VITAL SUBSTANCES

What do we mean by “Vital Substance”?  
• The substances that create the functional human body and its processes. It is the interaction of these substances that creates movement, physiological processes, soul, thought, etc...  
• The physical body is a manifestation of these substances, their combination, and interaction.  
• These substances vary in density and physicality. Body Fluids are material and Shen is immaterial, while the other 3 (Jing, Qi, and Blood) are in-between.  
• All of the Vital Substances are manifestations of Qi. Therefore by manipulating Qi via Shiatsu, all of the substances can be affected.

The 5 Vital Substances Are:  
1. Essence (Jing)  
2. Qi  
3. Blood  
4. Body Fluids  
5. Mind (Shen)

The 3 Treasures:  
1. Essence  
2. Qi  
3. Shen (Mind)

ESSENCE (JING) 精  
• Character indicates ‘clear, refined rice’.

The 3 Types of Essence:  
1. Pre-Heaven (Congenital; Prenatal)  
2. Post-Heaven (Acquired; Postnatal)  
3. Kidney Essence

Pre-Heaven Essence  
• Determines a person’s constitutional qualities.  
• The combining of male and female energies at conception forms the fetus’s pre-heaven essence, which nourishes the growing being and guides it’s development.  
• Quantity determined at birth.  
• Can be drained, but not increased. Goal of treatment & healthy lifestyle is to decrease drain, by living balanced life and having adequate post-heaven essence.

• REN4

Mingmen (Fire of the Gate of Life)  
• Between the KDs  
• Physiological fire of the body  
• DU4

Post-Heaven Essence  
• Replenished by Qi. Qi formed from food, drink, and air. Food and fluids are transformed by the SP & ST. Air is taken in by the LU.

KD Essence  
• Formed from both pre-heaven and post-heaven essence.  
• Stored in the KD, but circulates through the whole body.  
• Guides growth, reproduction, development, sexual maturation, conception, pregnancy, menopause and aging.  
• The root of KD qi.  
• Produces marrow (bone marrow, brain, spinal cord, nervous system).

Growth, Development, & Reproduction  
• Essence guides development in infants and children: growth of bones, teeth, hair, and brain.  
• Controls reproductive function: both sexual energies and fertility.  
• The natural decrease in Essence through the lifetime leads to aging.  
• Men’s essence flows in 8 year cycles, women’s in 7 year cycles. (growth, sexual maturity, peak fertility, menopause & andropause.)

Essence as the Basis of KD Qi  
• Essence is relatively dense/fluid, and can be considered an aspect of KD yin.  
• Combines with warmth of KD yang (mingmen) to produce KD qi.

Essence Produces Marrow  
• Bone marrow, brain, and spinal cord.  
• “The brain is the sea of Marrow” (Spiritual Axis, chapter 33)

Constitutional Strength  
• Resistance against exterior pathogens from Wei Qi, which is rooted in KD Essence.

Pathologies of Essence
• Growth, reproduction and development: stunted growth in children, poor bone development, infertility, habitual miscarriage, mental retardation, bone deterioration, losing teeth or hair, or graying hair.
• Essence as basis for KD qi: poor sexual function, impotence, weakness of knees, nocturnal emissions, tinnitus and deafness.
• Essence as the basis of Marrow: poor concentration, poor memory, dizziness, tinnitus, and a feeling of emptiness of the head.
• Essence as the basis of constitutional strength: being constantly prone to colds, influenza, and other exterior diseases, chronic rhinitis.

QI

• Character shows ‘rice vapor’. Rice is material, nourishing, and dense. Vapor is immaterial, moving, and light.
• There is no direct translation for QI. The most common translation is energy, but QI is much more all encompassing and complex than most people's concept of energy. QI refers to the entire spectrum of matter and energy.
• QI is not only human, animal, plant, or life, but also inanimate things, from the solar system to a pebble, from the weather to a twinkie.
• QI vitalizes the body, propels and warms, and is Yang in nature.

Types of Qi

• There are many different ‘types’ of Qi, but they are all manifestations of the same Qi. Liver Qi and Heart Qi have different qualities, but they are both Qi and are more similar than they are different. It simply puts on “different hats” in different situations.
• ‘Qi’ is also used to indicate the functional activity of an organ. ‘Liver Qi’ refers to the functional activity (or energetic physiology) of the Liver.

