One of the key differences between Chinese medicine (CM) and other systems of medicine is its unique understanding of viscera-bowel (zàng-fǔ) physiology and pathomechanisms. Yet due to language limitations, many English-speaking CM practitioners lack access to the deeper discussions of these concepts available in modern and classical Chinese texts. Unfortunately, this denies the English-language CM community the opportunity to develop a more mature and more clinically viable understanding of CM physiology and pathomechanisms on their own terms. Through his translations of modern and classical Chinese texts, Bob will provide the participants the chance to see Chinese medicine in a new and clearer light, and will present the integrated roles of each CM viscera and bowel in health and disease.

- Study viscera-bowel physiology and pathology as discussed in classical texts such as Nèi Jīng (Inner Canon) and Nàn Jīng (Classic of Difficult Issues)
- Develop a clearer understanding of Chinese medical viscera-bowel physiology as a coordinated system, not as a collection of isolated units with disconnected functions
- Fill in the gaps in your understanding of viscera-bowel physiology and pathomechanisms by studying reliable translations of Chinese language source texts
- Go beyond some English language textbook presentations of viscera-bowel physiology
- Explore CM pathology on its own terms by gaining a clearer understanding of pathomechanisms—why and how normal physiology is affected in disease processes
- Take further steps toward clinical mastery by patching the holes in your CM foundation

The coverage of each viscera and bowel begins with a review of its basic physiology, supported, whenever possible, by quotes from classical texts such as the Nèi Jīng (Inner Canon) and the Nàn Jīng (Classic of Difficult Issues). Since an understanding of pathomechanisms flows logically from knowledge of normal physiology, this approach will lay a strong foundation for grasping pathomechanisms. Once we have obtained a solid grasp of physiology and pathomechanisms, our clinical analysis and intervention is definitely enhanced.

One of the goals of this course is to develop a vision of the viscera and bowels as they function in a coordinated system and in a dynamic, living organism. It is clear to me that this requires a subtler understanding of the Chinese medical view of the human body as it is presented in the Nèi Jīng (Inner Canon) and the Nàn Jīng (Classic of Difficult Issues). Students and practitioners alike often have a static view of the CM human body as an uncoordinated collection of organs and channels with their own individual functions. We lack a sophisticated understanding of the CM body as a system of mutually supportive and interactive viscera, bowels, channels, and vessels. Unguided attempts at wading through seemingly contradictory classical statements about viscera-bowel functions can be frustrating and confusing. The fact that some English language textbooks do not explain CM physiology accurately and completely is equally disconcerting; consequently, some students may develop a naive disdain for CM physiology, concluding that there is no way to develop a clearer understanding of an inherently opaque reality. This arises when we mistake our flawed and incomplete understanding for weaknesses in the system itself. This is not to say that Chinese medicine does not have contradictions or limitations or that opaqueness is inherently problematic. However, if we investigate CM physiology further, we may find that our understanding grows and our confusion about basic concepts melts away, and that some of this apparent opaqueness gives way to greater clarity. One of the barriers to such an inquiry is the reality that the literature we need to access is in Chinese. This underscores our need to learn Chinese language and to support others’ efforts to do so. It is my sincere hope that this online continuing education course helps promote a clearer vision of CM physiology and results in better clinical results.
The main sources from which I have translated and adapted this material are in the PRC National TCM Textbook series, but much of the translated material comes directly from Zhōng Yī Jì Chǔ Lǐ Lùn (Fundamental Chinese Medical Theory), published by The People’s Hygiene Press in 2001. I have added some simple case vignettes, and some examples of viscera-bowel pathomechanisms operant within the context of a given CM disease. The cases are quite simple and only serve to illustrate the concept at hand. You will also find items for discussion peppered throughout the text as well as some of my own commentary. They may serve as points of discussion in our e-mail conversations, or they may simply provide stimulation for your own independent inquiry on a topic. When questions arise throughout the study period, I will do my best to clarify them in our e-mail discussions; however, I am limited by my own understanding, and at times will not have a solution to the problem at hand. Whenever I cannot answer a question, I will either take the time to seek its solution or I will identify possible resources the reader should consult. I look forward to studying together!
Physiology and Pathomechanisms of the Five Viscera

Heart Physiology and Disease Patterns

The Heart Governs the Blood and the Blood Vessels

1. Refers to the heart’s action of pushing the blood through the blood vessels and the heart’s role in engendering blood
2. Heart and blood vessels are directly connected so that as the heart beats, the blood is unceasingly propelled through the blood vessels

Three requisites for normality of this function:

1. Blood vessels must be free and unimpeded
2. Blood vessels must be full
3. Heart qi must be plentiful (Most important of these three)

Pathomechanisms and Clinical Applications:

Blood vessels may be blocked by phlegm, dampness, blood stasis, and qi stagnation, and it is not uncommon for a combination of two or more of these factors to present together in clinical practice. For example, in the heart vessel stasis obstruction pattern, which is commonly seen in patients with biomedically defined coronary artery disease, there is a combination of blood stasis and phlegm obstruction. There may be concurrent heart qi vacuity and/or a history of fulminant desertion of heart yang, particularly in those patients who have had a myocardial infarction. Logically, CM treatment requires phlegm transformation and blood-quickening treatments, as well as qi supplementation when appropriate. Additionally, medicinals that open the orifice are also often used as the plaque build-up in the coronary arteries can be seen in the context of phlegm confounding the heart orifice. CM diseases such as chest impediment (xiōng bì) are important reference headings under which practitioners may find other relevant clinical information for such cases.

The Heart’s Movement of the Blood Can Be Visualized on the Exterior of the Body

In the Nèi Jīng (Inner Canon), there is the concept of the “three positions and the nine indicators” (sān bù jiǔ hòu) which give a sense of the pulse in the upper, middle, and lower parts of the body. This gave the practitioner clues to the state of the movement of the blood throughout the whole body and in the viscera and bowels. In modern practice, most practitioners emphasize the pulse at the wrist.

Discussion: Since the time of the Nàn Jīng (Classic of Difficult Issues), only the wrist pulse (cùn kǒu) has been emphasized. Why did this happen?

Clinically, the beating of the heart in the chest, the facial color, and the tongue are important indicators of heart function. This is based on the following classical statements about the heart:

1. The heart blooms in the face
2. The heart opens into the tongue
3. The chest is the abode of the heart

When these aspects of the heart are normal:

1. The face is red and moist
2. The tongue is pink, moist, and lustrous
3. The pulse is moderate and forceful (not excessively)
4. The chest is comfortable and the patient is calm

When these aspects of the heart are abnormal, the following patterns and signs and symptoms may occur:

1. Effulgent heart fire: face and tongue red, heart vexation, rapid pulse, lingual ulcers
2. Insufficiency of heart blood: pale white facial color and lusterless tongue, fine pulse without force, palpitations and flusteredness
3. Heart blood stasis: dark (soot-black) facial complexion, purple tongue, rough (sè mái) and an otherwise impeded pulse, chest oppression and pain

Pathomechanisms and Clinical Applications:

In my experience, a very red face is an important indicator of effulgent heart fire. Once this pattern is identified, one then must ascertain whether the heart fire is based in repletion or vacuity. Those cases based in repletion usually have evolved from liver depression with depressed fire that is harassing the heart. Those based in vacuity have usually evolved from dual vacuity of heart and kidney yīn with an inability to control sovereign fire (heart fire). This pattern is also often described as lack of communication between the heart and kidney.

A pale-white face can be an important indicator of heart blood vacuity, which is often based in spleen qi vacuity and an inability to absorb the finest essence of fluid and grain. Therefore, one of the major substantial components of blood is absent, and as a result, the lung and heart are unable to complete the final steps in this loop of blood production. I find that this combination of circumstances is particularly common in women, and responds better to Guǐ Pí Tăng (Restore the Spleen Decoction) than to Bā Zhēn Tāng (Eight Precious Decoction). I think it is because the former not only supplements qi and blood, but also directly nourishes heart blood and quiets the spirit.

The normal movement of the heart is directly connected to the strength of the heart qi

The body has its overall qi, but this qi evolves as it reaches each individual viscera and bowel. When qi reaches the spleen, it takes on the nature of earth and governs movement and transformation. When it reaches the kidneys, it takes on the nature of water and stores essence. When it reaches the liver, it takes on the nature of wood and courses and discharges. When it reaches the lung, it takes on the nature of metal and depurates and downbears. When it reaches the heart, it takes on the nature of fire and heats the upper body. This heat in the upper body produces movement which is like the advance, retreat, and radiation of fire. This explains all the manifestations of the heart’s movement.

(Translated from Zhōng Yī Jì Chǔ Lǐ Lùn (Fundamental Chinese Medical Theory), published by The People’s Hygiene Press in 2001)
The Heart’s Role in Engendering Blood

According to Nèi Jīng (yīn yáng yīng xiang lún): “The heart engenders blood.”

The Heart Engenders and Transforms Blood

Xuè Zhèng Lùn (On Blood Patterns, Tao Rong-Chuan, Qīng Dynasty, 1884) states: “The heart is ascribed to sovereign fire (Jun Huo). It engenders and transforms blood.”

The heart, through its physiological yáng fire, provides the qi transformation that upon receiving the essence of fluid and grain from the spleen and through the assistance of the lung’s inhalation of clear qi from the environment, transforms this essence into red blood; this process known as “red transformation.” Although blood is generally ascribed to yīn, there is yáng fire qi within this yīn; that is, blood receives and takes in the heart’s yáng qi transformation.

Commentary and Clinical Application: We are all familiar with Sì Wù Tāng (Four Substance Decoction), the quintessential blood-nourishing formula, which contains not only substantial medicinals such as shú/shēng di huáng Rx. Rehmanniae Glutinosae) but also contains chuān xiōng (Rx. et Rz. Ligustici chuanxiong). The discussion above provides the theoretical underpinnings for the idea that when treating blood vacuity, one needs to attend to both the qi (yáng-function) of the blood and the blood (yīn-substance) of the blood. It also reminds us that when treating the blood, we must treat the heart.

Review and Discussion: In terms of engendering blood, what is the difference between the roles of the spleen and stomach, the kidneys, the liver, and the heart?

Resource: Here is a copy of an article I wrote for the Pacific College of Oriental Medicine Newspaper in May of 2003.
The Formation of Blood and Its Relationship to the Five Viscera

From time to time, it is a good idea to revisit basic concepts in order to clarify points of vagueness and to build in new layers of understanding. Toward this end, I have translated and adapted this short passage on blood formation from my favorite textbook on basic theory, Zhōng Yī Jī Chū Lì Lùn (Fundamental Chinese Medical Theory), published by The People’s Hygiene Press in 2001. I find myself increasingly drawn towards Chinese sources because of their clarity, accuracy, and comprehensiveness. Note this passage very clearly points out that, according to Chinese medical physiology, the formation of blood involves close coordination between many viscera and bowels; it is not simply created by the spleen. It is not difficult to see the clinical ramifications of these important concepts.

1) The Heart

The heart governs the blood vessels. On one hand, this statement means that the heart is responsible for moving the blood so that substantial nourishment can reach the entire body. The heart ensures that all the viscera and bowels acquire ample nourishment so that they can maintain their normal functions. On the other hand, this statement also indicates that the heart has a role in the formation of blood.

The essence of fluid and grain is assimilated via the movement and transformation actions of the spleen. The spleen, by raising the clear, sends this essence upward to the lung and heart. After the lung rejuvenates it, the essence of fluid and grain pours into the heart vessels and the heart yáng transforms it into fresh red blood. So it is said, “Blood is the juice of the middle burner. [This juice] flows from the middle burner, and is considered essence. The heart receives it, turns it red, and [it] becomes blood.” (Lǔ Shān Táng Lèi Biàn). This shows that the heart participates in the formation of blood.

“Blood comes about through the heart fire’s transformation; this is why [it is said] that the heart engenders blood and that blood is ascribed to the heart.” (Yī Biān)

2) The Lung

The lung governs the qi of the entire body, since it participates in the formation and movement of ancestral qi (Zōng Qi). Since qi engenders blood, when qi is effulgent, its blood-engendering function is strong, and when qi is vacuous, its blood-engendering function is weak. It follows that qi vacuity and an inability to engender blood is a common cause of blood debility.

By governing the qi of the entire body, the lung enables the viscera and bowels to be exuberant and thereby promotes blood formation. The lung’s action of blood formation is mainly accomplished through the aspect of lung function known as “the lung faces the hundred vessels” (fēi cháo bǎi mài). Through the combined digestive actions of the spleen and stomach, the finest essence of fluid and grain is assimilated. The nourishing substance, such as construction qi (yíng qi), fluid, and humor, that is engendered and transformed through digestion, passes through the channels and assembles in the lung. The essence of fluid and grain cannot become blood until after it has been subject to the gas exchange of respiration, which takes place in the lung. It is evident, then, that the lung plays a vital role in the formation of blood.

3) The Spleen

The spleen is the latter heaven source of the engenderment and transformation of qi and blood. The essence of fluid and grain absorbed by the spleen is the fundamental substance from which blood is formed. If the middle burner is vacuous and weak, it is unable to move and transform the finest essence of fluid and grain; therefore, when the spleen is vacuous, the source of transformation is insufficient, and blood vacuity may result.
4. **The Liver**

The liver governs coursing and discharge and stores blood. Since “essence and blood originate in the same source,” when there is ample liver blood, the kidney stores some of it as essence. It follows that when there is adequate endowment of essence, there will be ample blood. In light of the above, the liver can be considered a blood-producing organ.

