

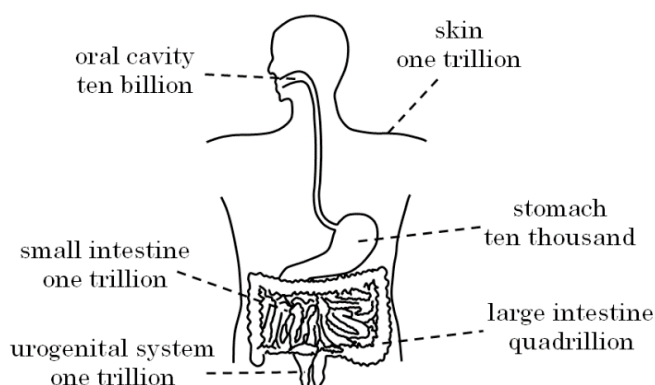
# Life correlation between human-body and bacteria

## Introduction

Medicine had interested in the pathogenic bacteria which induce simple apparent infectious diseases. But the correlation between human body and bacteria was more wide and deep in real position. So we must reconsider our life avoiding convenient way of thinking.

**First thing:** our higher animal cell is constituted from 1~2000 mitochondria, energetic organelle which was come from  $\alpha$ -proteo-bacteria, which has started to be coexisted 1.8 billion years ago. The expression of cell function is depended upon the activity of mitochondria. The key of evolution has depended upon the number and shape of mitochondria. Mitochondrion is actively working in the differentiated cell by the observation of bio-imaging method because differentiated function depends upon mitochondria job. On the processing of carcinogenesis mitochondria respiratory dysfunction has inevitably appeared. So as to avoid cancer suffering, it is necessary for human-being to protect mitochondrial function. Nuclear DNA was covered by double membrane, but mitochondria DNA has not covered by membrane, naked DNA. So carcinogen, radiation, ultraviolet can easily damage mitochondria DNA 10 times more fragile than nuclear DNA.

**Second problem:** The correlation between human-being and normal bacterial flora is great more than human's supposition. Human being have named some hundred of bacteria, but we are letting our lives by 1000 trillion intestinal bacteria, human body has constituted from 60 trillion cells, so this population is only under 1% compared with them. Furthermore, our higher animal cell are sponsored from 1~2000  $\alpha$ -proteo-bacteria. This means that higher animal cell is sponsored by many of original bacteria. So our life is the matrix among bacteria which let our higher animal cell lives along. Joshua Lederberg, novel prizel<sup>1</sup> have proposed that host and co-existing microbiota are collective body which is complicated with much gene information. So we should think "super-organism" and we don't think that microbiota are bad fellow, but think that the mutual relationship between host and normal flora which constitute this super-organism.



## Correlation between intestinal function and intestinal bacteria

In the colon canal, 1000 trillion intestinal bacteria exist. Professor

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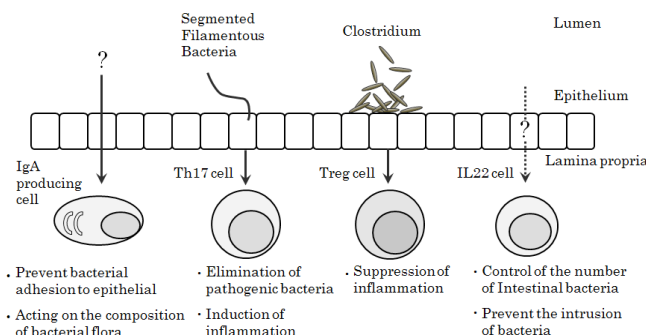
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Ito has verified that colon cannot keep colon shape without 46 stuck of clostridium by the comparative experiment of disinfected mouse.<sup>2</sup> So clostridium are inevitable necessary for co-existing bacteria. Third problem: When we consider why 1000 trillion intestinal bacteria live in the intestinal canal and why intestinal bacteria flora of mother and children are the same, we must consider that human development is derived from miniature of live earth, so we must think that original anaerobic earth circumstances are inherited in the colon. Also, in the embryology, Oogonia were made of 4 million at the birth, but oogonium is gradually dying according to the grown up, only 400 oogonia were left at the age of puberty. This demonstrates the history of human-being, don't demonstrate wasteful embryo. This means that ontogeny is repeating in the colon. According to the processing of differentiation, why intestinal canal is starting to differentiate from anus place (protostome) and why intestinal differentiation become to the mouth cavity organ at the end of endodermal differentiation. These facts show that original earth circumstances preserved in the colon. In another word, colon canal is like a cradle of bacteria. As its proof, Guirardia which was original life-being in those days of anaerobic circumstances is leaving in the colon as yet.



