
ball with Saliva before and more than 40 minutes  
after eating / drinking.








# Presentation at #9 Japan Anti-Aging Conference, Y2009

(Joint Study by Dr. Okazawa and Mr. Otomo)

Checking up Health condition by Saliva

Higher ORP level shows the condition of Oxidation.

Negative / Lower ORP level shows the condition of Reduction.

体の酸化とは体調不良 体がサビつく事 酸化=炎症・疲弊・過労・ストレス・老化要因		体の還元(抗酸化)とは体調良好 体のサビがとれる事 還元=免疫力アップ・体調良好	
ORP (酸化還元電位) ORP unit in millimeter voltage(MV)	体調度 Physical condition	色彩表示 Color Continum for Classification	酸化と還元の状態 State of Oxidation-Reduction
+160	 体調不良群 Outside of healthy level group	超酸化 (体調症状あり) Perceptive of excessive oxidation	Oxidative 酸化力非常に強い Extremely Oxidative
+100	 体調半不良群 Bordering healthy level group	酸化 (体調症状あり) Some what symptomatic of oxidation	酸化力やや強い Oxidative
+50	還元境界 Borderline oxidation usually without any symptom		酸化力弱い Fairly Oxidative
+40	Healthy level group		還元力弱い Fairly Reductive
+30	 体調良好群 Fully Healthy level group	還元 (体調良好) Good	還元力やや強い Reductive
±0			還元力強い Reductive
-30			還元力強い Reductive
-40	 Super Healthy level group	良還元 (体調爽快) Better	還元力強い Very Reductive
-50			還元力強い Very Reductive
-100		超還元 (体調爽快) Best	還元力非常に強い Extremely Reductive
-160			還元力非常に強い Extremely Reductive

# Presentation at #9 Japan Anti-Aging Conference, Y2009

(Joint Study by Dr. Okazawa and Mr. Otomo)

## (Objectives)

To confirm health condition by saliva ORP.  
 Designation of saliva ORP level due to the health condition.  
 Everybody from a new born baby to aged person can control the health condition by themselves.

## (Procedure)

Measured saliva ORP of age 0-90 of patients who have come to Okazawa Clinic.

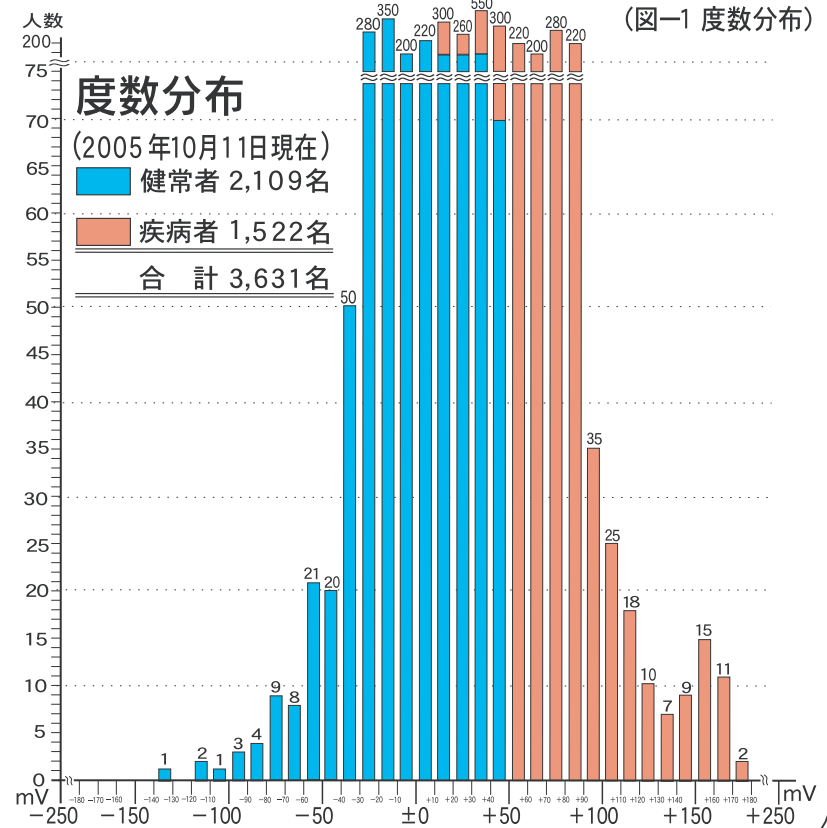
## (Result)

Distinctive difference of ORP between people with good health and bad health.  
 Regarding high blood pressure, diabetes, liver malfunction, metabolic syndrome or oxidative stress, saliva ORP level shows whether the treatment is right or not.

## (Conclusion)

Good health group (+40mV or less)  
 Not so good group (+40 ~ +100mV)  
 Very bad group (+101mV or more)  
 Saliva ORP of Healthy / Sick person

## 「唾液」にみる健康者と疾病者のORP





# Diseases that derive from stress are universal

Confirmation of body's information (wellness degree) of an infant to elderly can be made by using non-invasive method of soaking small amount of saliva on a cotton swab.

## ◆ Human relations

Oxidation of body indicates a poor physical condition. It means overwork, stress and aging.



## ◆ Food

## ◆ Mental

Reduction of body indicates a good physical condition. It means relief of fatigue and stress and stronger immune system.

# Wonders of Sri Lanka



# Wonders of Sri Lanka

Visualization of Ayurveda Treatment / Beauty Care  
Reductive action of our body can be confirmed in real time.



Democratic Socialist Republic of Sri Lanka

# Stress Level

Can Be Measured from Saliva of  
Parotid Glands, Submandibular Glands,  
Sublingual Glands and Combine Saliva

Quantization of Stress Levels Using Saliva ORP



# ORPreader, a Measuring Device Can Make Visualization of How Much the Body is Feeling Well in All Sorts of Situations

## Benefits of Ayurveda Therapies and Beauty Care Can Be Confirmed



- This is a medical device that is approved by Japan Labor Ministry of Health and Welfare
- Just a dab of saliva on cotton swab is needed for measurement
- Unlike blood tests that involve pain, with this method, the wellness of our body can be checked by looking at the saliva's indication of the efficacy of therapies
- Able to check the stress level of our human relationships in schools and in workplaces
- Able to check the physical wellness of someone who is unable to communicate their wish well, from babies to elderlies
- Family members can check their physical wellness anytime and anywhere
- Invisible psychological stress level can be confirmed numerically
- Physical wellness of the drivers who are responsible of many lives such as air pilot, train operator, bus driver can be checked
- Physical wellness of athletes, before and after playing sports can be checked
- Physical wellness of patient before and after surgery can be checked
- Physical wellness after food ingestion
- Physical wellness level, stress level and screening of stimulant drugs can be checked in real time