Original (Yuan) Qi: originates from the KD Essence and travels in the San Jiao (Triple Heater) and all channels.
• Yuan Qi is Essence in the form of Qi.
• Yuan Qi is the motive force that creates functional activity in the body.
• Facilitates Qi and Blood transformation (production).
• Emerges at the Yuan Source Points.
• Yuan Qi has a close relationship with the Triple Burner, as it is the passageway for Yuan Qi to reach the 12 channels. Some say the Triple Burner is the essential to differentiating into the various forms of Qi.
• Treated by stimulating the Source Points, REN 4, 5, 6, 7, and DU 4.
• Yuan Qi responds to warmth and moxa.

Food (Gu) Qi: is the Qi produced from food.
• Food is taken into the Stomach, which ‘rots and ripens’. Food is transformed into Food Qi by the action of the Spleen.
• Food Qi then rises to the Lungs, where it combines with air to form Zong Gathering Qi.
• Some Food Qi also passes through the Lungs to the Heart, where it becomes Blood.
• Spleen Qi normally flows upward, to carry Food Qi to the chest. If the Spleen Qi does not flow normally, there can be incomplete digestion and loose stools.
• Food Qi is the raw material for other forms of Qi or Blood. It is not used by the body in this form.

Gathering (Zong) Qi: formed by the combination of Food Qi and air. The SP sends food Qi up to the LU, where it combines with air to form Gathering Qi.
• Also translated as “Ancestral Qi” or “Qi of the chest”.
• Zong Qi is formed by the interaction of Food Qi and air in the Lungs.
• Nourishes the Heart and Lungs, and assists in the functions of the Heat and Lungs. Zong Qi can be evaluated by health of the Heart and Lungs.
• Promotes LU function of controlling Qi and respiration.
• Promotes HT function of governing Blood and vessels, and circulation of blood to extremities.
• Controls speech and strength of voice.
• Coordinates with Original Qi to regulate breathing and aid the KD.
• Zong Qi can be affected by emotional problems such as grief and sadness, which disperse energy in the chest and weaken the Lungs.
• REN17 is the sea of Qi.

True (Zhen) Qi: originates in the LU. Formed from Gathering (Zong) Qi and Original (Yuan) Qi.
• Zhen Qi is the form of Qi that circulates in the channels and nourishes the organs.
• Has 2 forms: Nutritive (Ying) Qi and Defensive (Wei) Qi.

Nutritive (Ying) Qi: circulates on the interior of the body, nourishes the organs and tissues, and is relatively thick.
• Closely related to the Blood.
• Flows in both blood vessels and meridians.
• Ying Qi is the form that we manipulate most often through treatment of acupoints.
• The thicker, more Yin type of Zhen Qi.

Defensive (Wei) Qi: circulates on the exterior of the body, protects the body from external forces, and is relatively thin.
• Protects the body from external pathogens: wind, cold, heat, and dampness.
• Warms, moistens, and helps to nourish skin and muscles, opens and closes the pores to regulate sweating.
• Controlled by the LU.
• The lighter, more Yang type of Zhen Qi.
• Wei Qi does not circulate in the channels, but rather in the Cou Li/exterior layer.
• Weakness of the Wei Qi may lead to frequent colds, or spontaneous sweating.
• Wei Qi has its origins from the Essence, Yuan Qi, and Kidney Yang.

Central (Zhong) Qi: Middle Burner Qi of the SP and ST.
• Central Qi refers the SP function of transformation and transportation, and raising Qi.

• Zhong Qi also describes the SP/ST and the production of Food Qi as the source of post-heaven essence.

Upright (Zheng) Qi: A general term that includes Defensive Qi, Nutritive Qi, and KD Essence, which play a role in the body’s defense against external pathogens.
• This term is used in contrast to ‘Xie Qi’ or evil/pathogenic Qi.

Functions of Qi
1. Transforming
2. Transporting
3. Holding
4. Raising
5. Protecting
6. Warming

Transforming
• Qi transforms food and fluids into clear (usable) and turbid (unusable).
• Involved in all transformations in the body: food → Food Qi → True Qi; fluids → urine; Food Qi → Blood; air → True Qi.

Transporting
• Qi has the function of moving substances around the body, and in and out of organs.
• Has many directions, together known as the Qi Mechanism: ascending/descending; entering/exiting.

Holding
• Qi holds fluids and Blood in their proper places.
• Spleen Qi holds Blood in the vessels. Lung Qi holds sweat in the Cou Li.

Raising
• Qi holds the organs and body structures in their proper place.
• When the raising function of Qi is inadequate, the Qi is said to be ‘sinking’. This can lead to prolapse or downward leakage of fluid (like leucorrhea).