## Correlation between immunity and intestinal bacteria

70 % of the Lymphocytes are gathering in the intestine. Main role of intestinal immunity that was the ability to discriminate which diet to intake, from which diet to expel, this function was easily bothered by cooling of the intestine: The production of IgA has intimate connection with intestinal bacteria. The evolution of Th17 immune cell has necessity of the existence of segmented filamentous bacteria

(SFB). Over 46 stuck of clostridium are verified to be necessary for the grown up T reg immune cell.<sup>3</sup>

## Correlation between brain function and intestinal bacteria

- A. Lately Elaine Hsiao demonstrated the correlation between Autism spectrum disorders (ASD) and intestinal bacterial flora. ASD of mouse was suppressed by 4EPS which was produced viral infection and some intestinal bacteria and inhibit the proliferation of other intestinal bacteria. ASD was relieved by probiotics treatment.<sup>4,5</sup>
- B. By the utilization of bancomicine( antibiotics), autistic syndrome is corrected, so gut microbiota, especially *Desulfovibrio* is found to be inducing autistic syndrome.<sup>6</sup>
- C. As for dementia, the correlation of intestinal bacteria was reported. For example, many researchers say that fan of fermented soybeans was decreased dementia. Among longevity village in the world, fermented food was taken much. There must be direct correlation between intestinal character and health condition.
- D. Multiple sclerosis disease has been reported that there is abnormality of intestinal bacterial flora in the Multiple sclerosis (MS) disease.
- E. Correlation between pathogenic bacteria and intestinal bacteria

Even if cholera and dysentery bacillus are exist, you can resist these bacteria when the influence of useful bacteria is stronger. So you will become to suffer from disease because of decreasing in the useful bacteria when you are utilizing antibiotics, steroid hormone and conservatives in ordinal life. Recently easy food style is degrading because of many additives. As convenient classification, we can classify, pathological bacteria, useful bacteria, opportunistic bacteria, and latent bacteria (latent infection). I will state about latent infection because this problem is very important. This latent infection is air pocket in the authorized west medicine.

### F. Correlation between latent infection and intestinal bacteria

Especially, when intestinal canal was cooled by cooling beverage, intestinal bacteria can easily enter into intestinal wall and white blood cell and lymphocyte in the intestine.

### G. General consideration about latent infection

## Conversion from authorized infection (this is just like conversion from Newton's physics to Einstein physics) to latent infection

In the infection, pathogenic apparent bacteria enter into the body and produce inflammatory infection, this is only narrow understandings. For example, tubercle bacillus infected 30% of the human-being, but infection symptom will appear 5~10% among them. In the case of *Helicobacter pylori*, 50% of the human-being was infected by these *Helicobacter pylori*, but symptom was few among them.

## Infection in broad meaning

Pathogenic infection, latent infection, opportunistic infection and co-existing infection should be considered.

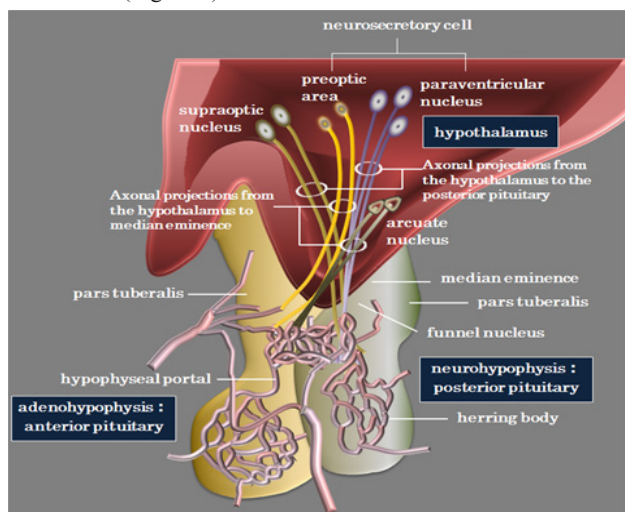
## Escape mechanism of bacteria into the cell

1. For example, *Regionella*, *Salmonella*, *Listeria* and tubercle bacillus etc. which have strong phagocytic action and disinfective activity enter into phagocytic cell, these bacteria produce superoxide dismutase (SOD) in the membrane and inhibit the damage of activated oxygen and invade mechanically into the cell.
2. On the other hand, dysentery bacillus, *Rickettsia* and *Chlamydia* are entering in the cell through mucinous epithelium and angioendothelia devoid of phagocytic activity.
3. As stated before, there is latent infection before apparent infection. Latent infection is derived from lowering body temperature, cooling beverage intoxication, tobacco smoking and mouth breathing. Latent infections produce the reduction of white blood cell and lymphocyte and finally produce cancer, autoimmune disease or allergy.
4. When aerobic bacteria enter into the cell, the damage of mitochondria will produce hormonal abnormality from mitochondria and abnormality of energetic metabolism will be followed.
5. Periodontal disease was derived from chronic infection of periodontal bacteria which is connected with mouth breathing. As mouth cavity organ is located in the important place, intestinal cranium, immunity impediment substances, immunity inhibiting bacteria have a possibility to be scattered and have a possibility to impose bad effect to all the body.
6. Mouth breathing (as mentioned later) put direct attachment of various bacteria to the Waldeyer lymph gland and dried bad effect of the lymph gland. Furthermore, in its center, Rathke cyst which connected with anterior hypophysis, inflammation of this place might have bad effect on the control center of hypophysis between brain nerve and hormone.

