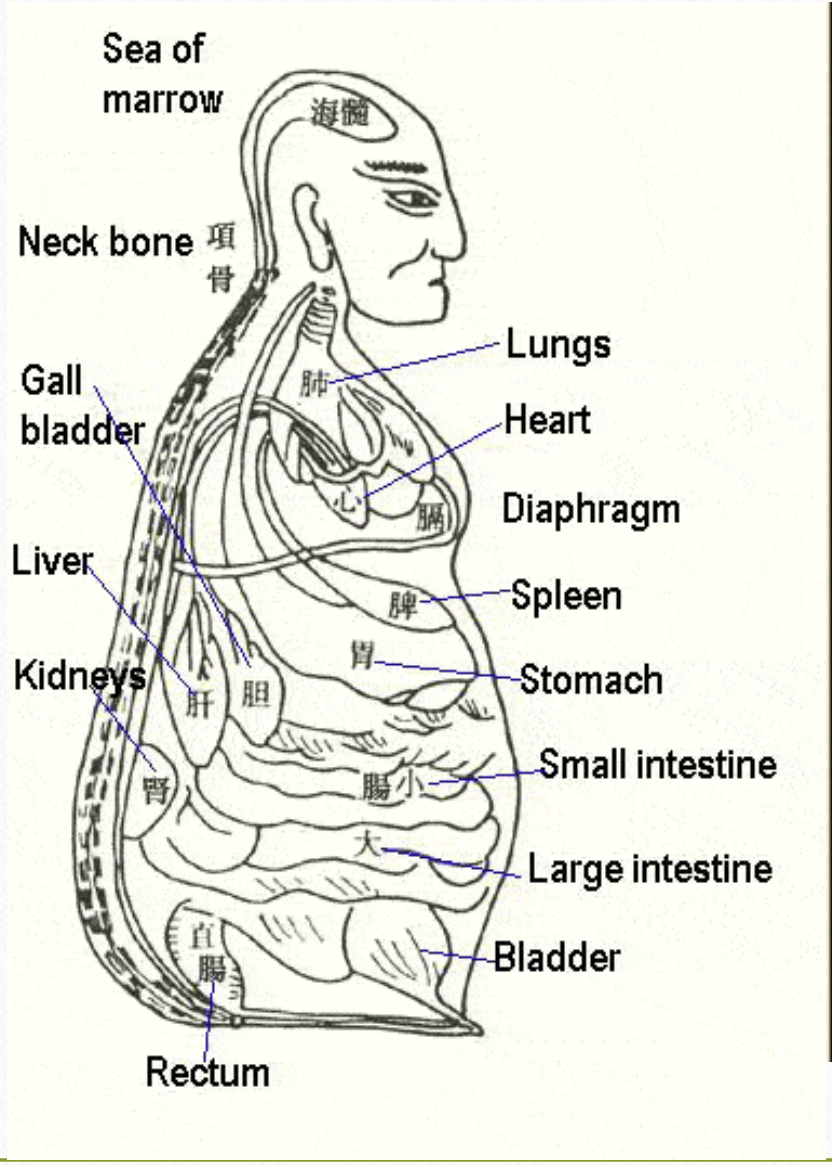
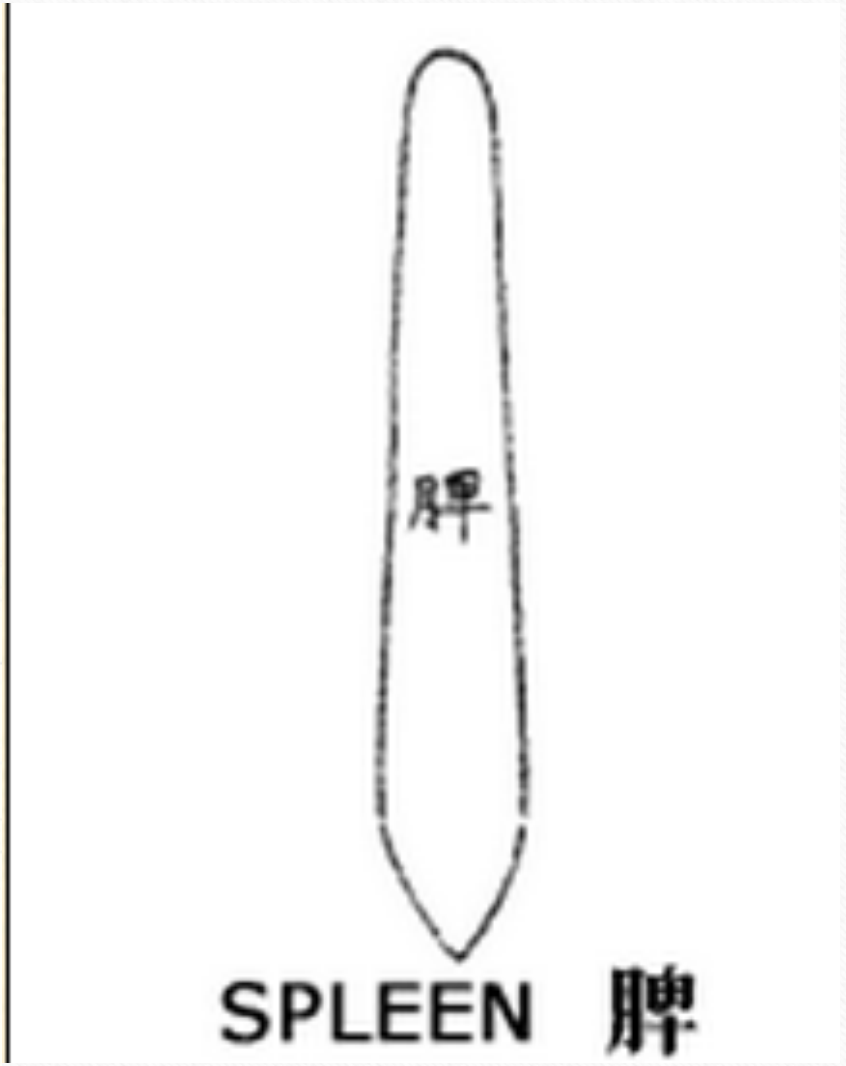
脾 Spleen