Protecting
• Qi protects the body from external pathogens.
Wei Qi is primarily responsible for the protecting function, but it relies also on strength of the Ying Qi and Kidney Essence.

Pathologies of Qi:
1. Qi deficiency
2. Qi sinking
3. Qi stagnant
4. Qi rebellious

Qi Deficiency
- A weakness of the Qi associated with poor organ function, general weakening through illness or overwork, or dietary imbalance.
- General symptoms: fatigue, lack of strength, spontaneous sweating, dizziness, soft voice, and shortness of breath.
- It is usually possible to pinpoint a certain organ as Qi Deficient.
- Tonify Qi with REN6, ST36, SP3, and DU20.

Qi Sinking
- Qi Sinking is a breakdown of the Spleen Qi function of raising.
- Sinking manifests as prolapsed organs, enduring diarrhea, hemorrhoids, or depressed fontanel in infants.
- Tonify the Spleen Qi and raise with DU20, REN6, REN12, ST36, and Back-Shu points.

Qi Stagnation
- A decrease in the normal activity of Qi due to obstruction by excess emotions, trauma, Cold, Dampness, Blood stasis, or Qi Deficiency.
- Qi Stagnation is characterized by feelings of fullness, distention, and oppression.
- Pain associated with Qi Stagnation does not have a fixed location.
- Move Qi to regulate with REN6, REN17, PC6, LI4, and LV3.

Qi Rebellion (Counterflow)
- A reversal of the normal direction of Qi.
- Lung and Stomach Qi normally flow downward. Lung Qi rebellion leads to difficulty breathing or cough. Stomach Qi rebellion can cause vomiting or hiccough.

Blood
Blood is considered a dense material form of Qi. It is the red fluid that flows to all parts of the body and is governed by the Heart. The Heart and Liver are said to have their own Blood: Heart Blood and Liver Blood.

Formation of Blood:
- The Spleen produces Food Qi, which circulates up through the Lungs to the Heart, where it is transformed into Blood.
- The transformation of Food Qi into Blood is assisted by the Original Yuan Qi.
- The Kidneys also play an important role in Blood formation: KD stores Essence, which generates Marrow, and Marrow contributes to the creation of Blood.

Functions of Blood:
1. Nourishes the body.
2. Moistens the body and tissues.
3. Provides material foundation to anchor the Mind (Shen).
4. Combines with Essence to form Menses.
- Blood circulates with Qi, both nourishing the body.
- Blood moistens the body tissues (Qi does not have a moistening function), preventing them from drying out.
- Liver Blood especially moistens the eyes ad sinews, and the skin and hair.
- Heart Blood moistens the tongue.
- Blood provides anchoring support for the Mind(Shen). Shen is immaterial and Yang, Blood is material and Yin, so the Blood keeps the Shen from dispersing, and “Houses the Shen”.
- Without sufficient Blood, the Shen becomes restless, and a person can become restless, anxious, and slightly irritable.
- At night, the Blood provides a resting place for the Shen and Hun, so if Blood is deficient, there may be difficulty sleeping or excessive dreaming.

Heart and Blood
- The Heart governs the Blood and blood vessels.
- Blood is made in the Heart.
• The left radial pulse reflects the state of Blood, while the right reflects the state of Qi.

Spleen and Blood
• The Spleen is responsible for the formation of Blood by transforming food into Food Qi.
• Spleen Qi has a holding function and keeps the Blood in the vessels. Without sufficient Spleen Qi, the Blood escapes from the vessels too easily, leading to easy bruising or hemorrhage.

Liver and Blood
• The Liver stores the Blood.
• During activity, Blood flows out to the body tissues. During rest, Blood returns to the Liver.
• Liver Blood moistens and nourishes the eyes, providing good sight and comfortable eyes.
• Liver Blood moistens the sinews, providing flexibility of the joints.
• The Liver supplies Blood to the uterus (along with the Chong Mai) for menstruation. Deficient Liver Blood can cause scanty periods, and Liver Blood stagnation can cause painful periods.
• Liver Blood is closely related to Kidney Essence, and both play an important role in reproductive function.

Lungs and Blood
• The Lungs help to circulate Food Qi to the Heart to be transformed into Blood.
• The Lungs govern Qi, and so assist with circulation through the Heart and blood vessels.

Kidneys and Blood
• The Kidneys provide Original Qi to assist in the transformation of Food Qi into Blood.
• Kidney Essence can also be transformed into Blood.

