

# **The Spleen**

Certified Naturopath Research Paper

Abigail Bauer Finney

January 2017

**Table of Contents**

Introduction ..... 3

Anatomy of the Spleen..... 3

Physiology of the Spleen..... 4

The Spleen in Traditional Chinese Medicine ..... 7

Remedies for the Spleen in Traditional Chinese Medicine..... 14

The Spleen in Ayurvedic Medicine..... 22

Remedies for the Spleen in Ayurvedic Medicine..... 28

Additional Information about the Spleen from a Naturopathic Perspective..... 39

Remedies for the Spleen from a Naturopathic Perspective..... 42

Conclusion..... 53

References..... 54

Appendices

    Appendix A- Yin and Yang Symbol..... 57

    Appendix B- Chinese Element Diagram..... 58

    Appendix C- Spleen Meridian Diagram..... 59

    Appendix D- Diagram of the Seven Major Chakras..... 60

## **Introduction**

Most everyone knows that human beings have lungs to breathe, a heart to pump our blood, and a stomach and intestinal tract to digest our food. But what do you know about the spleen? Most of us know that the spleen is an organ located in the human body, short of that; there is a general lack of knowledge about this important organ. This paper will begin by discussing the basic anatomy and physiology of the spleen. Additional information about the spleen based on recent scientific research will be included to increase our understanding of this organ. Once a basic understanding of the spleen is established, we will discuss the role of the spleen in Traditional Chinese Medicine and healing modalities for the spleen from this perspective. We will then discuss the role of the spleen in Ayurvedic medicine and explore Ayurvedic remedies for the spleen. The paper will conclude with information and a compilation of remedies for the spleen from the naturopathic perspective. After reading this paper, you will have a thorough understanding of the function of the spleen from multiple points of view. You will also have an extensive resource of modalities you can use to support the spleen.

## **Anatomy of the Spleen**

The spleen is located in the upper left quadrant of the abdominal cavity, to the left of the stomach. The spleen lies under the 9<sup>th</sup> and 11<sup>th</sup> ribs so one cannot usually feel the spleen unless there is a problem causing the spleen to become enlarged. The size and shape of the spleen is variable, but it is typically fist-shaped and about 3-5 inches long in an adult. More specifically, the spleen is usually about 1 inch thick by 3 inches wide by 5 inches long. It usually weighs between 5 and 7 ounces.

The spleen has two distinctly different surfaces: the diaphragmatic surface and the visceral surface. The diaphragmatic surface of the spleen lies against the diaphragm near the base of the left lung. This surface is smooth and convex. The visceral surface is concave and not as smooth as the diaphragmatic surface because it houses the arteries and veins that bring blood to and from the spleen. The visceral surface has anterior (gastric) and posterior (renal) regions. The anterior (gastric) region of the spleen lies against the posterior wall of the stomach and the tail of the pancreas. The posterior (renal) surface of the spleen is narrower than the anterior region and lies against the left kidney. Sometimes the posterior surface of the spleen also lies against the left adrenal gland. As mentioned above, the blood supply to the spleen is located on the visceral surface of the spleen. There is a long indentation down the middle of this surface called the splenic hilum. The splenic artery and splenic vein run down the hilum along with nerves and lymphatic vessels.

The spleen is composed of two types of tissues: red pulp and white pulp. The red pulp consists of sinuses that are filled with blood and fibrous connective tissue. The white pulp is composed of lymphoid tissue. The lymphoid tissue of the spleen is specifically made up of Malpighian corpuscles. These corpuscles are composed of lymph nodes and periarteriolar lymphoid sheaths. The spleen is actually the largest lymphatic organ in the body. It is similar in shape and shares functions with lymph nodes, but it is much larger.

### **Physiology of the Spleen**

The primary functions of the spleen are to filter red blood cells and play an active role in immune response. The red pulp described above is the site for red blood cell filtration. As blood cells filter through the red pulp of the spleen they must pass through very narrow passageways in

the interendothelial slits. The old or damaged red blood cells cannot pass through these narrow channels and are broken down by phagocytes (large white blood cells). Old and/or damaged blood platelets are also removed from circulation by the spleen. Mononuclear phagocytes in the spleen recycle the hemoglobin from the old blood cells. The globin portion of hemoglobin is broken down into amino acids that can be used in the body. The heme (or iron) portion of the hemoglobin is metabolized into bilirubin which is then processed by the liver and excreted from the body. The red pulp of the spleen also serves as a reservoir of red blood cells and white blood cells, which can be pumped out into circulation in cases of sudden blood loss. According to the Children's Hospital of Pittsburgh, the adult spleen can hold up to about 1 cup (8oz) of blood to be used if there is low blood volume (2010). The white pulp of the spleen stores blood platelets that can be used by the body in emergency to help clot a hemorrhaging wound.

The white pulp of the spleen is the home of most of the immune functions of the organ. As explained above, the white pulp is composed of Malpighian corpuscles comprised of periarteriolar lymphoid sheaths (PALS) and lymph nodes. The PALS contain T lymphocytes that attack any foreign material found in the blood as it is filtered through the spleen. The lymph nodules of the spleen contain B lymphocytes, which produce antibodies to tag pathogens for removal by white blood cells. The spleen also can produce some biochemicals that play a role in the immune system. Properdin (also called Factor P) can be secreted by the spleen. It is the only known positive regulator of the complement system of the innate immune system. Basically, Properdin promotes inflammation and enhances the ability of phagocytes to attack microbes and remove damaged cells from the body. Tuftsin is another biochemical produced by the spleen. It is a peptide that binds to certain receptors on the surface of white blood cells (specifically

macrophages and polynuclear leukocytes) to enhance their ability to migrate to the location of concern, engulf foreign material, and kill bacteria.

Since the red pulp of the spleen also contains some white blood cells, it also has an immune function. One study conducted with rats found that the red pulp of the spleen actually contains half of the body's supply of a specific type of white blood cells called monocytes (Swirski, 2009). Monocytes are the largest type of white blood cell in the body. These cells can become macrophages (another type of white blood cell that is known for engulfing foreign material) or dendritic cells (cells that process antigens and present them on the surface of T cells to facilitate communication between the innate and adaptive immune systems). The study mentioned above along with several other studies have shown that monocytes are released from the spleen after a heart attack. The monocytes differentiate into macrophages and dendritic cells which migrate to the heart to promote healing of the damaged heart tissue (Swirski, 2009).

Another important role of the spleen is hematopoiesis (blood production). Although the bone marrow is the primary site of hematopoiesis in adults, the spleen is actually the primary production site for red blood cells in human fetuses up until the 5<sup>th</sup> month of gestation. After birth, the spleen does not usually produce red blood cells. However, hematopoietic stem cells remain in the spleen throughout life. In times of stress or disease in which the bone marrow is not able to keep up with the body's demand for new red blood cells, the splenic stem cells are activated to produce new red blood cells. Researchers found that in humans with osteoporosis the spleen was activated as a significant site of red blood cell production with the spleen containing a similar concentration of hematopoietic stem cells as the bone marrow (Freedman, 1981).

In addition to stem cells that produce new blood cells, researchers have shown that the spleen also contains stem cells that can become bone matrix or develop into pancreatic islet cells

(insulin-producing cells). In 2001 researchers found that there is a small population of pancreatic islet cells in the spleen of mice. These researchers found that if these islet stem cells were given via blood infusion to a mouse with diabetes, the cells migrate to the pancreas and develop into fully functional islet cells that were able to bring the mouse's blood sugar back to a normal level (Ryu, 2001). The donor cells continued to be functional for more than 120 days in 92% of mice. Another research team tried giving an infusion of stem cells derived from bone marrow to diabetic mice (Kodama, 2005). No islet regeneration was observed in this therapy. An animal study published in 2003 found that removal of the spleen was associated with insulin-dependent diabetes (Hess, 2003). All of these studies and more are adding to the growing body of evidence that the spleen actually plays a vital role in the regeneration of islet cells in healthy individuals. Researchers posit that splenic stem cells could be used as a treatment for diabetes. They suggest that stem cells could actually be harvested from the same individual in whom they are to be used. Then when these stem cells were reintroduced as a treatment for diabetes, they would be seen as "self" (because they are) and immunosuppressant drugs would not need to be used. Using adult stem cells is also advantageous because it does not require embryos as a source of stem cells, which many find unethical. Human islet autotransplant has been used therapeutically to help prevent diabetes in cases of pancreas surgery with some success (White, 2000). However, I was unable to find any research that directly tested the hypothesis of spleen stem cells being given to treat diabetes. It could still be a promising prospect.

### **The Spleen in Traditional Chinese Medicine**

Now that we have a good understanding of the basic and lesser-known functions of the spleen according to Western science, let us look at the spleen from the perspective of Chinese

Medicine. First we must understand what Traditional Chinese Medicine (TCM) is and some of the basic principles on which it is founded.

The Traditional Chinese Medicine system was developed over 2,500 years ago. Since that time it has continued to grow and develop. TCM is a holistic (focused on the whole person) system that employs many different modalities to help people regain and maintain health. Some of the common therapies included in TCM include, acupuncture, moxibustion (burning herbs over acupuncture points), Chinese therapeutic massage, herbal medicine, dietary changes, Tai Chi, and Qi Gong. TCM is currently the primary mode of health care used by many people worldwide. In the United States, as of 2007, it was estimated that at least 5.5 million patients utilized some modality that falls beneath the TCM umbrella each year (NCCIH, 2013). That number is certainly higher today as the use of traditional forms of medicine, including TCM, has been on the rise over the last 10 years. According to the National Health Interview Survey, the number of visits to the acupuncturist tripled between 1997 and 2007 and has continued to grow since then (NCCIH, 2013). An estimated 3.1 million adults in America used acupuncture in 2006 (NCCIH, 2013). About 2.3 million Americans were estimated to practice Tai Chi, and an additional 600,000 Americans are estimated to practice Qi Gong in 2007 (NCCIH, 2013).

To understand TCM it is important to have an understanding of some of the basic principles on which TCM is founded. The following paragraphs will outline some of the key concepts of TCM. This is not an all inclusive list or an exhaustive explanation of each concept. Numerous books have been written on the principles of Chinese medicine. An in-depth look at all of these principles cannot be included here.

One of the most foundational principles of TCM is that life and health are based on energy. In TCM, this vital energy is called qi (pronounced “chee” and sometimes written “chi”



in most Westernized literature). Qi is the vital force that maintains life and health, but it is also the energy flowing through the environment and the energy of non-living things. In the human body, qi flows through specific meridians, or energy highways. These meridians lie within the body, but they have been mapped on the surface of the body for thousands of years and utilized by TCM practitioners. More recently, scientists have been able to confirm the presence and location of these energy pathways with sensitive equipment to detect bioelectric current. The ancient maps of the meridians in the human body are remarkably accurate. Each organ has its own meridian in the body. The meridians exist in pairs and each pair represents one of the five Chinese elements (these will be described in more detail below). The flow of qi through these energy pathways is of the utmost importance. One of the goals of TCM is to make sure that the flow of qi is unobstructed and in balance both in the body and in our environments.

As alluded to above, balance is an important principle of TCM. The Chinese believe that there are two halves to every whole. They call these two forces yin and yang. Yin is the feminine energy. It is soft, moist, cold, passive, dark, and contractive. Yang is the masculine energy. It is hard, dry, hot, dominant, light, restless, and expansive. Nothing can ever be purely yin or purely yang. There is always some yin in a dominantly yang state and some yang in a dominantly yin state. Yin and yang are not stagnant. There is a constant flow of energy between the two. The Chinese developed the yin and yang symbol to demonstrate both of these principles related to the balance between yin and yang. As you look at the yin and yang symbol in Appendix A (page 57), you will notice that half of the circle is black (yin) and half of the circle is white (yang). In each half there is a dot of the opposite color, symbolizing that there is always some yin in yang and vice versa. The line between the yin and yang halves is curved, symbolizing that there is constantly a dynamic flow between the two energies. In addition to the

yin and yang energies, there are other energies such as hot vs. cold, moist vs. dry, and excess vs. deficient that need to be balanced in order to maintain health.

In TCM there are five elements that are used symbolically to describe the body, how it changes in states of disease, and what force is needed to balance the body and bring it back into harmony. These elements are fire, earth, metal, water, and wood. Each element will be briefly described here. As mentioned above, each element is related to a pair of meridians. One should note that the two organs listed for each element are also the meridians that correspond with that element. In Chinese medicine the organs are more symbolic of systems and functions. That is to say, the physiological function of a particular organ may or may not be the same as the function and/or processes associated with the organ in Chinese medicine. You will see exactly what is meant by this when we discuss the functions of the spleen according to TCM versus what you have already read about the biological functions of the spleen.

The fire element generates warmth and energy. It is responsible for circulating blood and promoting activity in the body. The heart and the small intestines are the organs governed by the fire element. The emotions of the fire element are excitement and joy and the taste associated with this element is bitter. It is represented by the color red and related to the season of summer. The sense organ associated with the fire element is the tongue.