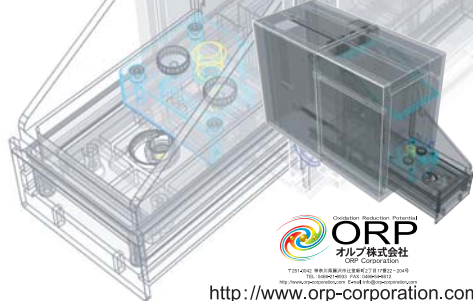


## Easter Island was the Origin of the Idea: ORP Monitoring Meter

Joint Research of Dr. Mieko Okazawa and Yoshitaka Otomo

- Since long time ago, it has been expected by people that the year of frequent lightning strikes or heavy snow fall will be a year of good harvest. Higher the positive electric potential on earth surface, high-altitude rain-bearing cloud charged with negative potential is readily attracted by the counter potential and causes downpour of rain.
- In spite of rather severe condition, flowering grasses growing up big and strong on Easter Island told us the fact that the plants as well as human live under a natural law repeated every day. Recognition of this has guided us to the concept of oxidation and reduction.
- Conventionally, it has been accepted that, when a level of oxidant is low or solution to be measured is excessively pure, oxidation-reduction potential (E) is indefinite and, particularly in human biological fluid having extremely poor buffering capacity, oxidation-reduction potential (E) is apt to be affected by the environmental conditions so that the potential measurement, using a pair of electrodes, is insufficiently stable to obtain an actual value.
- Combustion reaction occurring within a living body can be defined by oxidation-reduction reaction under action of enzyme. Now we developed the oxidation-reduction potentiometer (mV) allowing oxidation and reduction states within the living body to be accurately measured by using saliva as test substance. By comprehensively calculating the activity ratio of oxidant versus reductant both biological substances varying in the living body every day, we believe, it is possible to determine from saliva as the test substance whether your body is in oxidation condition or in reduction condition.
- In view of the fact that collection of blood sample is not only impermissible for ordinary person but also problematic with respect to safety as well as stressful to pain inevitably accompanying this method, we have taken a novel method which impregnating cotton bud with a small quantity of saliva having voluminous information comparable to blood is used as the test substance.

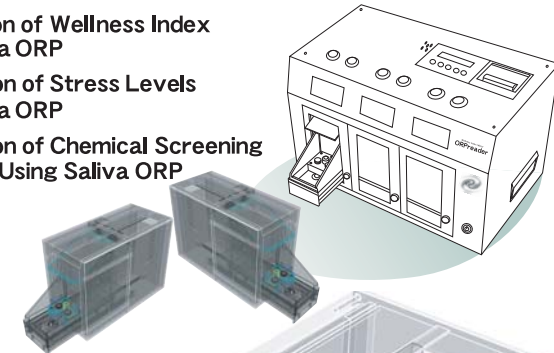
Medical Equipment  
Wellness Index Meter  
**ORPreader**  
オルプリーダー



<http://www.orp-corporation.com>

## Quantization of Stress Levels Using Saliva ORP

- Quantization of Wellness Index Using Saliva ORP
- Quantization of Stress Levels Using Saliva ORP
- Quantization of Chemical Screening Inspection Using Saliva ORP

