HISTORY OF AYURVEDA IN JAPAN

History of Ayurveda in Japan went back to the 6th century, when Buddhism brought Ayurveda as Buddhism medicine to Japan. Since then Japanese people have had learned Indian customs, that may be the reason why there are similar customs with Ayurveda or Yoga, or Japanese language had Sanskrit words such as Danna for a husband or seva for caring. In Edo era, some physician practiced oil massage in southern islands or Japan, however Ayurveda was not so popularized as Kampo medicine introduced from China. Kampo medicine reached its summit of prosperity in Edo or Meiji era. On the other hand, Ayurveda could not gain full attention until 1970, when the past professor of Osaka University H. Maruyama and his colleagues such as B. Hatai and T. Nanba visited India. Then they wondered at humanistic and systematic, holistic system of Ayurveda practiced in Gujarat Ayurveda University. After they came back to Japan, they founded Research association of Ayurveda in Japan, and started to publish the annual journal “Studies on Ayurveda in Japan”. In a few years, B. Hatai founded the Research Institute of Traditional Oriental medicine (RITOM) & Hatai clinic, and started integrated treatment of western and oriental medicine. In 1976 H. Imamura went to India and studied the authorized course of Ayurveda in Gujarat Ayurveda University. She finished the post graduate as well as the full 5 years course as the first Japanese woman. In 1980s Krishna U>K. came to Japan to take a Ph degree in the Medical School of Okayama University, thereafter he cooperated with B. Hatai as the Vice President of Research Institute of Oriental Medicine (RITOM) to start to devote his life for the popularization of genuine Ayurveda in Japan. He wrote many books on Ayurveda. Vaidya H. Imamura also wrote books on Ayurveda and started her institute in 1986 in Osaka. In 1988, Maharishi Ayurveda was introduced to Japan. Its first students were K. Takahashi and K. Uebaba. In a few years, M. Hasumura and other students studied Maharishi Ayurveda under the guidance of Dr. Raju and other teachers of Maharishi Ayurveda Association in Japan in 1992 under the support of Maharishi institute in Japan. In 1994, Research Institute of Oriental medicine started the teaching programs of Ayurveda, Self care course and specialist course. The main lecturer was U.K. Krishna supported by B. Hatai, Y. Katou, K. Takahashi, M. Nishikawa and U. Uebaba. Ayurvedic practices have been also started in Hatai Clinic, Okamoto Memorial Clinic and Maharishi Tachikawa clinic in 1990s. These clinics were for outpatients. The clinics for long stay were also started in Nasu and Nihonmatsu in 1998. In 1999, Research association of Ayurveda in Japan developed to change its name to Japanese Association of Ayurvedic Research in order to get more members and social recognition. In the same year, international center for Traditional Medicine has been opened in Toyama Prefecture. It is the first official...
center in Japan for the researches on the traditional medicines in the world. Its activity was focused on the physiological researches on the traditional medicines including Ayurveda. In the first year of the 21st century RITOM has succeeded to establish the authorized educational system under the guidance of Gujarat Ayurveda University. As one of foreign branches of the university, it was named “Ayurveda School in Japan”, The first principal of the Ayurveda School of Japan was Dr. Krishna U.K. who finished the postgraduate course of the Gujarat Ayurveda University.

PRESENT STATUS OF AYURVEDA IN JAPAN

Three aspects of popularization of Ayurveda, Education, Clinics, research are not going in Japan. Adding that, importing businesses of Indian herbs or goods are also needed in Japan in order to make Ayurveda more common. I will explain about these four aspects in sequence.

1. Education of Ayurveda in Japan

Table 2 shows the outline of faculties for education of Ayurveda in Japan. These programs should be divided into one for layman and another for specialists. The duration of education is different depending on the faculties. Japan Ayurveda School and Yoga Niketan of Japan have the direct and intimate relationship with authorized Indian faculties. Yoga Niketan of Japan is providing authorized scientific programs.

2. Clinics

A) Clinical practice of Ayurveda in Japan

In recent 10 years, many clinics or institutes have been established in Japan, Dental clinics also use Ayurveda for oral health. Other facilities than shown in the table 3 were many aesthetic salons, which have introduced one of aspects of Ayurveda. However, there are still few hospitals for residential treatments with ayurvedic care of long enough.

