

# The Yin and Yang of Bone Building

Martha Benedict's talk at American Bone Health, Apr. 2011  
from Lela Carney's notes + references

Bone requires both building/rebuilding and decomposition = deconstruction = clean up.  
There needs to be a balance.

We relate to the issue of bone physically, emotionally, and spiritually.

Chinese medicine's theory of the 5 Elements or Phases was/is based on the careful observation of nature. (Also from Ayurvedic medicine of India) These observations include qualitative aspects of Blood, energy/Qi, and spirit that can't be measured objectively. Western science has focused more on what can be measured - "a counting game".

What external environments affect structure? (Bone is structure)

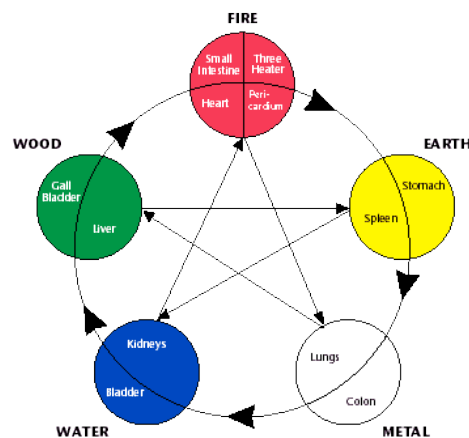
What internal environments (emotional).

What spiritual (not religious) aspects -- consciousness, values, what we love and care for, spirit/passion. (be kind to family, friends, and self)

Causality, etiology: in Western medicine where "cause unknown", Chinese medicine saw that the disruption in the flow of qi led to physical changes. Medical physicists now agree -- the boundaries between matter and energy are blurring with research in DNA and nanotech. We can weigh and measure matter. Energy makes us move, gives us heart and spirit, but we can't see it.

Matter and energy are not opposites in theory, they are not antagonistic concepts. We can direct and change both - but the treatment is different.

## 5 Elements/Phases description of the matter/energy/ spirit of the organs of the body



**Lung/Large Intestine/(skin):** we think, plan and dream from the gut

“Metal” element Holding on and letting go (life, love, children, precious objects, plans)

Skin is the largest organ in the body (Martha's favorite organ) It's the biggest organ of immunity - the first line of defense from toxic influences in the outer world.

GI tract, mucosal lining and bacteria in the gut destroy 90% of the pathogens that enter

Lungs take in 10% of the pathogens

**Liver/Gall Bladder:** “Wind” in heaven, liver and gall bladder in the body, “Wood” on earth (on earth, the growth of plant life)  
 creativity, dynamism, planning, anger, righteousness, revenge  
 Any living creature needs enough wind/wood energy to stay alive on the planet, to breathe, compete (need enough aggression, aggressive energy/qi) to hold one’s own and thrive. It’s important to channel a child’s anger/aggression into creativity, into productive action.

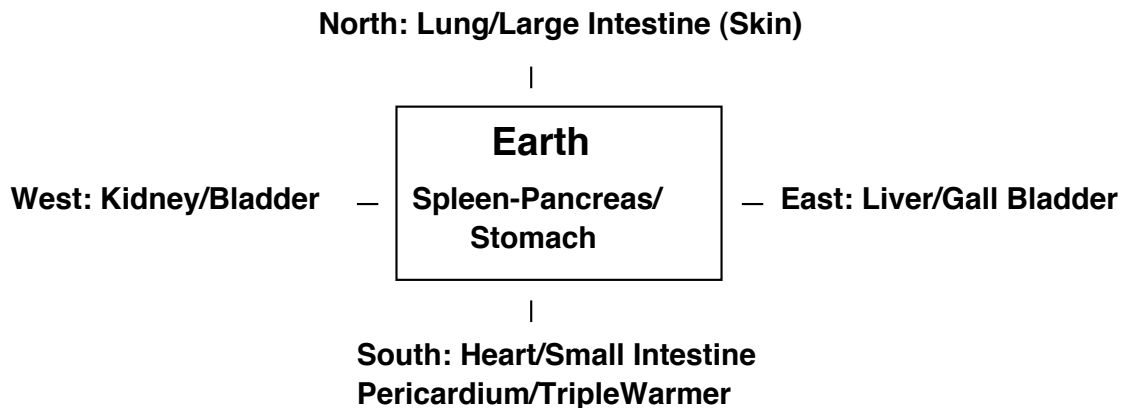
**Spleen/pancreas and Stomach: Earth:** reverie, “trieste” ? tristesse : sadness, unhappiness; dreariness, dullness, gloominess, bleakness; misery, sorrow; plaintiveness, wistfulness, gloom (More info to follow)