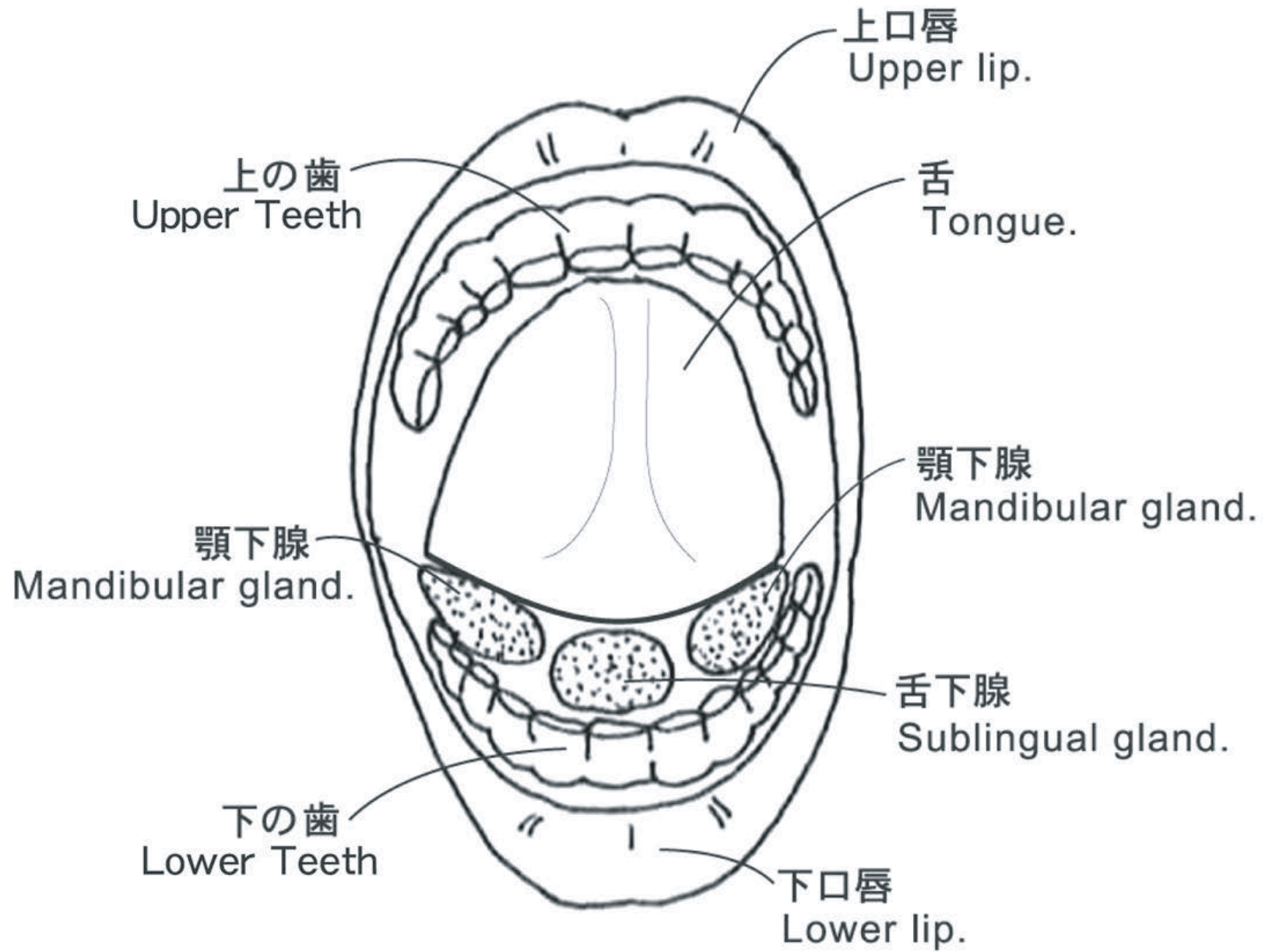


Medical Equipment  
Wellness Index Meter

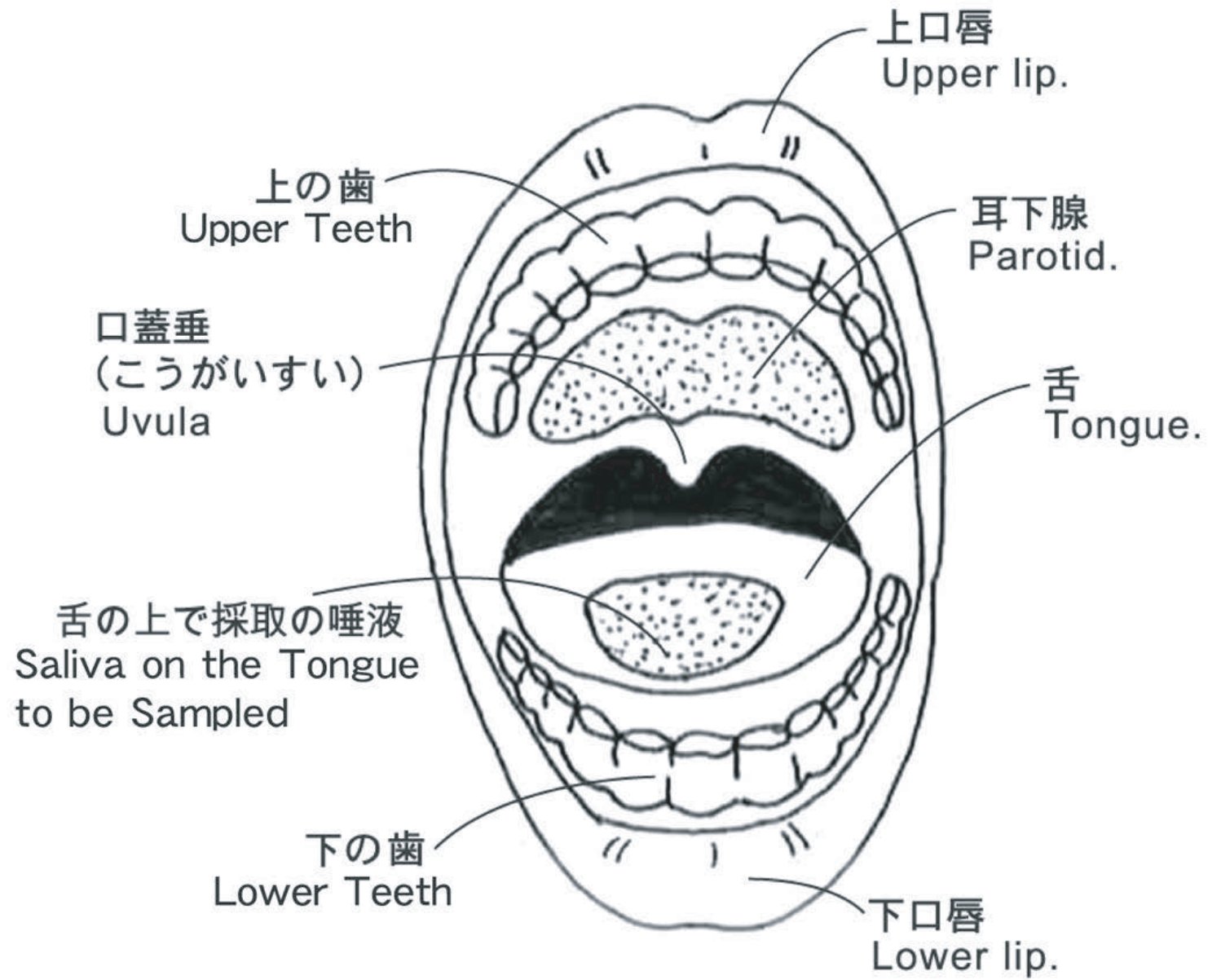
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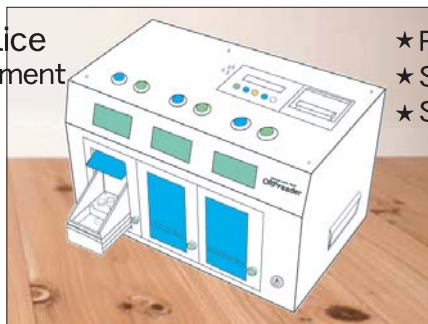


医療機器 医療従事者だけでなく一般人も使用できる  
**次世代のヒト唾液ORP測定装置**

Wellness Index Meter  
**ORPreader®**

オルプリーダー ウェルネスインデックスメーター

medical device  
 Saliva measurement



- ★ Physical condition
- ★ Stress levels
- ★ Screening test



外形寸法：約 25 (H) × 30 (D) × 45 (W) cm / 本体重量：約 4 Kg

## 身体が喜ぶ度合いを数値化

いままで、「着たあと、食べたあと、住んだあと、喜び・驚き・悲しみを体験したあと、音楽や芸術を体感したあと」、身体が喜ぶ度合いは感覚的にしかわかりませんでした。そこで、私達、「オルプ研究グループ(ORP Research Consortium)は、日常の生活習慣から起こる肉体的なストレス度及び精神的ストレス度を測定する方法の必要性に気づき、唾液の酸化還元電位ORP(Oxidation & Reduction Potential)比較検証をして、ストレス度を1分以内で数値化判定する(1),(2),(3)測定装置の開発に成功し、日本の厚生省認可の医療機器となりました。

### The Features of Measuring Device ORPreader

The consumers are waiting for the products that make their body well. Until now, the degree of our body feeling well after we wore a clothing, after we ate something, after we lived at a place or after we experienced joy, surprise and sadness, can only be recognized by our senses.

Upon realizing the necessity of a method that can measure psychological stress level in real-time, we, ORP Research Consortium has succeeded in developing a device that can measure 1, 2 and 3 by making quantitative judgment of stress levels: comparative verification of saliva oxidation and reduction potential (ORP), which can be done within one minute and has been approved by the Ministry of Health and Welfare of Japan as a medical device.