The earth element governs the process of digestion, metabolism, and the utilization of nutrients to build tissue. The stomach and spleen are the organs governed by the earth element. The emotions of the earth element are sympathy and worry and the taste associated with this element is sweet. It is represented by the color yellow and related to the season of late summer and also with the end of each season. The sense organ associated with the earth element is the mouth.

The metal element governs the process of receiving and getting rid of waste. It protects the body from infection and regulates energy in the body. The lungs and colon are the organs governed by the metal element. The emotions of the metal element are grief and sadness and the taste associated with this element is pungent. It is represented by the color white and related to the season of autumn. The sense organ associated with the metal element is the nose.

The water element maintains the balance of water and minerals in the body. It also helps maintain a strong structural system. The bladder and kidneys are the organs governed by the water element. The emotion of the water element is fear and the taste associated with this element is salty. It is represented by the color blue and related to the season of winter. The sense organ associated with the water element is the ear.

The wood element builds and stores blood and regulates the flow of qi through the body. The liver and gallbladder are the organs governed by the wood element. The emotions of the wood element are anger and irritability and the taste associated with this element is sour. It is represented by the color green and related to the season of spring. The sense organ associated with the wood element is the eye.

Each of the Chinese elements has a specific relationship with the other elements. Wood generates fire. Fire generates earth. Earth generates metal. Metal generates water. Water generates wood. In addition to the generation (sheng) cycle, each element will destroy or control another element (called the ke cycle). Wood destroys earth. Earth destroys water. Water destroys fire. Fire destroys metal and metal destroys wood. This dynamic interaction is represented in Appendix B (see page 58). The arrows forming the outer circle represent the generation or sheng cycle while the inner arrows forming a star-like shape represent the destructive or ke cycle.

In TCM it is important to determine the element that represents the patient's overall constitution. Then the practitioner is able to determine how the person is out of balance and choose a remedy that will help restore balance. Treating the whole person instead of the disease is another key principle of TCM. Keeping the constitution in balance is the ultimate goal and basis for maintaining health in the long run.

Now that we have at least a very rudimentary understanding of the principles of TCM, let us explore the role of the spleen in TCM. As mentioned above, the spleen is one of the two organs symbolically representing the earth element (the stomach being the other earth element). The spleen meridian starts at the medial tip of the big toe and runs up the inside of the leg to the groin region. The energy pathway moves internal to the body then resurfaces briefly before moving inward on the abdomen at the spleen and stomach region. When we trace the spleen meridian we stop tracing just above the base of the rib cage on the lateral portion of the front of the abdomen, but the meridian actually continues on internally wrapping the stomach and spleen then moving up through the diaphragm on both sides of the body. The meridian runs all the way up the lateral portion of the chest through the throat and converges to its terminal point underneath the base of the tongue. A branch of the spleen meridian runs to the heart. See Appendix C on page 59.

The spleen and stomach are the main organs of digestion in TCM. The spleen is responsible for metabolizing all of the food and drink we consume and using the nutrients from the food to build body tissue. In Western science the functions of the spleen in TCM would probably be more in line with the physiological functions of the pancreas. In addition to the vital process of assimilating nutrients, the spleen is also responsible for processing all of the other stimuli our bodies encounter. This is one reason the spleen is so often overwhelmed in our

modern stimuli-rich environment. Our bodies constantly encounter multiple stimuli at once. The spleen is over-taxed by constantly dealing with all of these stimuli and often becomes deficient.

In addition to the primary digestive function of the spleen in TCM, there are many other responsibilities for this organ in Chinese Medicine. The spleen is responsible for making blood and the spleen qi keeps the blood in the vessels. Weak spleen qi can be associated with bruising and bleeding problems. The spleen is responsible for holding our internal organs in place. If the spleen is weak, there can be a prolapse of organs (commonly the bladder, uterus, or stomach) or hemorrhoids. The spleen is responsible for circulating and transporting nutrients throughout the body. When the spleen is weak, muscles may become easily fatigued. If the spleen qi is weak the body overall feels weak and lacking energy. Appetite is poor and digestion is usually slow and often accompanied by watery bowel movements. The spleen directly relates to our ability to think clearly. If the spleen is strong, we are able to think more clearly, better manage our thoughts, and concentrate more easily. It makes sense that the emotion associated with the spleen being out of balance is worry and over thinking things.

As mentioned above, the spleen meridian's terminal point is in the mouth (specifically under the base of the tongue). In TCM the spleen is associated with the mouth and is said to manifest on the lips. If the spleen is deficient, taste may be dulled and the lips are likely to be pale from a lack of nourishment. On the other hand, moist, red, healthy-looking lips are an indication of a balanced spleen.

Signs of a deficient spleen have been indicated throughout the previous paragraphs. Some of the most common signs of an out of balance spleen (which almost always means a deficient spleen in our society) include: mental and physical fatigue, pale skin that bruises easily,

weak digestion, bloating, gas, loose stools, nausea, poor appetite, decreased ability to taste things, cravings for sweets, hemorrhoids, varicose veins, uterine bleeding, and dull muscle pain. People with a weak spleen are sometimes overweight even though they do not over eat or underweight and cannot gain weight no matter how much they eat. Diabetes and hypoglycemia are often due to spleen deficiencies.

### **Remedies for the Spleen in Traditional Chinese Medicine**

Nourishing the spleen starts with the food choices we make on a daily basis. Certain foods and certain ways of preparing food are known for being particularly beneficial for the spleen according to Chinese medicine. Some foods that are beneficial to the spleen include: millet, quinoa, carrots, cabbage, garbanzo beans, winter squash, beets, green beans, sweet potatoes, potatoes, rice, amaranth, peas, hazelnuts, apricots, peaches, mangos, papayas, and cantaloupe. These foods should be prepared simply with as little seasoning as possible to best support the spleen. Garlic, cumin, ginger, and black pepper are noted as being beneficial to the spleen, which makes sense because they are warming. However, if too much seasoning is used making the dish too spicy, it is no longer beneficial and actually stresses the spleen. Since the spleen must digest our food, it is helpful to cook these foods in a way that makes them as easily digestible as possible. This means that meals should contain fewer ingredients and be cooked for longer times on lower heat. Don't forget to properly soak and sprout and the grains, legumes, and nuts that are beneficial to the spleen. Soaking and sprouting these foods releases and removes the phytic acid they contain which makes them difficult to digest. The spleen is especially nourished by warm foods like soups. Some foods that are hard on the spleen include:

processed foods, white flour, sugar, dairy, wheat, coffee, alcohol, deep fried foods, fruit juices, and frozen or cold foods like popsicles, ice cream, ice water, etc.

In addition to what you eat and how you prepare the food you are eating, it also matters how you eat your food. To support the spleen, one should eat mindfully and slowly. It is best to turn off distractions like the TV and to put away your cell phone or the book you are reading. Remember, the spleen digests our food and all other sensory input, so the fewer distractions we have while eating, the more our body can focus on digesting our food instead of information. Eating slowly is also beneficial because we usually chew our food better when we eat slowly. The better chewed the food is, the more easy it is to digest. Being mindful while we eat allows us to enjoy our food and not overeat, both of which are beneficial to everyone even if you are not intentionally doing so to protect your spleen. Another eating practice that is helpful for the spleen is to eat more frequent smaller meals. This is also generally considered a good practice for most people. It is particularly good for the spleen because smaller meals are more easily digested and often contain fewer components. Frequent small meals also provide the body with food every few hours, which keeps blood sugar stable.

The environment you are in also affects the spleen. Cold damp environments are hard on the spleen. If you are having serious problems with the spleen, you might consider moving to a different climate- one that is warm, dry, and sunny. If you cannot move, you might be able to at least vacation in an area with a better climate to jump start the functions of the spleen. You could also try making the conditions inside your house more hospitable for the spleen using a heater and dehumidifier. If it is cold or rainy, limit how much you go outside that day. Swimming is usually not great for the spleen either (especially when the spleen is out of balance) as it will add to the damp condition of the body.

There are many herbal remedies that are recommended for the spleen in Chinese medicine. The herbs that are recommended depend on exactly how the spleen is out of balance. As mentioned before, in our culture the spleen is most commonly deficient. Some of the most common tonic herbs for the spleen qi include astragalus, ginseng, codonopsis, Chinese wild yam, white atractylode, licorice, and jujube dates. Some of the most common spleen qi tonics in TCM include the Four Gentlemen Combination (Si Jun Zi Tang), Six Gentlemen Combination (Liu Jun Zi Tang), and Ginseng and Astragalus Combination (Bu Zhong Yi Qi Tang).

The Four Gentlemen Combination contains codonopsis, portia, white atractylodes, and licorice. This combination is often indicated when there is fatigue, poor appetite, weak muscles, slow digestion, and watery diarrhea. The Six Gentlemen Combination contains the same four herbs as the Four Gentlemen Combination plus citrus and pinellia. It treats conditions similar to the Four Gentlemen Combination, but is also noted for clearing phlegm and damp conditions. The Six Gentlemen Combination is often indicated when there is a weak spleen accompanied by acid reflux, pressure in the chest, vomiting, and a cough that yields thin white sputum.

Ginseng and Astragalus Combination contains licorice, codonopsis, atractylodes, Angelica sinensis, cimicifuga, bupleurum, citrus, jujube dates, and ginger in addition to ginseng and astragalus. This blend is able to strengthen the kidneys by way of balancing the spleen. This combination is indicated when there is fatigue, shortness of breath, low appetite, loose stools, irritability, excessive sweating even with little or no exertion, prolapsed organs, and intolerance of cold weather.

In addition to the three common spleen qi tonics listed above, there are many other formulas. Steven Horne recommends the Spleen Activator Combination (Wen Zhong) for spleen deficiencies. The literal translation of Wen Zhang means “warm the center.” This blend helps



improve digestion and metabolism so nutrients are available to build muscle tissue. It is often indicated in people who are unable to digest their food and are therefore are very thin or overweight but with little muscle tone. Other symptoms of people needing this combination include bruising easily, fatigue, sinus congestion, chronic diarrhea, hernias, intestinal cramping and bloating, and hemorrhoids. The Spleen Activator Combination contains panax ginseng, astragalus, atractylodes, hoelen, dioscorea, lotus seed, ganlangal, chaenomeles, hyacinth bean, typhonium, flagelliforme, magnolia bark, saussurea, dong quai, citrus peel, dolichos, zanthoxylum, licorice, ginger, and cardamom.

The book *Planetary Herbology* by Micheal Tierra recommends the Chinese blend called 'Formula 39: Warm and Disperse' for spleen qi deficiencies. It contains ginger, astragalus, atractlodes, jujube dates, bayberry bark, zizyphus seeds, polygala, licorice, and logan berries. This blend tonifies and strengthens the spleen qi, improves digestion, and helps to calm and center the mind. It is often indicated in spleen imbalances that are accompanied by insomnia, heart palpitations, lack of energy, and poor appetite.

If the spleen is found to be damp in TCM, herbs that get rid of dampness like elecampane, cloves, or cardamom are frequently added to spleen tonics. One of the most common TCM herbal combinations for treating spleen dampness is called Wei Ling Tang. This herbal combination contains alisma, portia, poluporus, cinnamon twig, white atractylodes, black atractylodes, magnolia bark, citrus peel, licorice, ginger, and jujube date. This formula is particularly useful in cases where the patient has a full feeling in their abdomen, heaviness in the head and body, edema, poor appetite, and watery diarrhea.

Sometimes the spleen is classified as having deficient yang energy. In this case, warming herbs are used like ginger or psoralae. One of the most common formulas in TCM for spleen

yang deficiencies is Ginseng and Ginger Combination (Li Zhong Wan). This combination also includes white atractylodes and baked licorice in addition to ginseng and ginger. This formula works by warming the spleen and stomach. It is particularly useful in patients with a lack of appetite and thirst accompanied by pressure in the abdomen, loose stool, and vomiting.

General qi moving herbs like citrus are another common addition to remedies for imbalances of the spleen. Lemon peel moves both liver and spleen qi. Lime peel is usually more related to moving liver qi. Grapefruit peel is particularly good for the spleen qi.

In addition to diet and herbal remedies, acupuncture, acupressure, and moxibustion are often used in TCM to balance the spleen. The goal of all of these therapies is to balance the flow of qi in the body and remove any barriers that are blocking the flow of qi. They are all based on the meridians (or energy highways) in the body and particular acupuncture points along those highways. Two of the most common points used in acupuncture and acupressure for the spleen are the Stomach 36 (ST36) point and the Spleen 6 (SP6) point. The ST36 point is known for helping with almost all digestive issues. It also builds wei qi, which is pretty much the TCM equivalent of the immune system. Working the ST36 point can also strengthen the blood and help with problems of the breast, lower leg pain, asthma, wheezing, depression, anxiety, and PMS. You can locate the ST36 point by sliding your four fingers together up the shin and stopping when you reach the knee. The ST36 point will be located one finger's width to the outside of the leg from the middle of the tibia. The point will be just in line with your pinky finger. Working the SP6 point can help with any issue related to the spleen. It is often used to improve digestion and increase energy. It can also be helpful in cases of prolapsed organs, impotence, stimulating labor, eczema, rashes, acne, insomnia, and anxiety. The SP6 point is located along the inside of the tibia about four finger's width above the ankle bone.

