

PATHOPHYSIOLOGY OF QI, BLOOD, JING, BODY FLUIDS, SHEN

1. The Vital Substances are the foundation of the body. They are responsible for all movement and change.
 - a. Qi
 - b. Blood/Xue:
 - c. Body Fluids/Jin-Ye: Heart-sweat; Spleen-saliva; Lungs-mucus; Kidneys-urine; Liver-tears.
 - d. Essence/Jing congenital, responsible for growth and development
 - e. Spirit/Mind/Shen: 5 Shen (hun-ethereal, po-corporeal/animal, yi-thinking, zhi-will, and shen-spirit/mind)

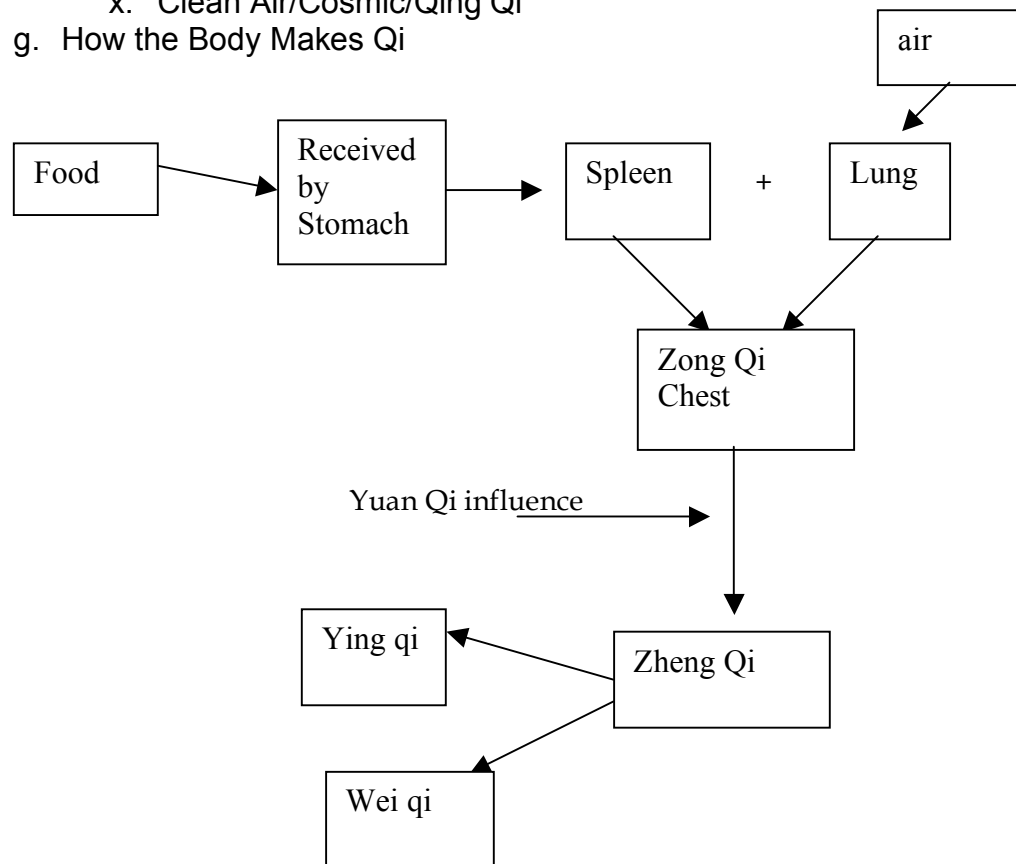
2. Qi: everything is composed of and defined by its Qi. Even a rock has Qi. The Chinese didn't distinguish b/w matter and energy and some people define Qi as matter on the verge of becoming energy and energy on the verge of becoming matter. Qi is a continuum: it is the point of materializing. It is perceived functionally: by what it does
 - a. Condensed Qi: gives rise to matter: birth
 - b. Dispersed Qi: gives rise to energy: death
 - c. Human is product of Qi of heaven and Qi of earth
 - d. Types of Qi:
 - i. Pre-Natal Qi/Congenital Qi
 1. stored in KI
 2. inherited at birth (or more accurately, conception)
 3. essential for growth of embryo and fetus
 4. imp after birth for growth (jing)
 5. gets used up during lifetime (can be supplemented by good post-natal Qi)
 - ii. Post-Natal Qi
 1. assoc w/ ST
 - e. 5 Functions of Qi
 - i. Movement: Qi is source of all movement and all movement is accompanied by Qi. This includes voluntary as well as involuntary and even mental/emotional functions (dreams, ideas, etc.)
 1. 4 Basic Movements
 - a. up/ascension
 - b. down/descension
 - c. inward/entering
 - d. outward/leaving/exiting
 - ii. Warming: body temp, metabolism
 - iii. Protection: Qi gives body ability to resist outside influences and prevents us from getting sick; and maintains internal homeostasis.
 - iv. Transformation: food is digested, transformed and assimilated under influence of Qi in order to make needed