5. **The Kidney**

The kidney stores essence and essence engenders marrow. Essence and marrow are also basic substances from which blood is engendered and transformed. The fountainhead of blood is in the kidney. Early in history, Chinese doctors recognized that bone marrow was a blood-producing substance and that the kidney had a regulating affect on blood formation; furthermore, they recognized that the liver can convert kidney essence into blood.

**The Heart Stores the Spirit**

Nèi Jīng Sù Wèn (Inner Canon, Simple Questions) states: “The heart stores the spirit” and “The heart holds the office of monarch, whence the spirit light emanates.”

Nèi Jīng Líng Shū (Inner Canon, Magic Axis) states: “The heart is the great ruler of the six bowels and the five viscera and is the abode of the essence—spirit.”

The word “essence” is used here to represent the fundamental substantial (yīn) aspect of the spirit, and the word “spirit” here is used to represent the entire function (yáng) of essence. I see this again as an allusion to the relationship between substance and function, that is, yīn and yáng. In this context, in terms of the spirit, we cannot have pure ethereal aspects of the spirit without having adequate substance.

**The Heart Manages the Activity of the Essence-Spirit:**

1. Knowledge
2. Memory
3. Thought
4. Decisiveness
5. Emotion
6. Imagination

At the Pacific Symposium in 2002, Philippe Sionneau presented the idea that shén (spirit), if subjected to reflection through a prism, would reveal that it is composed of its constituent five affects corresponding to each of the five viscera. This reveals that the heart, in its action of storing the shén, is in control of all emotional and spiritual activity, not just its own little segment of it. Again, this reinforces my position that we need to develop a more sophisticated view of the Chinese medical body that leaves reductionism aside in favor of holism. Of course, in order to understand the whole, reducing it down to smaller and more digestible portions can facilitate understanding, but we cannot forget that we must reconstruct the whole picture if we wish to have a more accurate view of CM physiology.
**Pathomechanisms and Clinical Applications:**

In clinical practice, it is common to see patients with emotional irregularities, that is, irregularities of the essence-spirit that are rooted in blood vacuity. Again, it is blood and essence that provides substantial nourishment to the heart so that it can perform its physiological function of storing the spirit. Many patients with depression, anxiety, and insomnia are in need of profound blood nourishing treatments. In terms of seeing the Chinese medical body as a whole system of complex interactions and relationships, there are many possible sources of this blood vacuity. Clinically, whatever the etiology and presenting pattern, if there is blood vacuity affecting the spirit-storing capability of the heart, the treatment principle of nourishing the heart and calming the spirit should be applied. One should choose spirit-calming medicinals that also nourish blood such as suān zǎo rén (Sm. Zizyphi spinosae) and bái zǐ rén (Sm. Biotae).

**Discussion and Review:**

1. What are some etiologies for essence-spirit diseases rooted in blood vacuity? (If we figure out the etiology, then we can have a more profound effect of the patient’s condition). What pathomechanisms are at play?
2. When we say “essence (jǐng), can we identify at least two broad types of essence?

**Resources:** Article on blood vacuity reprinted above, basic CM texts that review etiology of blood vacuity.

**Disease Patterns of the Heart (Wiseman and Ye, 1998)**

1. Heart Qi Vacuity
2. Heart Yáng vacuity
3. Heart Blood Vacuity
4. Heart Yīn Vacuity
5. Fulminant Desertion of Heart Yáng
6. Heart Vessel Stasis Obstruction
7. Hyperactive Heart Fire
8. Phlegm Confounding the Orifices of the Heart
9. Phlegm Fire Harassing the Heart
10. Water Qi Intimidating the Heart
Sù Wèn (Simple Questions) states: “The lung is the root of qi.”

**This has two aspects: Respiration and the Entire Body’s Qi**

1. **Respiration**

If respiration is normal, then the lung can govern the body’s qi in general. Through respiration, turbid qi is exhaled and clear qi is inhaled. The clear qi inhaled by the lung is combined with the essence of fluid and grain sent upward to the lung by the spleen; together, these become ancestral qi (zōng qi). I find that sometimes students are confused by the term ancestral qi here; in this context, the word “ancestral” implies “the source” and should not be confused with the original qi (yuán qi) of the kidney.

Zōng qi is spread throughout the entire body, supplying all the viscera and bowels with the finest essence and substance. When zong qi reaches the heart, it becomes heart qi. When it reaches the spleen, it becomes spleen qi. When it reaches the liver, it becomes liver qi. When it reaches the kidney, it becomes kidney qi. When it is in the channels it becomes construction qi. When it is outside of the channels, it becomes defensive qi. Although it may change in name, all of this qi originates in the lung. It is a result of the combination of qi from respiration (lung) and the fluid and grain essence from the spleen. (Translated from Zhōng Yǐ Jī Chǔ Li Lùn [Fundamental Chinese Medical Theory], published by The People's Hygiene Press in 2001).

**Comment:** To see the interconnectedness between the ancestral qi and the qi of each of the individual viscera and bowels is to see the body as a system and the division of qi into different seemingly separate parts as simply a tool that CM doctors use to make better sense of health and illness. In this light, if we supplement lung qi with rén shēn (Rx, Ginseng) or huáng qi (Rx, Astragalus), then we supplement the qi of the entire body, not only lung qi. Similarly, if we supplement spleen qi, we enhance its ability to absorb and transport the essence of fluid and grain up to the lung, which will likely result in the formation of adequate ancestral qi.

**Both of the following statements show relationships between the lung, respiration, the skin, and the exterior:**

“The lung governs the skin”
“The lung governs the exterior”

The lung accomplishes respiration through the exchange between the inside of the body and the outside of the body; this occurs at the “exterior.” Although the lung viscera itself is located in the chest, its qi pathway must lead directly to the great qi (in this context, “great qi” means the qi of the natural environment) therefore, the lung must connect directly with the great qi; it does so in part because it has a spongy, soft, supple (páo). The exterior surface of the skin is connected with the lung, so the skin also has a role in respiration.
2. **The Lung Governs the Qi of the Entire Body. This has several aspects:**

1. Zōng qi formation
2. The lung faces the hundred vessels
3. Qi movement
4. Qi transformation and activity

The latter two are related to the qi dynamic; therefore, it can be said that the lung is the “regulator of the qi dynamic”

**Zōng Qi Formation**

This mainly depends on lung function but has two aspects to consider:

1. Essential qi of fluid and grain sent upward by the spleen
2. Natural clear qi inhaled by the lung.

These two factors unite in the chest and form zōng qi (which combines with original qi from kidney to form zhēn qi [true qi]). Once zong qi is formed, it is the lung that diffuses and transports it throughout the whole body. (Ancestral qi is also called “great qi,” “gathering qi,” and “great qi of the chest”)

Although original qi (yuán qi) is the root of qi, it cannot act on its own. It must combine with the essence of fluid and grain and the natural clear qi (both components of zōng qi a form of latter heaven qi) before it grows in strength enough to nourish the entire body. Also, ancestral qi cannot act without the participation of original qi. In other words, they are mutually interdependent and cannot be separated in a living organism. For clarification, Zhēn qi (true qi) is a combination of original qi (from the kidney), the essence of fluid and grain (from the spleen), and the natural clear qi (from the lung). Original qi travels up to the lung via the triple burner.

In light of the above, we can say that the lung rules qi, but is not the root of qi and that ancestral qi is a form of latter heaven qi, but it is rooted in the kidney former heaven qi.

**Pathomechanisms and Clinical Applications:**

It is evident then that when we face patients with qi vacuity, we have to figure out what the source of their qi vacuity is. If there is a former heaven vacuity leading to latter heaven qi vacuity, then we must supplement the kidney in addition to supplementing lung and spleen. The advice of our predecessors to treat the root of disease can be applied in this circumstance. Additionally, because original qi (former heaven qi) and ancestral qi (latter heaven qi) are mutually interdependent, it becomes clear how different practitioners have evolved into stressing different aspects of this relationship when treating patients. For example, Lǐ Dōng-Yuán, in the Jīn-Yuán can argue quite convincingly that spleen and stomach vacuity is the key to treating enduring disease because the tradition includes the idea that latter heaven reinforces former heaven. In other words, if one supplements the spleen and stomach, the kidney can be fortified as a direct result. Also, 500 years later, Zhāng Jīng-Yuè, in the Ming Dynasty, made a case for the importance of supplementing the kidney as the key to treating many conditions. They are both right and there is no need to choose sides! The best approach is to apply the tool that is most suitable for the patient in front of us. If we know that true qi (zhēn qi) is composed of all three aspects, then we can make an educated decision on how to best treat our patients.
Qi Movement

The Ling Shū (Magic Axis) states: “The qi of the upper burner develops and diffuses the grains and tastes, fumigates the skin, fills the body, and [makes the body] hair lustrous; it irrigates [all of these] like a misty dew.”

The movement of all qi begins in the lung. The lung’s special function is spreading and dissipating, and movement of qi is the power behind all the physiological activities of each of the viscera and bowels. When qi is in the lung, it is called ancestral qi. It is when it leaves the lung that it divides in two:

1. Nutritive qi- travels inside the channels
2. Defense qi- travels outside the channels

However, even after the nutritive qi and the defense qi leave the chest, their movement is still under the direct control of the lung. Therefore, through qi gōng, meditation, and other breathing practices, one can influence the movement of qi throughout the entire body.

- Through lung diffusion qi turns outward and upward and is enlivened
- Through depurative downbearing qi turns inward and downward and contracts and restrains—because the lung is located in the upper body, downbearing is generally considered the more important function of the lung
- Through exhalation, qi of the entire body tends to dissipate outward
- Through inhalation, qi of the entire body tends to contract inward

If, in terms of producing qi, the kidney and spleen and stomach are compared to the “production department,” then the lung could be compared to the “distribution department.” In this light, the lung is the starting point for both former and latter heaven’s nourishment of the entire body.

Pathomechanisms and Clinical Applications:

In clinical practice, when there is depurative downbearing failure of the lung qi, there is often puffy swelling of the face and eyes. This is due to blockage of lung qi in the upper body, which can arise as a result of externally contracted evils or as a result of lung qi vacuity. In either case, depurative downbearing failure can result in an inability of the lung to move water downward to the bladder, which obstructs bladder qi transformation and leads to puffy swelling of the face and eyes, or inhibited urination or dribbling urinary block (Lóng Bì). When inhibited urination is caused by external contraction of wind-cold, the recommended treatment is Wǔ Ling Sān (Five-Ingredient Powder with Poria). Of note is the dual action of gui zhī to release the exterior and to transform bladder qi.

The Lung Faces the Hundred Vessels

The lung supports and regulates the heart in its movement of blood, which is a manifestation of the fact that the lung is in charge of the activity of qi in the entire body. Although the heart’s propulsion of the blood is a function of heart qi itself, there is such a close relationship between heart qi and lung qi that the heart’s propulsion of blood is directly dependent on the lung and the ancestral qi that it produces. In other words, there is no heart qi without ancestral qi, and there is no ancestral qi without lung qi. The activity of lung qi is constantly influencing the activity of qi and blood within the hundred vessels, thereby helping the heart to govern and propel the blood.
**Pathomechanisms and Clinical Applications:**

In clinical practice, the idea that the lung faces the hundred vessels is a central issue for the treatment of respiratory diseases such as Lung Distention (fèi zhàng), Asthma, (xiāo chuǎn), and acute or enduring cough. Some key signs and symptoms to look for are purple tongue body, purple and distended sublingual veins, chest pain, and soot-black complexion. The issue is that due to phlegm and/or lung qi vacuity, the lung may fail to aid the heart in blood propulsion; the result is phlegm-stasis, a mutual binding of phlegm and blood stasis. Treatment requires phlegm transformation, blood quickening, and qi supplementation when there is concurrent qi vacuity. Certain medicinals such as Yì Mǔ Cǎo (Hb Leonuri), Yù Jīn (Rz. Curcuma), and Máo Dōng Qing Gēn (Rx, Iilicis) are particularly indicated in these situations, since they both transform phlegm and quicken the blood. Also, Xuè Fù Zhú Yǔ Tǎng (Expel Stasis From the Mansion of Blood Decoction) can provide a classical formula base from which to derive an individualized prescription when enhancing disease and pattern specific lung formulas. Although phlegm-stasis obstructing the lung is more common in enduring lung diseases, I have seen it arise in acute cases of severe respiratory infections. Using some of these medicinals and this formula can improve clinical outcomes. For more information on phlegm stasis and on CM diagnosis and treatment of respiratory disease, see Charles Chace’s Blue Poppy Seminar on the treatment of respiratory diseases with Chinese medicine.

Consider the following case study.