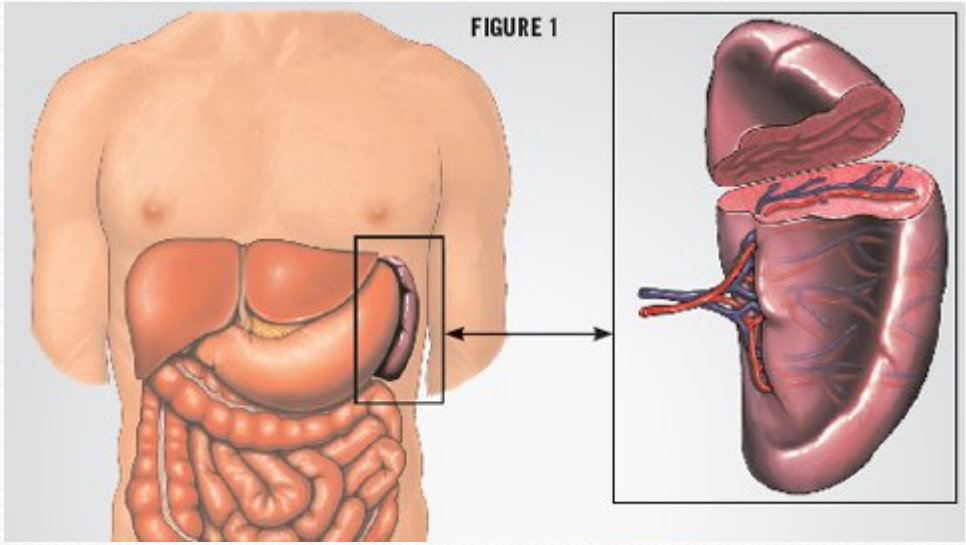




脾重二斤三兩，
扁廣三寸，長五寸，
有散膏半斤，
主裹血，溫五藏，
主藏意。

Western Spleen

- In western physiology, the spleen is a large, vascular, lymphatic organ. It acts as a reservoir and filters the blood. It also plays a role in making blood early on in life. In TCM, the spleen does not perform these functions. It assists with digestion, blood coagulation and fluid metabolism in the body.