- substances (blood, body fluids, and more Qi). Fluids are transformed into tears, sweat, saliva, urine, breast milk, etc.
- v. Holding/Retaining/Containing: holds blood in vessels, holds fluids in the body, holds organs in place, etc.

f. Different Types of Qi

- i. Organ/Zang Fu Qi
- ii. Meridian or Channel/Jing Luo Qi
- iii. Nutritive/Constructive/Ying Qi
- iv. Defensive/Protective/Wei Qi
- v. True/Upright/Correct/Zhen Qi
- vi. Chest/Ancstral/Essential/Zong Qi
- vii. Original/Source/Yuan Qi
- viii. Evil/Xie Qi
- ix. Food/Grain/Gu Qi
- x. Clean Air/Cosmic/Qing Qi

g. How the Body Makes Qi



h. Pathologies of Qi

- i. Qi Deficiency/Vacuity: Qi is insufficient to perform its functions
 1. Movement: causes stagnation (discuss this w/ stag)
 2. Warmth: leading towards yang defic
 3. Protection: Wei Qi insufficient to prevent external pathogenic influences (LU Qi defic)
 4. Transformation: poor appetite, gas, bloating, loose stools w/ undigested food (SP Qi defic)
 5. Holding/Retaining/Containing: hernias, prolapsed bladder, uterus, hemorrhoids, etc.
- ii. Qi Deficiency/Qi Collapse: associated w/ SP not being able to hold/retain/contain. Can also be associated w/ depression. (spiritual prolapse)
- iii. How does the Qi become deficient?
 1. constitution
 2. taxation-fatigue
 - a. no sleep
 - b. excessive activity
 - i. work
 - ii. mind
 - iii. sex
 3. irregular eating, poor nutrition
 4. illness
 5. poor air, pollution, environmental toxins
- iv. HT:
 1. pulse: slow rate, rhythm problems, change of intensity over entire pulse
 2. sx: fatigue, cold hands and feet, anxiety, palpitations, insomnia
- v. SP:
 1. pulse: diminished, yielding, reduced substance, empty at right middle
 2. sx: digestive (gas, bloating, retention of food, loose stools), fatigue, hemorrhoids, poor memory, prolapses, memory
- vi. LU:
 1. pulse: right distal
 2. sx: SOB, frequent colds and flus, cough, wheezing, spontaneous sweats, fatigue, allergies
- vii. LV:
 1. pulse: left middle
 2. sx: post mono, Epstein barr virus, fatigue (severe chronic fatigue syndrome type), depression, lack of aim, inability to recover energy

