A Review of Different Botanical Medicines & Delicious Oriental Ways of Botanical Applications in Daily Life Styles

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Intro

Botanical medicine, also known as herbal medicine, has been practiced worldwide for centuries. Currently, Doctors of Oriental Medicine, Acupuncturists, herbalists, Naturopathic Doctors, Natural Medicine Practitioners, etc., are practicing botanical/herbal medicine. Even Medical Doctors and pharmaceutical companies have been showing interest in botanical medicine, and they have been researching botanical medicine on their own. Governments do not regulate botanical medicine as most herbs are easy to find and get. Hence, anyone can easily access and apply herbal remedies. However, there are quite a bit of different perspectives and views on how botanical medicine is approached and practiced. Western cultures, like Europe, Canada, and the USA, rely on nutritional facts and traditionally approved top-down style of education. On the other hand, oriental cultures (specifically Korea, Taiwan, Japan, and China) approach botanical medicine similar to the traditional way of Western botanical medicine, but they add the Eum Yang and the 5 Elements theory system. For example, when Western medicine approaches the "mint" herb, they use nutritional facts and some commonly seen statistical results, although statistics can be seen biasedly. In addition to this story, dentists in the USA recommend using mint to clean teeth, as mint has a cleaning effect. Therefore, it is easy to see mint toothpaste. In Oriental medicine, mint is assigned to the "Metal" element, and the organs associated with "metal" are Lung & Large Intestine. The lung system is in charge of the respiratory system. Since mint represents the "metal" element, as stated above, the effectiveness of mint can be predicted/presumed when consumed by associating the characters of the "metal" element. When people chew mint gum or candy, they feel a refreshed or cool sensation in the mouth. Their nose and breathing also seem to be soothing and easier. This cool sensation not only gives a "refreshing" kind of feeling in the mouth only but also affects the respiratory system because mint affects the Lung system due to stimulating the "metal" element. In this essay, the readers will be able to learn the history of botanical medicine, a simple comparison of western and oriental botanical medicine, a simple introduction to the Eum Yang and 5 elements system, how to read the elements chart, how to apply the chart in daily life, and how to cook delicious and famous oriental dishes that are made with herbs.

History

Archaeologically speaking, botanical medicine has been practiced as far as 60,000 years ago in Iraq and 8,000 years ago in China, but also 15,000 years ago in Central Asia when the world got reset due to the great flood and this legend of the great flood talks about Noah's Ark. Herbs were used for healing purposes, but in shamanism, shamans used special herbs like weed to get intoxicated/drunk(a.k.a. getting high) to have rituals or temporarily ascend to the astral world to talk to the spirits, souls, etc. This traditional Shamanism ritual is often artistically visualized as advertisements on TV, especially advertisements for perfumes from luxury brands. Perfume, indeed, is also a botanical application. In Western cultures, doctors have been practising natural medicine, and it was the mainstream medicine until the introduction of chemistry/synthetic-based pharmaceutical medicine and surgical-based medicine. Synthetic and surgical-based medicine became the mainstream medicine due to the cost-effectiveness of mass production and World War I & II. The wars demanded effective emergency medicine. With synthetic anesthesia like morphine and surgical operations to

close wounds, take out bullets, etc., Medical Doctors (MDs) and pharmaceuticals got favoured by the governments and have become the mainstream medicine today. Also, another fact is that pharmaceutical companies make billions and trillions of dollars. This means they are generating a lot of tax for the government. This is all due to the fact that they are politically and legally protected by the government as the government has seated them at the top of the ministry of health across the world. They have absolute power, but due to the development of the internet, more and more people have become aware of the side effects of synthetic-based medicine. Therefore, they have been looking for safe alternative natural solutions such as acupuncture, botanical medicine, osteopathy, chiropractic, etc.

The Rise of Natural Medicine

The market size of natural medicine has been steadily increasing in the past decades for natural medicine. The growth of natural medicine, such as acupuncture, chiropractic, osteopathy, etc., is a piece of evidence and proof that people are demanding natural medicine. For botanical medicine, rather than herbs, the term "wellness and well-being" included "organic" food, and some daily edible herbs belong to that organic food category. Also, pharmaceutical companies seem to be integrating herbal formulas these days into supplements and skin care products. It is good that pharmaceutical companies are moving toward natural remedies, but it also worries natural medicine practitioners as pharmaceutical companies may take away natural medicine practitioners and companies' market portion and dominate the market with their infinite budget.