Moxibustion is the burning of herbs over certain acupuncture points to stimulate qi. The following moxibustion protocol by Lesley Tierra has been used with much success for strengthening the spleen. It improves digestion and circulates blood to cold areas in the body. First hold the moxa stick over the midline of the abdomen between the navel and public bone. You can hold the moxa stick still and move it when the heat tolerance is reached then move the stick away for a few seconds and return to the spot or you can move the moxa stick in a circular motion. You want to remain over the midline spot for about 10-15 minutes. At this point the spot should be red and warm. Next move the moxa stick to the Stomach 36 point just below the knee (exact location of the point described in previous paragraph). Again use the stick over the point for about 10-15 minutes. Finally, move the moxa stick to the Pericardium 6 point located one hand's width up from the wrist on the inside of the arm in the center between the tendons. Use the stick over the point on one side of the body for 10-15 minutes then repeat on the corresponding point on the other arm. If you are unfamiliar with this type of therapy, it is highly recommended to see a practitioner trained in moxibustion to get the most benefit from the therapy and ensure your own safety.

Another type of bodywork that can be beneficial for the spleen in TCM is abdominal massage. Lightly massaging the abdomen stimulates the spleen qi and helps it more freely circulate throughout the body. You can see a TCM practitioner or massage therapist for this type of bodywork. Additionally, you can give yourself a short abdomen massage on a daily basis. Lightly massaging the abdomen each day is good for digestion in addition to being good for the spleen. To give yourself an abdominal massage sit, stand, or lay down keeping your spine straight. Put your right palm on your upper abdomen and inhale deeply. As you exhale, rub circles on your abdomen in a clockwise direction. You should be moving in the direction of

the digestive tract. It can be beneficial to quietly make the hooooo (described in the following paragraph) as you exhale. Continue the abdominal massage for at least 10-20 slow breaths.

Qi Gong is another modality used in TCM to balance the internal organs and restore harmony in the body. Qi Gong uses gentle movement and sound to balance the body on both the physical and psycho-emotional levels. In Qi Gong the spleen energy is called yi. Dr. David Twicken, Doctor of Oriental Medicine, describes how to use the healing sounds of Qi Gong to remedy the spleen in his article published in *Acupuncture Today* (2013). Sit in a chair with your back straight and your body relaxed. With your eyes open, slowly inhale and move your hands in a circle to bring your hands to the sides of your body. Gently place your hands over the spleen and stomach. Your inhale should be complete just as your hands reach the abdomen. As you exhale, tilt your body slightly forward and tuck your middle abdomen gently in. The healing sound for the spleen and stomach is Hooooo. Gently make the Hoooo sound as you exhale. You should repeat this for several minutes. In some repetitions of the movement you can name emotions you are struggling with instead of making the Hoooo sound. For the second part of the exercise, remain seated and close your eyes. Place your hands over your abdomen or gently rest them on your thighs. Visualize the stomach and spleen and think about sending positive energy to those organs. Breathe in gently then exhale to release heat, gas, and unfavorable emotions from the stomach and spleen. Do this for several minutes. After you have completed both parts of the exercise simply rest in quiet meditation for a few more minutes. Resting at the end of the exercise reinforces your work and gives the energy time to move within the organ and body as a whole. If you find it difficult to follow the directions written here, simply search for spleen Qi Gong exercises on youtube and you can find many videos that will walk you through the exercises.

In general, meditation is good for the spleen. Spending quiet time breathing slowly and deeply into the abdomen allows the body to relax. Remember, the spleen has to process all of the stimuli we encounter in life. Most of us never stop to just rest and properly breathe, but our spleens desperately need quiet time. In this quiet time the spleen can focus on metabolizing the nutrients that nourish our body instead of all the things that over stimulate the mind.

One specific type of meditation you can do to help the spleen is called an Earth Attunement. Remember, the spleen is associated with the earth element and the color yellow. Deborah Davis, Doctor of Chinese Medicine, recommends the following meditation in her book *Women Qigong for Health and Longevity* (2008). To complete this meditation, stand outside in the grass or any other area outside. It is best to be barefoot while doing this meditation. Make sure your spine is straight and allow your arms to gently rest at your sides. Breathe deeply. Relax and try to feel the earth energy coming from the ground and moving up through your feet and legs, filling your whole body. Imagine the energy of the earth as a golden yellow light. Let the light fill your body and radiate out through your belly button. Do this meditation for 5 to 10 minutes each day to help nourish your spleen.

One is wise to consider the energy of their surroundings in addition to the energy within the body. The Chinese design system called Feng Shui can be used to make sure the flow of energy through your home is balanced to support your physical, emotional, and spiritual health. Since the spleen is associated with the earth element, it would be particularly useful to assess the middle of the home and the center of each room in the home. The center of the bagua (map used in Feng Shui), and therefore the center of the home, is associated with the earth element and the health of the body as a whole. The center of the home (and each room) should be well kept with plenty of light and no clutter. Yellow is a good color to use to enhance the health center area of

the home. Adding things with life force, such as healthy plants, flowing water, a well-kept fish tank, or bird, can increase the energy flow in this area or any area of the home. According to Feng Shui principles, all of the other areas of the bagua (wealth, fame, relationships, children/creativity, family, knowledge/spirituality, career, and helpful people) support the health center, so making adjustments in those areas can be beneficial for the spleen and the health of the body overall. Clearly, the information given here is just the tip of the iceberg on the topic of Feng Shui. A great resource for Feng Shui, especially in relationship to your health is a book called *Feng Shui and Health: the Anatomy of a Home* by Nancy SantoPietro (2002).

### **The Spleen in Ayurvedic Medicine**

Hopefully, you now have a better understanding of the spleen from both Western and Traditional Chinese perspectives. Now, let us expand our knowledge of the spleen by looking at it from the Ayurvedic perspective. Just as we started the section on Chinese medicine with an explanation of the basic tenants of TCM, we will begin this section by briefly discussing what Ayurvedic medicine (or Ayurveda) is and some of the basic principles on which it is founded.

The Ayurvedic system of medicine was developed in India over 5,000 years ago. At first Ayurveda was passed from generation to generation by word of mouth, but as society advanced works were written to capture the teachings of Ayurveda. Three main books written over 2,000 years ago and collectively called the Great Trilogy are the basis for Ayurvedic medicine. These three books (*Caraka Samhita*, *Sushruta Samhita*, and *Astanga Hridaya*) are all written in Sankrit. Ayurveda has been practiced in India and around the world since its inception. It is still the exclusive type of health care for the majority of the population of India. It is also widely

practiced in various forms throughout Southeast Asia and to a much lesser extent around the world.

The term Ayurveda is based on the Sanskrit words “life” and “science or knowledge” and literally translates as “the knowledge of life.” Like TCM, Ayurveda is a holistic healing system, meaning the whole person is always considered rather than just isolated symptoms. According to Ayurveda, the health and wellness of the individual is dependent upon balance and harmony between the body, mind, and spirit. Ayurveda also teaches that each person is a microcosm of the universe and that all things are universally connected. Ayurveda focuses on an up-stream approach to establish good health in the body rather than combating illness. However, there are numerous treatment options for health concerns in Ayurveda as you will see in the next section of the paper.

Somewhat similar to the Chinese system, in the Ayurvedic philosophy all things are based on five elements. In Ayurveda these elements are said to have originated from the energy of Cosmic Consciousness or creation. All five elements exist in all matter, but one element is often more predominate. The five elements are ether, air, fire, water, and earth. Each element manifests in a unique way and is related to a different sense and action. Ether is space. Since space is the medium through which sound is transmitted, ether has to do with the sense of hearing. The sense organ of ether is the ear, its action is speech, and the organ of action is the tongue, vocal cords, and mouth. Air is related to the sense of touch. The sense organ of air is the skin, its action is holding, and the organ of action is the hand. Fire manifests as light, heat, and color and therefore is related to the sense of sight. The sense organ of fire is the eye, the action is walking, and the organs of action are the feet. You may be wondering how the eye is related to walking. Dr. Vasant Lad, author of *Ayurveda: The Science of Self-Healing*, gives the

following rationale for this relationship, “The eye, the organ of sight, governs the action of walking and is thus related to the feet. A blind man can walk, but the walking has no definite direction. Eyes give direction to the action of walking” (Lad, 1984, p.23). Water is related to the sense of taste. The tongue is the organ of sense, the action is procreation, and the organ of action is the genitals. It may be helpful to note that in Ayurveda, the penis and clitoris are considered the lower tongue and the tongue in the mouth is referred to as the upper tongue. The earth element is related to the sense of smell and the sense organ is the nose. The action associated with the earth element is excretion and the organ of action is the anus. Dr. Lad describes the relationship between the sense of smell and the excretory system using the example of a person with constipation. When a person is constipated, their colon is unclean and he will experience bad breath. The sense of smell will also become dull when the colon is dirty.

The human body is made up of all five of the elements described above. However, they manifest in the body in three basic ways- vatta, pitta, and kapha. These three principles are referred to as the tridosha in Ayurveda. Think of a dosha as a life force. Vata is manifested from ether and air. Pitta is a combination of water and fire. Kapha is the manifestation of the earth and water elements. The tridosha is the foundation of the whole being and governs both physiological and psychological processes. According to Ayurveda, you are born with a particular constitution (prakriti) based on the tridosha. While there are only three doshas, there are actually seven constitutions laid out in Ayurveda. These constitutions are vata, pitta, kapha, vata-pitta, vata-kapha, pitta- kapha, and vata-pitta-kapha. The following paragraphs will describe the elements of the three main doshas. As you can imagine, the other constitutions are just combinations of the main three doshas.



Vata governs the function of movement and breathing in the body, natural urges, the transformation of issues, sensory and motor functions, secretions, and the process of excretion. Some of the feelings associated with vata are that of ungroundedness, fear, emptiness, and anxiety. Vata people tend to be thin with a dark complexion and dry, cool skin. Vata people tend to have black, dry, kinky hair and big crooked teeth with receding gums. Their eyes are usually small, dull, dry, and dark colored. Vata people tend to have a small or moderate appetite and thirst. They tend to be constipated with hard, dry stools. Vata people enjoy being physically active and they tend also have an active mind, which may often feel restless. Vata people tend to be fearful, insecure, and unpredictable. They have scary dreams and dreams of running, flying, and moving quickly. They do not tend to sleep well and often wake up multiple times in the night. Vata people tend to be able to remember things that happened recently very well, but they have a poor long-term memory. They tend to talk quickly and spend money quickly (not good at financial management). When vata people are out of balance they become more susceptible to respiratory illnesses and may have gas, twitches, aching joints, and mental confusion. The tastes associated with vata are sweet, sour, and salty.

Pitta has to do with the temperature of the body and body heat. Pitta governs the processes of digestion, perception, understanding, hunger, thirst, and intelligence. Some of the emotions associated with pitta are anger, hate, and jealousy. Pitta people usually have a medium build with fair skin that has a tendency towards being soft, warm, and oily. Pitta people have light colored hair that also tends to be soft and oily. The teeth are average-sized and tend to have a yellowish color. When pitta people look at you, you feel like they are looking into your soul because their eyes are so sharp and penetrating. The most common pitta eye colors are green, gray, and yellow. Pitta people have excessive appetite and thirst and tend to have loose, oily

stools. Pitta people are usually moderately physically active. They tend to be highly intelligent with a great memory. Pitta people can often be rather aggressive, irritable, and jealous. Their dreams are full of violence and anger. They do not tend to sleep a lot, but when they do sleep, they sleep soundly. Pitta people tend to be to-the-point in their speech and often can hurt others with what they say. Pitta people are better at managing their finances than vata people, but they are not as frugal as kapha individuals. When pitta people are out of balance they tend to get diseases associated with the fire element such as fevers, inflammation, rashes, and ulcers. The tastes associated with pitta are sweet, bitter, and astringent.