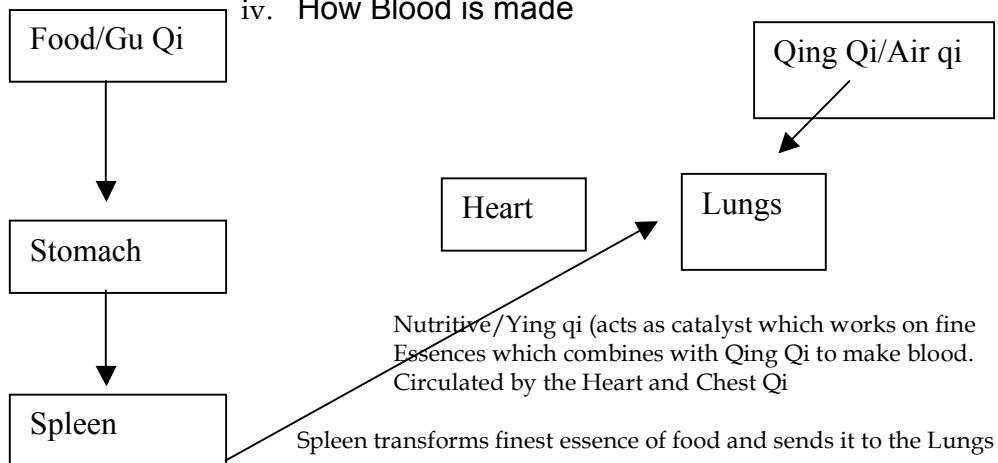
- viii. KI:
 1. pulse: proximal positions
 2. sx: back pain, joint pain, infertility and other reproductive problems, asthma, frequent urination
- ix. Qi Stagnation:
 1. From deficiency
 2. From excess: excess of 7 emotions cause disturbance of Qi dynamic and circulation, causing oppression, distention, pain, discomfort, sighing, irritability
 - a. Anger: ascends
 - b. Mania/joy: lazy
 - c. Overthinking: knots
 - d. Fear: descends
 - e. Grief: weakens
- x. Rebellious Qi/Qi Counterflow: why? Weakness, invasion
 1. ST: nausea/vomiting (poss LV invading ST)
 2. LU: coughing
 3. SP: hemorrhoids, prolapse, diarrhea (poss LV invading SP), dizziness

3. Blood/Xue: flows in blood vessels and meridians

a. 3 Functions of Blood

- i. Nourishes
- ii. Moistens
- iii. Provides material basis for the shen/spirit-mind. For shen to be peaceful, it resides in the HT and must be adequately nourished w/ blood. If not enough blood, shen wanders (anxiety, dream-disturbed sleep, etc.)

iv. How Blood is made



b. 3 Organs have special relationship with the Blood

- i. HT: governs blood (circulates it)
 - ii. LV: stores blood (when quiescent)
 - iii. SP: manages blood (holds it within the vessels)
- c. Blood-Qi Relationship
 - i. Qi is the commander of Blood: it helps create it, move it, move with it, holds blood in vessels
 - ii. Blood is the mother of Qi: blood nourishes and moistens organs that produce Qi
- d. Pathologies of Blood
 - i. Blood Vacuity: insufficient blood
 - 1. Causes
 - a. Bleeding: cuts, traumas, LV not storing well, menstruation, breast feeding, childbirth
 - b. Insufficient production: ST/SP/LU
 - c. Excess sweat: sweat is fluid of HT; sweat is steaming of blood
 - 2. Symptoms
 - a. HT:
 - i. Pulse: increased rate on exertion, thin
 - ii. Sx: cold hands and feet, dream-disturbed sleep, shen imbalances, menstrual problems
 - b. LV:
 - i. Pulse: thin left middle, hollow
 - ii. Sx: numbness, tingling, paresthesias, fatigue, inability to get second wind, menstrual problems, dry brittle nails
 - c. SP:
 - i. Pulse: thin right middle, hollow
 - ii. Sx: poor memory, fatigue, lassitude
 - ii. Blood Stasis/Congeaed Blood: obstructed, not free flowing
 - 1. pulse: choppy, occ slippery
 - 2. sx: sharp stabbing pain of fixed location, worse at night, bruises, local traumas, tumors, masses, etc.
 - 3. 4 Causes
 - a. local trauma: causing damage to vessels and structures
 - b. deficient Qi: not strong enough to course the blood (see Blood-Qi relationship)
 - c. stagnant Qi: (see Blood-Qi relationship)
 - d. blood heat: blood boils and dries out, congealing the blood
 - e. toxicity: choppy over entire pulse
 - iii. Blood Heat: in beginning causes blood to move fast and reckless; building of heat or heat toxin in blood; evil causing

acute febrile disease; eventually dries and thickens blood making it viscous, leading to hardening of arteries, etc.
Diagnose via pulse lifting method