The Growth of Botanical Medicine and Limitations

Botanical/Herbal medicine is rising, although people prefer to buy botanical products in the form of powder, syrup, and processed products that are easy to consume rather than raw herbs, according to detailed market research done by Polaris Market Research. Despite the difficulties, the global market has shown a big welcome and steady growth for botanical medicine. From the 1950s to the 2010s, the market size of natural herbs across the world grew up by 220 times (FRONTIERS IN 2020). In Western cultures, the applications of botanical medicine are rather limited to syrups, powders, extracts, etc., but the majority is in tablets and capsules (Polaris Market Research 2022). In Oriental cultures, specifically Korea, Japan, Taiwan, and China, the applications of herbs are more varied. They use raw herbs for food and drinks. Well, as an extreme example, tea is a part of botanical medicine, and Europe was importing tea from China which eventually led to a war which is a piece of evidence that Far East Asia had better ideas for daily life applications with botanical materials. Tea was one of them, for sure.

How Herbs Blended into People's Daily LifeStyle

Many humans living in the 21st century have been blessed with water accessibility due to modern infrastructures. However, when people did not have plumbing systems like now, they had to travel far to get water from river streams or lakes if there was no man-made well built nearby. Also, wells often were exposed to many dangerous factors. Hence, the quality of the water was not good. Rather, it was safe to say the water was smelly and horrible. Even when

they boiled the water, the smell of the water wasn't that great. This was why the herbal teas and coffee from China and other nations like America were so popular in Europe back a few centuries ago because the herbal teas removed the stench of dirty water. Because of herbal teas, people raised flags and went to war like the "Opium War" or made a political party like the "Boston Tea Party" in the USA, which became a historical moment in founding the USA. Why did Columbus find America? History says that Columbus suggested the kingdom look for another route to avoid the Ottoman Empire of Turkey as the "Silk Road" was occupied by the Empire. It's stated that one of the important trades/resources from America was "coffee". It's known that Nederland(Netherlands) was the first country to enjoy drinking herbal teas in the year 1610. So it's about 1 century after Columbus found the American continent. Ironically, coffee was not as popular in Europe at that time because the merchants and trading companies in European countries were looking for a product that was more stable supplies. It's reported that coffee had some difficulties supplying to meet the demand due to the insecure trading routes compared to herbal teas. In the Netherlands, green tea was more popular, while red tea was more popular in the UK. The UK people loved red tea so much that the entire nation was losing a tremendous amount of money from trading with China, which eventually led to Opium War in 1840. Also, "pepper", a spice that makes food more delicious, was a symbol of wealth among nobles as well. There was no electricity, hence the quality of food like vegetables, fruits, meat, etc. was poor and not as fresh as now hence the food was rather smelly. Sometimes people would smell a sickening stench. This is where the "pepper" shined. With peppers, not only it removed the smell drastically, but it also made food tasty significantly. Can you imagine that eating food with peppers and a cup of tea was the symbol of wealth? People can find peppers for less than \$2 and less than \$10 for packs of tea in tea bags at any Walmart-like store. Moreover, most people in developed countries have a refrigerator and a freezer. So people can drink cold or warm/hot tea depending on their needs anytime. Not only that, most households who enjoy drinking tea have various kinds of tea, coffee, syrups/sweeteners, crackers, etc., to enjoy tea time even more. Imagine people from the 17th century saw a common mid-income person's lifestyle, drinking tea every day by turning on the faucet to get water, eating fresh vegetables stored in a refrigerator, and throwing in all kinds of rich ingredients, spices, salt, sugar, etc. into one's meal. The people would get shocked by the differences in civilizations to see that those herbs that are only available to nobles or royal families are accessed by everyone including commoners.

Different Limitations of Botanical Medicine in the Orients.

In Western cultures, Botanical Medicine, like the word "medicine", means herbs for healing/therapeutic purposes in general but not limited to. In Oriental medicine, the term "botanical medicine" is broad. Technically almost anything can be a herb. Starting from rice, barley, and to a cicada(a loud buzzing insect)'s peeled skin, which is used for itchy skin and eye matters, according to the oriental herbology book, can be defined as herbs. This is specifically in Korea, Taiwan, China, and Japan, as they use the same herbal medicine. In other words, almost anything that humans can eat can be considered oriental herbal medicine. Critically, in TCM, they add dangerous poison/toxic herbs into their formulas. They say this is a theory of "kill the poison by another poison," which has been in debate for a long time, and many types of research have proved that the formulas without toxic herbs actually work well. The toxic herbs actually make things worse when they are added to those well-working formulas. However, still many TCM practitioners stick to the old TCM herbal formulas with poisonous herbs, unfortunately. Like traditional western botanical medicine, the education of botanical medicine is memorization based. However, to make things much easier, they

associate the herb with an element of the 5 elements. The following topic will be a short introduction to the 5 elements system.