Kapha has to do with stability and energy in the body. Kapha is related to the lubrication of the body and the secretion of oil from the sebaceous glands. Forgiveness, greed, attachment, and possessiveness are all based on the energy of kapha. Kapha people tend to have a large frame and are often overweight. They have very pale skin that is thick, oily, and cool. Kapha people tend to have very thick wavy hair that can be dark or light in color. They have strong, straight, white teeth. Kapha people usually have large attractive eyes with long eye lashes. The most common eye color for kapha people is blue. Kapha people tend to have little hunger and thirst and they tend to be slow eaters. They also have a slow elimination time with thick oily stools. Kapha people do not care much for vigorous physical activity. They prefer to rest. Their mind also moves at slower pace than in the other doshas. Kapha people tend to be very calm. They can become highly attached to other people and things. Kapha people tend to dream of water in rivers, lakes, or seas and they tend to have romantic dreams. Kapha people are heavy sleepers and can sleep for long periods of time without any trouble. They tend to speak slowly and it takes them awhile to recall information. Kapha people are very frugal so they tend to accumulate a lot of wealth during their life. When kapha people are out of balance, they are

prone to diseases associated with the water element such as edema, sinus congestion, and upper respiratory problems. The tastes associated with kapha are pungent, bitter, and astringent.

These doshas are used to describe the human constitution, but they are also used to describe different things like body regions and the organs that lie in that region. The spleen is located in the pitta region of the body and is therefore considered a pitta organ. According to Ayurvedic medicine, the main actions of the spleen are fighting off infections and breaking down pathogens and foreign matter in the body. Organs related to the immune system are usually considered kapha in nature, so the spleen is also strongly kapha.

Another concept that one will often encounter within the realm of Ayurvedic medicine is the chakra system. Chakras are spinning wheels of light, or energy vortices, which control the flow of energy throughout the entire body. There are seven major chakras in the body that work together to form an energy matrix that supports physical, emotional, mental, and spiritual life. The seven major chakras are the root, sacral, solar plexus, heart, throat, third eye, and crown chakras. Each chakra is associated with a different color, life principle, and organ. The spleen is governed by the sacral chakra. The sacral chakra is also related to the reproductive system, kidney, and bladder. This chakra is represented by the color orange and has to do with creativity and sexuality. Appendix D (page 60) is a diagram showing the location and colors associated with the seven major chakras. Numerous additional resources are available in print and online to learn more about the chakra system.

Ayurvedic practitioners will consider the client's constitution, primary dosha, balance of the other doshas in the body, and the flow of energy in the body when considering what therapy to recommend to the individual. Diet, exercise, meditation, herbal remedies, and cleansing protocols are some of the most common remedies used within Ayurveda. The following section

will give details on numerous modalities that can be used to support the spleen according to Ayurveda.

### **Remedies for the Spleen in Ayurvedic Medicine**

There are different foods that help balance each dosha. Since the spleen is pitta in nature, let's take a look at the foods that are balancing to the pitta energy. Recall that the tastes associated with pitta are sweet, bitter, and astringent. This being the case, most sweet fruits such as apples, pears, avocados, melons, figs, raisins, prunes, and red grapes are considered balancing to the pitta energy. Sweet and bitter vegetables such as asparagus, broccoli, cucumbers, celery, leafy greens, peas, green beans, mushrooms, potatoes, and zucchini are also balancing to pitta. On the other hand, sour fruits, bananas, papaya, peaches, and pungent vegetables like onions, garlic, hot peppers, and radishes aggravate the pitta dosha. This makes sense because the pitta dosha already runs hot. You would not want to add more heat to their already hot constitution. Barley, cooked oats, white rice, and wheat are balancing to the pitta energy, but corn, millet, dry oats, brown rice, and rye are aggravating to pitta. Chicken, turkey, rabbit, and egg whites are good meats for pitta, while beef, egg yolk, lamb, pork, and seafood should be avoided. All legumes except lentils are good for pitta. Sunflower and pumpkin seeds are also balancing, but all other nuts should be avoided. All sweeteners are ok for the pitta dosha except honey and molasses. Spices including coriander, cinnamon, cardamom, fennel, and turmeric are balancing to the pitta dosha, but all other spices should be avoided. Butter and milk are balancing to pitta, but soured milk products are aggravating. Coconut oils, olive oil, and sunflower oil are good for pitta, but nut oils, corn oil, safflower, and sesame oils should be avoided.

Since the spleen is also strongly kapha, we should also look at kapha foods to balance the spleen. Remember, the tastes associated with kapha are pungent, bitter, and astringent. Therefore, it makes sense that pungent and bitter vegetables are some of the best balancing foods for the kapha dosha. Most vegetables other than cucumbers, zucchini, sweet potatoes, and tomatoes are balancing and beneficial for kapha. In addition to vegetables, apples, berries, cherries, dried figs, mangos, peaches, pears, prunes, and raisins are balancing to the kapha energy. Other fruits such as avocado, bananas, coconut, fresh figs, most citrus fruit, papaya, pineapples, and plums are aggravating to kapha. Barley, corn, millet, and dry oats are balancing to kapha, but cooked oats, most rice, and wheat are aggravating. Similar to the pitta dosha, the kapha dosha is balanced by chicken, turkey, eggs, and rabbit, but beef, lamb, pork, and seafood should be avoided. Again overlapping with the pitta dosha, most legumes are balancing, while all nuts and seeds other than sunflower and pumpkin seeds are aggravating to kapha. However, all spices and seasonings other than salt are quite balancing for kapha (this differs significantly from pitta since pitta does best to avoid all spices). Nutmeg is particularly good for spleen disorders in kapha people (Lad, 1984). All sweeteners except honey are aggravating to the kapha energy (also nearly the opposite of pitta). Dairy and oil are generally aggravating for kapha.

As you can see there are many similarities and many differences between the pitta and kapha diet. Areas of overlap between the two would certainly be beneficial for the spleen. To determine which diet to follow in areas that are different between the two doshas, it would be best to consult an Ayurvedic practitioner. Remember, Ayurveda is not one size fits all so the diet they prescribed would depend on your individual constitution and exactly how the spleen (and possibly other areas of the body) is out of balance.

Dr. Elchuri Venkat Rao, famous Ayurvedic practitioner from south India, recommends a few specific food combinations to support the spleen. He suggests preparing roti (an Indian flat bread) with unpolished wheat. This flatbread can be eaten with mint chutney or radish curry. This should be eaten for several days while avoiding oil, ghee, rice, black and green lentils, chili pepper, very sour foods, and all meat. Another recommendation of Dr. Elchuri is to drink the juice of a mango with one teaspoon of honey twice a day for several days. Doing this should be helpful especially in cases of enlarged spleen. Taking two teaspoons of lemon juice and two teaspoons of onion juice first thing in the morning can also resolve enlargement of the spleen. In general, Dr. Elchuri recommends that one should be finished eating for the day by 7pm, but at 10pm or right before you go to sleep you should eat a ripe papaya. According to Dr. Elchuri, you will never suffer from problems of the spleen or liver if you do this every day.

In addition to food choices, herbal remedies are common in Ayurveda. Dr. Elchuri recommends ajwain seed (*Trachyspermum ammi*) for the spleen. Ajwain is commonly known as bishop's weed in the United States. The ajwain seed should be soaked in aloe vera juice overnight. In the morning, the mixture should be placed in the sunlight and stirred. This process should be done for three days then the ajwain should be dried and powdered. The powder is best taken an hour before eating. Children should take 2-3 pinches of the powder a day and adults will need about ¼ teaspoon a day for 40 days. This preparation of ajwain seed has been used to treat most any spleen problem including indigestion and loss of taste. It works by cleansing toxic build up in the stomach and spleen.

If the spleen is swelling due to damage, Dr. Elchuri has several herbal remedies he often recommends. The first is booruhu (*Bombax melabaricum*) more commonly known as silk cotton tree in the United States. Dr. Elchuri recommends boiling 20 grams of booruhu in about 1 cup of

water for 5 minutes. Let the mixture infuse overnight then strain the mixture in the morning and add 3 pinches of mustard powder just before drinking. Drink this every morning until the enlargement of the spleen subsides.

Another option is to use drumstick tree bark (*Moringa oleifera*). Prepare the drumstick bark by boiling 20 grams in 2 cups of water until the liquid reduces to 1 cup. Strain the mixture then add 1 gram powdered Chitramoolam (*Plumbago zeylanica*; English name: ceylon lead wort), 2 grams powdered pippali churna (*Piper longus*; English name: long pepper) and 3 grams rock salt. This should be consumed every day until the spleen returns to its normal size.

Citramoolan can also be used alone as effective remedy for an enlarged spleen. Dr. Elchuri suggests adding a little water to powdered citramoolan until it forms a thick paste. Then you can roll the paste into small pea-sized balls. The ball can be placed inside of a piece of banana and swallowed. Patients should find relief within three days of consistently using this remedy.

Vermali (*Baptisia tinctoria*; English name: Wild Indigo) can also be used for enlargement of the spleen. Use ¼ teaspoon vermpali powder in 1 cup of cows curd or yogurt twice a day for three weeks. Dr. Elchuri recommends only having liquid food for the three weeks you are taking this remedy. In the United States, this remedy would probably be considered as a cleanse since you are supposed to have a liquid diet while taking this herb. Cleansing is quite common in Ayurvedic medicine because one of the primary goals in Ayurveda is to cleanse the body of undigested food which can accumulate in the body leading to a host of health problems. The cleansing process is called panchakarma in Ayurveda and it is used to re-establish harmony and balance in the body.

Enlargement of the spleen can also be treated with an herbal combination of sunamukhi leaf powder (*Cassia senna*; English name: senna), haritaki powder (*Terminalia chebula*), revala chinna powder (*Rheum webbianum*; English name: Indian rhubarb), powdered dried grass, and sulphur powder. All of these powders should be mixed together in equal parts. Then 1-5 grams of the powder should be mixed with a cup of water and consumed daily until the spleen is no longer enlarged.

Another remedy for enlargement of the spleen uses burnt prickly flower (*Achyranthes aspera*; English name: prickly chaff flower), rock salt, dried ginger, pippali churna (*Piper longus*; English name: long pepper), and black pepper. To prepare this remedy, fry the ginger, pippali churna, and black peppers then powder them. Once all of the herbs are in powdered form, mix equal parts of all the ingredients together. About 2 grams of this herbal combination should be taken once daily with a spoon full of honey until the problems with the spleen are resolved.

Powdered bitter gourd with black pepper can also be used to treat an enlarged spleen. Two parts bitter gourd should be used to one part black pepper. Each morning one should take 3 grams of the combination with a large spoon full of honey. This remedy is to be used until the spleen returns to its normal size.

Yet another Ayurvedic remedy for an enlarged spleen is mandara (*Hibiscus rosa sinensis*; English name: Shoe flower). The powdered root of the mandara is used along with an equal proportion of rock salt. These two components are ground together and then water is added to make a thick paste. From the paste you can make pea-sized balls. Dry the balls so they will keep longer. Then take one ball with water before a meal twice daily. Dr. Elchuri recommends



using this remedy for four weeks to eliminate an enlarged spleen. This remedy is also often used for stomach problems.

The final remedy recommended by Dr. Elchuri is not exactly herbal, but it does not fall into another category either, so it is listed here. Dr. Elchuri sometimes has his patients use strained cows urine with a pinch of crystal salt to resolve problems associate with the spleen or liver. A pinch of salt is added to about ¼ cup of cow's urine that has been strained seven times discarding the first and last portion of the urine after each straining. This should be taken early in the morning for 40 days in a row. This remedy can also be used for children, but only 2 teaspoons of the strained cow's urine is used with a tiny pinch of salt.

Herbologist Michael Tierra recommends the Ayurvedic formula called chyavanprash for warming and toning the spleen and stomach energy (Tierra, 1988). Chyavanprash is made with fresh Indian gooseberries (*Emblic myrobalans*), which are called amla or amlakis in India. These berries are known for being one of the best sources for vitamin C that is easily assimilated in the body. Unlike most plant sources of vitamin C, the vitamin C in Indian gooseberries retains its potency even when dried or heated. Chyavanprash is prepared by tying hundreds of fresh gooseberries in a cloth then placing this in a vat of boiling water. They are boiled until the water is reduced to one sixth of the original volume. The boiled liquid is strained and the seeds of the fruit are removed. Then the remaining fruit is fried in butter and sesame oil and cooked until it forms a paste. The paste is added back to the water that was used to boil the fruit in the first step. This is then boiled again and mixed with crude brown sugar and molasses. Depending on the particular type of chyavanprash being made, various powdered herbs are added to the mixture. Usually 35-50 different herbs are added to each batch of chyavanprash based on the patient's needs. Once the herbs are added, the chyavanprash is cooked some more then finished by adding

honey to the mixture once it has cooled. It is usually recommended to take ½-1 teaspoon of chyavanprash each morning followed by a glass of warm water, herbal tea, or milk to reap its health benefits.

In addition to foods and herbs, metals, stones, and gems are used in Ayurveda for their healing properties. These precious minerals can be worn, but they are also commonly placed in water to create a kind of elixir that is consumed for health benefits. Copper, gold, silver, iron, and bloodstone have properties that make them beneficial to the spleen (Lad, 1984).