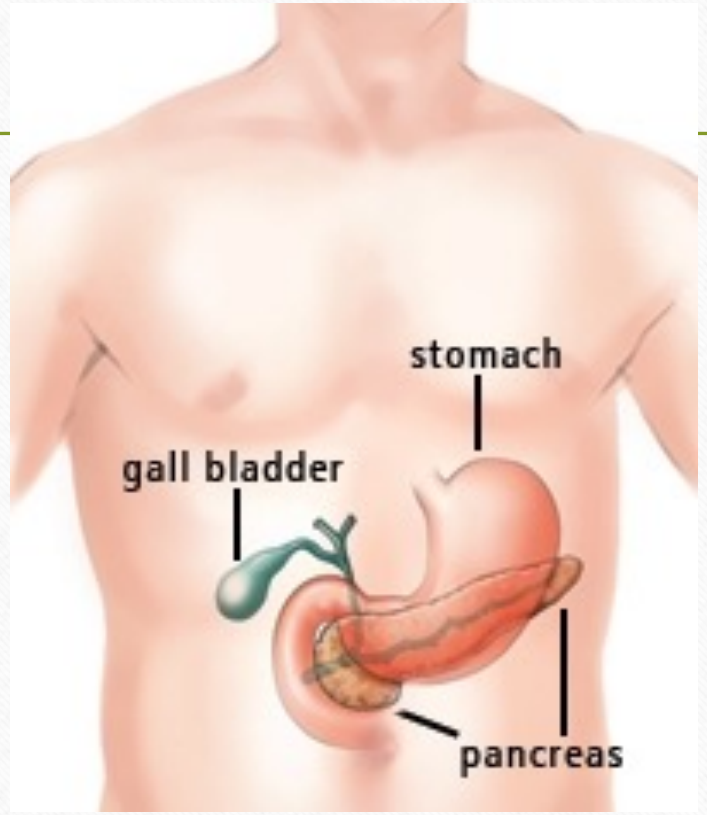


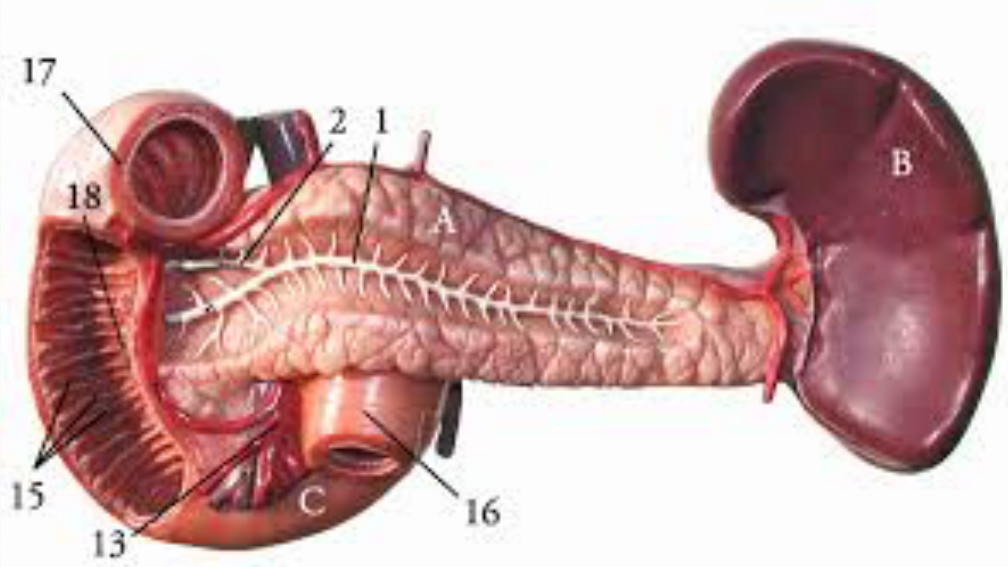
spleen

Pancreas

- The pancreas is an organ located in the abdomen. It plays an essential role in converting the food we eat into fuel for the body's cells. The pancreas has two main functions: an exocrine function that helps in digestion and an endocrine function that regulates blood sugar.
- Spleen-pancreas

pancreas function

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Spleen

- Governs transformation and transportation
- Controls the Blood
- Controls the muscles and the four limbs
- Opens into the mouth and manifests in the lips
- Controls the raising of Qi, the "raising of the pure"
- The Spleen houses thought