**Kidney/Urinary Bladder (and bones): Water:** Kidney energy = life force, vitality, hearing/ears, vision, intelligence, sleep quality.  
 60% of people are born with strong Water element  
 40% must give more care from early years.  
 It is possible to influence, strengthen the Water element - and this also nurtures/nourishes bone.

However, you can’t strengthen Water without also having the others elements strong. (Ginseng is such a powerful herb because it nourishes all the organs.)

Many factors of daily living influencing bone health: Exercise, diet/food, habits, thoughts -- all of these affect the strength of bone. Different types of constitutions need different ratios - combinations of these factors.

Especially the element of Earth, which, in some systems of Chinese medicine, is in the center - because of its central importance to every human’s well being:



Each person is in charge of the functioning of his or her digestive system. For example, the pH of the stomach is optimally 1.2. If the pH of the stomach is too low, health problems will follow. At pH of 2 a person will be achy and sluggish. If the pH is 3, the person will soon have a serious diagnosis.

With proper pH, there is no gas or bloating. After eating, the food has passed through to the small intestines in 45 minutes. When the pH is too low, the person will feel full after eating just a little food. It can feel like a lead weight in the stomach. So we can determine the pH of the stomach by inference from symptoms.

Balance of dietary macronutrients: Protein, fat, vegetables, carbs/starch/simple sugars, fruit. Most people get way too many carbs/simple sugars.

Protein and fat are important: they provide dynamism and stamina - the ability to finish our 'to do' list. Four mouthfuls of meat - the accumulation/condensation of sun energy >"lean and mean". They provide the force that holds us up against gravity. (Being vegetarian requires 4x the time and attention. Beans are 12-20% protein and 80% starch. They are a low quality source of protein. For vegetarians, cooked mushrooms offer higher quality protein.

Fruits and vegetables provide antioxidants and minerals.

Fresh herbs are the highest source of antioxidants. Grow them in window boxes.

Kale is a great calcium source. It has no oxalic acid from which one could form stones. You can juice it raw - caution if hypothyroid. (Spinach has oxalic acid and must be cooked). For kale recipes: <http://healthinourownhands.info/wp-content/uploads/2011/04/Kale-recipes-for-bones.pdf> *You'll need to cut and paste these links to get them to open properly.*

Too many starches -- people take on an apple shape -- putting on weight around the middle. Grains > starch > sugar > alcohol (Eating wheat > scotch, eating rice > saki)

Protein molecules are very large -- long chain amino acids. They must be broken down. Heat/cooking provides the alchemy of sun energy. So do salt, vinegar and oil. Pickling food also breaks down the molecules, rendering it more easily digested/absorbable. (Hummus has tahini - seeds. Adding salt and lemon juice helps 'cook' it.

Digestion is a yin/yang process, a process of cooking the food so it can be assimilated. Chewing moistens food and begins the cooking process. Molecules are broken down from big to little. Saliva's pH is 8 (yin). Stomach acid is 1.2 (yang). "The acidic chyme from the stomach is quickly neutralized through the release of secretin which targets the pancreas to release sodium bicarbonate (yin), bringing the pH back up to around 7. The pH of bile (acids) is 12 (more yin), Martha says. We need to eat fat. The appendix secretes an acidic liquid (yang) that extracts minerals -- If one has had an appendectomy, it's important to get extra minerals: **Herbal Mineral Tonic, Nettles & Milk Thistle Benedictine Healing Products**, <http://www.benedictineherbs.com>. Plant derived minerals from herbs like nettles and milk thistle, are bioactive, minerals are available (not as with "chelated rocks".)

Fat: the body dumps bile into the small intestine to kill pathogens and the small and large intestines. Fat causes bile to be secreted, and so it is important to keep the gut clean.

**Bone Broths:** Long term cooking of bones and connective tissue has been important in the cuisine of every traditional culture. The French cookbook, *Larousse Gastronomique*, has 21 pages on their preparation. You can cook them for 1 hour or for 1 week. In a pressure cooker, 45 minutes is = 3 days cooking.