The Eum Yang and Five Elements System

-Eum Yang

In ancient times in far east Asia, monks and shamans tried to understand how the universe and life worked, and they found that the universe was governed by Eum Yang and the Five (5) Elements System (EYFE / EYFES). From now on, we will refer to that system as EYFE or EYFES. The ancient shamans found out that this world we are living in was a 3rd-dimensional world and the EYFES was the absolute law of the universe no matter which dimension it was. Be it the 4th, 5th, or 6th dimension, whichever it is, the law of gravity and physics may change, but the EYFES would still be the system of the universe. The term universe here is not the galaxy or the NASA kind of astrological space, but more like the entire world. Buddhism says that there are up to twelve dimensions. Interestingly, quantum scientists used mathematics to find out that there are up to ten dimensions. Despite the many dimensions, all those dimensions fall under the EYFES. There is no vocabulary for Eum and Yang in English, but there are vocabularies that represent the definition closely enough. Eum represents "passive," and Yang represents "active." Eum and Yang are two separate characters but are one. What is the characteristic of "passive"? It's pretty simple. Anything materialized has storage, or facts that happened (history), is considered passive. "Yang" is the opposite. There is no form as it is not materialized, and it has not happened yet. For example, the ground is considered as Eum/Passive because it is storage for everything on the Earth. Ground stores trees, let food crops grow, and let humans and animals build their homes. On the other hand, Yang/Active is the sky. Unlike the ground, the sky can not store anything, but it does a lot of activities to keep us alive such as rain. Without rain, there would be no water. Without the ground, the water from the rain across the globe can not be stored. This is an example of Eum and Yang being two separate characters but being one. They can not live without each other. Fire can be Yang/Active, and water can be Eum/Passive. If there is too much fire, the water will be dried, and too much water will kill the fire. Hence we want the perfect balance of fire and water, just like in the picture below, Figure #1. Below is the symbol of Eum Yang.

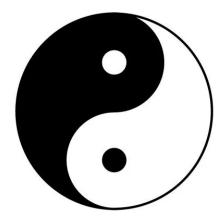


Figure #1. Symbol of Eum(Shadow) Yang(Light)

Here is another picture (Figure 2) of nature that represents the Eum Yang.



Figure #2. Eum Yang in the form of the nature

This is a great illustration that shows the phenomenon of Eum Yang, two inseparable characters in one. Just like a married couple, wife and husband, just like the Moon and the Sun, the Water and Fire, Women and Men, etc. The sky with the sun, representing Yang, is working in harmony with the sea, representing Eum. Below the sea is the ground, and the sea can not exist without the support of the ground. Without the sun, there would be no life. Everything needs to be perfectly in balance. If one is too much, there will be no life. For example, if the heat from the Sun is too much, there would be no water left as everything is dry, leading to no life. If the Sun is not there, it would be extremely cold or reach an absolute zero point where everything is frozen. Hence there would be no life as well. This was the way of oriental philosophy and living until recently in far east Asia. Due to Western science and education being dominant in modern society, people learned to narrow down at the microscopic level and separate matters. In oriental philosophy, they holistically approached things. There are still people who practice the oriental philosophy in Far East Asia. However, we must recognize that Western science has brought humanity much more good than harm, such as electricity, architecture, the internet, infrastructures, etc.

-The Five(5) Elements

CLASSIFICATION OF THINGS ACCORDING TO THE THEORY OF THE FIVE ELEMENTS

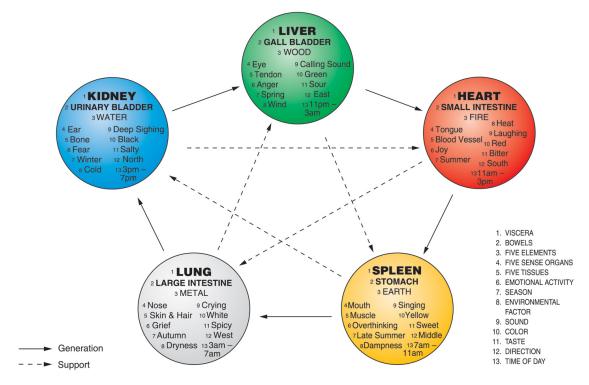


Fig. 3. Five Elements Cycle

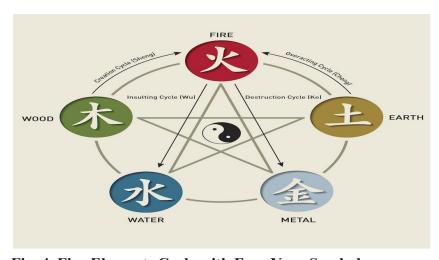


Fig. 4. Five Elements Cycle with Eum Yang Symbol

Ancient shamans/monks understood that under the Eum Yang system, there was an integrated system that managed the universe more specifically in detail which is the Five Elements System. Some European element systems say that there are four elements such as air, wind, fire, and water, or air, wind, earth, and water, but in they are all in the five elements system as it is the finished theory which is the law of the universe. There is a flaw in that 4 elements theory. The European theories included "air" as an element, but this is wrong. Without air, wind, fire, or water can not exist. Even in chemistry, water is H2O. Without air, humans can not create fire, and without air, wind can not be created. Therefore, the air is the foundation and fundamental vital being of every existence, which can not be counted as just an