- Earth
- Yellow
- Long Summer or Indian Summer
- Thought or pensiveness

脾居中焦。主要生理功能是主運化，主升清和主統血，為後天之本，氣血生化之源。在體合肌肉、主四肢；開竅于口，其華在唇；在志為思；在液為涎；應于長夏之氣。脾的生理特點是，脾氣主升，喜燥惡濕，。

Spleen

- Spleen is located in the abdomen, governs digestion and absorption. As the source of qi, blood and body fluid, the spleen plays a vital role in maintaining life activities. Such a function of the spleen only comes into play after birth.
- That is why it is said that “spleen is the acquired base of life” and “the source of qi, blood and body fluid”

Governs Transformation and Transportation

主運化，主升清 (水穀精微)

Transformation主運化 (水穀精微)

- Spleen is central Organ in production of Qi. Stomach "rots and ripens" ingested food and drink, and prepares the way for the Spleen which separates and extracts the GU Qi (food Qi) and refined essence from the chyme.
- Food Qi goes upward to the Lungs in the Upper Burner. Food Qi combines with air to form Zong Qi and goes to the Heart to form Blood. Flavors are distributed to the various organs, sweet to the Spleen, salty to Kidney, bitter to Heart, sour to Liver, pungent to Lung.
- 《素問·經脈別論》：“飲入于胃，遊溢精氣，上輸於脾，脾氣散精，上歸於肺。

Transportation of Gu Qi (Food Qi) 主運化 (水穀精微)

- The stomach is called the sea of grain and water(水穀之海); everything is assimilated here. The spleen is in charge of transportation; everything is moved by its workings. Absorbing and moving: these are the essential actions which define the spleen/stomach network as the main source of the life-sustaining postnatal energy.
- 海者，彙聚之意。

Transportation
主升清 (水穀精微)

- The stomach is called the sea of grain and water. Once food enters the stomach, its essential energy is moved upwards to infuse first the spleen and then the lung. In this fashion, the command of spring and summer is being carried out, and the entire body receives nourishment. This is due to the influence of clear heavenly qi.
- Spleen also separates usable from unusable fluids ingested. Pure "clear" part goes upwards to the Lungs for distribution to the skin. "Turbid" part goes to Intestines for further separation.

A Treatise on the Spleen and Stomach (Pi Wei Lun) 脾胃論

- Once the ascending motion has reached its climax, this current shifts directions and flows downwards toward the bladder. In this fashion, the command of autumn and winter is being carried out, and the waste becomes processed and the flavors will manifest. This is due to the influence of turbid earth qi.

Pathology

- In health, transforming and transporting function of Qi ensures good digestion, good appetite, normal absorption, regular bowel movements. Impaired function, poor appetite, bad digestion, abdominal distention, loose stools.
- When transformation/transportation of fluids impaired, fluids can accumulate to form Dampness and then Phlegm.
- "The Spleen likes Dryness and hates Dampness". Its transformation and transportation function can be impaired by Damp e.g. Damp-forming foods like salads, dairy, etc.
- 《素問·至真要大論》：“諸濕腫滿，皆屬於脾。”

Cont…

The main clinical manifestations of unhealthy Spleen-Qi can be divided into four groups