**オルプ株式会社** <http://www.orp-corporation.com/>  
 Tel: 0466-21-8933  

**NPO日本ORP測定検証協会** <http://www.npo-orp-japan.com/>  
 Tel: 0466-54-8614

測定日： 年 月 日 天候： 男 女

あなたの体調度は

1回目 mV です

2回目 mV です

様

## (1) 体調度を数値化 Quantization of Wellness Using Saliva ORP

ORP voltage (mV)	体調度 Physical condition	酸化と還元の状態 State of Oxidation-Reduction
<div style="display: flex; justify-content: space-between;"> <div style="background-color: #f4a460; padding: 5px;"> <b>体の酸化とは体調不良</b>                      酸化=炎症・疲弊・過労・ストレス・老化要因                      Oxidation of body indicates a poor physical condition. It means overwork, stress and aging.                 </div> <div style="background-color: #4682b4; padding: 5px;"> <b>体の還元とは体調良好</b>                      還元=免疫力アップ・体調良好                      Reduction of body indicates a good physical condition. It means relief of fatigue and stress and stronger immune system.                 </div> </div>		
+200	Oxidative <b>酸化</b> 体調不良群 Outside of healthy level group	<b>酸化力非常に強い</b> Extremely Oxidative
+180		
+160		
+140		
+120		
+100	体調半不良群 Bordering healthy level group	<b>酸化力やや強い</b> Oxidative
+80		
+60		
+50	酸化還元境界 Borderline	
+40	Healthy level group  体調良好群  Fully Healthy level group	<b>還元力弱い</b> Fairly Reductive
+30		
±0		
-20		<b>還元力やや強い</b> Reductive
-40		
-60		
-80		
-100	<b>還元力強い</b> Very Reductive	
-120		
-140		
-160		
-180	Reductive <b>還元</b>	<b>還元力非常に強い</b> Extremely Reductive
-200		
mV		

測定日: \_\_\_\_\_ 年 \_\_\_\_\_ 月 \_\_\_\_\_ 日 天候: \_\_\_\_\_ 男 \_\_\_\_\_ 女

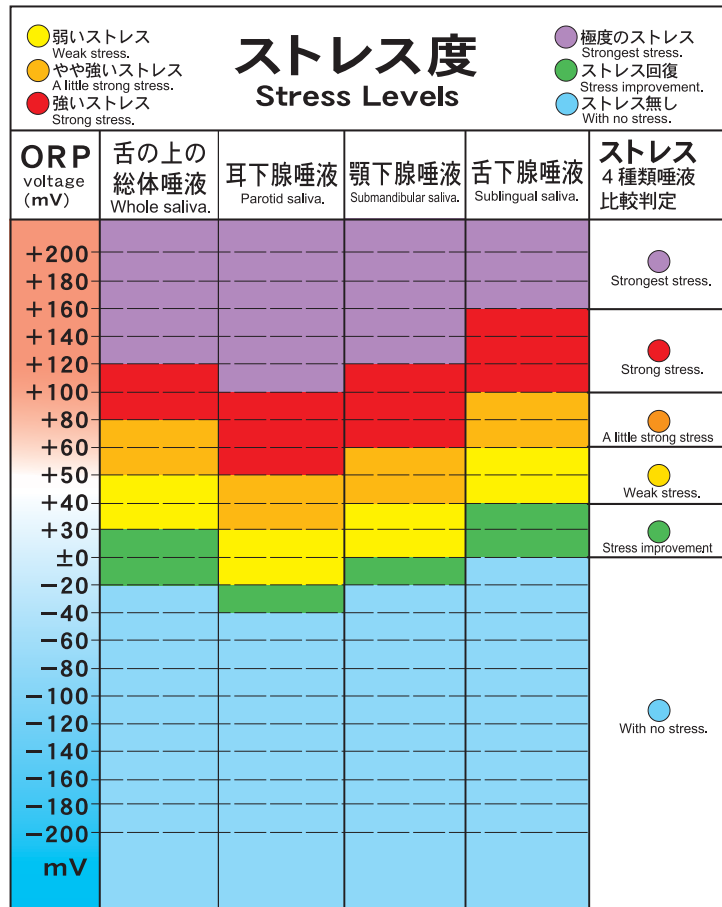
様

あなたのストレス度は

1回目	mV です
2回目	mV です

### (2) ストレス度を数値化

#### Quantization of Stress Levels Using Saliva ORP



測定日: \_\_\_\_\_ 年 \_\_\_\_\_ 月 \_\_\_\_\_ 日 天候: \_\_\_\_\_ 男 \_\_\_\_\_ 女

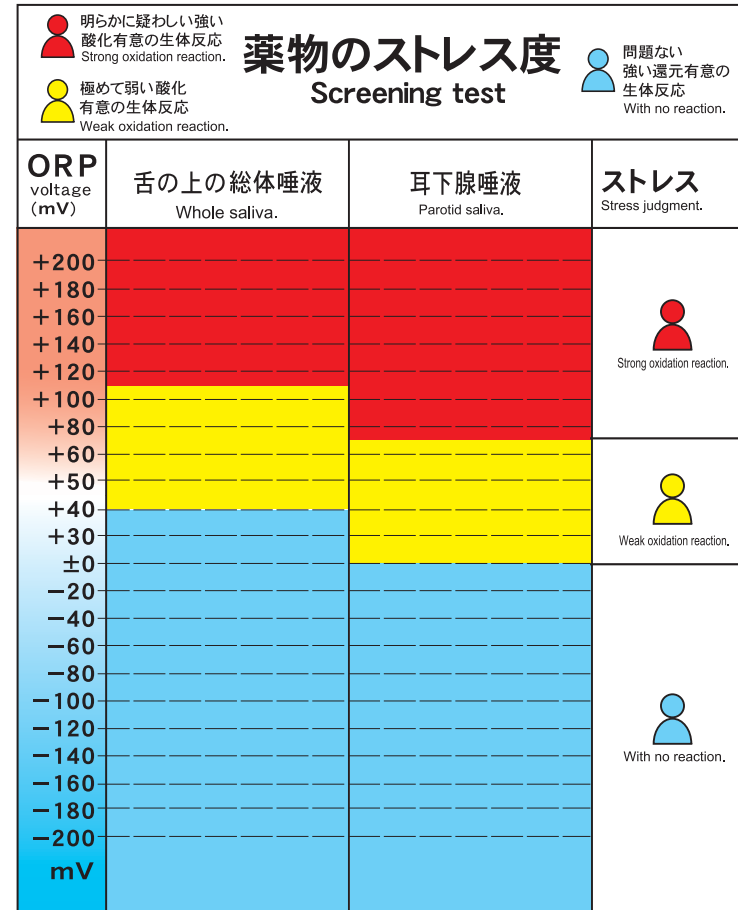
様

あなたのストレス度は

1回目	mV です
2回目	mV です

### (3) スクリーニングを数値化

#### Quantization of Chemical Screening inspection Using Saliva ORP



# Power of Saliva



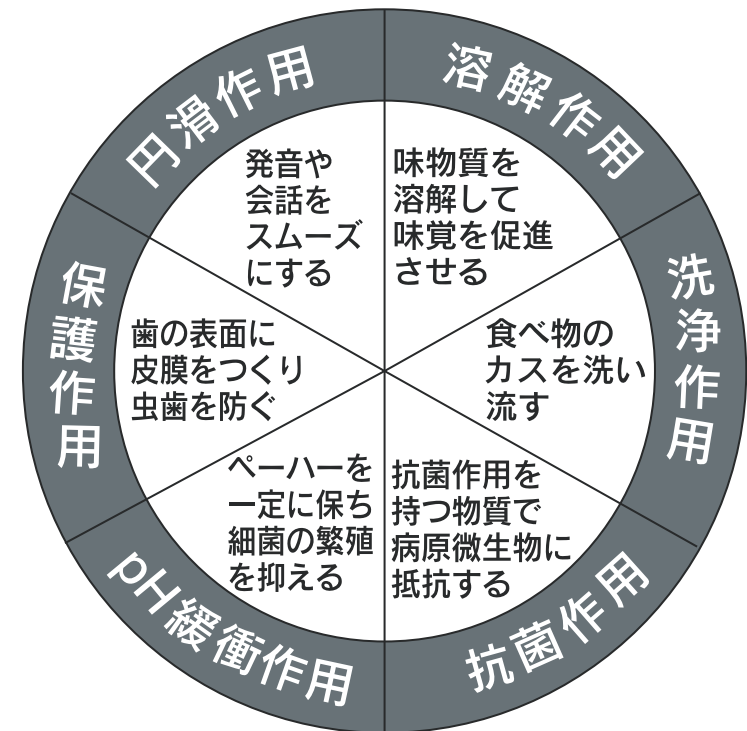
# Saliva's 6 Functions

Our life activity starts from the mouth.  
To live, first of all, we eat foods.