## H. Mouth breathing induce latent infection

It is becoming to be clear how human organ did differentiate from embryology. Spinal cord elongate along to nerve cranium, at last, brain is differentiated from ectoderm. As the same way, intestinal canal successively differentiate intestinal organ from anus. At last, mouth cavity organ will differentiate. So we must say that mouth cavity organ is not only mouth, but mouth cavity organ is equal to mouth cranium in real expression. In the mouth cavity organ, air route and esophageal route have crossed at the same place so as to speak language, simultaneously human-being has hold structural defect, which induce dangerous evolution, which has a possibility suffering from aspiration pneumonia. But speaking language as the children of god is more important than life. So we must available mouth cavity organ to speak language with thinking, to eat food with thinking, and to breathe with thinking. So we should not speak idle talk so as to deceive others or to make money with saying a lie. Nose breathing is sophisticated air route so as to guide clean inhaled air into the lung through nasal cavity, paranasal sinus and Waldeyer's gland. But mouth breathing is directly attached to the Waldeyer's gland and is guiding into the lung neglecting nasal cavity and para-nasal sinus, secondary dried air and undigested bacteria are making trouble in the white blood cell and lymphocyte and these trouble is indirectly bringing bad

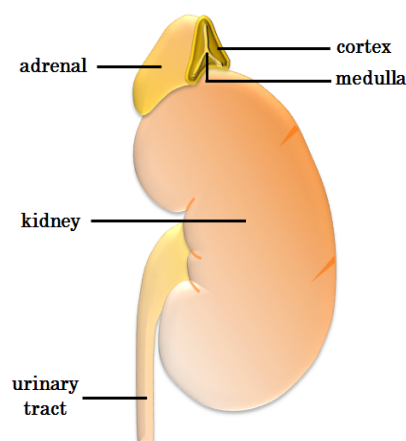
influence to the function of hormonal control of hypophysis through Rathke's cleft (Figure 1).



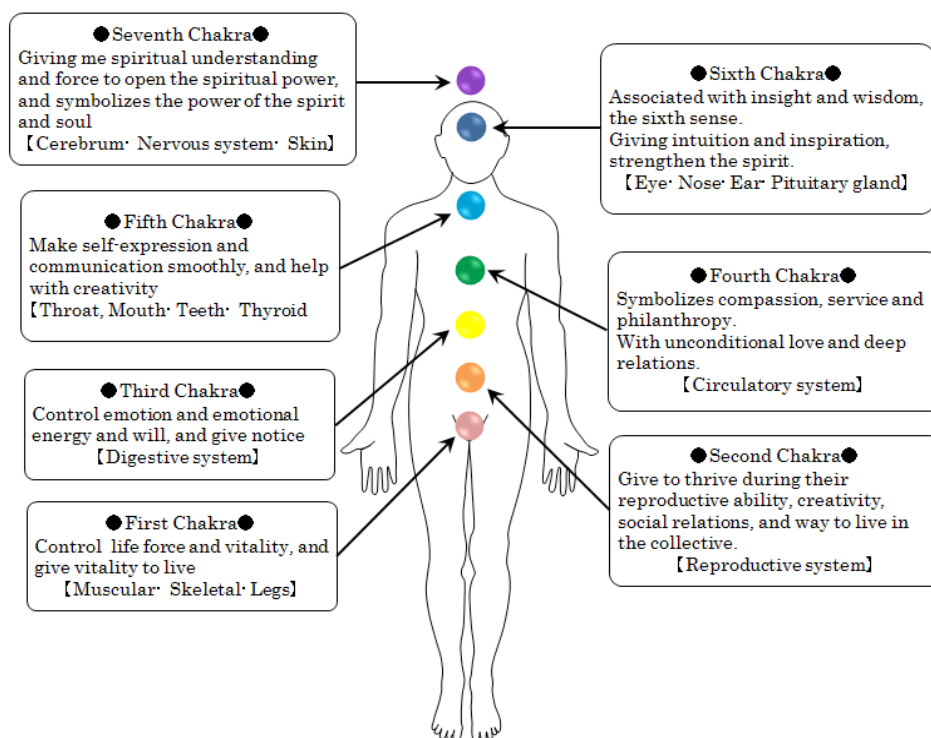
**Figure 1** Rathke's cleft. In the center of Waldeyer's gland.

The terminal of brain nerve is entered into posterior gland of Hypophysis and the terminal of endoderm is entered into anterior gland of Hypophysis through Rathke's cleft. In the center small hole of the brain, hypophysis is located on Sella turcica, 1cm diameter hole. Hypophysis is the largest neuro-hormonal center, not only in Waldeyer's gland and but also paranasal sinitis will produce some side effect of the function in the neuro-hormonal effect. (Fotta Kousaku) Mouth breathing will produce unexpected latent infection during sleeping because of receiving dropping bacteria and drying of Waldeyer's gland (counter-measure should be put tape on your

mouth). The most typical bad deed is tobacco smoking. In another point you don't throw cold water or cold over ice on Waldeyer's gland because the function of lymph gland will be weakened by this bad deed. This bad deed is inducing background for chronic disease in the gill of intestinal organ which are derived from nasal cavity, thyroid gland, lung, heart, kidney and adrenal gland. Another important point is cooling of the abdomen. There is adrenal gland in the center of the abdomen. Adrenal gland is life center which is control center of sympathetic nerve and parasympathetic nerve and blood circulation control center and adjustment of external respiration and internal respiration. If this life center is cooling, not only latent infection of intestinal bacteria but also dis-function of adrenal gland will appear.