Cooking bone with vinegar in the water brings the elements into liquid so the digestive organs don't have to work so hard. <http://healthinourownhands.info/wp-content/uploads/2011/04/Bone-Soup-Martha-B.pdf>

Another bone recipe: cook chicken in boiling water for 1 hour with veggies, fresh ginger root and 2T dulse flakes (they don't impart a seaweed taste or smell), adding fresh garlic later. Remove the meat and blend the bones (*You can grind chicken bones, but they have to be cooked.*)

*Jennifer, Vita-Mix Customer Service -- it can grind up chicken bones into a smooth puree without a trace of bone)*

To keep bodies flexible, it needs nucleic acids: a great source are beef tendons, slow cooked for a long time until they've melted into the broth. Also chicken or pork necks, backs, tails (oxtails) - any parts with bones, tendons and ligaments. Mexican markets, in San Jose, Lions or Ranch 99 markets.

The Stomach is big, wet and greedy. The Spleen-Pancreas is warm and refined. They need different things. Learn to eat to keep both of these vital organs happy.

How to improve and maintain good digestion

1) **Eat on time**

Stomach function is "all or none": the cells of the stomach lining secrete at one shot, every 4 hours. Train them to dump on time by eating within 15 minutes of the same time for each meal every day.

See <http://healthinourownhands.info/nutrition/> **Dietary program to heal the digestive system, balance blood sugar, regulate weight and & rebuild the adrenals: [dietary-program](#)**

2) **Eat warm cooked food** (slightly warmer than body temperature).

Even if eating something that's cold or cool, have hot water with lemon or hot soup.

With salads, the lemon juice or vinegar, the oil and salt enhance digestion.

3) **Eat very broadly** (a wide variety of foods) **in season**

**Magnesium is the gatekeeper for bone.** Calcium is not the limiting factor. It neutralizes stomach acid - like Tums. (Adrenals need magnesium.) A supplement formula that contains magnesium and is a Kidney/adrenal tonic/support is **Metagenics Cortico-B5B6**.

Calcium supplements: **Metagenics Cal Matrix, Collagenics**

**Chinese herbs: examples -- don't take without a Chinese herbalist/acupuncturist's supervision:**

**Ossifex Extract (Jian Bu Hu Qian Wan)** is a patent remedy based on the ancient recipe "Jian Bu Hu Qian Wan" (Vigorous Walk as Stealthy Tiger Pill; Health Step and Hidden Tiger Pill) originally appeared in Dan Xi Xin Fa (Danxi's Experiential Therapy), which is primarily used for nourishing yin and purging fire, strengthening tendons and bones, in cases of deficiency of liver and kidney, interior heat due to yin deficiency, lassitude in loin and knee, flaccidity of extremities, emaciation, walking asthenia, red tongue with little coating, and thready and weak pulse. This formula works well for pain that is worse in damp climates or reactive to changes in weather.

**Kang Gu Zeng Sheng Pian:** Kang Gu Zeng Sheng Pian translated literally means "Inhibit Bony Proliferation Tablets". It is a formula that has been in use for many years and is well known for its analgesic properties, its ability to encourage bony matrix remodeling and its ability to improve circulation. **Du Huo Ji Sheng Wan (Angelica Combination)** dislike of cold, pain that worsens in cold weather to strengthen tendons and bones, invigorate blood, move qi, dispel wind damp,

alleviate pain and tonify the liver and kidneys. It is often taken for occasional joint pain due to Liver and Kidney deficiency, associated with obstructions in the channels and collaterals - indicated by swollen joints with dull, aching pain and weakness in neck and lower back