- Anorexia, Abdominal distension, Abdominal pain, and loose stool if the digesting and absorbing functions are weak;
- Phlegm, rheum and edema if dampness and water are retained due to disrubance of water metabolism;
- Dizziness and spiritual lassitude if the spleen fails to elevate the lucid;
- Visceroptosis (prolapse), prolonged diarrhea and proctoptosis if spleen-Qi sinks

anorexia

From Li Dongyuan, **A Treatise on the Spleen and Stomach (*Piwei Lun*)**

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If we then regulate our daily lives by adjusting them to the prevailing energy of the seasons, if we avoid exposure to extreme cold and extreme heat, if we eat and drink in regular intervals, if we protect our shen by avoiding states of extreme anger or extreme ecstasy, and if we strive for balance by living in moderation during all four seasons, there will be peace. Otherwise, the spleen and stomach will suffer harm, and our true qi will leak downward in trickles or currents [i.e., diarrhea], with the possibility of failing to rise again. This, then, would be like having autumn and winter but no spring and summer, and a situation would arise in which the functions of birth and growth are muffled by the qi of death and extinction. Naturally, all kinds of diseases would arise from such a situation. At the same time it is without question that if there was only rising and no descending momentum within the body there would be disease.

Spleen Controls Blood

脾主統血

Keeps Blood in Vessels

- Spleen commands blood with its fixating function.
- If Spleen Qi healthy, Blood circulates normally (also Liver) and stays in vessels.
- Deficient Spleen Qi or Deficient Spleen Yang, Blood may spill from vessels this will result in hemorrhages, subcutaneous bleeding, etc. (petechiae, purpura)
- Also, especially lower body hemorrhage, e.g. metrorrhagia can be caused by Spleen Qi Deficiency.

Important role in Blood formation.

- (Food Qi extracted by Spleen sent to Lung and to Heart to form Blood with assistance of Yuan Qi from Kidney).
- To tonify Blood, always tonify Spleen.

Pathology

- Deficiency of spleen qi and spleen yang will impair the function of the spleen to command blood, leading to hematochezia, hematuria, sudden profuse uterine bleeding and subcutaneous purpura

Controls the Muscles and Four Limbs
在體合肌肉、主四肢

- Food Qi eventually goes to nourish all tissues in the body, transported throughout body by Spleen. Particularly directed to the muscles.
- The muscles and limbs depend on the nutrients transported and transformed by spleen.
- If the function pf spleen is abnormal, the absorption of food nutrients will be reduced, leading to insufficient production of qi and blood and bringing on malnutrition of the muscles and the limbs
- Weak Spleen Qi: fatigue, muscles weak or even atrophied. Tonify Spleen in fatigue.

Opens to the Mouth 開竅于口

- Mouth is the starting point of digestive canal.
- If spleen is normal in function, the appetite and taste in the mouth will be normal; if the spleen is abnormal in function, it will lead to anorexia, no taste in mouth, or greasy and sweet taste in mouth.
- Opens to the Mouth and Manifests in the Lips - When food enters mouth, chewing prepares food for transformation and transportation. Therefore Spleen related to mouth. Normal Spleen Qi; good sense of taste and moist pink lips.

External Manifestation on the lips
脾華在唇

- Functional states of the spleen can be observed from the colour and shape of the lips.
- If the spleen is normal in function, qi and blood will be sufficient, and the lips will be ruddy and lustrous;
- if the spleen is abnormal in function, qi and blood will become scanty, and the lips will be pale, lusterless or even sallow.

Spleen and stomach dry and damp balance

- The hollow stomach is in charge of “fermenting and ripening” incoming food. The character wei 胃 (stomach) reflects the stomach's likeness to a high altitude field. Since fields in higher locations are closer to the sun and their moisture can easily drain downwards, their earth has a tendency to get dry, earning it the designation "yang earth." As the yang earth of the body, the stomach is known to easily become dry.

Spleen and stomach dry and damp balance

- The spleen, among other things, is in charge of transforming dampness. The character pi 脾 (spleen) reflects the spleen's likeness to a low-altitude field. Like the earth at the bottom of a valley, the spleen has a tendency to become damp, and is thus known as "yin earth."

Spleen contains Yi 在志為意

- The mental processes of thinking and remembering are considered to be part of the physiological activity of the spleen.
- A person with a poor digestive system usually cannot think clearly. This is because clear yang energy fails to rise up to the heart and brain, or because of accumulating dampness clouding the orifices.
- As always, this relationship also works the other way around: if a person thinks or worries too much, this can easily lead to digestive symptoms such as poor appetite, diarrhea, or constipation.