**A 65 year-old woman with a history of congestive heart failure and COPD presents at your office with the chief complaints of panting and lower leg edema. Her ankles and lower legs exhibit pitting edema and she is rather obese. Other complaints include wheezing, palpitations, rapid breathing, and shortness of breath (panting) which is marked upon lying down, coldness, soreness, and heaviness of the lower back, decreased urine output, and cold limbs. She has increased antero-posterior chest diameter. She is constantly fatigued and has no enthusiasm for life in general. Her extremities are pale and have numerous visible small purple veins on them. Her face is very white, her tongue is pale and swollen with white fur, and the sublingual veins are dark purple and distended. Her pulse is deep, thready, and forceless (ruò mài).**

**In Summary, the lung’s activity and movement influences the function of all the other viscera and bowels**

- Ancestral qi is the fountainhead (source) from which all the other viscera and bowels draw their supply of qi
- If lung governs downbearing, then the liver can govern upbearing; these two functions support and influence each other
- Free diffusion of the lung has a very important influence on free downbearing of the other viscera and bowels, including the stomach and intestines
- Heart and lung are intimately connected and ancestral qi is the link

**Qi Transformation and Activity**

Qi transformation means the activity of qi that brings about change. These different types of qi transformation are all under the general control of the lung and kidney, which are known as the origins of qi transformation

1. **Similar transformation (tōng huá)**
   Taking in nourishing substances from the outside of the body, (such as the essence of fluid and grain and natural clear qi), which are transformed into qi, blood, fluid and humor, etc. By relating to the outside world through similar transformation, the body brings things in from the outside.
Lung is the origin of similar transformation

2. **Mutual transformation (hù huá)**
The reciprocal transformation, within the body, of the basic substances of life, such as qi, blood, essence, and body fluids. This is an intrinsic process.

3. **Dissimilar transformation (yì huá)**
The utilization of qi, blood, and essence through life processes, and the separation and elimination of unusable substances (turbid qi). By relating to the outside world through dissimilar transformation, the body emits waste out to the exterior. The kidney is the origin of dissimilar transformation.
The Lung Regulates the Waterways

The Nèi Jīng (The Inner Canon) states: “The lung moves water.”

In general, this relates to the collective metabolism of fluid and humor performed by the lung, spleen, and kidney. This statement does not imply that the lung directly propels fluid and humor, but that since the lung governs qi (including qi transformation and qi dynamic), and qi propels fluid and humor, the lung moves fluids.

What are the “waterways” (shuǐ dào)? This refers to the triple burner

According to Sù Wèn (Simple Questions): “The triple burner holds the office of the sluices; it manifests as the waterways.”

The triple burner is like a tube through which original qi as well as fluid and humor flow. Although the triple burner is a bowel itself, it cannot, on its own, free and move water and humor; it requires qi from the viscera to perform this function. The substance of the triple burner is in the body’s tissues, including the skin, body hair, the interstices, and in the gaps between structures. Since the lung governs diffusion, it transports fluid and humor outward to the skin through the triple burner. Since the lung governs depurative downbearing, it continuously sends fluid and humor downward; this can only occur by passing through the gaps between structures, in other words, through the triple burner.

The triple burner is connected with the kidney below and the lung above

Original qi flows upward to the lung via the triple burner to be mixed with the qi of the fluid and grain (also know as gǔ qi) and natural clear qi from the environment; together these make up zhēn qi (true qi). On the other hand, fluid and humor flow downward to the kidney via the triple burner. After the kidney separates the clear and the turbid, the clear is steamed and sent upward to the lung (via the triple burner) and the turbid is sent to the bladder (via the triple burner) for excretion as urine.

The Lung is The Upper Origin of Water

While the statement that the lung regulates the waterways emphasizes the role of the lung in the process of fluid metabolism, the idea that “the lung is the upper source of water” more specifically indicates another aspect of lung function——its moistening action and enriching function, its provision of fluid and humour, the material basis of life, to the rest of the body.

There are three “origins of water” in the human body- one in the upper body, one in the middle, and one in the lower body. The spleen is the first step in the creation of fluid and humour. When the spleen raises the clear, it sends fluid and humor up to the lung and the lung disperses them throughout the body. The kidney separates the clear and the turbid and sends the turbid to the bladder. The clear rises like steam through the action of kidney qi transformation, is borne upward via the triple burner, and is then useable by the body.
It is evident that this statement also reflects the relationship between the lung, bladder, and kidney in the formation and excretion of urine as summarized below:

Fluid and humor pass from the lung down to the bladder and kidney via the triple burner. When there is loss of depurative downbearing, water cannot move downward and becomes obstructed in the upper body leading to puffy swelling of the face and eyes.

If the bladder and kidney are not functioning properly and there is water stoppage, the water travels upward to the lung and inhibits respiration (SOB results). This is called “water flooding the upper source.”

**Lung Disease Patterns**

1) Wind-Cold Fettering the Lung  
2) Wind-Heat Invading the Lung  
3) Dryness-Heat Damaging the Lung  
4) Phlegm Turbidity Obstructing the Lung  
5) Phlegm-Heat Obstructing the Lung  
6) Water-Cold Shooting into the Lung  
7) Lung Qi Vacuity  
8) Lung Yin Vacuity
Spleen Physiology and Disease Patterns

Physiology and Disease Patterns of the Spleen

The Spleen is the Root of Latter Heaven and Governs Movement and Transformation of Fluid and Grain

The Spleen is the Source of Qi and Blood formation.

This, I believe, is a commonly misunderstood statement. This does not mean that the spleen produces qi and blood, or that the spleen is the only source of qi and blood. Of course, it is an essential step in the creation of qi and blood, but it is not the place where the final steps in these processes occur. What the spleen contributes to the formation of qi and blood is the absorption of the finest essence of fluid and grain. This latter heaven essence does not become usable by the body until it has been combined with clear qi inhaled by the lung, and with original qi contributed by the kidney. Through the collective action of the heart and lung, qi and blood are created and then distributed to the rest of the body. Thus, the production of qi and blood is not an individual accomplishment of the spleen, but is a coordinated effort between various viscera and bowels.

Pathomechanisms and Clinical Applications:

There is a classical formula called Guī Sháo Liù Jūn Zǐ Tāng (Six Gentlemen Decoction with Angelica and Peony) that, for me, exemplifies the relationship between spleen vacuity and blood vacuity. As we know, it is quite common for patients to have blood vacuity due to spleen vacuity. This formula places greater emphasis on supplementing and regulating the spleen and stomach with Liù Jūn Zǐ Tāng (Six Gentlemen Decoction) than it does on directly nourishing blood with the remaining two medicinals. For me, whenever I encounter patients with blood vacuity, I ask myself where the root of their blood vacuity lies; to me, blood vacuity as a pattern that does not usually exist on its own. In my experience, blood vacuity commonly results from enduring spleen vacuity and an inability to absorb the essence of fluid and grain. But to be clear, it is not because the spleen is not producing blood on its own, but because the spleen is not supplying the lung and heart with the raw material, in the form of essence of fluid and grain, to play their roles in qi and blood production.
Differentiating Vacuity and Repletion in Splenic Movement and Transformation Failure

Another key point I want to make is that the spleen may fail in its function of moving and transforming fluid and grain because of either vacuity or repletion; the latter cause is often overlooked, yet missing this can have a profound effect on choice and result of treatment. Take the case example and questions below. Should we supplement the spleen with sweet-warm medicinals or should we apply generally “freeing” methods that disencumber the spleen, drain dampness, etc.? Of course, if the spleen is vacuous, it should be supplemented.

The core issue is that we must recognize when the spleen is failing in movement and transformation because it is obstructed, and when it is failing because it is vacuous. In making this differentiation, I find that the history, the tongue picture, and the pulse presentation are the most reliable indicators.

A 25 year-old male complains of acute onset of diarrhea, abdominal pain, diarrhea, nausea and vomiting, thick, white, and greasy tongue fur, and slippery pulse.

1) The symptoms and signs are highly suggestive of which of the following patterns? (Choose the most comprehensive choice)
a) Dampness encumbering the spleen
b) Large intestinal damp-heat
c) Spleen yang vacuity complicated by dampness in the large intestine
d) Spleen-stomach damp heat
e) Spleen qi vacuity

2) What are the pathomechanisms (disease mechanisms) behind the diarrhea in this case?
a) Spleen qi vacuity and resultant movement and transformation failure
b) Dampness obstructs the spleen and stomach and leads to splenic movement and transformation failure
c) Damp obstructs the stomach qi and causes it to counterflow upward
d) Both b and c
e) Both a and b
In this light, consider the following article about Yè Tiān-Shì’s ideas on this subject:

**Excerpted From A Discussion of Yè Tiān Shì’s Therapeutic Concept that “All Diseases Require Freeing Methods”¹**

**Abstract**

Yè Tiān Shì derived his theory that “all diseases require freeing [methods]” from Zhāng Zhōng Jīng’s theory that “[when the] true source [qi] of the five viscera is free and open, human beings are peaceful and harmonious.” This theory permeated all of his treatments and was therefore one of the standard principles governing his treatment of various diseases. He thought that depression, stagnation, glomus blockage (pǐ sè), congelation, nodulation, and lack of free flow were responsible for the engenderment of most diseases; therefore, his treatments emphasized “freeing.”

He established a series of treatment methods such as freeing yáng and draining turbidity, freeing yáng and transforming rheum, draining the liver and freeing the stomach, perfusing and freeing qi and blood, freeing the bowels and disinhibiting urination, freeing and supplementing yáng brightness, and warming, softening, freeing, and supplementing the extraordinary vessels. This idea still has significance in guiding current clinical practice.

Yè Tiān Shì’s case studies were simple, not tricky, and were elegant and concentrated. His treatment theories were all insightful into the mechanisms of disease evolution. He blended ancient knowledge and theories to create a new perspective. In their simplicity and down-to-earth style, his case studies demonstrated standard principles. I would like to discuss his clinically useful therapeutic idea that “all diseases require freeing methods.”

**Blending Ancient Knowledge, Giving “Freeing” a New Meaning**

Xu Zhi Cai listed “freeing can dispel stagnation” as one of his ten methods. However, his original definition was very narrow. Some subsequent doctors broadened it. For example, Zhang Cong Zheng said: “The so-called freeing method is actually circulating. [When there is] inability to urinate and defecate, one should use medicinals and formulas such as Mù Tōng, Hǎi Jīn Shā, Dà Huáng, Hù Pò, and Bā Zhèng Sàn. [When there is] tenesmus with repeated [trips] to the latrine without [significant] bowel movement, one should use [the method of] “treating freeing with freeing.” Although freeing and draining are similar methods, draining [is generally considered] to be stronger than freeing. All [conditions such as] numbness, impediment, depression, fullness, and lack of flow within the channels cannot be cured without freeing.”

Subsequent doctors’ understanding of the freeing method has not deviated very far from this definition. Yè Tiān Shì derived his theory that “all diseases require freeing (methods)” from Zhāng Zhōng Jīng’s theory that “[when the] true source [qi] of the five viscera is free and open, human beings are peaceful and harmonious.” He deduced the meaning of “freeing methods” from previous doctors, promoted it, and, based on his clinical practice, derived his idea that “all diseases require freeing methods.” This idea permeated all of his treatments and was one of the standard principles governing his treatment of various diseases.

Master Yè thought that “generally diseases of the channels, network vessels, and the six bowels [always] require perfusion (xuān tōng). The channels and network vessels are the passage for qi and blood. Qi and blood circulate endlessly within them, internally irrigating the viscera and bowels, and externally nourishing the flesh and the interstices, endlessly engendering vitality. Once qi and blood

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¹ Translated from an article published in zhong1 yì1 zu2 zhi4. I owe a debt of gratitude to my colleague Lily Chang for helping me with the translation.
congeal and stagnate, the channels become obstructed and the viscera, bowels, and channels and network vessels lose their nourishment and normal function; as a result, disease arises. This is why the Inner Canon states: “to course qi and blood is to make it orderly reaching.”

The six bowels conduct and transform substance but do not store. In order to function normally, they should be free. Therefore, the most important consideration in diseases of the six bowels is perfusion. The Inner Canon also states: “the six qi guest evils can be freed and drained.” For example, it lists factors such as external invasion, emotional irregularity, and dietary irregularity as factors that can harass the body. These factors cause irregularity in yin and yang and chaotic function in the viscera and bowels; as a result, various diseases arise in a swarm-like fashion.

**The Spleen Manages Blood**

Blood production

Source of qi and blood formation (see above)
Evidence of impairment: spleen qi vacuity s/s combined with those of blood vacuity

Prevents extravasations of blood; contains blood within the vessels

This presents in qi vacuity patterns of bleeding disorders and is particularly important to understand when treating women for menstrual irregularities such as early menses, profuse menses, and flooding and spotting. Consider the following case study.

A 35 year-old woman complains of 40-day menstrual cycles (days between onset of one period and the next) for the past 8 months. Her previous menstrual cycle had always been about 28—30 days. She has been fatigued for several months, has a low appetite, and often suffers from loose stools. She denies feeling cold and coldness of the limbs. Her face is sallow in color. Her tongue is pale and tooth-marked and her pulse is soft (Rú Mài).

1) Which of the statements about normal spleen and stomach physiology listed below is of most value in analyzing the fact that this woman’s menstruation is “behind schedule”?
   a) The spleen likes dryness and is averse to dampness. The stomach likes dampness and is averse to dryness
   b) The spleen raises the clear, the stomach downbears the turbid
   c) The spleen and stomach are the latter heaven root of qi and blood production
   d) The stomach governs intake. The spleen governs movement and transformation
   e) The spleen turns the blood red

2) Which of the statements about normal spleen and stomach physiology listed below is of most value in analyzing the fact that this woman often has a low appetite and loose stools?
   a) The spleen likes dryness and is averse to dampness. The stomach likes dampness and is averse to dryness
   b) The spleen raises the clear, and the stomach downbears the turbid
   c) The spleen and stomach are the latter heaven root of qi and blood production
   d) The stomach governs intake. The spleen governs movement and transformation

3) Which of the patterns listed below is present in this case?
   a) Spleen yáng vacuity
   b) Spleen and stomach qi vacuity
   c) Food stagnation in the stomach duct
   d) Large intestinal vacuity cold
   e) Both a and c
Review and Discussion: If the spleen fails to manage the blood in either of the two ways we discussed:

1) How would this affect menstrual timing?
2) Could there be more than one answer to question # 1?
3) How would this affect the quantity of menstrual flow?
4) Could there be more than one answer to question # 2?
5) What menstrual diseases would these problems be organized under in Chinese gynecology?

