The Relationship Of Blood Quality to Metabolic Illnesses

Type 2 Diabetes
Insulin Resistance
Hypertension
Insomnia
What We Will Do

1. Look at Blood Physiology and Pathology

2. Look at the relationship of this to sugar absorption and hypertension

3. Look at diagnosis and treatment of poor blood quality

4. Look at a couple of cases of Sharon’s
Blood

Physiology and Pathology
Blood Physiology

Qi

Blood
Blood Physiology: Blood itself as Absorptive

Blood carries moisture, warmth and nutrients. It must be able to hold these.
Blood Physiology: Spleen Production
Beta Cells secrete insulin which pushes sugar/glucose from blood into cells to store for later use as energy. Insulin decreases blood sugar.
Alpha Cells produce Glucagon to push sugar into the blood when energy is needed. This increases blood sugar and is why stress increases blood sugar.
Blood Physiology: Lung
Blood Physiology: Heart

- peripheral circulation
- Blood and the womb and sexual organs
Blood Pathology

- Blood Deficiency
- Blood Dryness
- Blood Stasis
- Blood Cold
- Blood Heat
Blood Pathology

Yin aspect out of right relationship:

Water swelling
Weight gain
Thickening of blood vessels
Blood Pathology

Yang aspect out of right relationship:

- Heat symptoms
  - Feverishness
  - Burning feelings
  - Inflammation
  - Inflammation of the blood vessels
  - Agitation
- Qi/Wind symptoms:
  - Pain
  - Itching
  - Dizziness/Wind
Blood Pathology: Examples of Illnesses

- Bi Syndrome
- PTSD
- Ying/Wei disharmony
- Type 2 diabetes
- Hypertension
- Obesity
- Dysmenorrhea/
- Amenorrhea/
- Infertility/
- Miscarriage.....
What is Insulin Resistance?

Cells become unresponsive to insulin and so the blood sugar stays high.

Because the cells are lacking glucose/nutrition, the pancreas excretes more insulin until the blood becomes saturated with insulin. This is called insulinemia. This also causes the blood to become thick.

When the pancreas exhausts itself, it stops producing insulin at all. This is when a person becomes an insulin dependent diabetic. Synthetic insulin also makes the blood thick.
What is Insulin Resistance?

Insulin Resistance and Hyperinsulinemia

Cells

Blood Vessels

Pancreas

Alpha Cells
Beta Cells

Cells are starving

When there is too much sugar in the blood due to diet or stress, the cells cannot take it up and become resistant to the effects of insulin.

More insulin is created because the cells are starving for sugar but this insulin stays in the blood creating hyperinsulinemia.

Blood becomes thick due to glucose and insulin.

Blood Vessel walls become damaged

This is “inflammation in the blood vessels” which causes plaque build up.

Excess Glycogen that is not taken up by cells is stored as fat.

Diabetes Type Two is created when the pancreas exhausts itself trying to produce insulin and finally shuts down.
Blood Pathology

- Blood Deficiency
- Blood Dryness
- Blood Stasis
- Blood Cold
- Blood Heat
Blood Pathology as a Branch

- Caused by Deficiency
  - Qi deficiency
  - Blood deficiency
  - Yang deficiency
  - Yin deficiency
  - Deficiency heat

- Caused by stasis
  - Qi stasis
  - Damp/Phlegm/Food stasis
  - Blood stasis
  - Cold
  - Heat

- Caused by Trauma

- Bleeding as a cause
Blood Pathology as a Branch

• The Root of the Blood pathology will determine the treatment principle
Blood Stasis Etiology: Qi Disorders

One is Yin and one is Yang. The movement of Blood is dependent on the push forward from the Qi. This is what the saying “Qi is the commander of Blood and Blood moves along with the Qi” means. In the human body, if the Qi mechanism is disordered, the normal movement of the blood can be negatively influenced, giving rise to blood stasis. The Zhen Zhi Fang says “Qi is the commander of Blood. When Qi moves, blood moves. When Qi stops, blood stops. If Qi is slippery then blood is slippery. If Qi is cold then blood congeals. If, for one breath Qi does not open through then blood will not flow through for one breath”. The Qi Xiao Liang Fang also says “If Qi is stopped up and not open through then Blood is plugged up and does not flow”. Clinically it is very common to see blood stasis due to Qi stasis and Qi vacuity. Qi stasis is often due to Liver Qi constraint and knotting. When the Qi is deficient it is often because the Spleen and Stomach are weak”. Dr. Qiu Xiao-mei
Blood Stasis Etiology: Qi Stasis

• Qi leads the blood and is responsible for the smooth flow of blood in the vessels. If Qi is stagnant the blood flow will be sluggish.