When we bite foods well, its stimulation is transferred to brain nerve and saliva is secreted.

Saliva can assist our digestion and protect inner mouth environment as well with the following important functions.

1. Dissolving (Foods with taste is dissolved and sense of taste is enhanced.)
2. Cleaning (Washing foods waste away)
3. Anti-bacteria (Resisting against infectious microbe)
4. PH normalizer (Keeping PH level at normal condition to control bacteria propagation.)
5. Protecting (Coating teeth surface to prevent tooth decay.)
6. Smoothing (Smoothing pronunciation and communication.)





# Saliva quantity per day

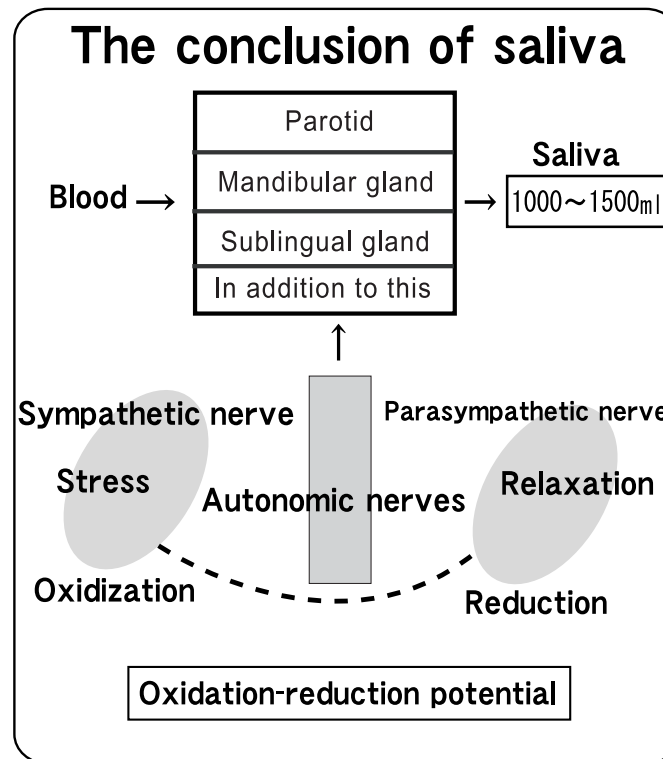
Saliva quantity per day is depending on individuals.

In case of ordinary adult, the average is 1000~1500 mL / day.

## In case of no saliva

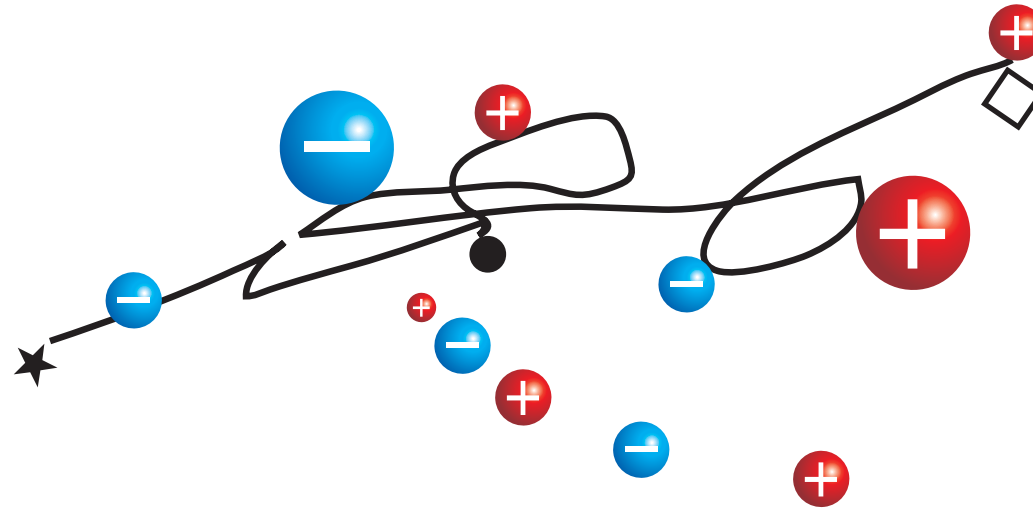
- Impossible to speak with a dried mouth
- Impossible to eat
- Bad breath
- Molds in a mouth
- Many tooth decay

Autonomic nerves consist of Sympathetic Nerves and Parasympathetic nerves. With the stimulation of parasympathetic nerves, stress level shall be increased. Parasympathetic nerves is related to Relaxation. With more relaxation, alpha Waves will be generated.



- With relaxation, saliva is secreted from Parotid glands and Sublingual glands. Especially clean Saliva is secreted from Parotid glands.
- With high tension, sticky saliva is secreted from Submandibular glands, but no saliva from Parotid.
- With stress / high tension, sticky saliva from Submandibular glands and Sublingual Glands cause bad breath.

# Electric Current and Electron

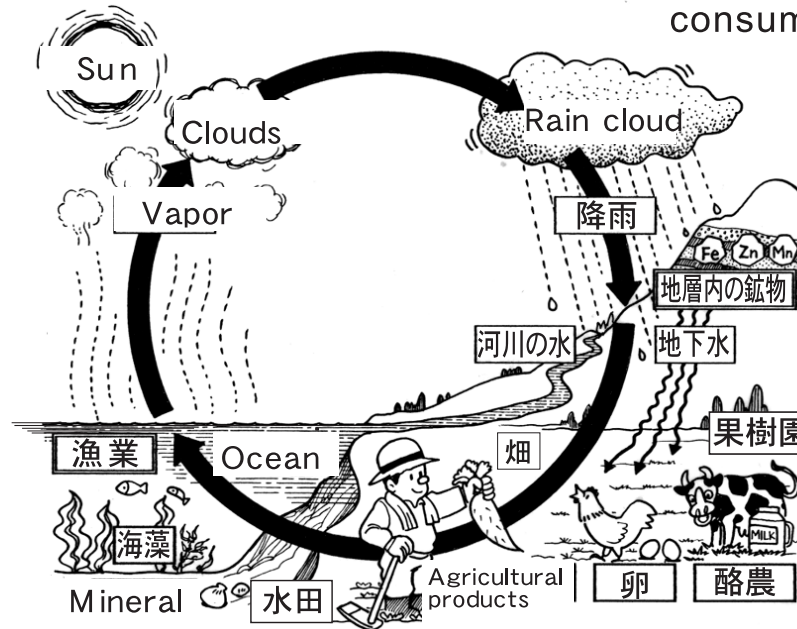


# What is the flow of electricity and electron? What is the Oxidation / Reduction potential in living creature ?

Electron flow of living body-  
From negative pole to positive pole:  
oxidation of the natural law.