Intro to Ghee/Ki/Qi and the Difference between Ghee VS. Energy

In Oriental 5 elements, the air is already integrated within the system, and we call it "Empty Ghee, Ki, or Qi". The reason they put "empty" is that it is invisible but can transform into any element. If you think about it, air can push to cause wind, transform into water (H2O), or even fire. Chemistry science also confirms it. The ghee is the very foundation of human vitality. It is not energy. Many people refer to ghee/ki as energy, but it's half right because the energy, in scientific terms, can be calculated mathematically in joules(J). Ghee can not be calculated, but it can transform into any of the 5 elements and get calculated after a kinetic/heat activity occurs. Energy, in general, is only related to kinetic movement and heat. Hence the unit in the calculation is joules(J). Also, in absolute zero theory, which is -273.5 degrees Celsius or 0 kelvin, nothing can move at all. There is zero energy because nothing is moving. How can there be any energy when nothing is moving? However, in the five elements, absolute zero can be considered extremely cold ghee. Some people without the proper definition of scientific terms may think, "Isn't that the same as extreme cold energy?" but again, energy equals kinetic and heat in general (although you may be able to add volume and pressure when talking about gas chemistry). Therefore, the colder it gets, the lower energy it becomes under the current academic and scientific term "energy." Hence, there will be no energy at all at the absolute zero stage. Often it is easy to spot people who call themselves "spiritual beings" and hear them saying, "I feel and follow my heart and energy." Their term "energy" is more of a broad sense like "vibe" or "aura" rather than the scientific term "energy." If a correction needs to be made, "aura" should be the right term. Figures 3 and 4 above show the cycle of Five elements. Figure 4 shows the fire element is the top centre, but **Figure 3** is the right one regarding the starting order. In the five elements, it starts from Wood > Fire > Earth > Metal > Water and then > Wood (infinite loop). The 5 elements cycle system is not a separate system from Eum Yang, but it's an integrated holistic system. For example, Eum and Yang in humans or any animal would be two genders. Eum is passive. Therefore Female gender belongs to Eum because females have storage (uterus) to store and grow a fetus. Males belong to Yang(active), which is the opposite of Eum. As stated above, yang has no storage, just like the sky. With the 5 elements, each Eum and Yang has its own 5 elements, like 5 elements of Eum and 5 elements of Yang, making it 10 total. However, in oriental medicine, they found out that the fire element has a subdivision, a supporting fire element. Since it still represents the fire, they count it as 5 elements total rather than 6. You can think of supporting subdivision as a shield of the main fire element. With that extra supporting element in mind, ancient monks discovered that there are 6 Zang (Eum, passive) organ systems and 6 Yang (Yang, active) organ systems, making it a total of 12 organ systems. Like **Figure 3**, starting from the wood element, it shows "Liver" in bold font while Gallbladder is in thinner font. The liver represents the Eum(passive) of the Wood element, while the Gallbladder represents the Yang(active) of the Wood element. They are like a wife and husband couple. Hence, in Figure 3, the organs written in bold font are Eum (Passive) organs, while the non-bold font is Yang (Active) organs. The Eum organs are significantly more important than the Yang organs in oriental medicine. You can see the list of more characters per element on the bottom right of Figure 3, which lists 13 categories.

Mechanism of the 5 Elements System (Excess/Deficiency Restrain/Govern and Counter-Retrain/Mother & Child)

5 Elements always work in an infinite loop of the cycle in order. It starts from Wood -> Fire -> Earth -> Metal and finishes with Water, but from Water, it goes to Wood again to start another cycle. To understand the mechanism, there are some rules you must understand by memorizing. Luckily, memorization is easy, but you must understand the concept.

-Excess & Deficiency

The main purpose of Eum Yang and Five Elements is to keep things in balance. No one element should be more excessive than the others. If Eum becomes excess, then Yang becomes deficient and vice versa. We want the Eum and Yang to be in balance perfectly. When one is stronger than the other, it's only natural that the other will become weaker and will cause disharmony. In TCM, they misunderstand this concept and are teaching the wrong history and knowledge to students, unfortunately. Their definition of excess and deficiency is a bit different. If one is in excess, only that is in excess, and the other is in normal condition.