• Qi stagnation relates to the Liver and to Shao Yang. Qi within the blood relates to Shao Yang and Jue Yin. Qi within the blood also relates to Metal/Wood
Blood Stasis Etiology: Damage to Fluids

- Dehydration thickens the blood
- Post febrile after fluid loss and heat decreases the fluid aspect of the blood.
Diagnosis of Blood Stasis: Key Points

• “Because the locations of Blood stasis as well as the course of disease varies, the clinical manifestations of Blood stasis can also be complex. There are some other general characteristics. From my clinical experience I have listed the four principle points to grasp below”. Dr. Qiu Xiao-mei
Key Diagnostic Points: Pain

• “Pain is the most prominent manifestation of blood stasis. The special characteristic of blood stasis pain is that it is fixed and unchanging, pressure increases the pain, it is enduring and can be pricking or knife-like and even gripping, angina pain”. Dr. Qiu Xiao-mei
Key Diagnostic Points: Bleeding

• “When Blood stasis lingers and is not dispelled, new blood cannot be stable. This is why bleeding is a principle symptom of blood stasis. The special characteristic of bleeding from blood stasis is that the blood is dark purple and contains clots. It also drips and is difficult to stop”. Dr. Qiu Xiao-mei
• “Blood stasis can take form. Especially when it is chronic it can become a mass. In this case the mass is even more clear. The special characteristic is fixed unchanging mass that is slightly painful on palpation”. Dr. Qiu Xiao-mei
Key Diagnostic Points: Tongue

- “The Zhu Bing Yuan Hou Lun says “When a person has blood stasis, the lips are withered, the tongue is qing and the mouth is dry”. Therefore a purple dark tongue or a tongue with stasis spots is an important manifestation of blood stasis”. Dr. Qiu Xiao-mei
Key Diagnostic Points: Abdomen and Skin

- Abdominal diagnosis: hardness palpated around the umbilicus below the St. 25 line and/or pressure pain around St. 27 area, especially on the left.
- Visual diagnosis: I also look at the patient’s lower legs to see if there is darkened skin or broken blood vessels. Also the patient’s complexion may be sallow and dark.
Key Diagnostic Points: Summary

• “The above four points are the fundamental characteristics of blood stasis. Certainly the manifestations of blood stasis are many. Clinically one must coordinate these findings with the entire condition of the patient’s body in order to get a comprehensive and correct diagnosis”. Dr. Qiu Xiao-mei
MAJOR CRITERIA

Pain
Fixed painful masses with discolored or dark overlying tissue. Darkish mottled complexion, purple or brown discoloration of the skin, including skin tags and moles. Purplish, dark spots, coloration or broken blood vessels on body or in the sclera and conjunctiva. The tongue is darkish or purplish or with brown or purplish petechial spots on the lip and edges. The sublingual veins beneath the tongue are distended and dark. A choppy pulse, or an irregular pulse, or a pulse too weak to be felt. Vascular abnormalities like petechiae, spider nevi, caput medusae, varicosities and angiomas which are purplish or dark, raised or flat. Purplish nails, thickened or deformed nails. Darkish or mottled and spotted palms and hands. Dry, scaly rough skin, dry mouth
Numbness and paraesthesia in the extremities: spasms and twitching, unusual feelings, chronic itching or cold sensations in the skin.

Chronic pain or distension; chronic haemorrhagic disorders.

Recurrent fever, usually at night and not associated with sweating, and in those that don't seem to conform to any pattern, or very long term, or following a severe febrile illness. The fever is hectic and usually associated with restlessness, vivid dreams or nightmares.

A history of some physical or psycho-emotional trauma, surgery or scarring.

Mental imbalances, mania, manic behavior, schizophrenia, epilepsy, severe mood swings, chronic depression, manic depressive psychosis, forgetfulness, chronic insomnia, particularly following trauma.

Hypertension, arteriosclerosis, coronary artery disease, Raynaud’s syndrome and other circulatory and haemopoietic system disorders.

Recurrent carbuncles, boils or other deep rooted sores or chronic non healing ulcers. Chronic inflammatory disorders, like bursitis and myositis.

Infertility, habitual or threatened miscarriage, menstrual disorders.

The elderly.

Cupping or massaging the Bladder Shu points draws out dark purplish marks.