Thought 思 Si

- The character Si, whose lower part is made up of the radical ‘heart’ and whose upper part represented and the head or brain in ancient times means

1. Think, consider, deliberate
2. Think about, having nostalgia
3. Thought

思則氣結 Thought, knotting Qi

- Thought as a form of reflection, a moment in which one stops and elaborates sensations, perceptions, and fantasies, is a correct movement of transformation of earth; if this function becomes excessive, thought, if it develops into preoccupation – or in other words it preoccupies all the space – it then produces knotting of qi.
- If we try imagine ourselves as being knotted, in other words bound up, we can immediately understand what happens to Qi in these cases and it is not a pleasant sensation. Qi that 'blocks and closes up' corresponds to a monotone voice, along with somatic symptoms such as oppression, bloating and heaviness, while the feeling that the patient transmits to us in one that reminds of sinking in a swamp.

- During conversation with patients, one must take into account that many describe themselves as ‘anxious’, but what they intend by this term is a tendency to ruminate, to return in their thoughts to things that have already happened. They are worried by recurring thoughts and on waking their thought process are already at work, to the point where they may suffer from actual obsessions in which the mind has no choice but to retrace the same path infinitely.
- Obsessive thought is a good example of the Ke Cycle 克 mechanism of control:
- The fear of water can be moderated by the reflection of the earth, but if the system becomes inflexible it cannot hold together indefinitely and the attempt to control the world in order to defend oneself from its dangers becomes and obsessive-compulsive pathology.

思

- 學而不思則罔,思而不學則殆。——《論語·為政》
- 舉頭望明月,低頭思故鄉。——唐·李白《靜夜思》

- 《說文》從心囟聲。囟頂門骨空，自囟至心，如絲相貫不絕。
- 囟ㄒㄧㄣˋ: 嬰兒頭頂骨未合縫的地方。亦稱“囟腦門兒”、“頂門兒”。

Spleen and Other Organs

Spleen and Lungs

- Mutually assist each other.
- Spleen extracts Food Qi and sends it up to the Lungs where it combines with air to form Zong Qi.
- Spleen relies on Lung descending function to assist in the transformation and transportation of food (diaphragm movement helps Middle burner - "pumping" action).

Cont.…

- Lung descending function also assists Spleen in the transformation of Body Fluids. Lung Qi weak, descending function impaired, Spleen cannot transform and transport the fluids, causing edema.
- Deficient Spleen Qi: Food Qi deficient and production of Qi impaired (especially of Lung Qi: tiredness, weak limbs, breathlessness, weak voice) (Earth not producing Metal).
- Spleen Deficiency: fluids not transformed but accumulate to form Phlegm, which settles in Lungs and impairs Lung function. "The Spleen forms Phlegm, the Lungs store it."

Spleen and Kidneys

- Relationship is one of mutual nourishment.
- Spleen: Root of Post-Heaven Qi (Foundation of Postnatal Existence)
- Kidneys: Root of Pre-Heaven Qi (Foundation of Prenatal Existence)
- The Postnatal Essence (Postnatal Jing) is formed from the food we eat and the air we breathe. The Spleen therefore plays the most important role in the formation of Postnatal Essence.

Spleen and Kidneys

- The Postnatal Essence is stored in the Kidneys together with the Prenatal Essence. Where Spleen Qi is weak, Postnatal Essence will not be produced as effectively, and the Kidney will have less Postnatal Essence to store.
- Prenatal Essence assists in the production of Qi via its active aspect (Original Qi): the Original Qi provides the necessary energy for the transformation and transportation of the substances and formation of Qi: this affects the Spleen's function.

Spleen and Kidneys

- Spleen and Kidneys support one another regarding transformation/ transportation of Body Fluids.
- Where Spleen Qi is weak, and Body Fluids are not able to be transformed and transported, these accumulate to form Dampness, which can interfere with the Kidney's function regarding fluid metabolism (which then makes the Dampness worse).
- Where Kidney Yang is Deficient, there is not enough heat for the Spleen to transform Fluids: this can cause Dampness or edema, chilliness and diarrhea.