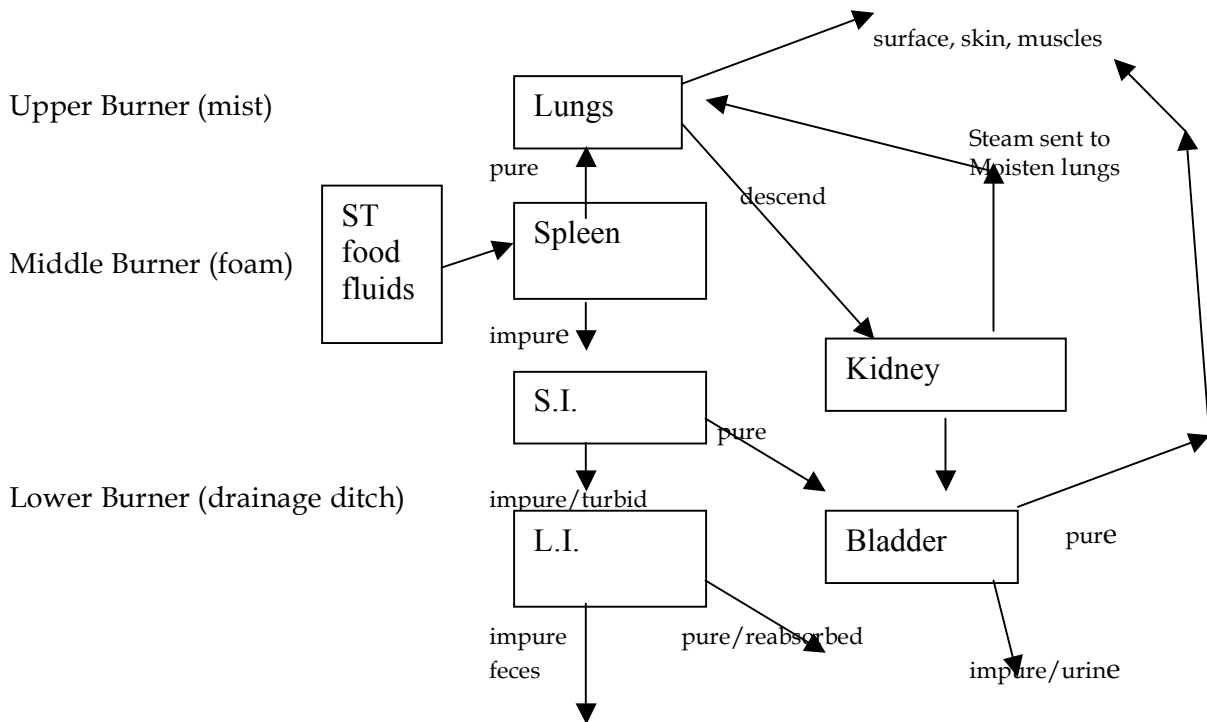
1. Can result in:
 - a. excessive bleeding
 - b. spontaneous bleeding
 - c. blood stasis
 - d. blood thick, F.O., ropy
2. Can be result of:
 - a. prolonged Qi stagnation
 - b. prolonged Blood stagnation

4. Body Fluids – Jin Ye

- a. Urine, sweat, tears, gastric juices, synovial fluids, etc.
- b. Organs
 - i. HT (sweat), SP (saliva), LU (mucus), KI (urine), LV (tears)
- c. Functions
 - i. Moistening: helps blood moisten organs, skin, muscles, mucous membranes
 - ii. Lubricates joints
 - iii. Nourishes: less nourishing than blood (nourishes brain, marrow, bones)
 - iv. 2 Main types
 1. Jin liquids: thinner, lighter, more mobile: nourishes outer surfaces (skin, membranes) and sense organs. More yang
 2. Ye humor: more viscous, less mobile: nourishes brain and bones, marrow, spinal fluid, lubricates joints. More yin