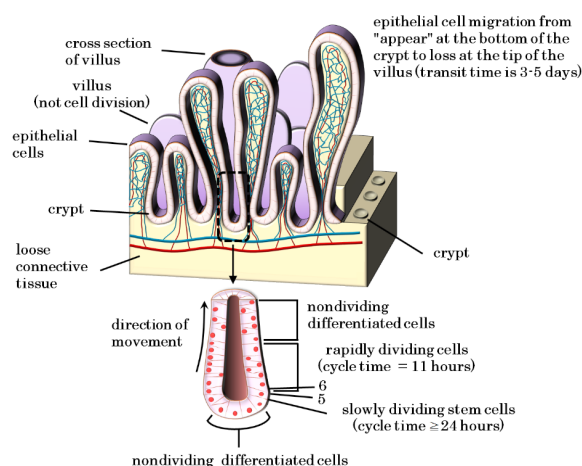
As homeostasis control center is located in the adrenal gland and regulation center of external respiration and internal respiration co-exists in the adrenal gland, this organ is just life control center. These places are coincided with chakra in Indian medicine.



1. Seventh (7) chakra is the meridian point where 100 gods gathered.
2. Six chakra (6) is the place of pituitary gland
3. Fifth chakra (5) is the place of thyroid and parathyroid gland
4. Fourth chakra (4) is the place of heart.
5. Third chakra (3) is the place of adrenal gland where control center of sympathetic and parasympathetic nerve and where control of external and internal respiration
6. Second chakra (2) is the place of intestinal immune center and solar nerve system center
7. First chakra (1) is the place of sex hormone center.

### Cooling of intestinal canal

1. Intestinal canal is endodermal origin which differentiates all internal organs in the processing of the development. Therefore, the doubling time of stem cell in the crypt of intestinal canal is fastest turnover, 11 hour. 30% of the feces is composed of fallen away from intestinal epithelial cells. In your life span, intestinal canal will produce total of 7 ton of intestinal epithelial cells. This fission time overtake its white blood cell which produce 5 ton of them. So if you cool your intestinal canal, most of the function of them will be hindered.



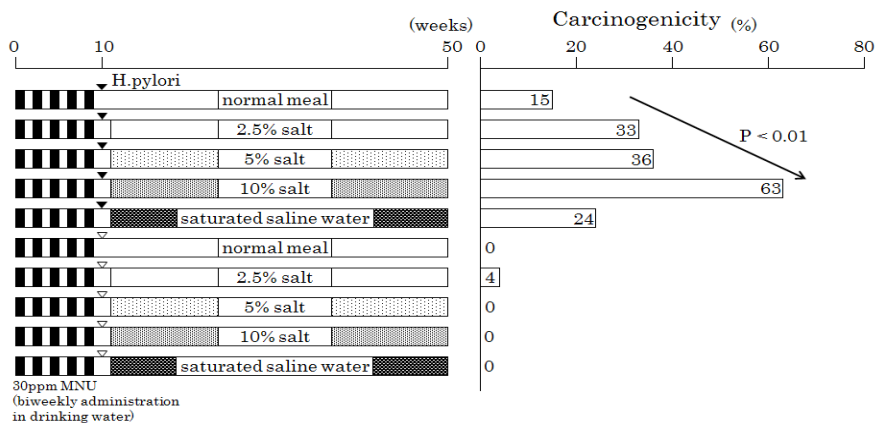
2. The square measure of the intestinal canal is equal of one side of tennis court where exist 200 times of skin surface area.

Therefore, we must think that cooling of intestinal canal is 200 times worse than the cooling of the skin surface.

3. As 70% of immunity tissue gathers in the intestine among total of them, cooling of the abdomen should be forbidden. The function of immunity and nerve are depending upon the temperature. Damage of cooling of the abdomen is worse than expected when intestinal canal is cooling, intestinal bacteria will easily be entering into intestinal canal wall and intestinal bacteria will be entering into lymphocyte and white blood cell. This phenomenon will lead to cause chronic disease.
4. We must realize that adrenal gland is the center of homeostasis and vaso-regulatory center and adjustment center of external respiration and internal respiration. Because these important function will be weakened by cooling of abdomen.<sup>7</sup>

### Latent infection of Helicobacter pylori

1. It is reported that Helicobacter pylori is infected as latent infection in stomach, duodenum and is sometime producing MALT lymphoma and thrombocytopathy. As to the stomach, I will show next report about the correlation of Helicobacter pylori and salt.
2. As the condition of with Helicobacter pylori or without Helicobacter pylori, how much the appearance of gastric cancer is changing according to the changing of the concentration of salt. In all experiments, all mouse drink a small amount of 30ppm of methy-N-nitrosourea(MNU) as a carcinogen. These data show that combination of Helicobacter pylori and high salt concentration induce gastric cancer according to the salt concentration.<sup>8</sup>
3. Among thrombocytopathy, there are some misdiagnosis of bone marrow disease and essential thrombocytopenia because of latent infection of Helicobacter pylori.
4. By the addition of CDX-1(excreted from Helicobacter pylori) stomach cell could be reprogrammed to iPS cell.<sup>9,10</sup> This data show that old way of thinking is wrong, which pathologist are thinking that stomach cell become chronic gastritis atrophicans by the effect of pylori infection and gastric acid decreased and inclined to alkali condition and duodenum cell invade to stomach and induce intestinal metaplasia. But by this Hatakeya's report, stomach cell can be changed to iPS cell by the excretes of





*Helicobacter pylori* and differentiate to duodenum cell.