Electric current of battery-  
It flows from positive to negative pole:  
consumption of the natural law.

## Electron



## Current



The reason our body oxidizes-  
In our body, the negative electron  
that has reduction power gives  
aging and it will also be robbed by the  
positive electron that can generate  
inflammation, whence the constant  
occurrence of oxidation phenomenon.

The reason why battery is discharged-  
The electricity flows from positive to negative pole:  
energy consumption.  
When the electrical current keeps flowing, the  
battery power is consumed.

# Health Care with Oxidation-free

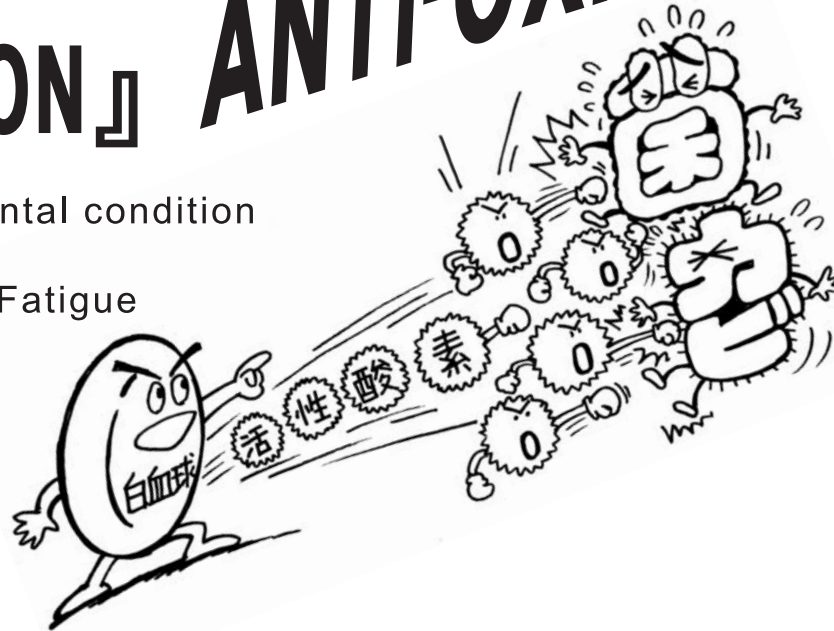
Foods for Reductive Potential

Method of personally maintaining Oxidation-free body

Good immunity

## 『OXIDATION』 ANTI-OXIDATION

- Bad health/mental condition
- Rust in body
- Inflammation, Fatigue  
Stress, Aging



## 『REDUCTION』

- Good health/mental condition
- Rust-free body
- Good immunity

# Recommendable Projects By Our Association

<http://www.npo-orp-japan.com/> mail:orp@npo-orp.com



特定非営利活動法人(NPO)日本ORP測定検証協会  
NPO Japan ORP Measurement Verification Association.

〒251-0042 神奈川県藤沢市辻堂新町2丁目17番22~204号  
TEL 0466-54-8614 FAX 0466-54-8612  
<http://www.npo-orp-japan.com/> mail:orp@npo-orp.com



# Quantification of Wellness of Body

Consumers are waiting for products that make their body healthy.



Until now, we could only feel the effect, but the effect of anti-oxidation in the areas of food, clothing and shelter can be proven numerically by the human saliva oxidation and reduction potential measurement that the Non-Profit Organization: Japan ORP Measurement Verification Association is promoting.







**The Certificate of  
Oxidation-Reduction Verification**

**Japan Pie Technological  
Research Laboratory Co., Ltd**

We grant this Certificate of Oxidation-Reduction for  
"Redox Healthy Vegetable Soup" that was submitted by your company  
to be significantly effective in  
oxidation reduction for it was  
concluded to be appropriate according to the  
measurement that was performed by this association.

**April 24, 2017**

(Valid for 2 years from the issuing date.)

**Yoshitaka Otomo**

Chairman

Non-Profit Organization

Japan ORP Measurement Verification Association



**酸化還元検証状**

**(株)日本パイ技術総合研究所 殿**

貴社の提出された商品「レドックス 健康野菜  
スープ」について当法人で酸化還元反応の測定結  
果により、還元作用が極めて高く、妥当であるとの  
評価から、この「酸化還元検証状」を授与いたしま  
す。

**2017年4月24日**

(発行日から2年間有効)

特定非営利活動法人日本 ORP 測定検証協会

理事長 **大友慶孝**





SAKANA  
還元検証票  
マルメ農園  
「イチゴ」  
還元検証  
特定非営利活動法人  
日本OAP測定検査協会  
0292-22-1111

根農園

神奈川県三浦市南下浦町

長嶋 真人







## The Certificate of Oxidation-Reduction Verification

"MARUNE FARM Strawberry" that was submitted  
by your company to be significantly effective in

We grant this Certificate of Oxidation-Reduction for  
"MARUNE FARM Strawberry" that was submitted by your company  
to be significantly effective in  
oxidation reduction for it was  
concluded to be appropriate according to the  
measurement that was performed by this association.

January 17, 2017  
(Valid for 2 years from the issuing date.)

*Yoshitaka Otomo*  
Chairman  
Non-Profit Organization  
Japan ORP Measurement Verification Association

## 酸化還元検証状

マルネ農園 殿

貴社の提出された商品 マルネ農園「イチゴ」に  
ついて当法人で酸化還元反応の測定結果により、  
還元作用が極めて高く、妥当であるとの評価から、  
この「酸化還元検証状」を授与いたします。

2017年1月17日  
(発行日から2年間有効)

特定非営利活動法人日本 ORP 測定検証協会

理事長 大友慶孝

# Clothes

## Measuring by Oxidation / Reduction Potential

### 1. Clothes = Shirts, Pants / Socks and Caps

- Outer clothings - Chemical fabric / Cotton / Hemp
- Underwear—Inner ?
- Caps—Hemp cap or Nylon cap
- Underwear- Rubber straps and strings of underwear, Bracket material for underwear