3. Fluid Metabolism

Disperse fluids to



San Jiao: triple heater: integration of fluid system in body

Upper Burner: mist: fluids are light and yang

Middle Burner: muddy pool: churning area; foam

Lower Burner: drainage ditch for remains; sluice

4. Body Fluid Pathologies

- a. Insufficient fluids: from heat drying fluids, diuretics, purgatives, too much exercise/sweat
 - i. SX: thirst, dry stools, constip, dry skin, dry tongue coat (eventually causing KI yin defic as KI provides fluids to areas in need)
- b. Too much in one place, stagnation: excessive water accumulation
 - i. Water swellings: edema
 1. Qi edema
 2. Pitting edema (fingerprint remains): water insulting earth
 - ii. Phlegm: thicker: ie, soft nodules, swollen glands.
 - iii. Rheum: thinner
 - iv. Insubstantial phlegm: Clouds orifices and prevents clear expression of shen; types of depression w/ heavy head, etc.

Dysfunction of transforming action of Qi. Water accumulation is Qi disharmony

- c. Organs most involved in transformation process
 - i. LU: upper source of water. Sends water to skin, mucous membranes, and down to KI. Phlegm stored here
 - ii. SP: center point. Takes in fluids and distills it to rest of body. Source of phlegm formation
 - iii. KI: root of transforming. Fire/metabolism
5. Essence—Jing: basis for all body substances from conception to death
- a. Pre-Natal/Congenital/Pre-Heaven Essence: fusion of parental jing is conception. There is a fixed amount encoded in DNA; makes up gene pool and is passed on from generation to generation. Has longer cycles than Qi
 - b. Acquired Post-Natal Essence: acquired from food and drink
 - c. KI Jing: congenital essence combined with acquired essence and stored in KI
 - d. Jing is responsible for development from conception to death. It is a yin aspect acted upon by yang Qi
 - e. During lifetime, it governs all cycles of life, ie growth development reproduction
 - f. Pathologies of Essence:
 - i. Jing Deficiency
 - 1. Birth Defects
 - ii. Declining Jing
 - 1. loss of hair, early graying
 - 2. weakness in bones
 - 3. failure to conceive, infertility
 - 4. low sperm counts, etc.
6. Shen – Spirit/Mind: visible thru complexion and eyes
- a. Resides in HT
 - b. Responsible for sleep-wake cycles and appropriate relations in and out of this world; communication and integration and feelings of belonging
 - c. Is a transformation of essence and Qi. Pre and Post-Natal essence contribute to a healthy shen.
 - d. 5 yin organs each have emotional/spiritual component that is stored in and combine to form the Big Shen
 - i. LU: Po: Corporeal Soul: close to the essence but moves in and out. Animal Spirit: Instinctual. Most physical part of you. It's what's living your life and in ground when you die.

Arrives from first breath and leaves with last breath through Po Men (DU 1-2 area)

- ii. LV: Hun: Ethereal Soul: akin to western concept of the soul. Enters shortly after birth and carries our appearance. Connected w/ ancestral aspects. Reflects past, present and future. It comes and goes. (restless when sleepwalking)
 - iii. SP: Yi: about memory – which depends on HT for nourishment but part of SP's storing capacity. Also about thinking capacity. Memory of blood (body carries memory in blood). About HT and thinking. Collective unconscious
 - iv. KI: Zhi: will power: about purpose, focused energy, fulfilling destiny, storage capacity
 - v. HT: little shen: integrates big shen
- e. Pathologies of Shen
- i. Shen Disturbed:
 - 1. yin: withdrawn, muttering, trying not to be seen, grey ashen complexion, phlegm clouding orifices
 - 2. yang: aggressive, manic, phlegm heat clouding
 - 3. phlegm misting the mind orifices

Qi, Jing, and Shen are the 3 Treasures. They depend on each other for balance and health. Jing is long cycles (more about bone). Qi cycles can be daily, monthly or yearly (more about flesh). Shen cycles are momentary (more about mind).