Vitamin D supplementation: Vitamin D is a hormone. (It was named in the 1920s before they realized what it is.) . The sun is the safest source, 15 minutes a day, not on face/hands where the skin may have gotten too much exposure. Expose arms, legs, chest, belly - outside (yang) skin can take more than yin, white 'inside' skin. Don't shower for at least 2, optimally 6 hours afterward so the D can continue to be made -- it has to penetrate through 7 layers of skin to get to the blood stream. <http://www.vitamindcouncil.org/newsletter/2009-march.shtml> -- "Do you shower with soap after you sunbathe? If so, you may be washing off the vitamin D-containing body oils (sebum)" other experts say: *It takes about 24 hours for UV-B-stimulated vitamin D to show up as maximum levels of vitamin D in the blood. Cholesterol-containing body oils are critical to this absorption process.*<sup>10</sup> **Because the body needs 30-60 minutes to absorb these vitamin-D-containing oils, it is best to delay showering or bathing for one hour after exposure.** The skin oils in which vitamin D is produced can also be removed by chlorine in swimming pools. <http://www.westonaprice.org/abcs-of-nutrition/168-miracle-of-vitamin-d> If you can't be in the sun (and so may be deficient) or are supplementing at high levels (and so could be overdosing), test **VITAMIN D, 25-HYDROXY**.

**Exercise is 4x more important than food for bone building -- do at home**  
**Sherri Betts bone builder classes:** <http://www.therapilates.com/index.html>

Balance and variety are important: fun/play, work, study, food, exercise.

The biggest enemy to the energy of the Kidney (and therefore to bone)

**is excess of anything:** "Everyone knows that prolonged walking and standing can cause excessive fatigue, which is harmful to good health, but few people mention the harmful effects of lying down or sitting all day. ' The Chinese use the term "people of fatigued mind" for people whose days are spent using their minds -- consuming their brain power -- and 'people of fatigued body' are those who are constantly consuming their physical energy. " from

**Traditional Chinese Medicine: How To Maintain Your Health and Treat Illness** By Henry C. Lu

[http://books.google.com/books?id=eJi9ngsDNhIC&printsec=frontcover&dq=Traditional+Chinese+Medicine:+How+To+Maintain+Your+Health+and+Treat+Illness+By+Henry+C.+Lu&hl=en&ei=ITiTaOmDOLiiAK\\_gvmOAw&sa=X&oi=book\\_result&ct=result&resnum=2&ved=0CEEQ6AEwAQ#v=onepage&q&f=false](http://books.google.com/books?id=eJi9ngsDNhIC&printsec=frontcover&dq=Traditional+Chinese+Medicine:+How+To+Maintain+Your+Health+and+Treat+Illness+By+Henry+C.+Lu&hl=en&ei=ITiTaOmDOLiiAK_gvmOAw&sa=X&oi=book_result&ct=result&resnum=2&ved=0CEEQ6AEwAQ#v=onepage&q&f=false)

Kidneys do not like cold - avoid allowing the waist to be exposed to cold air.

The difference in cold outer temperature and the needed warm inner temperature can create wind, sets one up for bladder infections, colds or flu.

Kidney/Hara (belly warmers): See <http://healthinourownhands.info> Living Well

<http://healthinourownhands.info/living-well-2/> **Hara/kidney warmers :**

*(haramaki in Japan) is a tubular piece of fabric that is worn around the midsection to warm the internal organs, especially kidneys. According to Eastern medicine, the Kidneys are the foundation of health. When your Kidneys are warm and working well, the whole body is healthy, and the vital energy, or*

chi, flows throughout. <http://www.squidoo.com/haramaki> To make your own: <http://www.planetjune.com/blog/haramaki-tummy-warmer-tutorial/>

Don't fast on work days -it pulls qi from *your* 100 years *life-span* (I think this is close to what Martha meant. - Lela)

Rhythms and cycles: Fly high at summer solstice, **delve deep at winter solstice** - into the deep unconsciousness where old hurts and fears are stored. Suppression of unconscious is related to bone loss. Meet them without fear. Helps bones. (Kidney deficiency is aggravated by fear and Kidneys are associated with the deep unconscious and with winter.)

**Moxa** Massage Oil that Invigorates Circulation contains mugwort and wintergreen, for cold tissue and joints. It moves the blood, increasing circulation to bone and joints. Apply with self-massage -- friction: to warm the affected area, invigorate circulation and alleviate pain. It is useful in situations of chronic pain that feels worse in cold damp weather and better with warmth. <http://www.benedictineherbs.com/product/10072.html>

Joints need to move properly. Rigidity - stuck - is obstruction of flow of qi. For arthritis, **Joint Relief**: <http://www.benedictineherbs.com/product/20803.html> for aching joints.

Immune support needed before you can build bone -- need yang energy to protect and build bone. If immunity is weak, it's harder to build bone: **Immune Plus**: <http://www.benedictineherbs.com/product/20783.html>