The Spleen Governs the Flesh and Limbs

The flesh of the entire body relies on the spleen for nourishment in order to be full, firm, and strong. It provides its part of that nourishment through its movement and transformation of water and grain. Evidence of Impairment (S/S): Emaciation, wilting weakness of limbs with loss of use (wěi zhèng).

Discussion:

1) How does the nourishment get to the flesh and limbs?
2) Does the spleen send it directly or does this require coordinated action between the spleen and other viscera and bowels?

Spleen Opens into the Mouth

1. The spleen is responsible for the appetite. When the spleen is harmonious, the appetite is normal. Evidence of Impairment: torpid intake, low appetite

Comments: Again, it is important to differentiate between dampness obstructing the spleen and spleen vacuity in situations involving the appetite, because dampness is frequently involved. See the discussion above for clarification.

2. Taste in the mouth. When the spleen is harmonious there is a pleasant taste in the mouth. Evidence of impairment: blandness, sweetness, sliminess, “swampiness,” and other tastes

Comments: In clinical practice in the United States, I have heard many different descriptions of abnormal tastes in the mouth. If I hear a complaint of an abnormal taste, and there is other convincing evidence that there is dampness obstructing the spleen and/or spleen vacuity resulting in dampness, I attribute the taste to dampness, even if the patient describes it as “bitter” or “sour.” I think it would be a mistake, in the face of obvious splenic impairment, to pursue a different course of clinical reasoning based on what may be a culturally mediated perception of taste.

Spleen Pathomechanisms in Men’s Diseases

The spleen and stomach is the root of latter heaven essence. They augment the former heaven essence through their engenderment and transformation. They have a strong relationship with the kidney in that kidney yáng warms and aids the spleen yáng and spleen and stomach transform and engender fluid and grain to supplement and augment the kidney essence. Also, the spleen raises the clear and restrains the blood.

If the spleen is vacuous, then dampness pours downward and fluid and humour congeal into phlegm giving rise to conditions such as water mounting (shuǐ shàn), testicular phlegm nodulation, and yīn stalk (penile) phlegm nodulation. If the spleen vacuous, then the central qi may fall and the bladder will lose its constraint; this can lead to strangury (Lín Zhèng) and urinary incontinence. Since the spleen is the source of the latter heaven engenderment of semen, semen will be scanty. If there is no consolidation of essence, semen will be lost and will lead to turbid urine, turbid semen, and spermatorrhea.
The Spleen’s Relationship with other Viscera and Bowels: Review of the basic relationships between spleen and other viscera and bowels

Spleen and Stomach
Movement and transformation vs. intake of fluid and grain
Upbearing vs. downbearing
Absorption of fluid and grain essence vs. taking in raw materials
Upbearing clear vs. downbearing turbid
Averse to dampness vs. likes “dampness”

The Spleen and Liver
Liver governs free coursing
Regulates qi dynamic
Liver depression leads to obstruction of free coursing
Discussion: Finish explaining how this will affect the functions of both the spleen and stomach
Give specific signs and symptoms for each. What are the differences in signs and symptoms between liver-spleen disharmony and liver-stomach disharmony?

Spleen and Kidney Yáng
Life gate fire is the motive force for all transformations in the human body
How would debility of life gate fire affect the qi dynamic of spleen and stomach?
What symptoms and signs will present in the digestive system?

Disease Patterns of the Spleen
1. Spleen qi vacuity
2. Central qi fall
3. Spleen not managing blood
4. Spleen yáng vacuity
5. Dampness encumbering spleen
6. Spleen stomach damp heat
7. Spleen yín vacuity (aka spleen-stomach yín vacuity)
Liver Physiology and Disease Patterns

The Liver Governs Coursing and Discharge

- In the Shuo Wen Jie Zi, 121 A.D., the character shū (course) was defined as “freeing,” as in freeing and abducting; opening and freeing
- In the Shuo Wen Jie Zi, 121 A.D., the character xiè (discharge; drain) was defined as “promoting and draining” and “promoting and dispersing”

This shows that the liver governs coursing, freeing, and regulating the qi of the entire body
- It keeps the qi flowing freely and prevents it from stagnating
- It disperses qi and prevents depression (Yù)

One of the earliest references to “coursing and discharge” is in the Su Wen (Simple Questions), chapter 70: “The expression of arising is spreading and expansion. Earth is coursed and discharged [as] dark green qi (i.e. plants and trees) reaches [upward and outward]. [As] yang harmoniously disperses, beauty [manifests]. Yin qi follows; qi is engendered and [brings] fertility, thus things become luxuriant.”

Wang Bin’s Commentary is: “[When] qi is engendered, there is upward promotion. The earth itself is coursed and discharged by the dictatorship of wood; dark green qi reaches upward. [This is] reaching, freeing, [expanding] outward, and moving. “

Zhang Jie-Bin, in the Lei Jing (Classified Canon), states: “Wood qi moves, engendering qi reaches. The earth itself is coursed and discharged and there is free [flow]. Dark green qi is the qi of wood.”

- It can be seen that the statement “earth is coursed and discharged” is referring to the “orderly reaching” of wood qi
- Earth must be subjected to the control, the transformation, and the coursing and discharge of wood
- As is stated in the Su Wen: “Earth must [be subjected to] the reaching of wood”

Later doctors stated: “The liver likes orderly reaching and is averse to repression and depression.” In the Han and Tang dynasties, texts began to say that coursing and discharge was one of the functions of the liver

Zhu Dan Xi, in the Jin Yuan, clearly stated: “The liver governs coursing and discharge”

He established two aspects of this “coursing and discharge”
- The liver’s function of releasing semen in men
- The pathomechanism of the ministerial fire causing the spontaneous release of seminal fluid

In the late Qing Dynasty, Tang Rong Chuan stated: “The liver is ascribed to wood and is able to course and discharge fluid and grain. Spleen earth relies on the coursing and discharge of wood in order to transform fluid and grain; without this coursing and discharge there is incomplete percolation and drainage from the middle.”
In the Xuè Zhèng Lùn (On Blood Patterns), he also said: “The liver governs the storage of blood. [When] wood qi surges, [there is] orderly reaching. If [wood qi] is not depressed, it can regulate the blood vessels”

These statements illustrate the importance of:

- Liver coursing in the digestive processes of the spleen and stomach
- Liver coursing in the movement of blood

**There are Four Aspects to Liver Coursing and Discharge:**

1. The liver courses and frees qi, blood, and fluids
2. The liver regulates the activity of the essence-spirit
3. The liver drives the digestive function of the spleen and stomach
4. The liver controls the release of semen in men and menstrual flow in women

**Free flow of qi, blood, and body fluids depends on the regulation of the qi dynamic**

Qi dynamic depends on coursing and discharge of the liver and the free and uninhibited flow of qi and blood within the channels and network vessels as well as the normal functioning of all the viscera and bowels depends on harmonious regulation of qi flow.

Shèn Jīn Aò said: “As a result of yáng qi arising within the reverting yīn (jué yīn), qi is not overwhelmed in either the upper body or the lower body. When the liver is harmonious, qi is engendered and the viscera and bowels engender and transform. [This] promotes the growth of the ten thousand things.”

If the function of coursing and freeing the qi, blood, and fluids is lost, it can manifest in two ways:

1. Depression and stagnation of the qi dynamic- also called “binding depression of liver qi, this condition presents with emotional repression/depression, chest, breast, and lower abdominal distention and pain, glomus fullness of the stomach duct and abdomen. If there is lateral counterflow and attack on the spleen and stomach, there will be symptoms such as belching, vomiting, abdominal pain, and diarrhea

2. Liver depression may transform into fire and cause excessive upbearing and discharge such as Upward counterflow of liver qi and upward flaming of liver fire with symptoms and signs such as distention and pain of the head, red face and eyes, hypochondriac distention and pain, and vexation and easiness to anger.

According to Lín Pèi Qín, of the Qīng dynasty: “The nature of wood is upward dispersion. If it is suppressed, there will be qi counterflow in the channels; this leads to belching, distention, vomiting, fulminant anger, hypochondriac pain, fullness of the chest, loss of appetite, dinner diarrhea, and bulging mounting. There are all [due to] lateral counterflow of liver qi”

**The movement of blood depends on the coursing and discharge of the liver:** When qi moves, blood moves. When qi stagnates, blood stasis forms

The Ming Yī Zá Zhù (Collected Writings of Famous Doctors) states: “When liver qi is free flowing, heart qi is harmonized. When liver qi stagnates, heart qi is exhausted.” This illustrates that the liver qi aids the heart in moving the blood; it lends force to the heart’s blood propulsion
If the liver fails to course and discharge, the blood can be influenced in two ways

1. Stasis can form as a result of depression and stagnation of the qi dynamic
   Pain of the hypochondria and breasts, lower abdominal fullness and pain, irregular menses, painful menses, masses, swellings, lumps, concretions and gatherings

**Depressed Fire Leads to Bleeding**
Depressed fire from anger and resentment can cause the blood to move recklessly outside its vessels which and results in:
1. Hematemesis and hemoptyisis if the blood moves up
2. Early menses, hemafecia, and flooding and spotting if the blood moves down
3. Fulminant loss of consciousness if the blood blocks the clear orifices

How does Liver Coursing and Discharge Influence the Dispersion of Body Fluids?

1) Fluid dispersion depends on the qi transformation of the lung, spleen, kidney, and the triple burner. What regulates the qi transformation of all of these?
2) If qi is transforming, fluids flow freely through the entire body. The triple burner is disinhibited and the waterways flow freely. How does liver depression affect this?
3) Since the liver channel passes around the genitals, the opening of the urinary meatus is regulated by the liver. How would urination be affected by liver depression?

If there is no coursing and discharge, triple burner qi transformation is inhibited. Water stoppage results. This can cause phlegm, water swelling, masses, breast lumps, Plum seed qi, scrofula, drum distention, and goiter

Since the liver channel passes around the genitals, the opening of the urinary meatus is regulated by the liver, if water qi stops in the bladder there will be
- Lower abdominal fullness and distention
- Dribbling urinary block (Lóng Bì)

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**Liver Pathomechanisms in Dribbling Urinary Block (Lóng Bì)**

Damage by the seven affects gives rise to binding depression of liver qi and loss of coursing and discharge. This interferes with triple burner movement and transformation and also with qi transformation of water and humor. The free regulation of the waterways obstructs and gives rise to Dribbling Urinary Block. Since the liver channel encircles the genitals, liver disease may also cause Dribbling Urinary Block. The Ling Shū (Magic Axis), [On] Channels states: “The liver foot reverting yīn channel is governed by the liver. [When the liver] is diseased, enuresis [and] Dribbling Urinary Block [lóng bì] results.”

According to Zhāng Jing Yuè, in Jing Yuè Quán Shū: “All qi repletion and qi nodulations within the small intestine and bladder can cause dribbling urinary block and inhibition. This is a disease of rigidity and counterflow of liver qi; it can be caused by fulminant anger, depression, and nodulation. Breaking and moving qi is the main treatment.”

If there is excessive coursing and discharge, dribbling urination can result
Zhāng Zhi Čōng, in the Huáng Dì Nèi Jīng Ling Shū Ji Zhù (Collected Commentaries on the Yellow Emperor’s Classic of Internal Medicine/Magic Axis) said: “The liver governs coursing and discharge. If liver qi is effulgent and hot, there will be dribbling.”
The Liver Regulates the Spirit and Affect

The Líng Shū (Magic Axis) states; “When there is liver vacuity, there is fear. When there is liver repletion there is anger”

The activity of the essence-spirit and the affect is regulated by qi transformation. Although these are ministered by the heart, the liver plays a major role in regulating the spirit and affect. Why? Because the liver is responsible for ensuring that qi and blood flow to all the viscera and bowels, including the heart, is free and uninhibited.

- If there is binding depression of liver qi, there will be emotional repression and depression, suspicion, and worry, oppression of the chest, and a desire to sigh.
- If depressed qi transforms to fire and leads to excessive upbearing of the liver, there will be a tendency to be easily angered and agitation.

The Liver Drives the Digestive Function of The Spleen and Stomach

The liver helps the spleen upbear and the stomach downbear. When the spleen upbears, it can absorb the essence from fluid and grain and send it to the heart and lung. When the stomach downbears, the turbid qi from fluid and grain can be sent downward to the small intestine and the large intestine for excretion.

The Liver Controls the Semen Release and Menstrual Flow

Semen is stored in the kidney and its appropriate release and storage is governed by the coursing and discharge of the liver

- If the liver is depressed, the essence gate cannot open; this can lead to inability to ejaculate and retrograde ejaculation
- If there is depressed fire, the ministerial fire is overly excited, and the essence gate will open inappropriately; this can lead to spermatorrhea and premature ejaculation

Liver Pathomechanisms in Men’s Diseases

The liver stores blood and governs coursing and discharge. Its channel encircles the external genitalia which are nourished by liver blood. Since the liver governs free coursing, its movement is the source of all openness of the qi dynamic. Therefore, it has a relationship with the engenderment and transformation of blood and essence and the normal functioning of the external genitalia. If liver coursing is inhibited, then the liver channel becomes obstructed by evils. This can lead to spermatorrhea, Mounting Qi, tightness of the testes, and pain and soreness of the testicles. If blood stasis develops and damp heat pours downwards or warm epidemic evils invade the liver channel, then conditions such as testicular abscess, water mounting, yang wilt, and dribbling urinary block may develop.