Copper is used as tonic for the spleen. It is known for alleviating conditions in which kapha energy is excessive. A copper bracelet can be worn on the wrist and copper-water should be used daily. Copper-water is prepared by washing ten pennies in lime water then boiling the pennies in a quart of water until the liquid is reduced by half. Two teaspoons of this preparation should be used three times a day for a month to remedy spleen ailments.

Gold can also be used to help the spleen. Gold ash (created by burning purified gold) or gold-water can be utilized. Gold-water is prepared by placing a piece of gold in water and boiling it until the water is reduced by half. One teaspoon of this preparation is consumed 2-3 times a day until the condition resolves. Gold should be used cautiously in individuals with pitta constitutions because gold is a warming remedy and pitta people generally already run hot. Some people are also allergic to gold. Do not use this remedy if there is an allergy to the metal.

Silver can be healing to the spleen. Silver is a cooling remedy so it is good for treating conditions where the pitta energy is excessive. Caution should be used when using silver with someone of a kapha constitution as it may be too cooling for them. Silver-water is prepared the same way as gold-water. The power of silver can also be harnessed by drinking milk that has

been heated in a silver container. Silver ash is noted as being especially helpful for treating liver and spleen disorders.

Iron ash can also be helpful for the spleen and liver. It is most commonly used when the liver or spleen is enlarged. Iron is good for the spleen and can be used to treat anemia because it supports the production of red blood cells. In general, iron strengthens the body's tissues (especially muscle and nerve tissue) and is re-energizing to the body as a whole.

Bloodstone is a somewhat translucent green and red stone. It is a type of green jasper that contains iron oxides that give the stone its characteristic red marbling. In Ayurveda, bloodstone is used to treat liver and spleen disorders along with anemia. Maybe it is the iron in this stone that give the stone its healing properties. Bloodstone should be worn around the neck on a gold chain near the heart to obtain the maximum health benefits from the stone.

Diet and remedies that are ingested are an important part of Ayurveda. Moving the body, balancing of the mind, and getting in tune with one's inner-self are equally, if not more, essential to well-being. Yoga with controlled breathing (called Praanaayam) is commonly use in Ayurveda to restore health and emotional balance. Some poses that are particularly good for the spleen are Vipareeta Karani, Matsyasana, Pavanamuktasana, Trikonasana, Uddiyana Bandha, Merudanda, and Shakti Mudra (Sudarsanam, 2009). Each of these poses will be briefly explained here. You can look any of the poses up online for illustrations and videos to help you better understand exactly how to do the pose.

Vipareeta Karani is more commonly known as the inverted lake pose or the legs up the wall pose. This pose is done by lying on your back on the floor and walking your legs up a wall to form a right angle with your body. Then lift your bottom off the floor and use your hands for support beneath your hips. You want keep your chest open and pull your shoulder blades

together while doing this pose. The pose is commonly held for 5-15 minutes. Vipareeta Karani is a restorative pose so it can really be useful for any ailment.

Matsyasana is commonly called the fish pose in the United States. This pose is achieved by lying on the floor and placing the top of your head on the ground. You can keep your hands by the sides of your ears for support or place them palm down under your butt. Once you are comfortable, raise one leg slightly off the ground. Hold it there for a few seconds then lower that leg and raise the other leg. Finally raise both legs together off the ground then return to the resting position. In addition to being beneficial for the spleen, this position strengthens the neck, chest, legs, and spine. People with high or low blood pressure or lower back or neck injuries should not do this pose.

Pavanamuktasana is also known as the wind or gas relieving pose. To achieve this pose you start by lying on your back on the floor. Then you raise one leg to the chest, hold it in place with your hands, and raise your head off the floor so your chin touches the raised knee. Take several deep breaths with one leg raised then lower the first leg and raise the other leg. Finally raise both knees to the chest at once. You can rock from side to side or up and down to help you relax. As the name suggests, this is a great pose to aid in the release of gas. This pose is beneficial for digestion and circulation so it makes sense that it is beneficial for the spleen. The wind relieving pose should be avoided or used with caution if you have high blood pressure, heart problems, hernias, neck or back problems, during menstruation, and during the third trimester of pregnancy.

Trikonasana is more commonly known as the triangle pose. To do the triangle pose, stand with your feet 3-4 feet apart. Point your toes forward on your right foot then align your left foot with your right heel. The left foot should be at a little less than a 90° angle with your right

foot. Breathe deeply and then as you exhale bend your body to the right without twisting your hips or waist. Extend your right hand towards your right foot and left hands toward the ceiling so that your arms form a straight line. Keep breathing deeply in this pose and try to stretch towards the floor a little farther on each exhale. This is a good pose to hold for several minutes. When you are ready, stand up, bring your arms back to your sides and your feet back to neutral then repeat the pose on the other side. This pose is especially good for the digestive function of the spleen. It also stretches and strengthens the hips, legs, shoulders chest, and spine. Triangle pose improves mental and physical equilibrium and can reduce stress and anxiety.

Uddiyana Bandha is more commonly known as the upward abdominal lock. The goal of the pose is to increase circulation to all of the organs in the abdominal cavity below the diaphragm including the spleen. It enhances digestion and boosts the immune system. This pose also stretches the diaphragm to allow you to breathe deeply more easily and exhale a greater volume from the lungs. The upward abdominal lock pose should only be performed on an empty stomach. When you are first learning this position it is best to stand with your knees slightly bent and your hands braced against your thighs. Exhale completely then try to inhale without actually allowing any air into the lungs. You should feel the diaphragm lift as you do this. Hold for as long as you are comfortable then gently inhale and take a few normal breaths before repeating several times. Only hold the breath as long as you are comfortable because gasping for air should be avoided. This pose is not usually recommended if you are pregnant, menstruating, have high blood pressure, a hiatal hernia, or stomach ulcer.

Merudanda is actually a series of hand mudras that are used to help people connect with their breathing and bring awareness to the body. Hand mudras are simply gestures used to circulate energy and to help people connect their mind, body, and spirit through movement,

intention, and sometime speech. Mudras can also be used to activate certain areas of the body. The Merudanda Mudra can be used as part of any yoga practice or just as a quick exercise on its own. You can do it while seated in a chair or on the floor or while standing in a comfortable stance. One should breathe deeply and intentionally throughout the exercise. The Merudanda Mudra starts with the palms open and facing up. Then all four fingers are bent into the palm leaving the thumb sticking out. Turn the hands inward 180° so the thumbs are pointing toward each other. This brings energy to the abdomen, pelvis, and low back. After about 10 breaths in this position, move the hands so the thumbs are pointing toward the ceiling. This shifts the energy to the solar plexus, diaphragm, and spleen. You want to spend extra time in this position if you are working on strengthening the spleen. After 10 or more breaths, turn your hands 90° degrees so the thumbs are pointing away from the body again. Take a few more breaths then relax your hands in a neutral position. You should feel more relaxed and in tune with your body.

The Sakti Mudra is another series of hand movements used to bring awareness to the body. This mudra is particularly well known for relaxing the body and calming the mind and nervous system thereby increasing mental and physical energy. Although this mudra is best known for helping people suffering from insomnia, it is also beneficial to the spleen. This makes sense, especially from a Chinese perspective, as the spleen must process all of the stimuli we encounter. Relaxation is key for the rejuvenation of the spleen. To do this mudra, join the pinky fingers and ring fingers to their counterparts on the other hand. Tuck the thumbs on both hands in and loosely fold the middle and pointer fingers on both hands over the thumbs. Breathe deeply while holding your hands in this position. Try to retain air in the abdomen for a few extra seconds before exhaling. Continue holding this position and breathing deeply until you start to feel calm and relaxed.

As mentioned in the previous section, the spleen is most commonly associated with the sacral chakra. However, if energy centers are broken down further than just the seven major chakras, the spleen actually is part of the left abdominal chakra. This chakra has to do with glory, wealth, possession, dominion, weight, mass, and tangibility. The pancreas, descending colon, and valve of Houston are also governed by the left abdominal chakra. Doing things to support the sacral chakra and left abdominal chakra will also support the spleen. Wearing orange clothing and looking at the color blue as well as eating blue food supports the left abdominal and sacral chakras. Engaging in play, spending time with children, and finding an appreciation of nature also help nourish the left abdominal chakra. The sacral chakra is usually more associated with the ability to feel the emotions that are part of life. The sacral chakra especially has to do with the feelings of being loved, feeling lovable, and sexuality. Affirmations such as, “I am open to experiencing the present moment with all my senses” and “I love and enjoy my body” are nourishing to the sacral chakra. Essential oils such as cedarwood, jasmine, and neroli are good for the sacral chakra. Stones including carmelion, aquamarine, onyx, and tiger’s eye can also be beneficial to the sacral chakra.

### **Additional Information about the Spleen from a Naturopathic Perspective**

In addition to the information about the spleen that has already been covered from the physiological, Chinese, and Ayurvedic perspectives, a few more things can be added when looking at this organ from a naturopathic perspective. First, we will look at some naturopathic diagnostic tools and visible cues given by the body that can indicate that the spleen is out of balance.

There are several visible signs that can manifest on the body that indicate a spleen weakness or imbalance. Some of these signs are derived from TCM or Ayurveda, but all of

these signs are commonly used by naturopathic practitioners to detect imbalances of the spleen. If the tongue has scalloped edges, this indicates that nutrients are not being assimilated in the body, which is often due to a weak spleen. A wet tongue is indicative of spleen and/or kidney weakness. If the tongue is yellowish in color, there is poor digestion and imbalance of the stomach and spleen. A yellow hue around the mouth is indicative of weak digestion. If the lips are pale and dry, it is likely that the spleen is deficient. Red patches on the skin, commonly referred to as strawberries, can indicate spleen and circulation issues. Any facial markings or blemishes in the temporal region of the face can also be a sign of spleen issues. Fingernails that are bluish, very thick, and/or brittle are a sign of poor circulation that could be related to a spleen imbalance. People with a weak spleen often have a messy appearance and would tell you that their life is chaotic.

The muscle testing point for the spleen is located roughly over the spleen in the body. It is located on the lateral portion of the left side of the body at the bottom of the ribcage. If the arm (or other isolated muscle used to muscle test) goes weak when the practitioner touches this point, there is an imbalance with the spleen. The practitioner can further determine if the spleen is stressed or weakened by placing the palm then back of the hand over the spleen test point. If the point tests strong when the palm is placed over the test point (signifying giving the organ more energy), it shows that the spleen is in a weakened state because it needs more energy to be strong. In this example, the person would test weak if the back of the hand were placed over the test point (signifying taking energy away from the organ) because the organ is already weak and taking more energy away from the organ would just make it weaker. Muscle testing can also be used to determine if the spleen is the primary organ of weakness in an individual or if there is an



imbalance elsewhere in the body that needs to be corrected first in order to remedy the problem with the spleen.

Iridology is an analysis tool used by many naturopathic practitioners to determine areas of weakness in the body by examining the iris (colored part) of the eye. The area of the iris that corresponds to the spleen in iridology is located only in the left iris since the spleen is located on the left side of the body. If you imagine the iris like a face of a clock, the area corresponding to the spleen is located just past four o'clock. This region extends from the outer edge of the iris to just short of the collarette or autonomic nerve wreath of the eye (the pancreas tail region of the iris occupies a small space between the collarette and spleen regions). According to Iridologist and researcher John Andrews, there are certain markings in the spleen region of the iris that are of particular interest (Andrews, 2006). A transversal (line that travels across the grain of the iris fibers) from the heart region to the spleen region can be a sign of a family history and personal risk for myocardial infarction (heart attack). Basic transversal lines are usually white, indicating inflammation. A red or pink or forked transversal can indicate that there is a more elevated problem with inflammation and/or infection in the spleen. This sign is often seen in people who have had appendicitis or appendectomy because extra stress is placed on the spleen when the appendix is not able to carry out its immunological functions. A red or pink transversal in the spleen region of the iris can also be indicative of an autoimmune condition or impaired immune response. A spleen transversal that reaches all the way from the outside of the iris to the inner collarette can indicate extreme stress of the spleen due to infection or an adverse reaction to a drug, vaccine, or environmental pollutants. According to Andrews, brown or brownish orange pigment patches in the spleen region of the iris can indicate anemia and infections of the spleen that can be related to mononucleosis or viral hepatitis. Black pigment patches in the spleen

region can indicate a family disposition for tumors. Yellow pigment in the spleen region can indicate that the immune system is impaired due to intestinal dysbiosis or an overload of toxins in the body.