### Combination between latent infection of Chlamydia pneumonia and arteriosclerosis

In 1908, William Osler had pointed out that infection is also one of risk factor otherwise aging, tobacco smoking and hypertension. In 1979, chicken had suffered from arteriosclerosis after infection of Marek's disease. Otherwise, cytomegalo-virus infection and herpes infection are also reported about same phenomenon. Especially, in

the case of chlamydia pneumonia, serological research investigated that chlamydia pneumonia infection produce arteriosclerosis in 40% reason otherwise obesity, Diabetes mellitus, smoking and hypertension, chlamydia don't produce typical inflammation. Even if massive dose of antibiotics, there is no effectiveness. In 1999, Ross<sup>11</sup> admitted that atherosclerosis is inflammatory disease.<sup>11,12</sup> Chlamydia can infect not only to arterioendothel, but also macrophage and lymphocyte. Especially, Chlamydia continuously infect for a long time in the inclusion body when they infect to lymphocyte. Therefore, antibiotics have no effect to this Chlamydia latent infection.

Author	Location	Atheroma tissue	Target age	Method	Positive rate (%)
Shor	South Africa	Coronary artery	25–44	Electron Microscope	71
Kuo	South Africa	Coronary artery	20–83	PCR, Immunostaining	56
	Seattle	Aorta	38–58	Immunostaining	33
Campbell	Seattle	Coronary artery	35–81	PCR, Immunostaining	53
Ouchi	Shimonoseki	Coronary artery	51–78	PCR, Immunostaining	69
		Great arteries	45–73	PCR, Immunostaining	50
Yamashita	Yamaguchi	Carotid artery	61–80	Immunostaining	60
Muhlestein	Salt Lake City	Coronary artery	50–65	Immunostaining	79
Blasi	Milan	Aorta	54–81	PCR	51
Juvonen	Helsinki	Aortic valve	45–80	PCR, Immunostaining	53
Welss	New York	Coronary artery	43–86	PCR	2
Ramirez	Louisville	Coronary artery	56	Culture	8
Jackson	Seattle	Carotid artery	60	Culture	4
Maass	Lubeck	Coronary artery	34–82	Culture	16

Many researchers have reported Chlamydia findings in atherosclerosis.

We should consider that smoking, mouth breathing, cooling beverage intoxication produce latent infection and Chlamydia pneumonia invade into arterial endothelia and are resulted in arteriosclerosis, and we must consider that chronic disease must be reconsidered from latent infection's aspect.

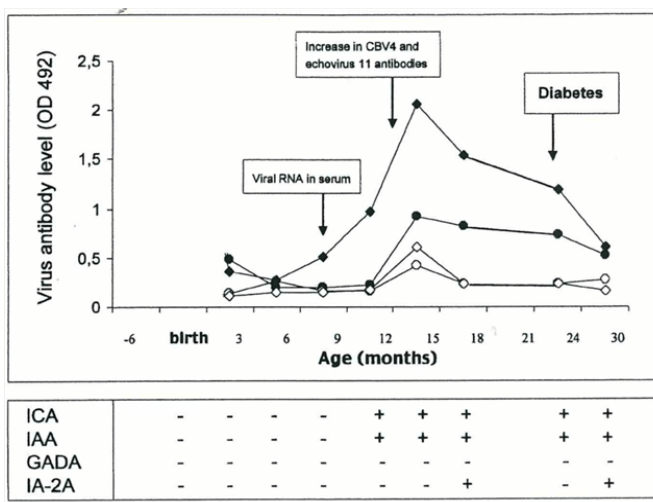
### Diabetes mellitus must be reconsidered from latent infection

In the western medicine, they say that type I of diabetes mellitus (DM) is congenital DM, type II of DM is acquired DM, but there is no counter-measure of its cause. But many researchers have reported many reasons.

A. As the autoimmune disease from viral infection is appeared in infant days. Enterovirus, cytomegalovirus and coxackie virus are considered to be candidate.<sup>13</sup>

The figure shows that enterovirus infections and the appearance of autoantibodies and clinical diabetes in a child participating in the Finnish Diabetes Prediction and Prevention (DIPP) trial. Enterovirus antibody levels against different enterovirus antigens as measured by EIA from serial serum samples between the samples were considered to be significant. The presence or absence of autoantibodies during the follow up is indicated by (+/-) in the lower panel. Level of cosackie virus B4 IgG shown by ●□B4 IgA□○. Level of echovirus 11 IgG□□

□IgA□□. Enterovirus antibody titre for its RNA can be detected at age 8 year old. Coxackie virus antibody titre can be detected at age 12 year old. Accordingly, ICA,IAA autoimmune antibody for pancreas cell are elevating. Accordingly a few years later, Type I, DM will appear. This must be considered that damaging of pancreatic cell from



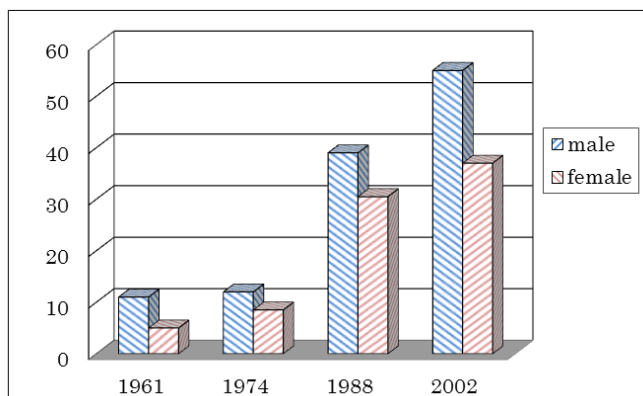
viral infection induce autoimmune antibody.