A 25 year-old male has premature ejaculation and a very active libido. He frequently experiences spontaneous erections and morning and nighttime erections. He is prone to sweating and rashes in the groin. His pulse is wiry and rapid, and his tongue has a thick greasy yellow fur at the root. Which of the patterns below is most defensible for this case?

a.) Damp heat in the liver channel
b) Heart and kidney failing to connect
c) Insecurity of kidney qi
d) Both a and b
Menstruation requires a combination of fullness of the penetrating vessel (chōng mài) and free flow in the directing vessel (rèn mài).

- Since the liver stores blood it is connected with fullness of the penetrating vessel
- Since liver courses and discharge it is connected with free flow of the directing vessel

The liver channel and the penetrating and directing vessels are in close communication

- If blood is insufficient or if there is no coursing and discharge
  a) Late menses, blocked menses (amenorrhea). Why?
  b) If there is liver depression and depressed fire, early menses, profuse menses. Why?

**The Liver Governs the Storage of Blood**

The Nèi Jīng (Inner Canon) states: “The liver stores blood. Blood houses the ethereal soul [hún].”

The storage of blood involves all of the following

• Nourishing the ethereal soul
• Emolliating the sinews
• Nourishing the eyes
• Flourishing in the nails

**The Liver Stores the Blood and Regulates the Quantity of Blood Flow**

According to the Nèi Jīng (Inner Canon): “If there is anger and qi counterflow, vomiting of blood or dinner diarrhea can result”

“Stores blood” also implies that the liver has a role in containing the blood. This is demonstrated by the fact that in liver disease there can be bleeding, particularly if there is liver depression and depressed fire that scorches the network vessels and leads to reckless movement of blood.

There are Two Aspects to The Concept of Liver Governing the Storage of Blood

1. The liver storing blood as relates to it supplying blood to the entire body
   • If it fails in this function various tissues and viscera-bowels suffer loss of nourishment and may fail to function normally
2. The liver storing blood for its own nourishment
   • If liver blood is insufficient, then its yáng functions such as coursing and discharge will suffer
     If there is liver blood insufficiency, then liver yáng will upbear excessively; this will lead to
     • Hyperactive ascendancy of liver yáng
     • Upward flaming of liver fire
     • Internal stirring of liver wind

Reviewing General Statements of Fact About the Liver

• The liver is yīn in body and yáng in function
• The liver governs ascendancy and movement
• The liver likes orderly reaching and is averse to repression and depression
• The liver relates to the season of spring

**Disease Patterns of the Liver**

1) Binding Depression of Liver Qi
2) Liver Fire Flaming Upward
3) Ascendant Hyperactivity of Liver Yáng
4) Liver Wind Stirring Internally
5) Liver Blood Vacuity
6) Cold Stagnating in the Liver Channel
7) Damp Heat in the Liver (and Gallbladder)
8) Liver Invading the Spleen
9) Liver Attacking the Stomach
Kidney Physiology and Disease Patterns

The Sù Wèn (Simple Questions) states: “The kidney is the root of qi,” and the “root of yīn and yáng”

Lì Zhōng Zǐ stated: “[The] kidney is the former heaven root [and the] spleen is the latter heaven root”

The Sù Wèn (Simple Questions) also states: “Kidney is the root of sealing and storage”

There are three main aspects to Kidney function in Chinese medicine

1. Stores essence and promotes growth and reproduction
2. Kidney governs water and humor
3. Absorbs qi and is the root of qi

General Statements of Fact about the Kidney

- Unites with bone
- Shows its luxuriance in the hair
- Its affect is fear
- Its fluid is urine
- It opens into the ear and into the two lower Yīn
- Stands in interior/exterior relationship with the bladder and is interlinked with bladder qi transformation
- Also unites with the triple burner
- Is associated with winter
- The testicles are also known as the external kidneys

The Kidney Stores Essence and Promotes Growth and Reproduction

- The storage aspect shows that the kidney has a restraining and containing function

- The human body is formed from essence
  - It is the material substance that is the basis of life and all its activities
  - The Sù Wèn (Simple Questions) states: “Human essence is the root of the body”

“Essence” has a broad and a narrow meaning

The broad meaning of essence is the finest essence and material aspect of the qi, blood, fluid, and humor of an organism. Also under the broad meaning is the essence of fluid and grain (latter heaven essence).

The narrow meaning is the reproductive essence of men and women (sperm and egg) that unites to form life; this is called former heaven essence.

The Sù Wèn (Simple Questions) states: “At 2 times 8 [i.e., 16 years of age in men], kidney qi is effulgent and tān guǐ arrives, essential qi flows downward and yīn and yáng are in harmony; there is the ability to have a child.”

The kidney’s storage of essence has two aspects:

1. Former heaven
   - It receives the essence from the male and female which is used as the material substrate from which the embryo is formed
2. Latter heaven

- The Sù Wèn (Simple Questions) states: “The Kidney governs water; it receives the essence of the five viscera and the six bowels and stores it.”
- It retains the essence of fluid and grain that is formed from the physiological processes of all the viscera and bowels (that which is left over)
- This is also known as viscera and bowel essence

Former Heaven and Latter heaven have a reciprocal relationship

They mutually support and complement one another

- Latter heaven depends on former heaven for sustenance
- Former heaven depends on latter heaven for ( péi bǔ ) cultivation, banking up, and supplementation
- When there is a surplus of essential qi after all the viscera and bowels have been adequately supplied by splenic movement and transformation, the kidney unites this surplus with the former heaven essence and stores it.

Comment: This should debunk the myth that kidney essence (former heaven essence) is permanently fixed and unchangeable. It is clear from this information that latter heaven essence can bolster and supplement former heaven essence.

The kidney's storage of former and latter heaven essence is very important for the preservation of life

Birth, growth, maturation, and aging are all a result of the waxing and waning of the kidney essence

When the body goes through puberty, and the reproductive capacity matures, the body can transform this essence into reproductive essence

The Kidney Governs Water

Water metabolism in the human body depends on the normal processes of the lung, spleen, stomach, kidney, intestines, bladder, and the triple burner, but the kidney’s qi transformation is what drives all of these other processes.

There are three aspects to this:

1. The kidney supplies the driving force behind water metabolism

The kidney, since it is in the lower burner, aids the lung in regulating the waterways by steaming fluids; as a result, the clear fluid ascends upward. The lung can then send it out to moisten, lubricate, and nourish the whole body.

2. Kidney is the root of lung and spleen qi transformation

Kidney stores essence and is the root of the engendering and transformation of original qi. Original qi is what sets all of the functions of the viscera and bowels into motion; it gives strength to lung depurative downbearing of fluids and to splenic movement and transformation.

3. Kidney governs the excretion of urine

Normal fluid metabolism involves respiration, sweating, and urination; these all involve coordination between the lung and the kidney

The Su Wen states: “[During] summer, [when one wears] heavy clothing, the interstices open; [this] results in sweating. [When the] weather is cold, the interstices close; [as a result], qi and fluids do not move, and water is retained in the bladder. This drowns qi.”
In order for the urine to be excreted from the body

The clear and the turbid waste must be separated, and the turbid fluid must be excreted from the body. Since this falls under the kidney’s role of regulation and control, the kidney is responsible for maintaining the fluid balance within the body.

The formation and excretion of urine are controlled and regulated by kidney qi transformation

Should the body absorb too much water or if the weather is cold, and there is scanty sweat, there will be a relative surplus of fluids inside the body. Through the action of kidney qi transformation, more fluid is sent to the bladder; this results in copious and pale urine. Should the body absorb too little or if the weather is hot, and there is copious sweating, there will be a relative insufficiency of fluids in the body. The kidney must then restrain its excretion action which leads to scanty and concentrated (yellow) urine.

If the essential qi within the kidney is insufficient, the qi transformation of the spleen, lung, and triple burner and the opening and closing functions of the kidney will also be affected. This will cause chaos in the maintenance of balanced fluid metabolism and lead to symptoms such as scanty urine, long clear urine, and dribbling urinary block (Lóng Bì).

The Kidney Governs Qi Absorption
This shows the kidney’s role in spurring on the inhalation of the clear and exhalation of the turbid

This aspect of kidney function can be explained under three headings

1. How it influences the upbearing, downbearing, and movement within the body as a whole
   - Lung downbears essential qi to the kidney and the kidney absorbs it
   - Kidney sends its essential qi upward to the lung

So it is said: “The lung is the uniting place of the essential qi of the five viscera and the six bowels. The kidney receives the essence of the five viscera and six bowels and stores it. Kidney qi originates in the lung, and lung qi also returns to the kidney; [it is one and the same] qi that is up borne and down borne.”

2. From this relationship between the kidney and respiration, it can be seen that the kidney is the root of original qi

The original qi that is stored within the kidney arouses and stimulates the lung. It propels, restrains, and participates in the process of respiration; it ensures that the clear is inhaled and the turbid is exhaled

3. The relationship between metal and water, mother and son
Kidney governs water, the lung governs qi. If water qi is free flowing and regulated, the hundred vessels are harmonized and regulated and respiration should be smooth.

Disease Patterns of the Kidney
1. Kidney qi vacuity
2. Kidney yáng vacuity
3. Insecurity of kidney qi
4. Kidney vacuity water flood
5. Insufficiency of kidney essence
6. Kidney yín vacuity
Physiology and Pathomechanisms of the Six Bowels

Gallbladder Physiology and Disease Patterns

The Gallbladder Stores Bile

The Nei Jing Ling Shu (Magic Axis) states: “The gallbladder is the bowel that contains essence.”

Features of Bile

• Clear and clean
• Has a bitter taste
• Yellowish-green colored
• Is also known as “essential juice” and “clear juice”

The Gallbladder and Liver Channels Have an Interior/Exterior Relationship

Therefore, heat can shift from liver channel to gallbladder channel

Discussion:

1. What type of heat can do this?
2. What diseases/complaints will it cause?

Gallbladder Pathomechanisms in Deep Source Nasal Congestion

The gallbladder is an indomitable bowel. It contains ministerial fire and its qi opens into the brain. When the affect-mind is not smooth and hatred and anger lose their integrity, the gallbladder loses its coursing and discharge. As a result, qi depression transforms into heat and gallbladder fire follows the course of the gallbladder channel and attacks above. Heat may then shift to the brain, damage the nasal tissue, scorch the qi and blood, and putrefy and scorch the nasal flesh and membranes. Heat then smelts the fluids and humor and they become nasal mucous. It is also possible that evil heat may invade the gallbladder producing effulgent heat of the gallbladder channel that steams above and enters the brain compelling its fluids to seep downward, producing disease. This is discussed in Life-Saving Formulas, Nasal Category, where it states: “[when] heat resides in the gallbladder bowel, the evil [will] shift to the brain and then [lead to] Deep Source Nasal Congestion. Deep Source Nasal Congestion is unceasing downward flow of turbid snivel. The disease can worsen and lead to nosebleed, bleeding, and death. The cause of death is qi reversal.”

The Gallbladder Stores and Secretes Bile

• Together with the small intestine, has an important role in digestion
• The gallbladder is a “extraordinary bowel” because it contains bile, which is a clear fluid

Discussion:

1. How does it differ from a regular viscera or bowel?
2. What does it have in common with other extraordinary bowels such as the brain, marrow, bone, vessels, gallbladder, and the uterus?

Bile is engendered and transformed from the essential qi of the liver

According to Dong Yi Bao Jian (The Treasured Mirror of Eastern Medicine): “Surplus liver qi flows downward to the gallbladder; it gathers [there] and becomes essence.”
The liver continuously produces bile spontaneously and naturally; however, since the production and secretion of bile are not coordinated, it must be stored for later use by the gallbladder.

**The Gallbladder is connected with the liver and the small intestine**
- Bile flows from the liver to the GB
- Bile flows from the gallbladder to the small intestine to aid digestion of fluid and grain

**Bile can only flow if the gallbladder is free flowing**
If the gallbladder is obstructed, then bile cannot be secreted
What can lead to GB obstruction?
- Damp-heat
- Static blood
- Stones, parasites and worms

**Discussion:** What are the pathomechanisms behind the formation of gallbladder stones? If damp-heat endures, then bile is decocted and hardened into stones.

**Some Basic Gallbladder Pathomechanisms**
- If the gallbladder qi dynamic is obstructed or chaotic, this leads to spasms in the bile duct and symptoms such as rib-side distention, fullness, and pain.
- If there is a lack of free flow of the bile, digestion is affected; loss of appetite, dislike of greasy foods, abdominal distention, constipation, diarrhea, and vomiting of yellowish-green fluid may result.
- If the bile flow is obstructed and instead of flowing into the small intestine, it flows into the skin, there will be jaundice.

**The Secretion of Bile Depends on Free coursing and Discharge of Liver Qi**
“The Liver and Gallbladder govern coursing and discharge” If the liver is depressed, bile flow will also be depressed

**The Gallbladder Governs Decision**

The Sù Wèn states: “The gallbladder holds the office of justice, from which decision emanates.”