Pathologies of Blood
1. Blood deficiency
2. Blood heat
3. Blood stasis
4. Blood cold
5. Blood dryness
6. Blood desertion

Blood Deficiency
• This is an insufficiency of Blood.
• Blood Deficiency may be caused by excessive Blood loss, or a failure to form enough new Blood.
• Symptoms: paleness, withered complexion, dizziness, dizzy vision, pale tongue, fine pulse.
• Most often, this condition is related to the Heart, Liver, and Spleen.
• Tonify Blood with LV3, SP6, ST36, and Back-Shu points. Moxa is also good.

Blood Heat
• Blood Heat is a condition of pathogenic heat in the Blood.
• This is most common with severe external diseases.
• Heat causes the Blood to move ‘recklessly’ and extravasate, leading to symptoms of bleeding (nosebleeds, profuse menstruation, blood in urine or stools).
• Bleeding due to heat is generally bright red or purple-black.
• There are also general heat symptoms, such as thirst, red tongue, and rapid pulse.
• Clear Blood Heat with KD2, LV2, SP6, and PC7.

Blood Stasis
• Blood Stasis is an impairment or cessation of the normal free flow of Blood.
• Blood Stasis can be caused by trauma, Qi Stagnation, Qi Deficiency, Heat, or Cold.
• Can manifest as pain, masses or swellings, or bleeding.
• Symptoms: sooty complexion, dark purple tongue with speckles, fine rough pulse. There may also be rough, dry skin, bruising, spider nevi, or prominent veins on the abdomen.
• Treat according to location of symptoms. Points include REN17, SP10, LI4, LV3, and SP6.
“Body Fluids” are all of the normal fluid substance of the human body. The main functions are to moisten, lubricate, and to nourish the marrow, brain, and bones.

Jin 津: indicates moist, saliva
Light clear fluids, such as sweat, tears, saliva, mucus.

Ye 液: fluid
More turbid, heavy, dense fluids, such as synovial fluid to moisten joints, brain, spine, bone marrow.

Source
- Body Fluids originate from food and drink. These are transformed and separated by the Spleen.
- The Spleen sends fluids up to the Lung, which diffuses them out to the surface, and descends fluids to the Kidney.
- The Spleen also sends fluids to the Small Intestine, which separates clear and turbid, sending clear the Bladder and turbid to the Large Intestine.
- The Bladder again separates clear and turbid fluids, sending clear fluids back into the body’s circulation, and excreting the turbid as urine. This function of the Bladder relies on Kidney Yang.
- The Large Intestine reabsorbs some of the fluids, and the turbid is excreted with feces.
- In fluid circulation, clear fluids must be sent upward and outward, turbid fluids must flow downward to be excreted.
- The Lungs, Spleen, and Kidneys are the primary organs of fluid circulation. These three also represent the three burners of the San Jiao (Triple Heater).

Spleen
- The SP controls the initial transformation of food and drink into body fluids, and the separation of clear and turbid.
- The SP is responsible for sending the pure upwards, and the impure downwards.
- As the SP is central to body fluid physiology, it is always treated in cases of fluid pathology.

Lungs
- The LU diffuse fluids from the SP out to the body surface and Cou Li.
- LU also sends fluids down to the KD and UB.
- It is said that ‘the Lungs regulate the water passages’.

Kidneys
- The KD vaporize, or steam, fluids in order to circulate them back up to the Lungs. This helps to moisturize the Lungs, preventing them from becoming too dry.
- KD Yang helps the SP transform body fluids, and insufficient KD Yang often causes an accumulation of body fluids.
- KD Yang supports the SI function of separating clear and turbid.
- KD Yang assists the UB in separating pure and impure.

Small Intestine
- The SI receives fluids from the SP/ST and separates them into clear and turbid. It sends the clear to the UB and LI for further refinement.
- SI function relies on KD Yang for warmth and Qi to fuel its action.

Bladder
- The UB further refines fluids from the SI, sending pure fluids back into circulation and excreting the impure as urine.

Triple Burner
- The Triple Burner is involved in all stages of fluid transformation, transportation, and excretion.
- The Upper Burner helps to draw fluids upward from the SP, and helps the LU to diffuse those fluids.
- The Middle Burner assists the SP/ST in transforming fluids from food and drink.
- The Lower Burner assists the KD, UB, and SI in their functions of transforming, separating, and excreting fluids.

JIN & YE

Jin
- “Fluids”
• Jin fluids are clear, light, and thin. They circulate with Wei Qi at the exterior.
• Jin are controlled by the Lungs, which diffuse them out to the skin and body surface.
• Jin fluids include sweat, tears, saliva, and mucus.
• Form the fluid component of the Blood.