# Saliva ORP with garments natural material

Average ORP of 8 Testees unit mV

Material	Before	40min. after	Average ORP
Hemp Handkerchief	35mV	0 mV	35mV reduction
Hemp H.chief touching	40mV	15mV	15mV reduction
Hemp shorts	40mV	10mV	30mV reduction
Hemp cap	55mV	5mV	45mV reduction
Hemp pillow cover	30mV	-15mV	45mV reduction
Wool blanket	45mV	0mV	-45mV reduction
Silk bed seats	30mV	-15mV	-45mV reduction
Acrylic scarf	25mV	50mV	25mV oxidation
Acrylic cap	30mV	40mV	10mV oxidation
Polyester scarf	40mV	60mV	20mV oxidation
Mixed yarn scarf	40mV	30mV	10mV reduction

# Food

## Measuring by Oxidation / Reduction Potential

### 2. Foods = Eating, Drinking

- Potable water — Green tea, Black tea, Oolong tea, Coffee, Juice ?
- Good quality water ?
- Brown rice or Polished rice with or without chemicals
- Salted plum, Sweet potato, Boiled potato or Dried potato ?
- Vegetables — Green and yellow, Leafy, Root veggies
- Fruit — Water melon, Melon, Grape, Tropical fruits
- Meat / Fish — Oxidation-free cooking



### Lifestyle on Eating / Drinking

- Alcohol — Any alcohol good for oxidation-free ?
- Alcohol — Any difference between a
- Smoker or non-smoker ?
- Chewing well — Hard, Soft or Porridge
- Lipstick — Emission color Lip cream
- Dehydration — Drinking well, Dehydration is a red signal for life.
- Mother's milk — Immunity of an infant from Mother's milk





# Saliva ORP before / after eating or drinking foods

Average ORP of 10 tessees on various food in mV

Material	Before	40min. after	Average ORP
Miso soup	50mV	-15mV	-65mV reduction
Green soy beans	60mV	-20mV	-85mV reduction
Sweet potato boil	65mV	-40mV	-105mv reduction
Sweet potato dry	50mV	-80mV	-130mV reduction
Dried persimmon	40mV	-55mV	-95mV reduction
Salted plum	35mV	-30mV	-65mV reduction
Pumpkin	55mV	-35mV	-90mV reduction
Lemon	55mV	-55mV	-110mV reduction
Coffee	55mV	-30mV	-85mV reducion

# Housing

## Measuring by Oxidation / Reduction Potential

### 3. Housing = ( House, Office )

- Concrete Houses—Difference between breathing or non-breathing ?
- Wood Houses—Natural dried woods, Heated dried woods, Cold dried woods, Imported woods or Local woods
- Pre-fabricated house —Floor, Wall, Ceiling material ?

### Life style in Houses

- Sealed housing ? Chemical deodorants in the room
- Electric appliance ? Refrigerator, Washing machine, Rice cooker, Heater, Fan, Micro-wave, IH cooker, Cellphone, Radio tower



# Sickness and Health All from the Mind



# Truth: Sickness Starts with the Mind

It has happened so frequently in many companies that employees are suffering from Depression / Melancholy resulting in physical reaction caused by a phobia when they're going to work or when they're coming home with heavy stress. Recently, there is an increase in people who have heavy stress and in some cases, people die from heavy work/stress.

- Deep breathing
- Laughing with big voice
- Loving yourself
- Feeling / Touching Nature as much as possible

Special counselors are needed---  
From kindergarten children to college students and all the way up to adults so that they can survive in the society as they coexist with stress.



# Secret of Good Health

- Less stress
- Be positive and smile
- Loving yourself





# Oxidation (Rust of Body)



# Spots, Wrinkles, Sagging Skin Are the Signals of Oxidation

Lack of sleep is an enemy to Beauty because digestive enzymes will not work properly.

Sleeping time is important for metabolizing enzymes to work well.



# Why ? Color changes into Red.

Along with studying the relation between Colorant and color light, the mechanism of changing color of fruits and leaves starts from chlorophyll (green) of plant's skin cells.

Along with ripening, Chlorophyll is decomposed and Anthocyanin (purple or red) or Carotenoids (yellow) is composed.

It is found that this color change affects our body condition so much.



# Smoker or Non-Smoker?





# Smoking Oxidizes Our Body

Smoking generates free radicals excessively.

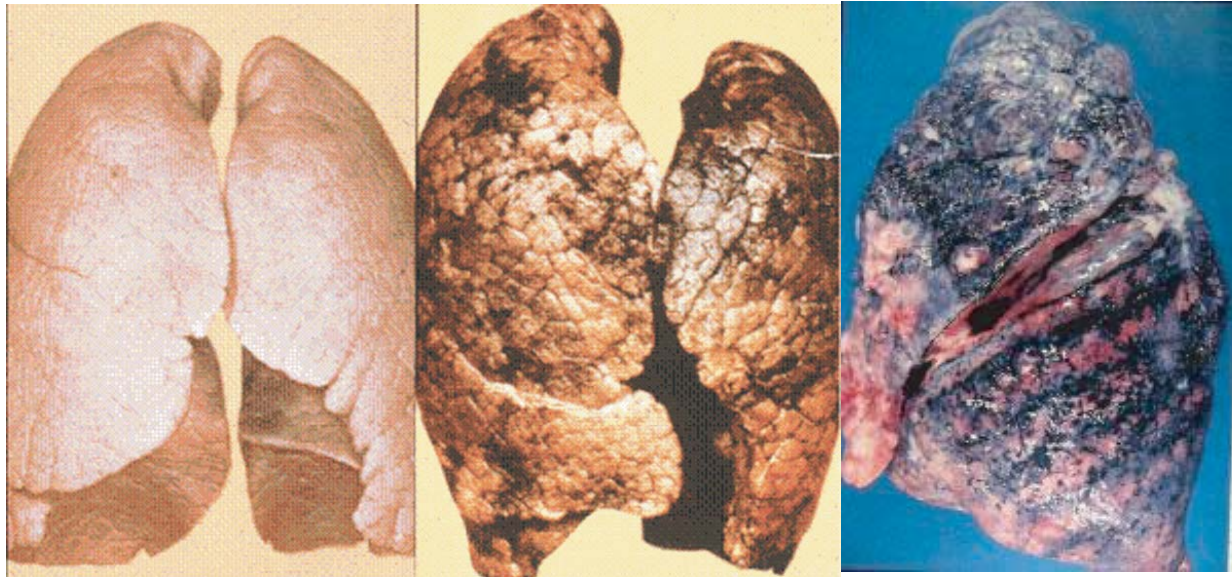
Distribution of oxygen to the brain while smoking decreases to 1/3.

Much worse is the big problem of secondhand smoke harm that people around are breathing.



# Risk of a Smoker / Second-Hand Smoker

Negative ions generated by anti-oxidative foods can not pass through fine Intestinal wall and produce clean blood. It is very clear about the result of continuous smoking.