**Discussion:** What is meant by “justice” in this statement?
- Justice means to be impartial, unbiased, and upright. “The gallbladder governs decisions” means that the gallbladder has the function of determining what measures should be adopted and making decisions about things. This refers, in part, to the gallbladder sac having the ability to store and secrete bile; in other words, having functions similar to other viscera and bowels.
- This also refers to an activity of the spirit. The gallbladder protects against and moderates the provocation of extreme emotional states (such as great fear of dying). It does so by regulating and controlling the flow of qi and blood to all the viscera and bowels. Changes in the natural environment and in social circumstances can have a very strong influence on a person’s essence-spirit
  - A person with strong gallbladder qi is less influenced by such things
  - A person with weak gallbladder qi is easily perturbed by such changes and may develop illnesses because of this
The Sù Wèn (Simple Questions) states: “The gallbladder holds the office of justice, from which decision emanates.

There is a relationship between this statement and the fact that the heart governs the spirit and that the Gallbladder qi connects with the heart. Because of this connection, when there is gallbladder disease, the gallbladder qi harasses the heart and leads to s/s such as palpitations, fear, dread, desire to sleep, and insomnia. When treating panic and anxiety, treat the gallbladder. If there is also mania-withdrawal, one should emphasize treatment of the heart.

**Disease Patterns of the Gallbladder**

1. Gallbladder Vacuity (Heart, Spleen, and gallbladder qi vacuity with liver/GB depression)
2. Gallbladder timidity and heart vacuity
3. Gallbladder vacuity cold
4. Gallbladder qi vacuity
5. Liver Gallbladder Damp Heat
Stomach Physiology and Disease Patterns

The Stomach Governs Intake and Decomposition of Fluid and Grain

The stomach performs the initial stage of digestion and absorption, initial decomposition. In order for the fluid and grain to move along, stomach freely downbear.

Nàn Jīng (Classic of Difficult Issues), Difficulty 31 states: “The middle burner is located in the middle venter, where the stomach is, not above and not below; it governs the decomposition of fluid and grain.”

Other names for stomach include “sea of fluid and grain,” the office of the granary,” “great granary,” and “the sea of fluid, grain, qi, and blood”

The Nèi Jīng (Inner Canon) states: “The middle burner is like a place where things are soaked, steeped, or macerated [ou].”

Jǐng–Yuè Quán Shū (Jǐng-Yuè’s Complete Compendium, 1624 CE) states: “The stomach governs intake and the spleen governs movement and transformation. One takes in and the other moves; together they engender and transform essential qi”

Decomposition (fǔ shóu) means the initial stage of digestion, by which an easily absorbable food gruel (shí méi) is made

• This is transported down to the small intestine via splenic movement and transformation
• Essential substances are absorbed
• Qi and blood are engendered and transformed
• The essence of fluid and grain is eventually sent to nourish the entire body through the coordinated actions of other viscera and bowels

If intake and decomposition are impaired

This function can be impaired if stomach qi is vacuous or obstructed, and fails to downbear. There will be a lack of desire for food and drink, postprandial epigastric pain, foul belching, and vomiting after eating. If this function is too swift due to effulgent stomach fire, there will be rapid hungering

The Stomach Governs Free Downbearing

Although free (tōng) and (jiàng) are different actions, they depend on each other; one cannot be maintained without the other. When there is downbearing, there is normalcy and when there is free flow, there is harmony.

The stomach downbears the turbid to the intestinal pathway

Stomach downbearing plays an important role in the large intestine’s function of conduction and conveyance of waste downward.

The stomach likes lubrication and is averse to dryness

Lin Zhēng Zhǐ Nán Yī àn (Clinical Guide with Case Histories, 1766, Yé Tiān-Shí) states: “The spleen likes firmness and dryness and the stomach likes tenderness and lubrication”

Normal stomach function depends on adequate Yīn for nourishment. In general, healthy viscera-bowel...
function depends on the presence of adequate nourishing substances. When the food enters the stomach, it needs to steep in the stomach fluid in order to decompose. If there is no liquid, there will be no decomposition.

<table>
<thead>
<tr>
<th>In light of this aspect of the stomach, consider the effects of the following tastes/temperatures on the stomach fluids:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Acrid to open, bitter to downbear</td>
</tr>
<tr>
<td>• Bitter cold</td>
</tr>
<tr>
<td>• Sweet and cold</td>
</tr>
<tr>
<td>• Sour and sweet</td>
</tr>
<tr>
<td>• Sweet and neutral</td>
</tr>
</tbody>
</table>

In Pi Wèi Lún, Jin-Yuan Dynasty, Lǐ Dōng-Yuán said: “The Stomach is the root of humans.”

According to Sù Wèn (Simple Questions): “The spleen and stomach are the source of engenderment and transformation of qi and blood” and the “spleen and stomach is the root of latter heaven.”

**Summary**

- The stomach governs intake and decomposition of fluid and grain
- The spleen governs movement and transformation of fluid and grain
- Through the combined action of the spleen and stomach, fluid and grain becomes essence
- Qi and blood are engendered and transformed and can then nourish the entire body

M, a 30 year-old pregnant woman arrives for treatment of morning sickness. She is about 3 weeks pregnant and is having a good deal of difficulty with nausea, vomiting, and fatigue. She vomits often right after attempting to eat some food. On occasion, the vomitus contains clear mucus. She has been very fatigued for the past 2 weeks and is feeling worried. She is worried about such things as what kind of a mother she will be, how she and her partner will make ends meet, and how they will pay for prenatal care. This makes her slightly irritable and depressed. She looks visibly fatigued and has a pale facial complexion. Her partner is worried about the fact she is unable to eat anything and points out that M, an already petite woman, has lost 6 pounds in the past few weeks. Her tongue is pale and enlarged with teeth marks and her pulse is moderate (Huān Mài), but weak in force.

1) Which pattern of nausea during pregnancy is presenting in this case?
   a) Liver and stomach disharmony
   b) Qi and yīn vacuity
   c) Spleen and stomach vacuity
   d) None of the above

2) What is the representative formula for this case?
   a) Shēng Mài Sān (Generate the pulse Powder)
   b) Xiǎo Bān Xià Jiǎ Fú Lǐng Tāng (Minor Pinellia Poria Decoction)
   c) Sū Yè Huáng Lián Tāng (Perilla and Coptis Decoction)
   d) Either a or b

3) What are the stomach pathomechanisms that are unique to nausea during pregnancy? How is the penetrating vessel (chōng mài) involved in this disease?
Etiology and Pathomechanisms of Nausea during Pregnancy

During Pregnancy there is usually a lack of menstruation, so a relative repletion of qi develops within the penetrating vessel. This relative repletion of qi within the penetrating vessel enhances its physiological tendency to rush upward. Since the penetrating vessel communicates with the stomach channel, as it rushes upward, it causes the stomach qi to counterflow upward leading to nausea and vomiting. This is more likely to occur if stomach qi is vacuous, as it often is during pregnancy. This is because in order to grow and develop a fetus in the uterus, the spleen and stomach are called upon to work order at their contributions to qi and blood production.

Disease Patterns of the Stomach

1. Stomach Vacuity Cold
2. Stomach Repletion Cold
3. Food Stagnation in the Stomach Duct
4. Stomach Yin Vacuity
5. Stomach Heat
6. Stomach Qi Ascending Counterflow
7. Liver-Stomach Disharmony
Small Intestine Physiology and Disease Patterns

The Small Intestine Governs Reception and the Transformation of Things

According to Sù Wén (Simple Questions): “The small intestine holds the office of reception, whence the transformation of things emanates.”

The stomach governs intake of fluid and grain which is then received by the small intestine. The “transformation of things” refers to its digestion of fluid and grain. However, the small intestine does not perform this function on its own. It depends on the functions of the liver, spleen, stomach, and GB.

Discussion and Review: What do each of these viscera and bowels contribute to the process of digestion according to Chinese medical physiology?

This is one aspect of splenic movement and transformation. In other words, small intestinal function is a manifestation of splenic movement and transformation. There is no small intestinal reception and transformation function without splenic function. This aspect of small intestinal function is in fact treated through the spleen.

Small Intestinal Reception and Transformation Depends on

- Stomach governing intake and decomposition
- Stomach downbearing the fluid and grain
- Coursing and discharge of the liver and gallbladder
- Gallbladder juice discharge into the small intestine

Through this gradual process of digestion, the food gruel (shí méi) can be received and transformed

- The nourishing substances can be separated from the dregs and absorbed
- The waste matter is then sent to the large intestine and the bladder for excretion

The Small Intestine Governs the Separation of the Clear and the Turbid

The Lèi Jīng (17th c., Zhāng Jing-Yuè) states: “The small intestine is located below the stomach. It receives fluid and grain from the stomach and separates the clear and the turbid; as a result, fluid percolates [downward] and exits from the front and [solid] waste exits from the back. Spleen qi transforms and upbears [and the] small intestine transforms and downbears. So, [the small intestine is called the place] whence the transformation of things emanates.”

This refers to the absorptive function of the small intestine
The clear is the finest essence of fluid and grain
The turbid is the waste or dregs left over after the finest essence of fluid and grain has been absorbed

Discussion: What does it mean to separate the clear and the turbid?

Separating the Clear and the Turbid

- Absorbing the finest essence of fluid and grain
- Conducting the dregs downward to the large intestine for elimination through stool and urine
The “separation of the clear and the turbid” and the “transformation of things” are manifestations of splenic movement and transformation and of the free downbearing of stomach qi.

- The spleen conveys the finest essence that will eventually reach the entire body
- The stomach conducts the waste downward to the large intestine
- If impaired, this aspect of the small intestine is inseparable from loss of splenic movement and transformation and this impairment is treated by fortifying the spleen
- This function is also very important in the production and excretion of urine

The Small Intestine Governs Humours

Zhu Bing Yuan Hou Lun (On the Origin and Symptoms of Disease) states: “The bladder and the kidney stand in exterior-interior relationship; together they govern water. When water enters the small intestine, it flows downward to the bladder, travels to the [front] Yin, and becomes urine.”

Zhong Guo Yi Xue Da Ci Dian (Great Dictionary of Chinese Medicine) states: “The small intestine is narrower and longer than the large intestine; it connects with the stomach above, joins with the large intestine below, and is located in the middle of the abdomen. The stomach takes in food and conducts it all to the small intestine. The small intestine separates the filth and the dregs and sends it to the large intestine. It sends fluid and humor to the bladder; this is why it is called the bowel of reception.”

When this function is normal, the stools are formed and the urine is normal

- If the small intestine absorbs too much, there will be excessive urine and dry and bound stool
- If the small intestine doesn’t absorb enough fluid, there will be scant urine and sloppy stool

There is also a theory which states: The small intestine governs urine

Discussion: There is a treatment method called disinhibiting the urine to firm up the stool. What are some medicinals that meet this treatment principle?

Small Intestine Patterns

1. Small Intestinal Repletion Heat
2. Small Intestinal Vacuity Cold
3. Small Intestinal Qi Pain
Large Intestine Physiology and Disease Patterns

The Large Intestine Conducts and Conveys Out Waste

The Sù Wèn (Simple Questions) states: “The large intestine holds the office of conveyance, whence mutation emanates.”

- The small intestine sends the dregs from fluid and grain to the large intestine
- The large intestine conveys the waste to the anus and it is expelled from the body

“Mutation” here means transforming the dregs into stool. In the process, the large intestine must absorb fluid from the dregs. This is why the large intestine is said to “govern liquid.” Impairment of this aspect of large intestinal function may result in bound stool or diarrhea.

<table>
<thead>
<tr>
<th>Digestion and elimination requires a coordinated effort between several viscera and bowels</th>
</tr>
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<tbody>
<tr>
<td>Stomach- intake and decomposition, free downbearing</td>
</tr>
<tr>
<td>Spleen- movement and transformation, absorption of the finest essence</td>
</tr>
<tr>
<td>Small intestine- separation of the clear and the turbid, reception</td>
</tr>
<tr>
<td>Large intestine- conducting and conveying out the waste</td>
</tr>
<tr>
<td>Lung- diffusion, regulation, and depurative downbearing</td>
</tr>
</tbody>
</table>

When lung qi downbears, the large intestine can conduct and convey out waste
- When the lung qi disperses and spreads fluid and humor, the large intestine is moistened and enriched

Depends on free downbearing of stomach qi
- If lung and stomach qi vacuity, there will be no propulsive power to conduct out the waste
- If there is lung and stomach counterflow, conduction and conveyance may become sluggish

Large Intestinal Disease Patterns
1. Large Intestinal Vacuity Cold
2. Large Intestinal Humor Depletion
3. Large Intestinal Damp-Heat
4. Large Intestinal Heat Bind
5. Large Intestinal Cold Bind
Bladder Physiology and Disease Patterns

Location and Structure

The bladder, a sac-like organ, is located in the lesser abdomen. At its upper end, it connects with the kidney and at its lower end, it connects with the urinary meatus. It expands and contracts in response to its degree of fullness.

The Nei Jing (Inner Canon) has very little to say about this aspect of the bladder, though the Nang Jing (Classic of Difficult Issues), 42nd difficulty, states: “[The] bladder weighs nine liǎng [and] two zhū and is nine cùn long [and nine cùn] wide. [It can hold] nine shēng and nine gě of urine.”

General Facts about the Bladder

The bladder and kidney are joined through their network vessels and constitute an interior-exterior pair. The physiological function of the bladder is to store and excrete urine.

The Ling Shū (Magic Axis) states: “[The] kidney unites with [the] bladder.”

The main explanations of the meaning of páng guāng, which is the original name for the bladder, are listed below:

1. The name corresponds to the modern conception and function of the dissectible urinary bladder

2. According to Ling Shū, Wǔ Wèi Lùn: “[The] wall of the bladder is thin and weak, [when it] is exposed to sourness, it contracts and [becomes] bound, restricted, and inhibited; [as a result, there] is no movement within the waterways dribbling [urine] results.”