B. Bovine milk protein has 37% of molecular homology of the

pancreatic protein, Therefore, milk protein easily pass through intestine when intestinal immunity don't mature in infant days or when intestinal circumstances are cooling situation. Among bovine albumin, ICA 69 has same molecular homology with pancreatic protein.<sup>14</sup> In the days of 1980, intake of bovine milk are coincided with the appearance of type I, DM. In much western medical treatment, they have neglected counter-measure of cause of DM. They are only erasing the symptom of disease nevertheless; the nosotropic treatment is not solving the cause of the disease.

## Type II of diabetes mellitus

As to the acquired DM, specialist utilizes only anti-glycemic



medicine and insisting that calorie control of DM patient is very difficult.

This should be surprising not because this is dangerous, but

because that medical staffs are highly appreciated. Treatment of DM is adrift because they have highly appreciated without counter-measure for cause and without reduction of DM patients.

## Simple treatment of DM

- As to the DM patient, they have shortage of minute minerals of zinc, chromium and manganese. You can investigate minute minerals by hair analysis. If there is shortage in minerals, you should not only calorie control but also eating of oyster, cocoa, rye, pepper, and nut and buck wheat flower so as to compensate necessary minerals. Simple calorie control is that you should take half or one cabbage before meal, after that you should be temperate in eating.
- Of course, cooling beverage intoxication must be forbidden. Before treatment of DM, over-calorie in advanced country should not be left. If people be temperate in eating in advanced country, there would be no food crisis in developing country.
- Avoiding milk which has a possibility to produce autoimmune disease in pancreas.
- Stop periodontal disease.

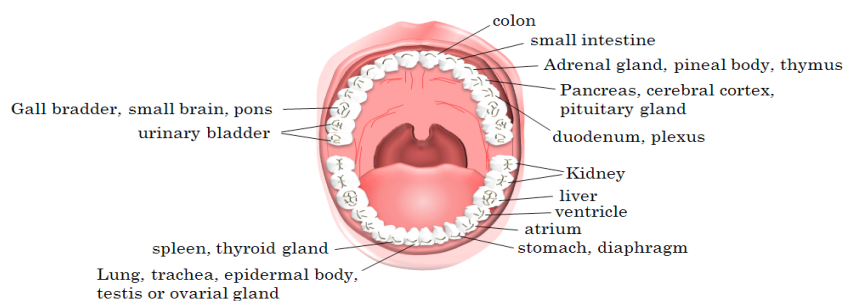
Those people who suffer from periodontal disease, are easily suffer from not only DM, but also other diseases.

## Mouth is not only simple mouth, but mouth cavity organ and intestinal cranium

In western medicine they are too lightly misunderstandings that mouth is only mouth canal so as to eat. This is lack of aspect from embryology.

- Mouth is very important intestinal cranium equal value with

The relationship between tooth and organ



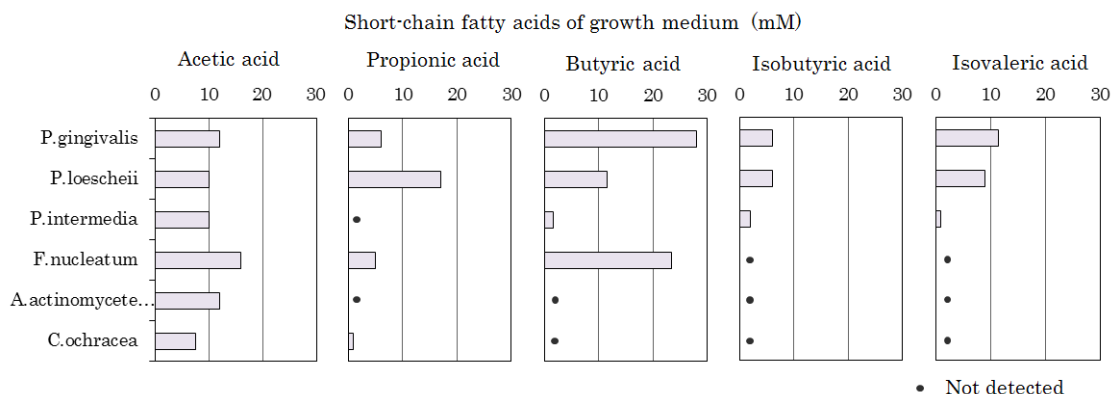
brain(=nerve cranium)

**Tooth:** cutting tooth:2, canine tooth:1, bicuspid tooth:2, molar tooth:3, total16, upper side and lower side 32, each tooth is connected with each meridian, so we should eat thinking about meridian.