7. 4 Examinations

- a. Inspection/Looking/Observation: usually the first step. Look at the entire body as a whole, then can break it down to particular areas
 - i. Shen: look at person's spirit. Is it vital, weakened, withdrawn? Is there a connection?
 - ii. Tongue:
 1. Body: tells state of blood, yin organs
 - a. Color
 - b. Shape and Size
 - c. Demarcations/Cracks/Fissures/Petechia
 - d. Moisture
 - e. Motility
 2. Coat: state of ST qi
 - a. Color
 - b. Thickness
 - c. Geography
 - d. Rootedness/Texture
 - e. Moisture
 - iii. Eyes:
 1. Sclera=LU; Canthus=HT; Pupil=KI; Iris=LV; Lids=ST/SP
 - iv. Complexion/Face
 1. Color
 2. Moisture
 3. Vitality
 4. Location
- b. Listening and Smelling:
 - i. Sound and quality of voice: faint, rough, hoarse, weak, etc.
Correspondences to Elements (Fire = laughing; Earth = singing; Metal = weeping; Water = groaning; Wood = shouting)
 - ii. Respiration: difficulty breathing, coughing, etc.
 - iii. Odors: Elements (see handout)
- c. Asking: "10 Questions"
 - i. Energy
 - ii. Temperature
 - iii. Sweat
 - iv. Pain
 - v. Appetite/Digestion/Craving
 - vi. Thirst
 - vii. Urination
 - viii. Bowels
 - ix. Gynecology/Urology
 - x. Head and Chest
 - xi. Eyes, Ears, Nose and Throat
 - xii. Emotions
 - xiii. Sleep
 - xiv. Lifestyle

- d. Palpation:
 - i. Pulse: see handout
 - 1. Tells about yin and yang, qi, blood, viscera and bowels, channels, etc.
 - 2. Rate, Depth, Strength, Rhythm, Quality
 - 3. Locations
 - ii. Abdomen/Channels/Acupuncture points
 - 1. Tenderness, Coolness or Warmth, Nodules, Indurations, Roughness or Slipperiness, Draft, etc.

Acupuncture Channels and Theory

- e. The Spiritual Pivot, Ch. 17 states: “it is by virtue of the 12 channels that human life exists, that diseases arises, that human beings can be treated and illness cured. The 12 channels are where beginners start and masters end. To beginners it seems easy; the masters know how difficult it is.”
- f. The Spiritual Pivot, Ch. 17 also states: “qi cannot travel without a path, just as water flows or the sun and moon orbit without rest. So do the yin vessels nourish the zang (viscera) and the yang vessels nourish the fu (bowels).”
- g. The term “channels and collaterals” is a translation of the Chinese words “jing-luo”. “Jing” has a geographical connotation and means a channel (like a water channel) or longitude. If we think of a tree, the jing or channels are analogous to the trunk and main branches. In humans they run longitudinally throughout the body at a relatively deep level and connect internally with our organs.
- h. The term “luo” means to “attach” or a “net.” This refers to the finer branches which are more superficial and interconnect the trunk and main branches (jing), the connective tissues and the cutaneous regions.
- i. In addition to the jing and luo, there are also 12 sinew channels and 12 cutaneous channels, as well as divergent channels of each of the main organ channels.
- j. **Functions of the Channel system:** The channels penetrate all the organs into the deepest levels of the body and connect with the skin, muscles, flesh, tendons, bones, head, body, limbs and sense organs, linking all the tissues and structures of the body into an integrated whole.
- k. 4 main functions that the channels serve. They are:
 - (1) transferring qi and blood throughout the body;
 - (2) protecting the body;
 - (3) responding to dysfunctions of the body;
 - (4) transmitting qi to diseased areas of the body.
- l. See acupuncture charts
- m. Point Locations
- n. Point Categories and Energetics
- o. Point Functions