B) Cultivation of Indian Herbs

The climate of India is so different from Japan that it is very difficult to cultivate Indian herbs in Japan. However, Mr. Ooya has been trying to overcome such troublesome problems for over 20 years. He has succeeded to cultivate some important Indian herbs, such as Ashvaghanda and Tulsi in northern part of Japan, Hukushima Prefecture. He uses closed nylon house for keeping warm in the house even in cold winter seasons.

C) Import of Ayurvedic Goods into Japan

As Ayurveda got popular, people wanted to have Ayurvedic goods, especially, Ayurvedic herbs, herbal oils and rasayanas. Owing to legal regulation by Japanese government, some of goods are not able to be imported to Japan. However, some companies have succeeded to deal with Ayurvedic goods such as herbal products, and to import to Japan. They are importing them as foods or miscellaneous goods to pass the legal regulation. According to Ayurvedic concept “food and drug is same”, there must be no problems to import them to Japan. Another special good is a soil amendment which is made from Neem. The Original products of Ayurveda made in Japan are some herbal teas. The special one is machine for ayurvedic treatment. Japan is one of the highly developed industrial countries. It is easy to make machines for Japanese. We have developed some machines for Ayurvedic treatments such as shirodhara and Swedana. We call then ‘Healing robots’. These machines are necessary for the scientific researches,
however, they can save technicians and they can practice the treatments more safely and sometimes more comfortably. In the near future these healing robots will be exported to India in turn.

3. Researches

There are few researches on going, nor few research faculties in Japan. In 1980s Professor Kenji Tazawa has started the clinical researches on Kushara Sutra under the guidance of professor pirapithia form surilanka, recommended by professor T. Nanba. And in 1990s since Maharishi Ayurveda was introduced into Japan some researches on Ayurveda were added under the financial support of the Japanese Ministry of Health and Welfare. 3 researches on the Panchakarma treatment of Ayurveda were conducted by K. Takahashi, M. Hasumura, M. Miyoshi and K. Uebaba. In 1999, International Research Center for Traditional Medicine was founded in Toyama prefecture, which prefecture has had long history of traditional medicines. The spectra of researches were alternative medicine of all over the world as well as Ayurveda.

The last 8 research is essential them for Ayurveda. In order to Justify Ayurveda, we should use modern technique of examinations, and correlate these results with Ayurvedic principle. In this research, 194 young males wrote the Dosha check sheets, which are very commonly used in some Ayurvedic textbooks. The number of questions were 20 about each dosha check for prakriti diagnosis, 60 in all. Adding to that vikriti check sheet was made, which had 10 questions, 30 in all. According to the prevalence of each dosha in the dosha check sheets, prakriti and vikriti were decided. Of 194 males, 30 cases had the typical prakriti or vikriti, vata 14, Pitta 10 and Kapha 6 cases. After answering questions, all of 194 cases had the examinations such as blood pressure, body weight, height and blood drawing the statistics were conducted by one way ANOVA.

BMI (body mass index) was different among these three types, kapha type had the largest BMI and Vata type had the smallest BMI (Fig1). Serum free fatty acid (FFA) is a very sensitive parameters of fat metabolism. Comparing FFA of three types showed vata type had the largest FFA value, while Kapha type had the smallest FFA (Fig.2) which supported the Ayurvedic principle that Kapha type had the tendency to keep fat. On the other hand, Pitta vikriti had the largest serum direct bilirubin concentration (Fig.3) Bilirubin is the yellow pigment in the body, which is the similar substance to Pitta in Ayurvedic. This result also supported Ayurvedic principles.

PONTENTIALITY OF AYURVEDA IN THE FUTURE OF JAPAN

In 21st century, as aged people increase, need for disease prevention and health promotion is being stronger. Ayurveda aims disease prevention and health promotion and it can offer aged people better QOL by its systematic and holistic approaches. Ayurveda plays the important roles in Japan even now.