- Mother & Child Mechanism

In this 5 elements cycle, there is a rule called the "mother and child" relationship. In a cycle, any couple of elements next to each other can become mother and child, but the mother is one before the child in order. For example, with Water and Wood elements, the Water element would be the mother, while the Wood element would be the child in that mother-and-child mechanism. Why is the water element the mother? It's simple. Without water, the wood element can not be nourished so that it won't grow or exist. Therefore, water is the mother, and the wood element is the child. Without a parent, there can not be a child.

-Restrain / Governing and over restrain/over governing

As mentioned above, the whole purpose of oriental medicine with Eum Yang and the five elements is to keep things in balance. In a balanced see-saw, the see-saw would be perfectly parallel, not leaning toward any side due to the perfect balance. To achieve this, the five elements system has a restrain/govern mechanism. For example, if the fire element is rising up, the water element will try to restrain the fire element from governing the harmony of the five elements cycle. Another example is that if the water element starts rising to the point it is about to cross the line, then the "Earth" element will suppress the water element. It's good when the governing/restraining strength is appropriate, but if the governing element becomes overpowered and over-restrains an element, for example, water over-restraining fire, it will attack the fire element. Imagine we want a warm bath, but if there is too much water and not much fire(warmth), it would be a cold bath which is not ideal. That's why we need to keep things in balance. So the governing/restraining element is one before the mother element. Therefore you need to move 2 to the left of the cycle. However, if an element goes ultra excess, it may attack the governor/restrainer element.

-Counter-Attack/Counter-Restraint

As mentioned above, if an element is at an ultra-excess state, it may attack other governing elements. It usually does not attack its mother or child element. For example, normally Water element would be the governing element of the Fire element and keep an eye on the Fire element, but if the Fire element becomes too strong to the point that the Water element can not govern, then the Fire element may go on a rampage and attack the Water element. For example, if the fire element is too strong and starts attacking the water element, the water element would get evaporated. In other words, there would be no water left. This means the end of the water element. This is an example of a "counter-attack" state. If this happens in oriental medicine, the governing element must get reinforced to gain the strength back to suppress the other aggressive and rebellious element. Other quick examples would be, if the water element is in excess, the earth element should get reinforced to suppress the water element. If the wood element is in excess, then the metal element should be reinforced. Pretty simple, isn't it? Now we have touched the basic and fundamental mechanism of the 5 elements, it's time to look how to apply this in botanical approach.

Application of The Eum Yang and 5 Elements Chart

| | Wood | Water | Fire | Earth | Metal |
|---|----------------------------|-----------------------|------------------------------|---------------------------|---------------------------|
| П | Acne | Backache | Anxiety | Acid reflux | Aloof |
| П | Aggressive | Bladder infection | Burning sensation hands/feet | Bad breath | Analytical |
| П | Allergies | Burning urination | Charismatic | Brooding | Asthma |
| П | Argumentative | Calm | Charming | Caretaker | Bossy |
| П | Assertive | Cautious / fearful | Cheerful | Chronic worry | Chronic cough |
| | Blurred Vision | Chronic complainer | Communicative | Clings to past | Clean |
| П | Bold | Contemplative | Curious | Comforting | Discerning |
| П | Competitive | Creative | Distractible | Concerned | Discreet |
| | Decisive | Deep | Dizzy / light headed | Conforming | Dislikes crowds |
| | Demanding | Fear of change | Easily excited | Consistent | Distant |
| | Depression | Introspective | Enthusiastic | Cooperative | Dry skin |
| | Determined | Lack of sexual desire | Excessive enthusiasm | Craves sugar | Elegant |
| П | Difficult | Leg pain | Excessive talking | Deliberate | Emotionally aloof/distant |
| | Direct | Night sweats | Feel overwhelmed | Dependent | Excessive grieving |
| | Dominant | Observant | Flighty | Easy-going | Eye for detail/beauty |
| | Driven | Patient | Flirtatious | Feels emotionally hungry | Feels Disconnected |
| | Dry Eyes | Peaceful | Flushed face | Hard to swallow capsules | Gracious |
| | Fast | Persevering | Funny | Helpful | Hoarder |
| | Fatigue in the Mornings | Private | Heart palpitations | Involved | Honorable |
| | Focused | Reflective | Incapable of compassion | Loyal | Humble |
| | Goal-oriented | Resolute | Insomnia | Muscle weakness | Idealistic |
| | Impatient | Restless | Life of party | Nurturing | Inhibited |
| | Indecisive | Ringing in ears | Likes to make people laugh | Overprotective | Likes to think & journal |
| | Inflexible attitude | Secretive | Lively | Poor appetite | Neat & organized |
| | Intense | Serene | Muddled thinking | Poor digestion | Polished |
| | Irritable | Serious | Nervous | Predictable | Precise |
| | Loud | Solitary | Optimistic | Relaxed | Proper |
| Ш | Migraines | Stubborn | Quick | Slow | Refined |
| Ш | Passionate | Subtle | Scattered | Sociable | Reserved |
| | PMS | Wakes frequently | Spontaneous | Supportive | Self contained |
| | Skin rash | Weak or brittle bones | Talkative | Sweats easily | Systematic |
| | Strong/loud voice | Willful | Unpredictable | Sympathetic | Weak voice |
| | Stubborn/Aggressive/Temper | Wise | Witty | Tough to gain/lose weight | Well-mannered |