3. According to Nang Jing, Difficulty 42: “[The] bladder weighs nine liǎng [and] two zhū and is nine cùn long [and nine cùn] wide. [It may] fill with nine shēng and nine gě of urine.”

4. Later names for the bladder, such as “Bladder sac” (bāo náng,), Bladder (pāo,), and “Urinary Bladder” (niào bāo) all reflect this perception of the bladder in which the name and form of the bladder have a definite relationship.

5. The name also refers to the bladder as the “residence of fluids.” The earliest mentions of the bladder as the storage place of fluids appear below:

   a. Sù Wèn, Ling Lán Mi Diǎn Lùn: “The bladder holds the office of the river island; it stores fluids. Qi transformation enables [the bladder] to outthrust [fluid].”

   b. Ling Shū, Bēn Shū: “[The] kidney unites with the bladder. The bladder stores fluids.”

Sù Wèn, Ling Lán Mi Diǎn Lùn discusses certain functional qualities of the viscera and bowels which cannot be directly observed from looking at the structure of the organs themselves:

- The spirit light emanates from the heart
- Governance and control emanate from the lung
- Intelligence and consideration emanate from the liver
- Talent and cleverness emanate from the heart
- Decisiveness emanate from the gallbladder
- The waterways emanate from the triple burner
- Fluids are stored in the bladder
The Bladder Stores Fluids

There are two aspects to the “fluids” that the bladder stores

• Urine
• Bladder fluid storage as it relates to the normal fluids of the body

The Bladder Fluids as Urine

First mentioned in Sū Wèn, Ling Lán Mi Dián Lùn, Wang Bin Version: “Below, there is emptiness within which fluids are stored. If qi from the sea of qi reaches [the bladder], transformation occurs and urine flows; if qi from the sea of qi does not reach [it], blockage, pain, and inhibition [occurs].”

Sū Wèn, Xuān Ming Wǔ Qì Lùn states: “If the bladder is inhibited, dribbling [urine] results. If the bladder is unrestrained, urinary incontinence results.”

Zhū Bing Yuán Hóu Lùn, Xiāo Biàn Bing Zhū Hòu further clarifies: “The bladder is the bowel of fluids. If there is vacuity and cold and yáng qi debility and weakness, it cannot restrain water; this leads to urinary incontinence.”

After passing through the kidney qi transformation, urine is formed. It then flows downward to and is stored in the bladder. The bladder is responsible for excreting it.

Bladder Fluid Storage as it Relates to the Normal Fluids of the Body

The Nèi Jīng contains numerous references to fluids as a precious substance of the human body. Collectively, qi, blood, essence, channels, fluid, and humor constitute the “six qi.”

According to Sū Wèn, Liù Jié Zàng Xiāng Lùn: “The five flavors enter the mouth [and] are stored in the intestines and stomach. Each flavor corresponds to a viscus and nourishes the five qi. [When] qi is harmonious, there is life, fluid and humor are both formed, and spirit spontaneously arises.”

According to Líng Shū, Jué Qì: “[When the] interstices effuse and drain, light sweating is outthrust; [this substance] is called fluid [Jīn]. [When] grain enters, qi is abundant [and an] emollient and lubricant flows into the bones [which] joins them [and enables them to] stretch and bend. It flows [into] and lubricates, supplements, and boosts the brain and marrow, and lubricates the skin; [this substance] is called humor [Yè].”

To understand the relationship between the bladder and the formation and dispersion of fluids, see Sū Wèn, Jīng Mái Bié Lùn: “Drink enters the stomach, [where] essential qi floats and brims over. [It is] sent upward to the spleen and spleen qi disperses [its] essence. [It] is moved upward to the lung [and through the lung’s] regulation of the waterways, is transported downward to the bladder. Water and essence is divided [into] four parts, travels in the five channels, and unites with the four seasons, the five viscera, and yīn and yáng. [This is] the normal state of affairs.”

This quote shows that fluids are managed in accordance with the current circumstances such as the season and the state of yīn and yáng in the viscera and bowels. The goal of the division of the water and essence into four parts is to supply the exterior and interior of the whole body with fluids and essence, that is, the skin and body hair, the viscera and bowels, and the channels.
Zhū Bing Yuán Hòu Lùn, Xiǎo Biàn Bing Zhū Hòu further clarifies: “The bladder corresponds to water [i.e. the water phase] and is ruled by winter. [Its] channel is the foot greater yáng channel and it is the bowel of the kidney. The five grains and the five flavors all come under the jurisdiction of the bladder, [where] qi transformation and separation [occur]; [fluids then] enter the blood vessels in order to become bone and marrow. Surplus fluids are eliminated [by] entering the bladder and becoming urine.”

To shed some further light on the statement “qi transformation enables [the body] to outthrust [it],” see Xuè Zhèng Lùn, Zàng Fǔ Bing Jī Lùn: Through what is called qi transformation, [the bladder is] able to outthrust. [This is] bladder qi transporting fluid upward and moving [it and] reaching [it] outward; it is outthrust as sweat and resembles rain. Since the bladder is also called greater yáng and is known as the yáng within water; it reaches outward in order to become defensive qi. It is the greatest of the yáng. [When there is] external contraction, its yáng is damaged; heat effusion and aversion to cold [result].”

The statement above can be restated as follows:
• The bladder governs the storage of all fluids that are usable by the entire body
• Through the assistance of kidney qi, water and essence are divided into four parts; externally, it brings abundance to the skin, emolliates the [body] hair, and guards the exterior in the form of defensive qi. Internally, it irrigates the viscera and bowels, and the skeletal form as essence, blood, and fluids
• Any surplus becomes sweat at the exterior and is outthrust from the lower body as urine.

Clinical application: External contraction of evil into the bladder disrupting the bladder function of fluid storage

If there is an external contraction of evil invading the greater yáng bladder channel, the bladder channel qi becomes obstructed and the defensive yáng is encumbered. This leads to aversion to cold and heat effusion. Fluids become obstructed and are unable to drain outward to the exterior and are unable to be transported downward. This leads to lack of sweating and inhibited urination.

Treatment: Wǔ Líng Sǎn to transform bladder qi and move water. This causes both sweating and urination.

Bladder Qi Transformation

Qi transformation was originally an ancient Chinese philosophical concept referring to the qi transformation of yīn and yáng and how this engendered the ten thousand things. It was later applied in the realm of medicine to explain the life and activities of the human body and all its physiological changes consisting of the metabolism of essence, blood, and fluids and their mutual transformations. Bladder qi transformation refers to the role of the bladder in outthrusting urine and sweat

According to Xuè Zhèng Lùn, Zàng Fǔ Bing Jī Lùn: “The Inner Canon says [the bladder] holds the office of the river island, [that it] stores fluids [and that] qi transformation enables it to outthrust. This refers to outthrust of sweat, not urine. What is meant by ‘qi transformation enables it to outthrust’ is the bladder’s transportation of fluids reaching upward and outward and [its] outthrust [of fluids] as sweat, resembling rain.”

Body hair, skin, and interstices, are dependent on the bladder’s outthrust of fluids.

According to Líng Shū, Bēn Zàng: [The] interstices and the body hair are dependent on the bladder and the triple burner…the texture and the thickness of the skin reflects the thickness of the bladder and the triple burner [and the] coarseness or fineness of the skin reflects the fineness of the bladder and the triple burner.”
In light of the above quotes, the outthrust of sweat to the body hair, the skin, and the interstices cannot be separated from bladder and triple burner qi transformation

**Bladder Qi Transformation as it Relates to Other Viscera and Bowels**

Intimately connected with kidney qi transformation as the kidney and bladder are directly connected structurally and through their network vessels

Líng Shū, Běn Zàng states: “The kidney is united with the bladder”

Since the kidney’s steaming qi transformation transforms water into fluids, sweat, and urine, it is said to preside over fluid metabolism in the entire body. Bladder qi transformation is totally reliant on the kidney's steaming qi transformation

Bladder qi transformation is reliant on the triple burner for coordination and balanced function

According to Nán Jīng, 31st Difficulty: “[The] triple burner is the end and the beginning of qi [transformation].”

According to Nán Jīng, 38th Difficulty: “[The] triple burner governs [and] supports all qi”

According to Sū Wèn, Líng Lán Mi Diǎn Lùn: “The triple burner holds the office of the sluices; it manifests as the waterways”

This shows that the triple burner is the free passageway for the qi dynamic’s upbearing and downbearing, exit, and entry

It is the site in which qi transformation occurs and the waterways through which fluids freely flow. It maintains coursing and free flow of fluids through its waterways

Bladder qi transformation is dependent on the lung’s regulation of the waterways and on splenic movement and transformation

Xuè Zhèng Lùn explains: “Although urine is outthrust through the bladder, [this outthrust] is actually dependent on [the fact that the] lung is the upper source of water; [when] the upper source [is] clear, [the] lower source is free [and] clear. [The] spleen is the dike, when the dike is uninhibited, the waterways are uninhibited.”

This quote explains the influence of the lung and spleen on the excretion of urine.

**Bladder Disease Patterns**

1. Bladder damp-heat
2. Bladder vacuity cold
3. Bladder qi block
Triple Burner Physiology and Disease Patterns

The triple burner is one of the six bowels and includes the upper, middle, and lower burners

In the Classic of Difficult Issues, Nan Jing, 25th and 38th Difficulties, the idea of the triple burner “having a name, but no form,” appears
- This led to much debate and lack of clarity among later doctors and scholars
- The main point of debate was whether or not the triple burner had form

Nowadays, the concept of triple burner can be applied in various ways
- Triple burner as a bowel
- Triple burner in terms of location in the body
- Triple burner as a channel
- Triple burner as a means of diagnosis

General Facts About The Triple Burner
- Triple burner has an interior-exterior relationship with the pericardium
- Triple burner mainly transports original qi, fluid and grain, and fluids

“The Triple Burner Has a Name and Form” and “The Triple Burner Has a Name But No Form”

The 25th Difficulty of the Nan Jing states: “The heart governor and the triple burner [have an] interior-exterior [relationship]; [they] each have a name, [but] no form.”
- This line led to a lot of controversy among doctors and scholars

Concerning “The Triple Burner Has a Name and Form”

Earliest mention is in the Líng Shū, Lùn Yōng, Chapter 50: “[Within] a brave warrior…[the] triple burner flows laterally; [within] a timid warrior…[the] triple burner flows longitudinally.”

In Líng Shū, Běn Zāng, Chapter 47, it says: “[In one who has] thickly textured and thick skin, [the] triple burner and bladder [will also be] thick. [In one who has] roughly textured and thin skin, [the] triple burner and bladder [will also be] thin.”

Sū Wèn, Jīn Gǔi Zhēn Yán Lún, Chapter 4 states: “[The] six bowels, [namely, the] gallbladder, stomach, large intestine, small intestine, bladder, and triple burner, are all ascribed to yáng.”

Líng Shū, Běn Shū, Chapter 2, states: “The triple burner holds the office of the sluices; it manifests as the waterways.” It joins with the bladder [and] is the solitary bowel.”
Later generations of doctors understood the triple burner to be like other bowels in that it

• Has an interior-exterior relationship
• Definitely has a name and form
• It occupies space and a body cavity
• It has a fatty membrane, oily membrane, or oily network

Yú Tuán Zài, in the Ming Dynasty, in Yī Xué Zhèng Chuán: “Regarding [the] triple burner as [occupying] a body cavity, it is the commander contained within the stomach and intestines. [That which is] above the huang membrane within the chest is called the upper burner. [That which is] below the huang membrane but above the umbilicus is called the middle burner. [That which is] below the umbilicus is called the lower burner; collectively, they are called the triple burner.”

Zhāng Huáng Zài, in Tú Shū Biān, states: “The triple burner has a covering like that of the bladder; this enables it to store and connect [to other viscera and bowels]. If it did not have form, how could it store and connect [to other viscera and bowels]?"

“Below the right kidney there is a fatty membrane [that looks] like a large hand, directly opposite to the bladder. There are two white vessels that come out of it towards the spine and upward to connect with the brain. This means that what Daoist breathing adepts say about this connection to the spine has a double meaning; they were not aware that this fatty membrane [that looks] like a large hand is indeed the triple burner.”

Zhāng Jiè Bìn, in the Lèi Jīng (Classified Canon), Zāng Xiàng Lèi, postulated that the triple burner was a cavity inside the body that covered or embraced all the other organs within a large bowel. “Among all the twelve organs, only the triple burner is alone and large. [Since] it is not matched with any other organs, it is called the solitary bowel. “It is a covering on the outside of all the other viscera and bowels; [it is] a cavity inside the body [and] covers all the other organs. [It is like a] a large bowel.”

In the Qing Dynasty, Táng Zōng Hǎi, in Xuè Zhèng Lùn, Zāng Fǔ Bìng Jī Lùn stated: “[The] triple burner, [which in] ancient times was written as “膲,” that is, the upper, lower, inside, and outside [parts] of the human body is associated with [the] oily membrane.”

In modern times, this idea manifests in theories about the triple burner and its relationship to the
• Lymphatic System
• Fat Network
• Nervous System
• Pancreas
• Spinal Nerves
• Sympathetic Nervous System

Concerning the Triple Burner Having a Name and No Form

This idea originated in the Nàn Jīng. The 25th Difficulty states: “The heart governor and the triple burner [constitute] an interior-exterior pair. Both have a name [but] no form.”