Furthermore, as the ration of children decreases promotion of body and mind health of children is sough Ayurveda has the traditional system for promotion of child health, and it facilitates the contacts among parents-child, grandparents-child, child-child, and it can help to improve social relationship in families and society these merits will make Ayurveda the most necessary system in Japan in 21st century.
However, as Ayurveda has supplied expensive treatments, it may be difficult to be popularized uniformly in Japan. But, in fact, Ayurveda offers many techniques of cheap cost and large benefit. From aged to child, Ayurveda can offer the benefits of inexpensive treatments. Ayurveda is a science of life which covers form the past life to next life. Such a holistic system is needed especially for the terminal care, not only in Japan but also in all over the world. Considering these vast large spectra of potentiality of Ayurveda, Ayurveda must be essential holistic system in Japan in the 21st century.

PROBLEMS OF IMPORTING AYURVEDA IN TO JAPAN

Ayurveda has the great potentiality in Japan, but there are some essential problems to popularize Ayurveda in Japan. At first, it is difficult to get some essential herbs or herbal oils, which have not yet been certified in Japan. They may be very effective, but they may be sometimes harmful for Japanese. Some Indian herbs may have toxic heavy metals such as arsenic or mercusy in a large quantity. Some herbs have their own toxic substances such as Neem oil which has the stimulating effect on CNS and may induce convulsion.

Some ayurvedic treatments used to be for kings they are so expensive that only rich people may monopolize its benefits. Ayurvedic treatments need so much human power that it is obligated to be expensive.

Even it Ayurveda would be introduced, it is difficult to keep its full style in Japan. There must be some modification. Modification of ayurvedic treatments may spoil its full effectiveness, in turn it may enhance its potentiality for Japanese. We should go back to the classics whenever we observe ayurvedic principle, but ayurvedic textbooks have contradictory teachings, or be incompatible with Japanese life style. Then we should confirm the effectiveness, safety and mechanism of action of ayurvedic treatment, and we need to re-construct the Japanese Ayurveda without losing the essence of genuine Ayurveda.

IDEAS FOR RESOLVING SOME PROBLEMS IN IMPORTING AYURVEDA INTO JAPAN.

As a rule, we should observe the classics whenever we lose our way. Then it is essential to translate accurately ayurvedic classics into Japanese. We have not yet translated all of the important classics into Japan. Translation of charaka Samhita in English into Japan is now going by some of members of Japanese association of Ayurveda, such as Mr. Y. Yamauchi and Dr. T. Ushioda.

However, the direct utilization of Indian Ayurveda in Japan may have some problems, and it may be incompatible with Japanese life style. We should carefully use of Ayurvedic teachings which are apparently out of Japanese common sense, which have not yet certified its safety and effectiveness.

In order to import Ayurvedic goods such as herbs and oils, we should better import them as food supplements or miscellaneous goods to pass the regal regulation. In fact some goods like rasayana and anti-DM preparations are now being imported constantly, or single herbs of Ayurved may be imported in the near future. According to Ayurveda, people should use the herbs growing within 2 km wide area of their residence. Japanese people can use other medicinal herbs than Indian herbs, such as natural Kampo medicines, which have already been authorized in Japan, and been
covered by official health insurance. However, we should translate the effects of these Chinese or kampo herbs or herbal preparations into ayurvedic concepts depending on the modern scientific future researches.

As one of methods to overcome the expensiveness of Ayurvedic treatments, partial utilization of full panchakarma system may be convenient and effective in some cases, and development of the computerized, safe and quality controlled systems may offer effective, safe and inexpensive Ayurveda.

**PROSPECT OF AYURVEDA IN JAPAN**

Ayurveda will develop and will be established and popularized in Japan on the evidence based rational researches which observe the essential principle of the Ayurveda. Some modification depending on ayurvedic treatments and using Kampo medicines may be necessary. And it may offer more effective, safer and more convenient system in Japan, Japanese Ayurveda, long and steady practice of Ayurveda in Japan will give us high QOL and a happy, meaningful longevity. Furthermore, social pathology such as crime rate by young people and child abuse will be also improved. In the 21st century, Ayurveda must be an essential wisdom of life and medicine not only in Japan but also in all over the world.