Figure 5. Lists of characters per element and how to apply them in oriental herbal medicine

This Figure. 5 shows lists of associated characters per element in general. Please be reminded that this chart is very basic for beginners. This gives you a broad sense of how oriental medicine approaches health and the universe. As this essay is an intro level, readers won't touch on this topic in-depth. Still, they will get an idea of how oriental herbology and

medicine apply the Eum Yang and five elements for medicinal purposes. For example, under the "Wood" element, we see "Aggressive," which means anger. So if someone is angry, an oriental medicine practitioner would have a few choices, but like the cycle of the five elements above, the best method would be to reinforce the "Metal" element to suppress the overworking "Wood" element for the fastest and best result. Therefore, the practitioner would find something that helps with the metal element. Generally, the most commonly used strong metal element herbs are ginger, garlic, onion, wasabi, mustard, mint, and pepper. So to treat the wood element (liver and gallbladder system), in oriental herbal medicine, it will be a formula that contains heavily based on those pungent herbs or food. If the metal element (lung and large intestine) is showing issues such as respiratory system issues, constipation, etc., then pungent food may help as well to soothe the issues, but sometimes it's faster to work with the "Fire" element as it suppresses the "metal" element directly. For example #2, if the "metal" element is overworking and needs to be suppressed, then it is appropriate to reinforce the "fire" element. Common fire element herbs and consumable food are cacao, tomato, red ginseng, coffee, grapefruits, Ginko Biloba, etc. The ingredients would include most of those that help the fire element. As you can see, this is how oriental medicine approaches health using Eum Yang and the 5 elements theory. This has been applied to not only health but everything, such as lifestyle. Poong Soo(Feng Shui in Chinese) is a great example which uses the Eum Yang and 5 Elements theory for daily life and the interior. The great ancestors have made great food recipes using herbs to enhance their health benefits and taste.

Herbs Used As Food Ingredients For Better Taste and Health

In Far East Asia, especially Korea, Taiwan, Japan and China, many herbs have been used as food spices or tea besides medicinal use. Often, the ancestors mixed herbs to make soups, side dishes, etc. As a result, Korea has produced famous vegan-friendly dishes like "kimchi", "bibimbap" (spicy mixed rice on a stone pot), soybean paste tofu soup, etc. If you look at Korean and Japanese dishes, you will find that many dishes are vegetarian or vegan-friendly. When people think about "kimchi", they think of fermented lettuce coloured in red which is spicy chilli peppers and think kimchi is always red in colour and spicy. Surprisingly, there are variations, such as the sweet and sour version of non-spicy white kimchi. In this thesis, the readers will learn various kimchis, herbal side dishes, and some famous herbal main dishes from Korea and Japan that are known but not well known worldwide. These are hidden treasures. After all, the meaning of "treasure" is due to being unknown and yet has high value.

Did You Know Baek Kim Chi and Its Effects?

In Korea, the next known kimchi other than the traditional red kimchi is BAEK KIMCHI (백김치). Baek means "White." So unlike the traditional red kimchi, this kimchi does not have ground chilli pepper powder, and it mostly tastes sour and sometimes sweet and sour, depending on how much they add sugar.



Figure 6. Baek Kim Chi (White Kimchi)

What about the healing properties of Baek Kimchi? A research team has found that Baek Kimchi works significantly better than red Kimchi regarding losing weight. They found that Baek Kimchi was boosting the effectiveness of losing weight by preventing the body from storing fat. They did this by comparing it to the red kimchi and feeding them to mice as well by giving them the same environment and same food, and the Baek Kimchi was the winner. What about other properties that Baek Kimchi has?