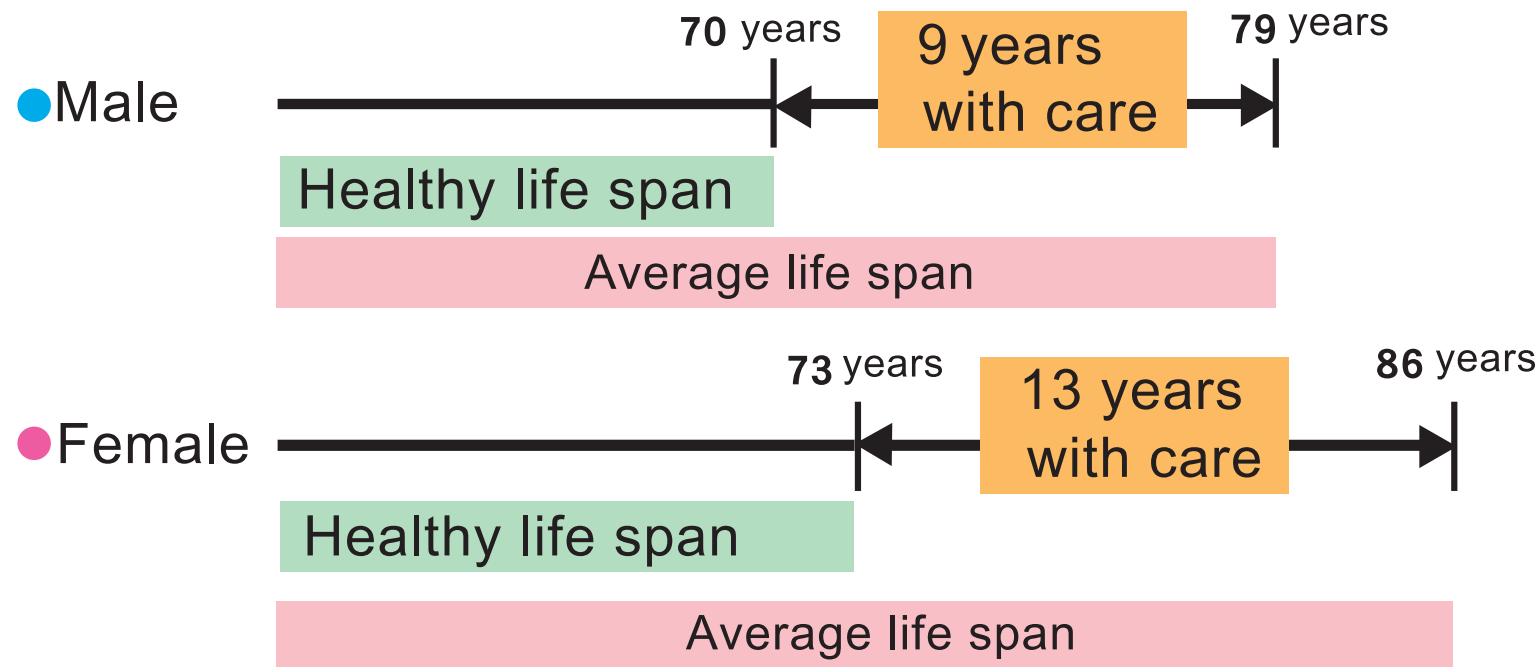


# Oxidation and Life span



# Healthy life span and Average life span

What is Healthy life span: Life span in which we can live with self-reliance without any day care services.



## 厚生労働省の発表

### ■2010年の健康寿命

- ・男性——70.42歳
- ・女性——73.62歳

### ■2010年の平均寿命

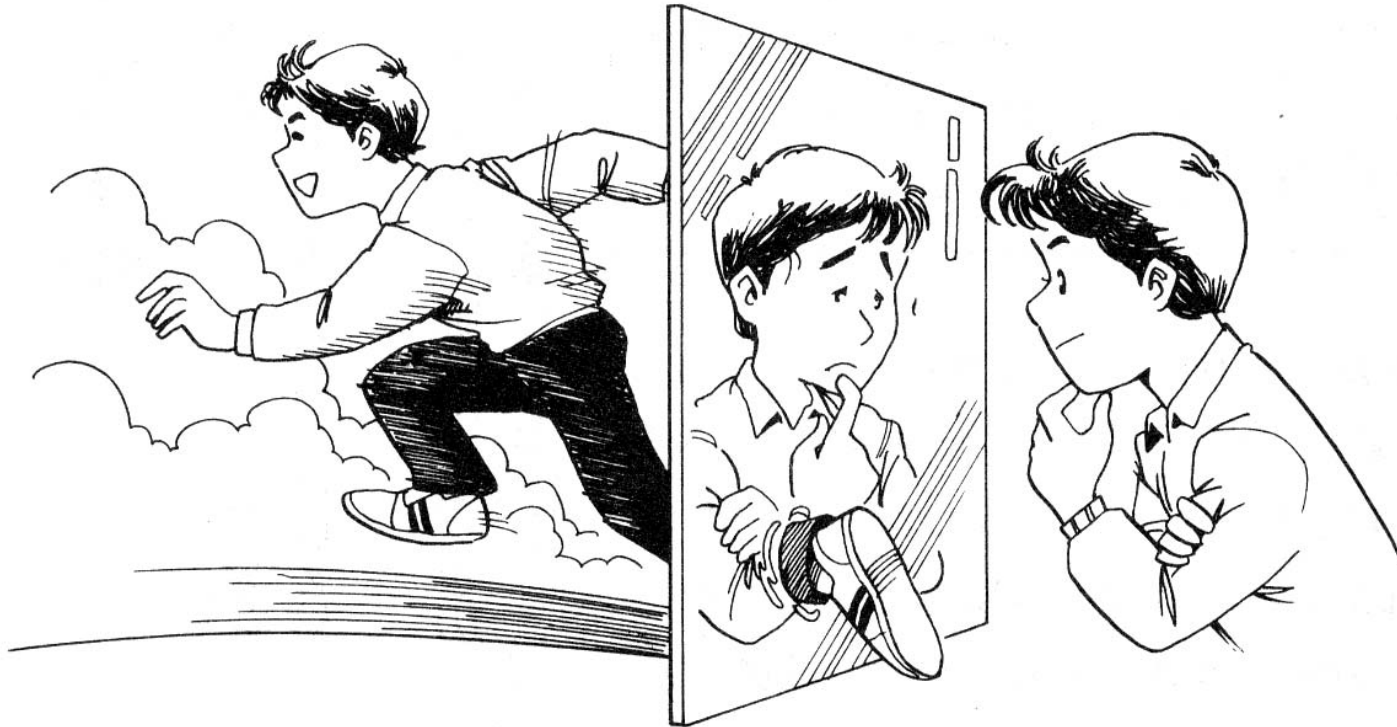
- ・男性——79.55歳
- ・女性——86.30歳

### ■健康寿命と介護を必要とされる平均寿命差

- ・男性——9.13歳
- ・女性——12.68歳

# Thank you very much for your attendance.

The secret of good health is to love yourself.



Relax and yield to people and learn to trust others,  
and don't stretch yourself too much trying to do things alone.  
The secret of wellness is to not accumulate stress.