Before we discuss about even teeth, or gene, we should think sleeping style and chewing with one side or mouth breathing from embryology. Chewing is total body movement, we must chew not inclined to one sided.

- As for this important tooth, we should not left of periodontal disease as latent infection of the teeth.
  - Premature childbirth: 4.3 times more increased in case of periodontal disease.

- Low baby weight birth: 2.3 times more increased in case of periodontal disease.
  - Premature low body weight birth increased 5.3 times in case of periodontal disease.
  - Easy catch a cold increased in case of periodontal disease.
  - If you utilize amalgam and paradium in your mouth as the instead of tooth, minute electric current will be followed and heavy metal is solving and damage will be appeared in the organ.
- Periodontal disease is promoting health risk,<sup>15</sup> as mentioned in next paragraph. Because immunosuppressive latent bacteria are scattering in total body. Of course, you can easily suffer from DM and influenza. Medicine and dental medicine were separately



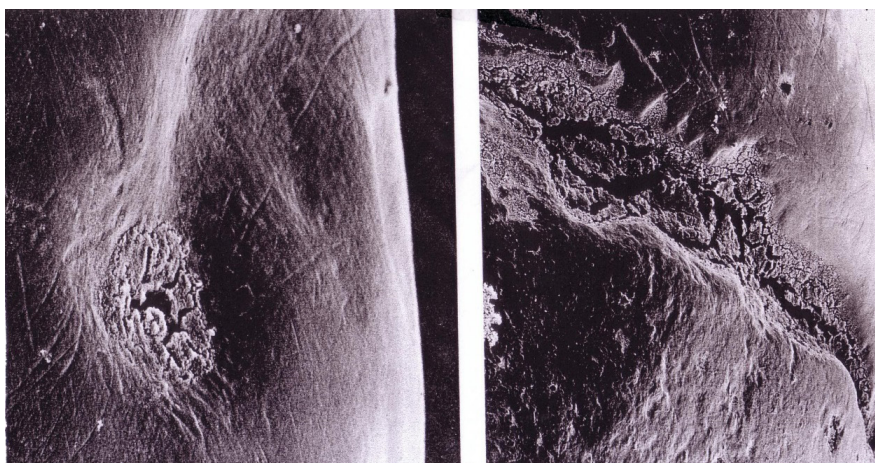
making business. This is serious defect of selective organ medicine.

4. As you see that periodontal bacteria produce short chain fatty acids (acetic acid, propionic acid, lactic acid, isolactic acid, isovaleric acid) which are promote apoptosis and inhibit immunity.

Therefore, counter-measure of periodontal disease is very

important.

- Limitation of sweets and artificial sweetening.
- Stop tobacco smoking.
- Stop cooling beverage intoxication (cold drinking water, ice cream and over ice).
- Nasal breathing and stop mouth breathing.



- Avoiding multi-doses of antibiotics, adrenal gland hormone, conservatives and additives.
- Good selection of tooth powder.

Caries is also important latent infection.

Upper figure is magnified photograph of caries. In our body, brain and tooth are never restoring if you have broken them. Recently nerve cell can be cleared to substitute by glia cell. In the case of tooth, substitution is difficult. Dentist will make artificial tooth and full denture, but it becomes impossible for the correlation between tooth and meridian. Simply speaking as easy substitution of tooth are dangerous for your health, otherwise with carrying out 8020, that is important for us to protect our tooth, 20 teeth, living up to 80 years old without senility. If substitution of tooth is easy available neglecting protect our own tooth, this is evil ways.

After spoiling our tooth, to promote artificial tooth and full denture or substitution business of utilizing iPS cell, these way of thinking are evil ways, not evolution of human-being. We must be available

our body with sophisticated way because tooth is crystal of intestinal organ as if brain is crystal of nerve organ. As we have been brain washed because medicine named mouth with misunderstandings. We must realize that mouth is not entrance for eating, but intestinal cranium organ.

Autoimmune disease and dermatomyositis has primordial life form (PLFs) was admitted by gene staining. Majid Ali in Washington integrative medical University has reported many Primordial life Forms (PLFs) (Figure 2-7).<sup>10</sup>

### New disease is derived from deviation against law of food chain

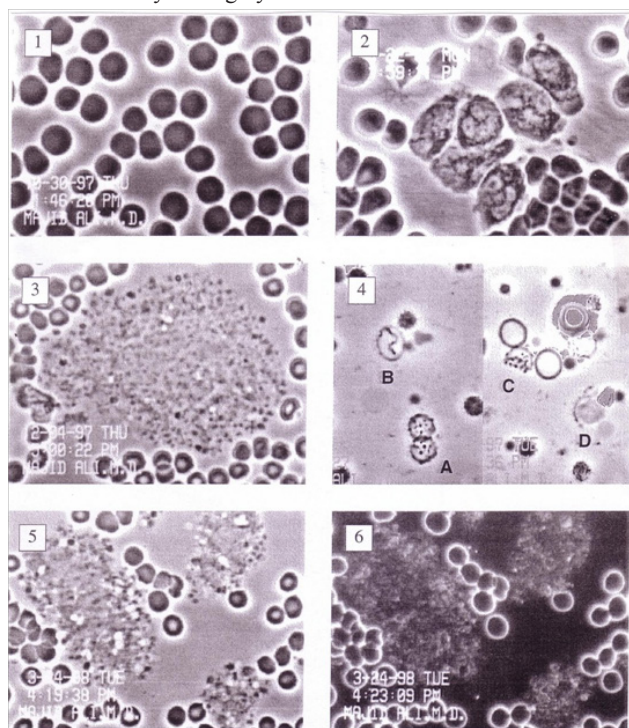
- Cow mad disease which was for European people to be thrown into threat 20~30 years ago This reason is evil things that man make cow eat the powder of cow bone protein, nevertheless, cow is complete herbivorous animal. Fundamentally prion never infects to human-being, but human-being broke natural food chain law. Thereafter, prion can infect from cow to cow. In real