- Prevents high cholesterol
- Baek Kimchi made in summer at 25c and stored at room temperature creates 2x fibres than other baek kimchis made in Spring or Winter at 5c.
- Helps with the intestinal system(digestive system)
- Builds immune system
- Anti-acidic effect

Representing Element: Wood (Liver / Gall-Bladder)

Historically, Baek Kimchi was the original kimchi and was the main trend side dish before spicy chilli peppers were introduced in Korea. Regardless of the colour, Kimchi and many side dishes always have been included in any meal, be it breakfast, lunch, or dinner. Koreans were applying the Eum Yang and 5 Elements system into their everyday lifestyle. So what exactly the Korean ancestors made was a balanced elemental meal that is focused on health. The purpose of the side dishes was to support the main dish as supplements to cover what the main dish was lacking. For example, if the main dish was oily soup, they used the side dishes to refresh their mouth and remove the greasy taste.

Multi-Grain Rice, Jab Gok Bab

There are a few kinds of rice, like long-grain rice, known as either jasmine rice or balsamic rice. These types of rice are popular in India and China. Meanwhile, Korea and Japan focus on using sticky rice, which is a bit shorter than balsamic rice but quite sticky and is also known as sushi rice. This sushi rice has been the mainstream rice, or we could say, the only rice consumed in Korea and Japan. Jab Gok Bab means multi-grain rice. 'Jab Gok' means multi-grain, and 'Bab' means rice in Korean. This multi-grain is arranged explicitly for sushi rice rather than long-grain rice. If you try it, you will understand as the multi-grains won't go as well and won't be as tasty as long-grain rice.

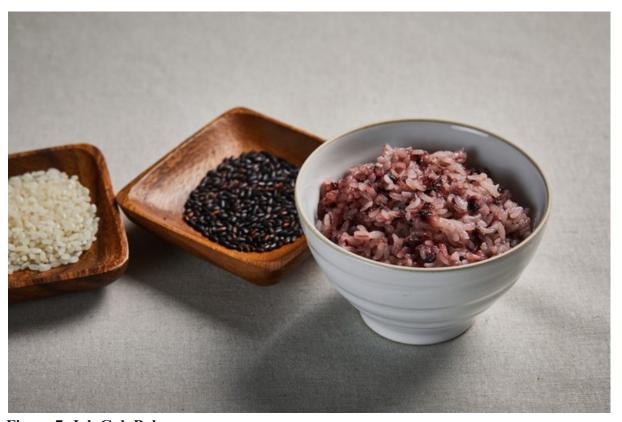


Figure 7. Jab Gok Bab

As you can see from the picture above, unlike white sushi rice, Jab Gok Bab is a coloured cherry, dark reddish colour. It is due to the multi grains in dark red and black getting blended into white rice during the process of cooking the rice. So what exactly is Jab Gok Bab good for? What in botanical medicine way does it offer advantages and benefits to our health? According to research conducted by several hospitals in Korea, they reported that Jab Gok Bab helps the followings:

- Breast Cancer Prevention
- Lowering cholesterol (maximum of 50% absorption)
- Blood Pressure control/management
- Blood Sugar level control
- Prevents the body from absorbing more fat than necessary
- An abundance of Vitamin A, B, C, & E

- An abundance of Minerals and Fibers

Ingredients: brown rice, white rice, black rice, buckwheat, sorghum

Ratio: White Rice 70%, Mixed-grain 30%

Representative Element: Earth (Spleen/Stomach)

Recommended cooking method: Use an automated pressured rice cooker

The Unique Pleasing Smell and Delicious Kimchi, Ggaet Ip Kimchi(깻잎 김치) (Sesame/Perilla Leaf Kimchi)

Sesame/Perilla leaf kimchi has been one of the traditional dishes which are not known to foreigners in general. The Korean sesame leaf has a unique smell that's very pleasing and calms down people. There once was an American vegetarian I knew, and I invited him to a Korean dinner at a Korean restaurant in Korea. At the restaurant, sesame kimchi dishes were served, and he was astonished by the flavour and the pleasing smell. He kept asking me to find out the name of the leaf and where to get in a city near L.A., California. Hence, I personally gave him all the instructions on where to get it. The American guy was a millionaire chemist specializing in organic chemical products for architectural materials for waterproofing and flooring membranes. Because he was deeply involved in chemistry every day, he started getting skin rashes, breathing issues, irritation, etc., from the chemical toxin smell. His doctor recommended he try a vegetarian lifestyle. He wasn't too happy with it until he visited Korea. He found that most of the side dishes in Korea were vegetarian-friendly yet delicious, including this sesame leaf kimchi.