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Table 1 BRIEF HISTORY OF AYURVEDA IN JAPAN

| 6th Century | Entrance of Ayurveda into Japan with Buddhism |
|-------------|---------------------------------------------|
| 1670        | Publication of “Studies on Ayurveda in Japan”  |
|             | Foundation of “Research Association of Ayurveda in Japan” |
|             | Representatives: Past H. Maruyama, B. Hatai, T. Nanba et al |
|             | B. Hatai founded oriental medicine research Institute (OMTI) |
|             | H. Inamura graduated from Gujarat Ayurveda Univ. |
|             | Kurishna U.K. came to Japan: He worked as a Vice President of OMRI |
|             | Maharishi Ayurveda was imported to japan (1988) |
|             | OMRI started Educational systems of Ayurveda |
|             | Clinical practice of Ayurveda started in Hatai Clinic, Okamoto Memorial Clinic, Maharishi Tachikawa Clinic and Maharishi Nasu Clinic. |
| 1999:       | Development to “Japanese Association of Ayurvedic Research” |
| 2001:       | Progression of Ayurveda in japan in the 1st year of the 21st Century Japan Ayurveda school has started its authorized educational system under the support of Gujarat Ayurveda University. The first principal was Krishna UK |

Table 2-FACULTIES FOR EDUCATIONAL SYSTEM OF AYURVEDA IN JAPAN

| S.NO | For layman | For specialists |
|------|------------|----------------|
| 1.   | Research institute of Tradi. Oriental Med. (Japan Ayurvedic School) | ♣ | ♣ |
| 2.   | Osaka Ayurveda Institute | ♣ | ♣ |
| 3.   | Maharishi Institute | ♣ | ♣ |
| 4.   | Int. of Traditional Health Science | ♣ | ♣ |
| 5.   | Beauty Life Institute | ♣ | ♣ |
| 6.   | Natural Healing Center of Japan | ♣ | ♣ |
| 7.   | Takaoka Healing Center | ♣ | ♣ |
| 8.   | Mukti | ♣ | ♣ |
| 9.   | Yoga Niketan of Japan | ♣ | ♣ (yogaTherapist) |
## Table 3 CLINICAL PRACTICE OF AYURVEDA IN JAPAN

| S.No. | Clinic                       | Beauty & Health | Outpatient | Hospital |
|-------|------------------------------|----------------|------------|----------|
| 1.    | Hatai Clinic                 |                | ♣          |          |
| 2.    | Yamaha House                 |                | ♣          | ▲         |
| 3.    | Maharishi Tachikawa Clinic   |                | ♣          |          |
| 4.    | Maharishi Nasu Clinic        |                | ♣          | ♣        |
| 5.    | Akita Ayurveda Inst.         |                | ♣          |          |
| 6.    | Osaka Ayurveda Inst.         | ♣              | ♣          | ♣        |
| 7.    | Ayur Space RAKU              |                | ♣          |          |
| 8.    | Cosmo Acupuncture Clinic     |                | ♣          |          |
| 9.    | Arc Hills Spa                | ♣              |            |          |
| 10.   | Jounan Dental Clinic         |                | ♣(Dentist) |          |
| 11.   | Hirata Dental Clinic         | ♣              | ♣(Dentist) |          |
| 12.   | Beaty Life Institute         | ♣              |            |          |
| 13.   | Natural healing Center & Natura | ♣            |            |          |
| 14.   | Mukti                        |                | ♣(Hair Care) |          |

## Table 4 IMPORTED HERBAL PRODUCTS AND MAIN COMPANIES WHICH DEAL WITH THEM

| Herbal Products                               | Main Companies                      |
|-----------------------------------------------|-------------------------------------|
| Medicated sesame oils                         | Meiken –sha                         |
| Gymnema sylvestre                             | Meiji Seika Co.Ltd.,                |
| Salacia oblongata                             | Mona Co.Ltd                         |
| Rasayana & insence & Neem                      | Amrit pty ltd.                      |
| Neem                                          | Neem Co. Ltd                        |
| Henna                                         | Souyaku Institute                   |
| D-balance (Diabecon)                          | Green notes, MH corporation, NTH    |
| Himalaya Singles                              | Souyaku Institute                   |
| Asava                                         | Mona Co.Ltd                         |
| Soil Improvement                              | Souyaku Institute                   |
|                                               | Mona Co.Ltd                         |
Table 4 MANI FACILITIES FOR AYURVEDIC RESEARCH

|   |   |
|---|---|
| 1 | Research institutes for Oriental Medicine |
| 2 | Osaka Ayurveda Institute |
| 3 | Toyama medical & Pharmaceutical University (national University) |
| 4 | Hujikoshi Hospital in Toyama city |
| 5 | International Center for Traditional medicine of Toyama Prefecture |
| 6 | Faculty of Medicine of Gifu University (National University) |