Sclerology, or the study of the sclera (white part) of the eye, is another non-invasive evaluation tool that can be used to find health conditions in the body. Like in iridology, the spleen region of the sclera is only located in the left eye. The spleen region of the sclera is located in the left lateral quadrant of the left eye. It is located at about four o'clock in the medial part of the sclera adjacent to the iris. The chart we used in class has the spleen region only extending about a quarter of the way out into the sclera. Other charts have the spleen region stretching from the edge of the iris all the way to the outer part of the sclera. Some sclerology charts indicate the region of the sclera closer to the iris represents the spleen while the outer portion of the spleen region represents the spleen and lymphatic system. Although the sclerology maps differ, the spleen is always around and just after four o'clock in sclera of the left eye. Any red lines or discoloration in this area can indicate that there is a problem with the spleen.

### **Remedies for the Spleen from a Naturopathic Perspective**

There are numerous healing modalities for the spleen that are used within the field of naturopathy. The spleen can be supported on a physical level and also on the emotional and spiritual levels. Some of the naturopathic remedies for the spleen include diet, vitamins, minerals, herbs, essential oils, and flower essences. Color and sound therapy and precious stones can also be used to support the spleen. Each of these healing modalities will be explained in further detail in the following pages.

Diet is the foundation of any prescription for good health. Information on diets that support the spleen from the TCM and Ayurvedic perspectives has already been shared in the previous sections. However, there are some additional dietary suggestions that can be made based on how to support the biological functions of the spleen from a naturopathic perspective. Since the spleen's largest biological function is immunological in nature, it makes sense that supporting the immune system would be a foundational way to support the spleen. Foods that are high in antioxidants (especially vitamins A, C, and E) and minerals (especially selenium and zinc) are great for boosting the immune system. According to the *Prescription for Dietary Wellness* by Phyllis Balch, the best fruits for the immune system include apricot, kiwis, avocados, blueberries, black berries, and strawberries (Balch, 2003). Some of the best vegetables for the immune system are onions, garlic, cruciferous vegetables like broccoli, Brussels sprouts, and collards, spinach, kale, turnip greens, carrots, squash, sweet potatoes, and sweet peppers. Organically grown produce is preferable. For the most nutritional benefit it is best if a majority of these fruits and vegetables are consumed fresh as cooking causes some nutrients to be lost. Yogurt (preferably made from raw organic milk) is also good for the immune system because it provides healthy flora to support the gut. Having an ample supply of good bacteria in the guts helps prevent pathogenic bacteria from taking hold in the gut and causing dysbiosis. Chlorella and pearl barley are helpful for the immune system because they contain germanium, a trace mineral that supports the immune system. What you don't eat can be just as important as what you do eat to support the immune system. One should avoid refined sugar and other highly processed foods. Raw honey is an excellent alternative to refined sugar as it actually contains components that are beneficial for the immune system. Sugar-laden beverages, caffeine, and alcohol deplete the immune system. In addition to diet, basic lifestyle

choices like getting enough sleep, getting regular exercise, and managing stress are beneficial to the immune system. Phyllis Balch also recommends fasting once a month while taking spirulina to allow toxins to be flushed from the immune system while still supplying the body the protein and nutrients it needs to function (Balch, 2003).

As indicated in the previous paragraph, vitamins A, C, and E along with several minerals and other nutrients are important to immune health and therefore can be used to support the biological functions of the spleen. Vitamin A supports the immune system by helping to maintain the body's mucous membranes, the first line of defense against pathogens. Beta-carotene which is converted into vitamin A in the body helps the body be able to detect the presence of viruses and activate the immune response. Yellow fruits and vegetables are generally high in vitamin A, but animal sources of vitamin A such as liver and fish liver oil are up to six times more potent than plant-based sources (Balch, 2003). Vitamin C is essential for the formation of lymphocytes and has been found to enhance the immune system's ability to combat bacteria and viruses. Berries, citrus fruit, and many green vegetables are high in vitamin C. If you are looking for large doses of vitamin C and want to take a supplement, you should make sure the supplement contains plant bioflavonoids which enhance the absorption and function of vitamin C. You might also consider liposomal vitamin C (vitamin C combined with tiny fat molecules that make it more easily absorbable) or rosehips especially if you are a blood type O. Vitamin E is an antioxidant, meaning it helps protect the body from free radical damage. People, especially older people, who are deficient in vitamin E have been found to have decreased immunity (Moriguchi, 2000). Supplementing with vitamin E boosts the immune system by increasing white blood cell production.

Two of the most important minerals for the immune system are selenium and zinc. Selenium is needed to make certain proteins in the body called selenoproteins. These proteins are required for the proper functioning of white blood cells including neutrophils, macrophages, natural killer cells, and t lymphocytes (Ferecik, 2002). Zinc is the catalyst for many reactions in the body, which makes it a vital trace element for keeping the immune system, and body as a whole, healthy. Researchers have shown that when the body does not have enough zinc available, the immune system is less able to fight infection, especially in older people. They also found that taking a zinc supplement for 1-2 months restores the immune response and decreases the frequency of infections in the body (Ferecik, 2002). Even though selenium and zinc are of specific importance to the immune system, almost all minerals play some role in maintaining a healthy immune system. When your body is mineralized with all the minerals it needs, it is difficult for disease of any kind to take hold.

Various herbal remedies can also be used to support the immunological function of the spleen. Some great herbs that we often discuss in class for the immune system include: elderberry (especially for blood type A), holy basil, Echinacea, garlic, and adaptogens like astragalus, schizandra, ashwagandha, and ginseng. The herbal blend called VSC by Nature's Sunshine is another great immune booster, especially when you feel like you are starting to get sick. VSC contains dandelion, purslane, indigo, thlaspi, bupleurum root, scute root, typhonium rhizome, cinnamon twig, licorice root, and ginseng root. Mark Pedersen's *Nutritional Herbology* list the following herbs as having immunostimulating properties: astragalus, Echinacea, garlic, horseradish, parthenium root, plantain seed, sarsaparilla root, and Siberian ginseng (Pedersen, 2002). Phyllis Balch recommends aloe vera, astragalus, bayberry, fenugreek, hawthorn, horehound, licorice root, red clover, cat's claw, and Echinacea to boost the immune system

(Balch, 2003). Aloe vera might seem like a surprising choice for boosting the immune system, but it has actually been found to “turn on” the immune system by activating macrophages. Aloe vera is also rich in vitamins and minerals that support the immune system. Echinacea is very well known for its immune boosting power, but many people do not know that Echinacea is most effective in the beginning stages of a cold, but once a cold has reached its peak, you are actually better off to use goldenseal rather than Echinacea.

Wheatgrass, alfalfa, sheep sorrel, and other blood cleansing herbs have also been used to support the spleen since filtering the blood is one of the primary jobs for the spleen. Sheep sorrel can be particularly good for the spleen because in addition to cleansing the blood, it is a powerful antioxidant, protecting your body from free radical damage. Sheep sorrel also has diuretic properties, which can help clear fluid from the spleen and the lymphatic system as a whole. Mark Pedersen’s *Nutritional Herbology* list the following herbs as having blood purifying properties: alfalfa, asparagus root, burdock, celery seed, chaparral, Devil’s claw, hydrangea root, juniper berry, kelp, lobelia, nettle leaf, pau d’arco, red clover, and sarsaparilla root (Pedersen, 2002). Phyllis Balch recommends the following herbs for their blood cleansing properties: black radish, burdock root, dandelion, milk thistle, and red clover (Balch, 2003).

In addition to immune boosting and blood cleansing herbs, there are multiple herbs that are indicated for the spleen outside of those already mentioned in the TCM and Ayurveda sections of this paper. For example, according to Mark Pederson, dandelion is useful for various ailments of the spleen and liver (Pederson, 2002). Naturopathic Doctor William Mitchell Jr. lists dandelion, New Jersey tea, barberry, iris, oak acorn kernels, and yellow leaf cup as good remedies for an enlarged spleen. In addition to those remedies, bearsfoot, Hart’s tongue fern, and white oak can also be helpful for a congested or enlarged spleen (Mitchell, 2003).

Naturopathic Physician, Sharol Tilgner, recommends iris as one of the top herbs for treating problems with the spleen. Tilgner likes using the iris rhizomes for the spleen because they contain triterpenoids that have been found to be particularly medicinal for spleen ailments. Iris rhizomes also have a strong bitter taste, which can help clear spleen and lymphatic congestion (Tilgner, 2009).

Many plants that are native to North America or that were introduced and now grow in the wild can be used for spleen ailments. The beauty of using plants that grow locally is that you can make your own medicine as long as you can find it growing in the wild and you are confident of your plant identification skills. *Peterson's Field Guide to Medicinal Herbs of Eastern and Central North America* is a great resource for identifying plants and their medicinal uses. This book lists many herbs which either are currently or have historically been used for the spleen. Please note that historic or folk use does not always mean these herbs are the best choice for a particular ailment, but it may mean that they could be of benefit. The following information is based on *Peterson's Field Guide* (Foster, 2000). Eclipta is used in India to treat liver and spleen diseases. Celandine poppy was historically used in the nineteenth century to for liver and spleen ailments. Gumweed (also called rosinweed) is a folk remedy for cancers of the spleen and stomach. A tea made of the roots of cup plant has historically been used to treat the spleen when it is enlarged. Soapwort (also called bouncing bet) was used by Native Americans for spleen pain. High mallow is said to be good for the stomach and spleen. A tea made of European vervain is commonly used in Europe to treat obstructions of the liver and spleen. Kudzu flower tea is used for stomach acidity and is said to "awaken the spleen." Stinging nettle leaf tea is frequently used in Europe as a treatment for an enlarged spleen. New Jersey Tea (also called red root) was once used for spleen inflammation and pain.

The spleen meridian is associated with the feelings of being wanted and rejection. The spleen and stomach are also related to the emotions of stress, worry, and over-thinking things versus that of inner peace. When the spleen is out of balance, it can also cause obsession. There are several flower essences and essential oils that can help balance the emotions of the spleen. Several of them will be listed here. Please note that the *Flower Essence Repertory* by Patricia Kaminski and Richard Katz can help you narrow down which flower essences best fit in each individual case.

If someone is feeling that they are always being rejected and not accepted for who they are, the following flower essences may be helpful: angelica, baby blue eyes, black cohosh, bleeding heart, buttercup, chicory, crab apple, dogwood, Echinacea, evening primrose, gentian, goldenrod, holly, honeysuckle, larch, mallow, mariposa lily, Oregon grape, pine, pink monkey flower, pretty face, scarlet monkeyflower, shooting star, sticky monkeyflower, sweet chestnut, sweet pea, and willow. The essential oil blends Joy and Acceptance by Young Living are also helpful for feelings of rejection.

If someone is constantly worrying and stressed about things, they might do well on one or more of the following flower essences: aloe vera, chamomile, cherry plum, dill, elm, five flower remedy, impatiens, Indian pink, lavender, pink yarrow, rosemary, star of Bethlehem, vervain, yarrow, or yarrow environmental solution. There are numerous essential oils that are good for emotional stress including bergamot, Clary sage, geranium, ravenara, and sandalwood. The blends Evergreen Essence, Forgiveness, Gathering, Joy, Stress Away, Surrender, Transformation, and Trauma Life by Young Living are also good for emotional stress. Worry can specifically be combated by diffusing the essential oil bergamot in the room.



If the person is worried to the point of being obsessive about something, the following flower essences may be helpful: crab apple, filigree, heather, pink monkeyflower, purple monkeyflower, red chestnut, rock water, sticky monkeyflower, vervain, and white chestnut. The essential oils Clary sage, cypress, geranium, helichrysum, lavender, marjoram, rose, sandalwood, and ylang ylang can be helpful for obsessiveness. The Young Living blends Acceptance, Awaken, Forgiveness, Humility, Inner Child, Joy, Motivation, Present Time, Sacred Mountain, and Valor can also be helpful for obsessiveness.

In addition to being helpful for the emotional aspects of the spleen, essential oils can also be used to boost the physiological functions of the spleen. For example, since the spleen has a significant role in immune response, immune boosting essential oils such as cistus, clove, cumin, frankincense, geranium, Idaho tansy, lavender, ledum, lemon, melaleuca, mountain savory, ravensara, rosemary, thyme, white lotus, and the Young Living Blends Abundance, Exodus II, ImmuPower, Raven, and Thieves can be useful for the spleen. Blood cleansing essential oils like helichrysum, Roman chamomile, and the blend Juva Cleanse can help support the spleen with its filtration of the blood. Since the spleen's major role in TCM is digestive in nature, essential oils that support the digestive system could also be beneficial to the spleen. Some oils that support the digestive system include: basil, bergamot, black pepper, cinnamon, Clary sage, clove, cumin, fennel, ginger, grapefruit, juniper, laurel, lemon, mandarin, marjoram, myrrh, myrtle, neroli, nutmeg, orange, patchouli, peppermint, rosemary, spearmint, tangerine, and tarragon. The Young Living blend called DiGize is also very good for stimulating the secretion of digestive enzymes and alleviating indigestion. Laurel and marjoram essential oils are indicated as being good for the spleen in general (Higley, 2006).