problem, most of the prion is limited in not only brain but also spinal cord. This prion has possibility to connect with not only Creutzfeldt Jacob syndrome, but also other senility.

Cow consume 7 times of grain and 10 times of water in comparison with human-being. Therefore, eating cow is equal to be great stress to the earth.

- B. In China, SARS disease has magnified. This is also derivation from law of food chain because Chinese had eaten wild animal (HAKUBISHIN) which human-being should not eat mammal meat against law of food chain.
- C. HIV (Human immunodeficiency virus) is also fundamentally monkey virus. Because African people eat monkey against law of food chain. After that, HIV magnified all over the world, especially in high sex contamination places.
- D. Ebola bleeding virus is also started from West Africa. This virus has magnified by eating chimpanzee that West African people eat against law of food chain. People are interested in its high fatality, but we must realize its reason.
- E. These diseases are the results of extravagant eating of human-being.
- F. From embryological development, human-being can eat up to the fish meat. Fundamentally we should not eat cow or pig because they are highly mammal animal.



**Figure 2** is a phase-contrast photo-micrograph of the peripheral smear of one of healthy control subjects.

**Figure 3** Shows a cluster of polymorphonuclear leukocytes (PMNs).

**Figure 4** S a large cluster of a pale and dark round PLF bodies within a coagulum of plasma and entrapped platelets.

**Figure 5** Shows dark PLFs within two erythrocytes(A), and a sigmoid-shaped PLF in a degenerated erythrocyte (B), an erythrocyte with PLFs protruding through the cell membrane(C) and a curvilinear PLF which has

not completely emerged from its erythrocyte encasement(D).

**Figure 6 & 7** show phase-contrast (5) and dark-field (6) views of three large clusters of dark and pale PLFs.

## Acknowledgments

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## Conflict of interest

The author declares that there is no conflict of interest.

## References

- Joshua Lederberg. Infection History. *Science*. 2003;228:5463–5474.
- Ito K, Mitsuokai T. Characterization of Clostridia isolated from faces of limited flora mice and effect on caecal size when associated with germ-free mice. *Lab Anim*. 1985;19(2):111–118.
- Szcesnak A, Segata N, Qin X. The genome of Th17 cell-inducing segmented Filamentous bacteria reveals extensive Autotrophy and Adaptations to the intestinal environment. *Cell Host Microbe*. 2011;15(3):260–272.
- Hisao EY, McBride SW, Hsien S. The microbiota modulates gut physiology and bacterial abnormalities associated with autism. *Cell*. 2013;155(7):1451–1463.
- Finegold SM et al. Microbiology of regressive autism. *Anaerobe*. 2012;18(2):260–262.
- David G Amaral. The protein promise and the pitfall of autism research: An introductory note for new autism researchers. *Brain Res*. 2011;1380:3–9.
- Yamamura T, Miyake S, Diet. Gut flora and multiple sclerosis: Current Research and future Perspectives: Multiple Sclerosis. *Immunology (Yamamura T & Gran, Beds)*. 2013;115–126.
- Koji N, Shimizu N, Inada K. Synergistic promoting Effects of Helicobacter pylori infection and high-salt Diet on Gastric Carcinogenesis in Mongolian Gerbils. *Jpn J Cancer Res*. 2009;93(10):1083–1089.
- Fujii Y, Yoshihashi K, Suzuki H. CDx1 confers intestinal phenotype on gastric epithelial cells via inducing of stemness- associated reprogramming factors SALL4 and KLFC. *Proc Natl Acad Sci U S A*. 2012;109(50):20585–20589.
- Majid Ali. Oxidative Regression to periodontal cellular Ecology. *J Integrative Medicine*. 1998;2:4–55.
- Russel Ross. Mechanism of disease. *New England J of Medicine*. 1999;340:115–126.
- Saikku P, Leinonen M, Mattila K. Serological evidence of an association of a novel Chlamydia TMAR, with chronic coronary heart disease and acute myocardial infarction. *Lancet*. 1988;2(8618):983–6.
- Hyoty H, Taylor KW. The ride of viruses in human diabetes. *Diabetologia*. 45(10):1353–1361.
- Pietropaolo M, Castaño L, Babu S. Islet Cell Autoantigen 69KD (ICA69). Molecular cloning and characterization of a novel Diabetes associated auto-antigen. *J Clin Invest*. 1993;92(1):359–371.
- Kimmo J, Mattila MS, Valtanen VV. Association between dental health and acute myocardial Infarction. *BMJ*. 1989;298(6676):779–781.