Table 5 MAIN RESEARCH THEMES ON AYURVEDA IN JAPAN

|   |   |
|---|---|
| 1 | Clinical cases of Kushara Sutra (Professor K.Tazawa, 900 cases) |
| 2 | Unility and effectiveness of Panchakarma for health promotion and rejuvenation (K.Takahashi, M.hasumura, M.Miyoshi and K.Uebaba) |
| 3 | Visualization of pulse diagnosis (K.Uebaba) |
| 4 | Pharmacological study of Rasayana especially on immune function (K.Inanami, Gifu University). |
| 5 | Effectiveness of Toga therapy (Naikan meditation)(K.Keishin) |
| 6 | Child massage (T.shindou,T.Uziki,Y.Tatsuno) |
| 7 | Physiological changes during Sirodhara (K.Uebaba) |
| 8 | Ayurvedic body types and blood chemistry (K.Uebaba) |

Table 6 POTENTIALITY OF AYURVEDA IN THE FUTURE OF JAPAN

|   |   |
|---|---|
| 1 | Ayurveda aims disease prevention and health promotion |
| 2 | Ayurveda offers increasing aged people better QOL (Care and Wellfaire) |
| 3 | Ayurveda promotes child health |
| 4 | Ayurveda facilitates the contacts among parents-child, grandparents-child child-child and improves social relationship. |
| 5 | Ayurveda offers many techniques of cheap cost and large benefit. |
| 6 | Ayurveda is a science of life which covers from the past life to future life. Such holistic system is needed especially for the terminal care. |

Table 7 PROBLEMS OF AYURVEDA IN JAPAN

|   |   |
|---|---|
| 1 | It is difficult to get herbs or herbal oils, which have not yet been certifies in Japan |
| 2 | Some Ayurvedic treatments are so expensive that only rich people may monopolize its benefits. |
| 3 | Modification of Ayurvedic treatments may spoil its full effectiveness, in turn it may enhance the potentiality. |
| 4 | Ayurvedic textbooks have contradictory teachings, or be incompatible with Japanese life style. |
| 5 | We need to re-construct the Japanese Ayurveda without losing the essence of genuine Ayurveda, based on the effectiveness, safety and mechanism of action of Ayurvedic treatment. |
Table 8 IDEAS FOR RESOLVING SOME PROBLEMS IN IMPORTING AYRUVEDA INTO JAPAN

|   |   |
|---|---|
| 1. | We should observe the classics, and accurate translation of Ayurveda into Japanese is essential. |
| 2. | We should carefully observe ayurvedic teachings, because it is sometimes apparently out of common sense, have not yet been certified its safety and effectiveness. |
| 3. | We had better import ayurvedic goods as food supplements or miscellaneous goods. Original Japanese or Chinese herbs are available in Japan in stead of Indian herbs, depending on the scientific researches on these herbal preparations which examined its effectiveness, safety and mechanism of action, and which can be translated into ayurvedic principles. |
| 4. | We had better try to develop the computerized, safe and quality controlled systems in order to supple effective and inexpensive ayurveda is apt to need expensive treatments which need two or more technicians. Partial utilization of full panchakarma system may be convenient and effective in some cases. |

Fig 1. Prakriti and BMI

Vata prakrti had least value of BMI, while Kapha prakrti had the largest BMI. Pitta had the middle value. These results supported the description of ayurvedic text booked. The questionnaire contained a few questions about body weight. BMI+Bpdy mass index=weight (kg)/height (m)²
Fig 2. *Prakriti and Serum Free Fatty Acid*
Serum free fatty acid (FFA) is one of sensitive marker of fat metabolism; Larger FFA is, faster fat metabolism is Kapha had the least FFA level, Which means least fat metabolism, while Vata had the largest test FFA, Which means the fastest catabolism. This result also supported the Ayurvedic typology.

![Graph showing FFA levels among different Prakritis](image)

Fig 3. *Vikriti and serum direct bilirubin*
Pitta Vikrīti had the highest level of direct bilirubin. Bilirubin is a yellow pigment of our body made from red blood cells in the liver. According to the ayurveda, Pitta has the guna of yellow colour, which description was supported by this result.

![Graph showing bilirubin levels among different Vikritis](image)