Homeopathic remedies can also be used for ailments of the spleen. The homeopathic remedy needed will vary based on the individual case. Some of the most common homeopathic remedies for pain, infection, and enlargement of the spleen include *Ceanothus*, *Cinchona*, *Capsicum*, *Arnica*, *Quercus*, and *Natrum muraticum* (Hpathy.com, 2014). *Ceanothus* is indicated when there deep pain and stitches in the spleen and the spleen is enlarged. Some additional modalities of this remedy are that the pain is worse in damp weather, pain is present on the whole left side of the body, and pain is accompanied by a shortness of breath. *Cinchona* can also be indicated when there is pain and swelling in the spleen, but it is usually dull pain with congestion and inflammation of the spleen. People needing this remedy tend to be sensitive and easily aggravated by any physical or mental effort. This remedy is particularly useful for enlarged spleen due to malaria fever. *Capsicum* is good for a sensitive swollen spleen. *Arnica* is a common remedy that may be needed when the enlargement of the spleen is caused by injury. *Quercus* is often indicated when the spleen is enlarged due to over consumption of alcohol and liver damage. *Natrum muraticum* (*Nat mur*) is good for a swollen spleen in persons suffering from constipation and who crave salt. A person in need of *Nat mur* will tend to be very sensitive and will get upset if you offer consolation to them. *Aurum muraticum*, *Aranea diadema*, *Phosphorus*, *Cina officinalis*, *Iodum*, *Arsenicum album*, *Chininum sulph*, *Grindelia robusta*, *Sulphuric acid*, *Magnesia muraticum*, *Phosphoric acid*, *Cocculus*, and other homeopathic remedies can also be used to treat an enlarged spleen (Hpathy.com, 2014).

Color and sound therapy can also be used to help resolve imbalances of the spleen. According to Dinshah, an abscess of the spleen can be treated with green light on the systemic front, indigo light on the area over the spleen, and magenta light on the chest and upper abdominal region (Dinshah, 2012). Enlarged spleen can be treated with lemon or red light on the

systemic front and magenta light on the chest and upper abdominal region. Indigo light can be used directly over the area of the spleen and over any areas where bleeding occurs due to the enlargement of the spleen. The musical notes associated with these colors could also be used. According to Dinshah the following colors used in the treatment of the spleen are related to the following frequencies and musical notes: green-531.5 hz-C; indigo- 632.1 hz- D#; magenta- 531.5 hz- G and E; lemon-497.9 hz- B; red- 397.3 hz- G.

Sharry Edwards has been researching the science of BioAcustics for over 30 years and has established a different relationship between color and sound. According to her research the colors are related with the music notes as follows: red- C, red/orange- C#, orange- D, orange/yellow- D#, yellow- E, yellow/green- F, green- F#, green/blue- G, blue- G#, blue/violet- A, violet- A#, and violet/red- B. According to Edwards' work the color orange and the musical note D would be the most healing for the spleen. You could muscle test to see which note and color would be most helpful in a particular case if you were not sure whose method to follow. A product called EarFoods CDs can be used to tone (practice vocalizing) the particular note you are deficient in.

The Solfeggio frequencies (ancient frequencies used in sacred music) can also be used for healing the body. Any of the notes of the Solfeggio scale could potentially be healing to the spleen, but the frequencies of ut, re, and mi seem most related to the spleen. Ut (396 hz) turns grief into joy and help relieves past pains. This could help someone who is worrying or obsessing (the emotions of the spleen) let go of what is bothering them. Re (417 hz) is also noted for helping let go of old baggage. Re also conveys the message "you are worthy" which could help combat the feeling of rejection associated with the spleen being out of balance. Mi (528 hz) is called the frequency of miracles because it allows for DNA repair. This frequency

can facilitate physical and emotional healing in any damaged area of the body. Solfeggio tuning forks can be used to generate these notes or you can listen to music based on the Solfeggio scale. Musician Michael Tyrell has created a set of CDs that using the Solfeggio scale. His work can be quite helpful if you are targeting a certain frequency because each CD is based on a different note of the Solfeggio scale.

There are a number of stones that have been noted as being beneficial to the spleen. Since the spleen is associated with the sacral chakra, many of the stones for healing the spleen are orange or blue/green (the complimentary colors of orange). According to *Love is in the Earth a Kaleidoscope of Crystals*, the following stones are good for the spleen: alexandrite, bixbite, bloodstone, bronchantite, calcite, carnelian, churchite, clinozoiste, cuproadamite, damsonite (a specific type of jasper), diabantite, grandidierite, helidor, herderite, jade, jasper, moltramite, red obsidian, pink opal, peridot, blue quartz, rickardite, yellow sapphire, stillwellite, tenorite, yellow tourmaline, and zoiste. Bloodstone is one of the more common stones used for the spleen. It is used to neutralize and eliminate toxins from the body, especially those that are being carried in the blood. Rickardite is not as common, but it is also good for the blood. It is known for maintaining the optimal condition of blood cells while eliminating toxins from the body. Jasper is good for the spleen overall, but especially in cases where there is tissue degeneration and or malfunction. Peridot is a good tonic to strengthen the spleen. It also helps regenerate damaged tissues in the body including the tissue of the spleen. Tenorite stimulates the spleen and assists in assimilation.

Certain types of bodywork can be beneficial to the spleen. A lymphatic drain massage can be helpful for the spleen since the spleen is the largest lymphatic organ in the body. Light healing touch and/or energy work on the spleen can also be beneficial, especially if there are

significant emotional components associated with the spleen malady. Having your meridians traced to make sure energy is able to properly flow through the body could also be helpful. It would be wise to trace all of the meridians, but you could spend extra time tracing the spleen meridian (see page 12 or Appendix B on page 58 for the location of this meridian). Holding a magnet while tracing the meridians could increase the effectiveness and efficiency of meridian tracing. Drinking magnetized water has been found to strengthen the immune system and therefore could be beneficial for the spleen.

## **Conclusion**

After reading this paper, you should have a better understanding of the spleen from a variety of perspectives. The spleen is a vital organ located in the upper left portion of the abdominal cavity. From a Western physiological perspective, the spleen has important immunological functions and filters the blood, removing pathogens and old red blood cells from circulation. In Traditional Chinese Medicine, the spleen's primary responsibility is the process of digestion and assimilation of nutrients and information. The functions of the spleen in Ayurvedic Medicine are fighting off infections and breaking down pathogens and foreign matter in the body. There are numerous remedies for the spleen and its various functions within TCM, Ayurveda, and naturopathy. Nourishing and balancing the spleen can be the foundation of good health. Hopefully you have learned some things you can do in your daily life to take care of your spleen, thereby taking care of your health.

## References

- Andrews, John. (2006). The Spleen in Iridology: New Research in Immunology. Available online: <http://www.johnandrewsiridology.net/research/JAndrewsspleeniridology.pdf>
- Baslch, P. (2003) Prescription for Dietary Wellness. 2nd Edition. New York, NY: Avery Books.
- Center for Classical Acupuncture. (2016) The Five Elements. Available online: <http://centerfca.com/acupuncture/five-elements/>
- Children's Hospital of Pittsburg. (2010) Spleen: Information Surgery and Functions. November 17, 2010. Available online: <http://www.chp.edu/our-services/transplant/liver/education/organs/spleen-information>
- Davis, Deborah (2008). *Women's Qigong for Health and Longevity*. 1<sup>st</sup> Ed. Boulder, CO: Shambhala Publishing.
- Dinshah, D. (2012) *Let There Be Light*. 11<sup>th</sup> Ed. Malaga, NJ: Dinshah Healthy Society.
- Foster, Steven and Duke, James. (2000) *Peterson's Field Guide to Medicinal Herbs of Eastern and Central North America*. 2<sup>nd</sup> Ed. New York, NY: Houghton Mifflin Company.
- Freedman, M and Saunders, E. (1981) Hematopoiesis in the Human Spleen. *American Journal of Hematology*: Nov 1981;11(3):271-5.
- Ferenčík, M. and Ebringer, L. (2003) *Folia Microbiologica*: May 2003: 48: 417.
- Hess D, et al. (2003) Bone marrow-derived stem cells initiate pancreatic regeneration. *Nature Biotechnology* 21:763-77.
- Higley, Connie and Alan. (2006) *Reference Guide for Essential Oils*. 10<sup>th</sup> Ed. Spanish Fork, UT: Abundant Health.

- Horne, Steven. (2007) *Healing with Chinese Herbs: Chinese Constitutional Herb Formulas for Better Health*. St. George, UT: Tree of Light.
- Hpathy.com. (2014) Hpathy Ezine. May 2014. Available online:  
<http://treatment.hpathy.com/homeo-medicine/homeopathy-spleen-pain-infection-enlarged-spleen/>
- Kaminski, Patricia and Katz, Richard. (2004) *Flower Essence Repertory*. Nevada City, California: Flower Essence Society.
- Kodama S, Davis M, Faustman DL. (2005) Diabetes and stem cell researchers turn to the lowly spleen. *Science of Aging Knowledge Environment*: vol 3:2.
- Lad, Vasant. (1984) *Ayurveda: The Science of Self-Healing*. Twin Lakes, WI: Lotus Press.
- Melody (1999). *Love is in the Earth: A Kaleidoscope of Crystals*. Wheat Ridge, CO: Earth-Love Publishing House.
- Mitchell Jr, William. (2003) *Plant Medicine in Practice: Using Techniques of John Bastyr*. 1<sup>st</sup> Ed. London, England: Churchill Livingstone Publishers.
- Moriguchi, S, and Muraga, M. (2000) Vitamin E and Immunity. *Journal of Vitamins and Hormones*: 59: 305–336.
- National Center for Complementray Medicine and Integrative Health. (2013) Traditional Chinese Medicine: In Depth. Available online:  
<https://nccih.nih.gov/health/whatiscam/chinesemed.htm>
- Ryu S, Kodama S, Ryu K, Schoenfeld DA, Faustman DL. (2001) Reversal of established autoimmune diabetes by restoration of endogenous beta cell function. *Journal of Clinical Investigation* 108:63-72.

Santopietro, N. (2002) *Feng Shui and Health: The Anatomy of a Home*. New York, NY: Three Rivers Press.

Sudarsanam, M.Sai. (2009) Dr. Elchuri's recipes for spleen problems. Available online:  
<http://www.ayurformula.com/dr-elchuris-recipes-for-spleen-problem/>

Swirski, FK, et al (2009). "Identification of splenic reservoir monocytes and their deployment to inflammatory sites". *Science*. 325 (5940): 612–6.

Tierra, Lesley. (2016) Snap Your Spleen Back into Shape Part 2. East West School of Planetary Herbology. Available Online: <https://www.planetherbs.com/lesley-tierras-blogs/snap-your-spleen-back-into-shape-part-2.html>

Tierra, Michael. (1988) *Planetary Herbology: An Integration of Western Herbs into the Traditional Chinese and Ayurvedic Systems*. Twin Lakes, WI: Lotus Press.

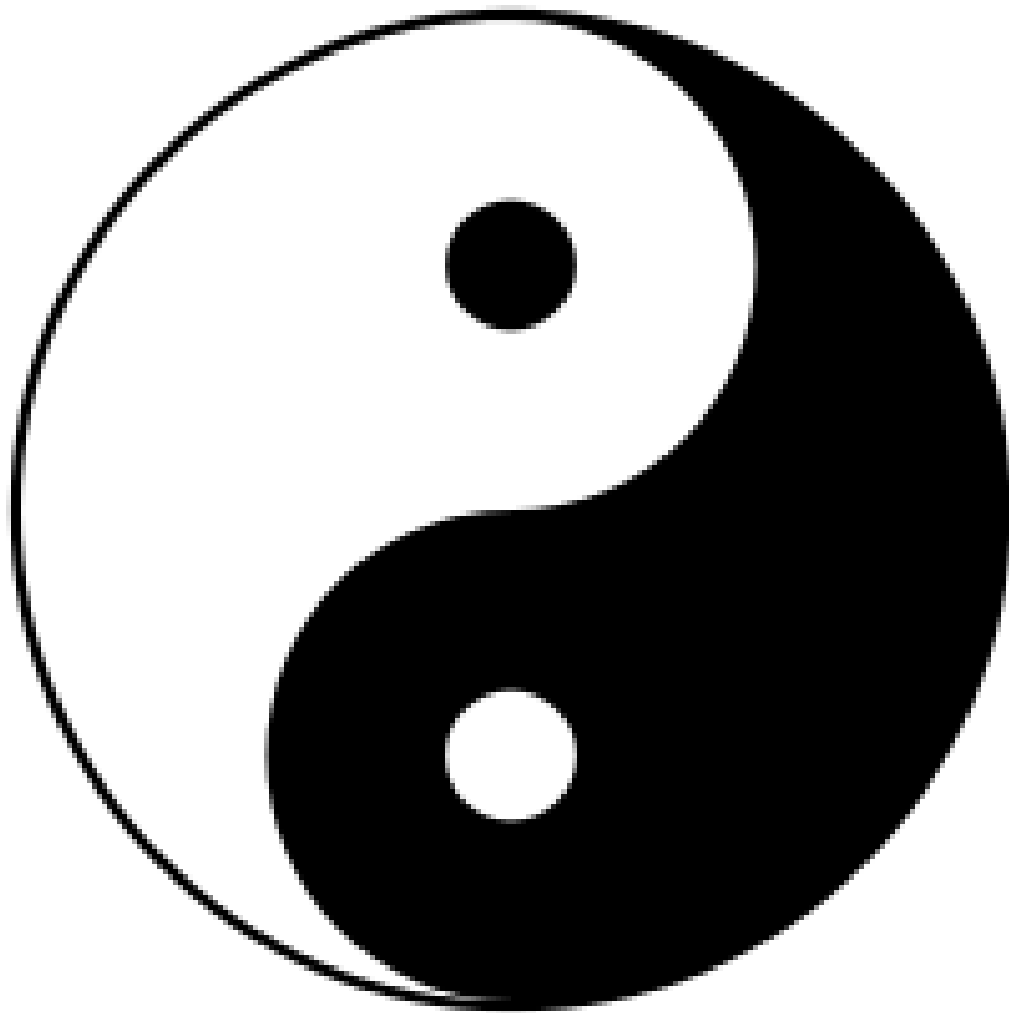
Tilgner, Sharol. (2009) *Herbal Medicine from the Heart of the Earth*. 2<sup>nd</sup> Ed. Los Angeles, CA: Wise Acres LLC.