The 38th Difficulty states: “[The triple burner] governs all the qi; it has a name [but] no form. Its channel is ascribed to hand lesser yáng. It is an exterior bowel.”
Later, in the Zhōng Zāng Jīng (Central Treasury Canon), it states: “The triple burner, the three origins of humans’ qi…has a name, but no form.”

In the Táng Dynasty, Sūn Sī Miǎo, in Qián Jīn Yāo Fāng (Thousand Gold Pieces Prescriptions) states: “[The] triple burner [has] one name, [but] three gates. The upper burner is called “three managers of return and discharge”; the middle burner is called “sudden turmoil,” and the lower burner is called “traveling chewed-up food.” [In] combination, they are one. [The triple burner] has a name [but] lacks form. [It] governs the five viscera and the six bowels, and [makes] contact with the divine dào. [It] links the whole body together [as one] system. It can be spoken of, but it cannot be seen.”

In the Yuán Dynasty, in Nán Jīng Bēn Yì, Huá Shǒu, states: Surrounding the triple burner’s exterior, there is a channel, but [the triple burner itself] has no interior form

In the Míng Dynasty, in Yī Xué Rū Mén, Li 3 Yán states: “[The] three burners are like a mist, foam, and a sluice. Although [the triple burner] has a name, it has no form. It governs qi, eating, and excretion [of stool and urine]. Although it has no form, it [does] perform [various] functions.”

In recent times, Zhāng Shān Lèi, in Nán Jīng Hui Zhù Lóng Zhèng states: “The triple burner has a name, but no form.”

Both of these theories are reasonable and each has their advantage:
• That the triple burner has a name and form
• That the triple burner has a name but no form
This is a thousand year-old debate to which there has been no final solution. Each idea has its own biases and advantages

Zhāng Zhi Cōng, in Lù Shān Táng Lèi Biàn. said: “[The opinions that the triple burner] has form or does not have form are both biased [in their own way]; therefore, [one cannot] accept [all that is] heard [on the topic]!”

In that Táng Dynasty, Liú Yǔ-Xī said: “[In] Ancient [times], it was said that [the triple burner] had no form, perhaps [because] it has a changeable form.”

Some people have believed that the triple burner “does not have its own autonomous individual form and body as the other five viscera do; therefore, one cannot be sure of its appearance.”

In the Qīng Dynasty, Yù Chāng, in Yī Mén Fǎ Lù said: “Those who say that the [triple burner] has form does not mean that it exists on its own as other viscera and bowels do, but it does indicate that it has a shape.”

In modern times, some people have put forward the following argument
• The idea that “the triple burner has no form” is not understood by most people to mean that it lacks physical shape and form.
• The triple burner is the free passageway for original qi, water and grain, and fluids. The performance of these functions definitely brings some fundamental structures into play (i.e., requires some physical structure), but it lacks its own individual structure. It performs its function through the coordinated efforts of the other organs.
• This is what is meant by “changeable,” “indescribable appearance,” and “appears as if it has form but has no form.”
The Location of the Triple Burner

The triple burner is not a stand alone organ, but is described based on the specialized functions of the organs in individual regions of the body (upper, middle, and lower).

There are different views about how to divide the body into these different regions.

In the Inner Canon, (Líng Shū 18, Yíng Wèi Shēng Hui), there is a rough outline of the three burners:

“The upper burner issues from the upper opening of the stomach, ascends up the pharynx, connects with the diaphragm, and then spreads within the chest”

“The middle burner also issues from within the stomach, and proceeds upward behind the upper burner.”

“The lower burner issues from within the small intestine; it is the place from which water pours into the bladder and is percolated [downward].”

Essentially, the original texts state that the upper burner is within the chest, the middle burner is in the stomach area, and the lower burner is below the stomach area.

The Nán Jīng, 31st Difficulty, states:

“The upper burner is [located in the area from] below the heart [to] above the diaphragm.”

“The middle burner is located within the stomach venter; not above and not below.”

“The lower burner is right at the upper opening of the bladder.”

The diaphragm is the main divider between the upper and middle burners, and the lower mouth of the stomach is the divider between the middle and lower burners. In summary, the upper burner is located above the diaphragm and within the chest, the middle burner is located from below the diaphragm to the upper abdomen and the umbilicus, and the lower burner is located in the lower abdomen below the umbilicus.

There have been other descriptions of the division of the three burners.

For example, Dōng Yī Bào Jiàn, (The Precious Mirror of Eastern Medicine) states: “From the head to the heart is the upper burner, from the heart to the navel is the middle burner, and from the umbilicus to the feet is the lower burner.”

Recently, this division has appeared in some teaching materials and journals. However, according to the specific concept of the triple burner presented in Líng Shū, Chapter 35 (Zhang Lun), the triple burner pertains to “the viscera and bowels within the chest, flanks, and abdomen”; therefore, including the head and the extremities does not seem appropriate.

In terms of which viscera and bowels are ascribed to which burner, there is general agreement on all, except the liver:

- The upper burner: heart and lung
- The middle burner: spleen, stomach, liver, gallbladder
- The lower burner: kidney, bladder, small intestine, large intestine
**Some disagreements about the location of the liver:**

1. There are some passages within the Inner Canon that place the liver in the lower burner

2. Wang Shu He, in the Mài Jīng (Pulse Classic), in the Jin Dynasty, placed the liver in the middle burner

3. Sun Si Miao, in Qiān Jīn Yāo Fāng (Thousand Gold Pieces Prescriptions), in the Táng Dynasty, said the liver was in the lower burner

4. Wú Jū Tōng, in Wēn Bìng Tiáo Biàn (Systemized Identification of Warm Diseases, in the Qīng Dynasty, also placed the liver in the lower burner. However, it seems that the warm disease concept that the liver lies in the lower burner applied to diagnosis and treatment; it did not mean that the liver was physically located below the umbilicus

**General Functions of the Triple Burner**

**Frees and Moves Original Qi (Yuán Qì)**

According to Nán Jīng, 31st Difficulty: “The triple burner is the path of fluid and grain, [and is the] place from which qì begins and [at which it] ends.”

According to Nán Jīng, 38th Difficulty: “So, there are six bowels [and the sixth] is called the triple burner; it is the special courier of original qi; it governs and maintains all the various [forms of] qi.”

According to Nán Jīng, 66th Difficulty: The triple burner, [which is] the special courier of original qì, governs the free movement of all three qì and passes through the five viscera and six bowels.”

**These passages from Nán Jīng clearly demonstrate that the triple burner is**

- The path of upbearing, downbearing, exit, and entry of original qì
- The conduit through which original qì reaches all the different parts of the body

**Original qì is the most basic form of qì within the body**

- It is the active source of all life activities
- It is rooted in the kidney and passes through the triple burner into the channels. Then it spreads to the five viscera and six bowels
- The triple burner is called the “special courier of the original qi.”

Zhōng Zàng Jīng (Central Treasury Canon) very concretely describes the triple burner’s physiological function of freeing and moving original qì in the following passage: “The triple burner, the three origins of qì in the human body, is called the bowel [that contains] clear; it commands the qì of the five viscera and the six bowels, the nutritive [qì] and defensive [qì], the channels and network vessels, the interior and the exterior, the left and the right, and above and below. If the triple burner is free flowing, then the interior and the exterior, the left and the right, and above and below will all be free flowing. It [brings] irrigation to the entire body, it harmonizes the interior and regulates the exterior, it nurtures the left and nourishes the right, it abducts above and diffuses below; there is nothing greater than [the triple burner].”

Since the triple burner is the conduit through original qì flows throughout the body, and is the source of all upbearing, downbearing, downbearing, exit, and entry, it is also the place in which qì transformation occurs
This is why it is said that the triple burner “governs the various [forms of] qi,” and that it is the general manager of the qi dynamic and of all qi transformation in the human body. If there is qi vacuity and weakness, then there will be general qi vacuity manifestations in the whole body.

**Moves Water and Grain**

In Sù Wèn, chapter 4, the triple burner is called one of the six bowels.

In Sù Wèn, chapter 11, the triple burner is called the conveying and transforming bowel.

It conveys and transforms fluid and grain.

In Sù Wèn, chapter 9, it says: “The triple burner…is the basic warehouse and granary; it is the location of the nutritive [qi], and is called an organ. It is the one which transforms the dregs and conveys [the five] flavors through entry and exit.”

These passages point out that the triple burner transforms the finest essence of fluid and grain into nutritive qi, and conveys out the dregs.

The Nán Jīng, 31st Difficulty clearly alludes to this function of the triple burner: “The triple burner, the pathway of fluid and grain, is the beginning and end of qi. The upper burner is located below the heart and above the diaphragm, and [ends at] the upper mouth of the stomach. It governs intake and does not discharge….The middle burner is located in the stomach middle venter, not above and not below; it governs the decomposition of fluid and grain….The lower burner is located right at the upper opening of the bladder; it governs the separation of clear and turbid. It [also] governs discharge, but not intake.”

So, it can be seen from these passages, that when we say the triple burner moves fluid and grain, we are referring to the unique, collective, and coordinated actions of each of the three burners:

- The upper burner governs intake, the middle burner governs decomposition, and the lower burner governs the separation of the clear and the turbid.
- The movement of fluid and grain refers to the digestive process, in which nutrients are absorbed and the waste is expelled from the body.

**The Triple Burner Moves Fluid and Humour**

The triple burner is the main pathway for fluid and humor in the human body. The passages below help explain that it courses and frees the waterways, and moves fluid and humor.

Sù Wèn, Chapter 8 states: “The triple burner holds the office of the sluices; it manifests as the waterways.”

Líng Shū, Chapter 2 states: “The triple burner is the bowel of the sluices, and it manifests as the waterways; it is ascribed to the bladder, and is the solitary bowel.”

The metabolism of fluid and humour in the human body is a complex physiological process and involves the coordination of the viscera and bowel system (ST, SP, LU, KI, Intestines, and UB). In order to function normally, they all require:

- Free passage through the triple burner
- Upbearing, downbearing, downbearing, exit, and entry of the triple burner
Sū Wèn, Chapter 21 states: “Fluid enters the stomach, where the essential qi floats and spills over and is transported upward to the spleen. The spleen qi disperses the essence upward to the lung. The lung, [by] regulating the waterways, transports it downward to the bladder, disperses water and essence to the four [limbs] and the five channels.”

If the triple burner function of moving fluid and humor is not free and uninhibited then its obstruction will result in an inability to spread and excrete water. This can lead to:

- Water swelling
- Phlegm-rheum

Lèi Jīng (Classified Canon) states:

- “If the upper burner is disordered, then water will flood the upper source.”
- “If the middle burner is disordered, then water will be retained in the middle venter.”
- “If the lower burner is disordered, then water will confuse the two excretions.” (i.e. stool and urine)

**The Specific Functions of Each Burner**

Besides the general functions of freeing and moving Original qi, moving fluid and grain, and moving fluid and grain, each burner has its own specific role to play.

**The Upper Burner is Like a Mist**

Since the upper burner is located in the chest, the two viscera that correspond to the upper burner are the heart and lung, and since the Lung governs qi and the heart governs blood, the main function of the upper burner is to disperse and propel the finest essence of fluid and grain (in the form of qi and blood) throughout the whole body.

Líng Shū, Chapter 30, states: “The upper burner opens and effuses, and diffuses the five grains and tastes; this permeates the skin, fills the body, and makes the body hair lustrous. It is as if it is irrigating [all of these] with mist.”

Líng Shū, Chapter 18, states: “The upper burner is like a mist.”

This phrase “like a mist” refers to the heart and lung spreading and dispersing qi and blood, in order to irrigate, warm, and nourish the entire body

**The Middle Burner is Like Foam**

The middle burner includes the spleen, stomach, liver, and gallbladder

- The stomach governs intake, the spleen governs movement and transformation, and the liver and gallbladder govern coursing and discharge as well as the secretion and discharge of bile in order to help digestion
- The middle burner is essentially involved with digesting, absorbing, and distributing the finest essence of fluid and grain, and with engendering and transforming qi and blood

Líng Shu, Chapter 18 states: “The middle burner…is the place where qi is received, where waste is secreted from, and where fluid and humour is steamed. It absorbs the finest [of fluid and grain], which then flows upward to the lung channel. Only then can it be transformed into blood and given to the rest of the body.”
The statement “the middle burner is like foam” has the meaning of “soaking,” “steeping,” and “immersing.” This describes the decomposing, and moving and transforming functions of the middle burner.

Nán Jīng, Difficulty 31 states: “The middle burner is located in the stomach and middle venter, not above and not below; it governs decomposition of fluid and grain”

**The Lower Burner is Like a Sluice**
The middle burner is mainly located in the lower abdomen and includes the kidney, bladder, and the intestines.

Nán Jīng, Difficulty 31 states: The lower burner….governs the separation of clear and turbid. It governs exit and not intake and serves as a conveyer [of waste].”

This quote shows that the lower burner mainly serves as a conduit through which waste passes in the form of urine and stool

There are at least three ways to understand “separation of the clear and the turbid”

1. **Function of the Bladder and Kidney in retaining useful fluid and expelling waste fluid**
   By virtue of the qi transformation of the bladder and kidney, the clear fluid (useful fluid) is retained in the body and the turbid fluid (waste fluid) is expelled as urine

2. **Function of the Small Intestine in absorbing the finest essence of fluid and grain and sending the waste to the Large Intestine**
   When water and grain pass through the small intestine action of “transforming things,” it absorbs the clear (useful) and sends the turbid (waste) to the large intestine to be conducted and conveyed out

3. “Clear” indicating urine and “turbid” indicating stool