Ye
• “Liquids” or “Humors”
• Ye humors are more turbid, dense, and heavy. They circulate in the interior with the Ying Qi.
• Ye fluids are controlled by the KD and SP.
• Ye fluids moisten the joints, spine, brain, and bone marrow (synovial and spinal fluid), and lubricate the sense organs.

Fluids, Blood, and Qi
• All are derived from food and drink.
• Production, distribution, and excretion of fluids all rely on the movement of Qi (upward, downward, inward, and outwards).
• The holding function of Qi pertains to fluids as well as Blood. Deficiency of Qi may lead to excess fluid loss through sweat, urine, etc...
• Damage to fluids can lead to deficient Qi and abnormal accumulation of fluids can impair the normal flow of Qi.
• Fluid is an important constituent of Blood.
• Insufficient fluids may impair formation of Blood, leading to Blood deficiency.

Fluid Pathology
1. Depletion or deficiency of fluids
2. Accumulation of fluids.

Depletion of Fluids
• Fluids can be damaged by high fever or prolonged fever, excessive sweating, urination, vomiting or diarrhea.
• Symptoms include: thirst, dry throat, lips, nose, and skin, dry stool, and a rough dry tongue.

Accumulation of Fluids
• This refers to abnormal accumulations of fluid in the body.
• Accumulation generally results from impairment of the transformation functions of the SP, KD, or LU.

Fluid accumulation can give rise to phlegm, leading to cough and expectoration of mucus. Fluids can also impair the movement of organ Qi, causing varied symptoms, such as palpitations, rapid breathing, cough, feelings of fullness, a watery feeling to the abdomen, edema, and others.

MIND (SHEN) 神

Mind (Shen)
• The Shen is the most subtle and immaterial of the vital substances.

The 5 Spirits
1. Shen (HT) mind
2. Hun (LV) ethereal soul
3. Po (LU) corporeal soul
4. Yi (SP) intellect
5. Zhi (KD) will

• Of the 5 spirits, the Shen is closest to the Western idea of ‘spirit’ or ‘mind’.
• The Shen is a form of Qi. It is considered to be a component of the body, not separate from the body.
• Shen is formed at conception from Essence of the mother and father. The Essence is the material foundation of the Shen.
• Shen relies on nourishment from both pre-natal and post-natal Essence (therefore KD and SP/ST).
• Insufficiency of Qi and Essence will affect the Shen, leading to unhappiness, depression, anxiety, or clouded mind.
• State of mind also affects Essence and Qi. Emotional stress or excess emotion affects the Shen first, but also the Qi and Essence.
• Shen resides in the Heart (and HT Blood).
• Shen and the other spirits interact closely, and together form the spirit or soul of a person. Each spirit has its own emotions, but these are all registered by the Shen.

Functions of the Shen
1. Consciousness
2. Thinking
3. Memory
4. Insight
5. Cognition
6. Sleep
7. Intelligence
8. Wisdom
9. Ideas
10. Affections
11. Feelings
12. Senses

1. **Consciousness**: includes thoughts, perception, and self awareness. This gives us a sense of individuality. The Shen recognizes our thoughts, feelings, and sensations and integrates them into our idea of self.
2. **Thinking**: relies on clearness of the Shen. A weakened or disturbed Shen slows and dulls the thinking.
3. **Memory**: includes the ability to memorize facts and create new memories, as well as the ability to remember past events.
4. **Insight**: is the capacity for self knowledge and self recognition. The Shen processes all perceptions, stimuli, and feelings.
5. **Cognition**: includes perceiving and forming reactions to stimuli.
6. **Sleep**: calmness and balance of the Shen is necessary for sound sleep. Restless Shen leads to restless sleep.
7. **Intelligence**: relies on a healthy Shen. Weakness of the Shen dulls thoughts and decreases intelligence. Innate intelligence relies on the Essence, but putting that innate talent to the greatest use relies on the Shen.
8. **Wisdom**: is the ability to integrate thoughts and memories to apply them wisely.
9. **Ideas**: of dreams, imagination, and projects rely on the Shen. The Hun also plays a major role.
10. **Affections**: indicates a normal range of affectionate feelings. The Shen recognizes and is aware of all ‘feelings’ the person experiences. Anger is associated with the Liver, but it is the Heart that recognizes ‘I feel angry’.
11. **Feelings**: rely on the Shen to recognize and perceive sensations and stimuli.
12. **Senses**: rely on the Shen for recognition. Although the ears are associated with the KD, the Shen must process sounds in order for them to become meaningful. This is similar to the Western medicine idea of the brain being essential to perception of the senses.