What's so good about this sesame kimchi beside the unique smell and taste? According to a food and health research centre in Korea, they have found out that Korean sesame leaves have several antioxidants such as chlorophyll, beta-carotene, and anthocyanin. Also, a substance called "phytol" selects and removes cancer cells only. Therefore it prevents the body from growing cancer cells. Not only that, it offers much more health benefits as the followings:

- Skincare & whitening effect: Rich in vitamins A and C, they improve wrinkles by increasing skin elasticity. Also, the rosmarinic acid and luteolin ingredients suppress the production of melanin pigment. Hence it's good for freckles. Lastly, rosmarinic acid is known to be more than twice as effective in inhibiting melanin products as arbutin, which is known for its whitening effect on cosmetic products.
- As mentioned above, due to being rich in Vitamin C, it prevents the body from getting cold by boosting the immune system. It also helps relieve inflammation.
- Sesame leaves also prevent anemia as they contain a lot of iron
- Due to being rich in Vitamin A, it is good for the eyes
- It's also excellent in anti-bacterial actions
- Promotes brain health due to being rich in rosmarinic acid



Figure 8. Ggaet Ip (Sesame Leaf)

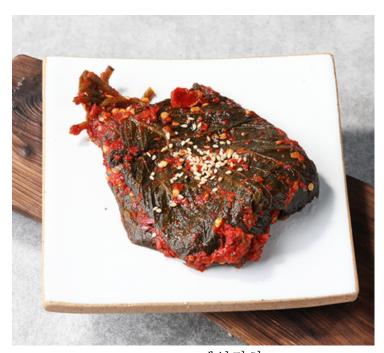


Figure 9. Ggaet Ip Kimchi (깻잎김치) (Sesame Leaf Kimchi, marinated and fermented)

Ingredients: Sesame Leaf (Korean product), spicy chilli pepper powder, cider (7up/sprite), salts, sugar, ginger, onion, soy sauce, and love

Representative Element: Metal

Recommended eating method: eat with rice, use sesame leaf as a wrap, or it could go well with pasta, pizza, like greasy and cheesy food to refresh the mouth

Edamame, A Popular Snack/Side Dish from Japan

Edamame is green peas. Unlike Korea, where they heavily ferment or marinate food, Japan focuses much more on keeping the originality of the food by lightly marinating. Therefore, food like tofu, sushi, sashimi, etc., is produced in Japan. To begin with Japanese healthy

vegetarian food, edamame is an ideal snack for beginners. Japanese people enjoy eating edamame while drinking beer or wine. Therefore you will easily see "edamame" on Japanese restaurant menus. You would be surprised to know that edamame is the original ingredient for processed food such as tofu, soy sauce, soybean paste, etc. Edamame is rich in Vitamin B1 and protein. Rather than eating raw, Japanese people like to spray a bit of salt on edamame to eat it a bit salty to add taste.

Ingredients: Edamame (green peas) and salts Recommended eating method: eat as snacks

Representing element: Water (kidneys and bladder)

Conclusion

Western botanical medicine focuses mostly on the extraction of herbs, syrups, tea-like drinkable methods, candies, and popsicles which lack the potentiality of joyful tastes. Well, some people may argue that western botanical medicine element does exist in western dishes. Still, that type of green-like salad, the so-called "well-being" nutrition/food trend, only has become popular very recently. In the orients, they have successfully used herbs and evolved them into delicious dishes. Many dishes have become popular worldwide, such as Kimchi, edamame, ramen, Bi Bim Bab, Jab Gok Bab, etc. Not only that, there are hundreds of different variant meals, snacks, and side dishes of botanical effect herbs. It proves that the botanical materials/herbs do not need to be boring in terms of taste. By making it tasty, many herbs have become categorized as vegetables and are used for daily dish ingredients in the orients. It truly is out of box thinking. It's not just about health but the joy of life from tasty, healthy meals. Unlike 10 years ago, all the information is available online these days. You do not need to go to libraries or bookstores anymore to find recipes. On top of the tasty and joyful dishes, you can enhance a certain organ body system in your body by using the Five Elements Chart and the associated characters per element like the chart above. For example, if you have a lot of stress which causes your eyesight to get worse, start ageing rapidly, etc., you can simply choose the sesame leaf and find sesame leaf-related food such as sesame leaf kimchi or start adding sesame leaves to every meal. Be it pizza or soup, although pizza would not be that healthy due to the flour being fundamental. Maybe you can alternate it with rice. Or, you can use the leaf as a wrap to wrap food like salad wraps, meat or fish wraps instead of tacos, etc. I like sesame leaf foods a lot. I also have seen many foreign vegetarians who have tried Korean sesame leaf kimchi fall in love with it and ask me where to get them. Although oriental medicine has medicinal herbology formulas, which often include herbs that are not delicious nor used as daily ingredients due to being extremely bitter, most herbal vegetable side dishes are proven to be great for preventing many diseases with great tastes. I strongly believe that rather than focusing on tasty heavy meals, using effective botanical ingredients or herbs to enhance health benefits while keeping them delicious to enjoy daily meals will be the way in the future. Vegetarian options and the size of global markets are increasing in the world which proves that more and more people are starting to pay attention to healthy lifestyles and well-being.

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