Twicken, David (2013). Medical Qi Gong: The Spleen Healing Sounds. *Acupuncture Today*. May 2013: Vol 14: 05.

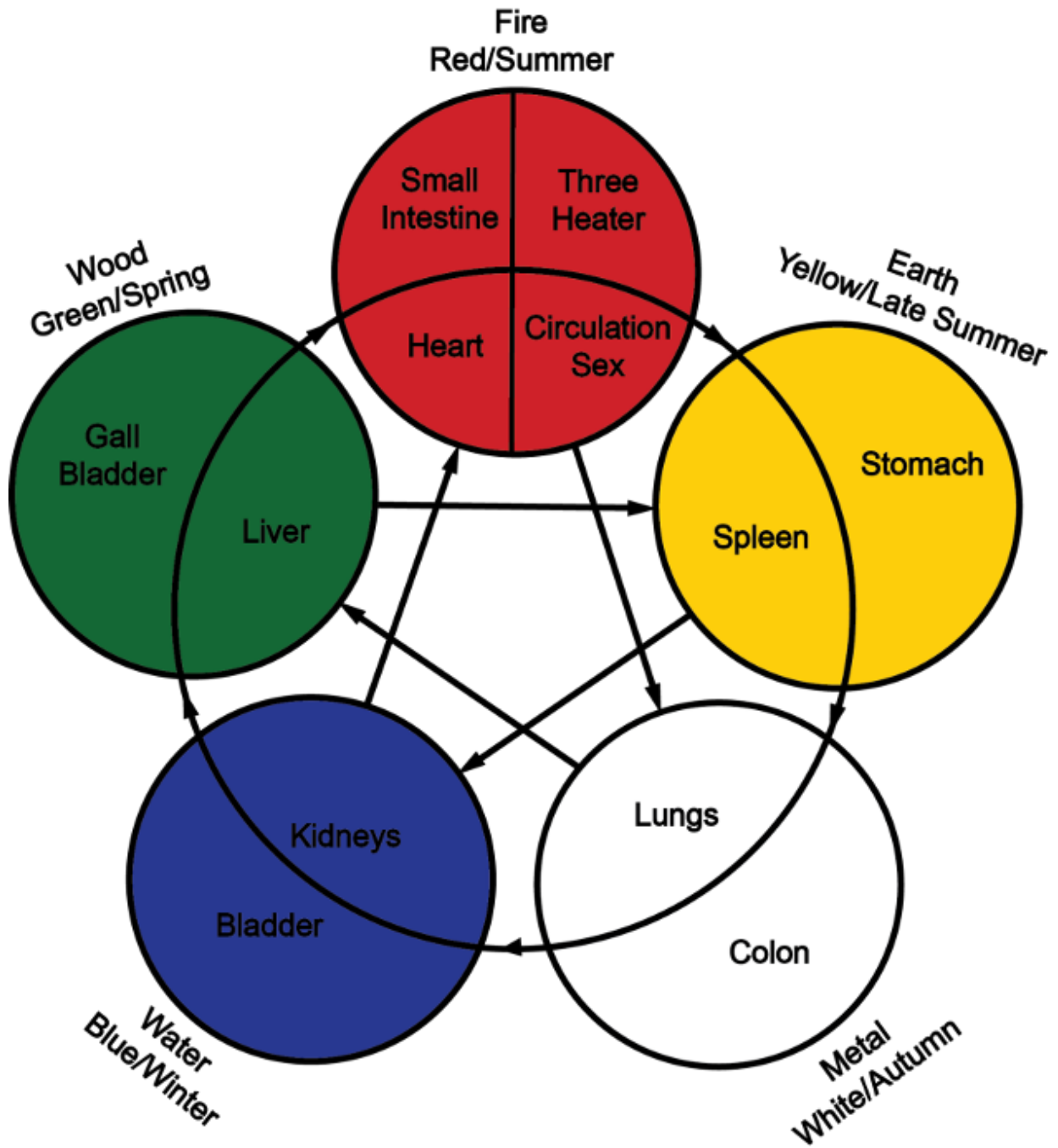
White S, Robertson G, London N, Dennison A, (2000). Human Islet Autotransplantation to Prevent Diabetes after Pancreas Resection. *Digestive Surgery Journal*: 17:439-450.



**Appendix A-** Yin and Yang Symbol



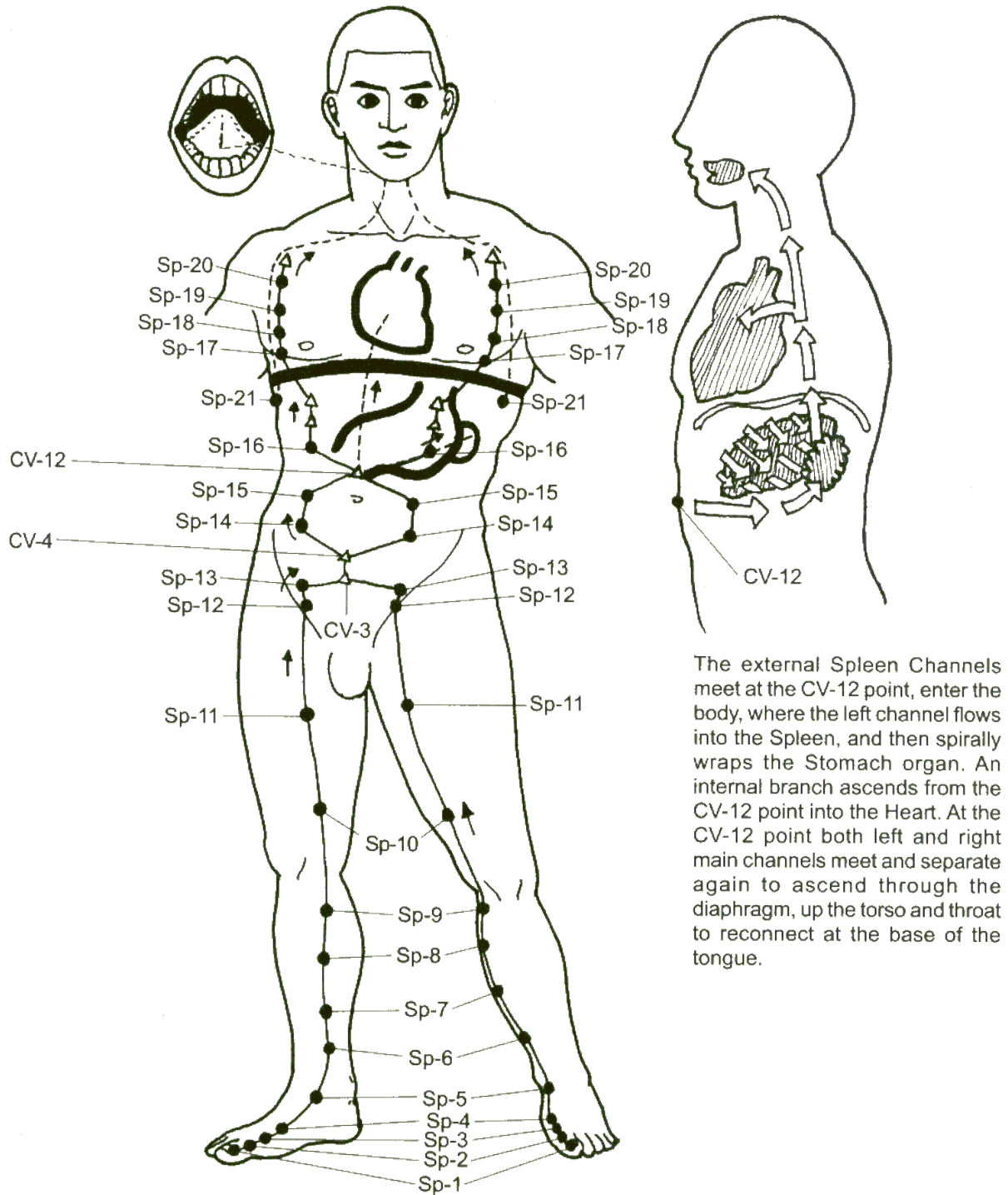
Appendix B- Chinese Element Diagram



**THE FIVE ELEMENTS**

Available at: <http://centerfca.com/acupuncture/five-elements/>

Appendix C- Spleen Meridian Diagram

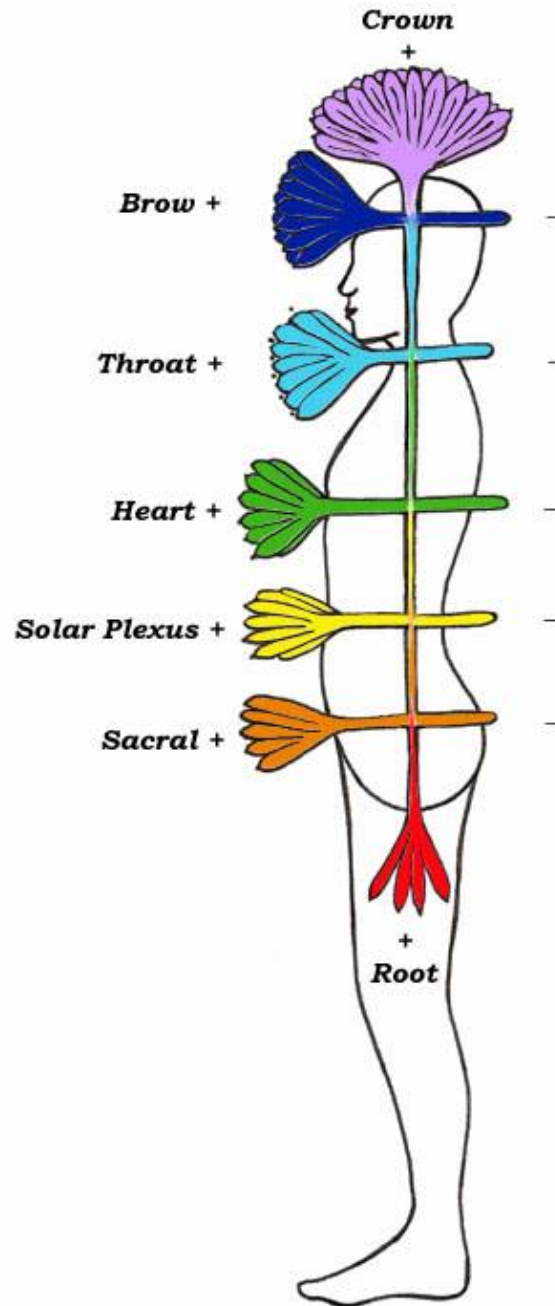


The external Spleen Channels meet at the CV-12 point, enter the body, where the left channel flows into the Spleen, and then spirally wraps the Stomach organ. An internal branch ascends from the CV-12 point into the Heart. At the CV-12 point both left and right main channels meet and separate again to ascend through the diaphragm, up the torso and throat to reconnect at the base of the tongue.

The Internal and External Qi Flow of the Spleen (Sp) Channels

Available at: <http://lieske.com/channels/5e-spleen.htm>

**Appendix C-** Diagram of the Seven Major Chakras



***The 7 best known Chakra's of the human body. Note that Energy flows in through the positive side and out through the negative side and up and down the central column.***

**Available at:** <http://innerhue.com/2014/08/chakras-what-the-heck-are-they-a-comprehensive-guide/>