Finally, Blood stagnation should be considered after excluding all other possibilities and in any condition that does not respond to other therapies.
“The fundamental method for treating blood stasis is to vitalize blood and transform stasis. However, because the location, type and timing of the illness varies and the disease characteristics and intensity are also dissimilar, treatment should weigh and consider the root and branch, chronic and acute aspects of the pathology.” Dr. Qiu Xiao-mei
Blood Stasis Treatment Principles

- Nourish Blood
- Harmonize Blood
- Quicken Blood and Transform Stasis
- Break Stasis and Scatter Binding
- Eliminate Dead Blood
- Warm the Blood and Scatter Stasis
- Cool the Blood and Transform Stasis
- Opening the network vessels and invigorating Blood
- Purging to break up Blood stasis
- Softening the Hard and invigorating the Blood
<table>
<thead>
<tr>
<th>Vitalize Blood in order to....</th>
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<tbody>
<tr>
<td>• Harmonize Menses</td>
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<tr>
<td>• Promote Menses</td>
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<td>• Open Tubes</td>
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<td>• Stop Pain</td>
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<tr>
<td>• Dispel Masses</td>
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<td>• Stop Bleeding</td>
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<td>• Prevent Miscarriage</td>
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<td>• Calm the Shen</td>
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<td>• Open the Bowel</td>
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<td>• Clear Heat or Toxin</td>
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<td>• Open the Jing Luo</td>
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<td>• Stop Cough</td>
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<tr>
<td>• Treat Cancer</td>
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<tr>
<td>• Open the Orifices</td>
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<tr>
<td>• Nourish the Blood</td>
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<td>• Treat Consumption</td>
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<tr>
<td>• Promote sight, hearing, speaking, tasting, smelling</td>
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<td>• Improve the appetite</td>
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Vitalize Blood in order to....

- Reduce blood pressure
- Reduce blood sugar
- Reduce cholesterol
- Improve artery health
- Stop fibrillations
- Stop angina
- Improve insulin responsiveness
- Improve energy
- Improve sleep
- Reduce medications
Basics of Blood Treatment

- Si Wu Tang

<table>
<thead>
<tr>
<th>Dang Gui</th>
<th>Shao Yao</th>
<th>Di Huang</th>
<th>Chuan Xiong</th>
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[Image of yin-yang symbols]
Because the formula is a combination of Si Ni San and Tao Hong Si Wu Tang, it is best for pathology relating to Blood Stasis and Liver. Areas it treats (modified for location) are head - temporal, lateral chest, hypochondria and reproductive system. It is also good for systemic blood stasis. It has been shown to improve microcirculation and growth of new microcirculation (scar tissue and fibrosis). It increases tissue perfusion with nutrients, inhibits platelet aggregation, enhances immune function. It can retard the growth of atherosclerosis and Liver fibrosis (especially with Hep C patients). It increases radio-sensitivity of Liver cancer cells and reduces side effect of radiation.
<table>
<thead>
<tr>
<th>Ingredient</th>
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<tbody>
<tr>
<td>Hong Hua</td>
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<td>Tao Ren</td>
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<tr>
<td>Chuan Xiong</td>
<td>6</td>
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<tr>
<td>Jie Geng</td>
<td>4.5</td>
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<tr>
<td>Zhi Qiao</td>
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<tr>
<td>Huai Niu Xi</td>
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Zelda, age 79 – first visit 12/21
Zelda was diagnosed with type 2 diabetes in 1986 and has been insulin dependent (3 X/day at 8 units each time) since then. She had a heart attack in 2004 and received 2 stents.

In 2009 had 3 breast cancer surgeries for DCIS (2 lumpectomies and 1 axillary lymph surgery), and triple coronary bypass surgery. Before the bypass surgery she was experiencing strong shortness of breath and pounding of her heart with very little exercise. Since bypass surgery she is very very exhausted, even having difficulty getting out of bed. She has been diagnosed also with high cholesterol and hypothyroid.

**Other symptoms**
Neuropathy in feet
Occasionally hesitant urination
Slightly scanty sweating
Dry cough
Difficulty falling asleep
Arthritis in knees, hips and back with an inability to walk much
Good digestion
Significant weight gain
<table>
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<tr>
<th>Condition</th>
<th>Medication</th>
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<tr>
<td>Diabetes</td>
<td>Humalog, Lantus</td>
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<td>Cholesterol</td>
<td>Zetia, Simvastatin</td>
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<tr>
<td>Hypo-thyroid</td>
<td>Levoxl</td>
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<tr>
<td>Hypertension</td>
<td>Lasix, Asperin</td>
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<tr>
<td>Neuropathy</td>
<td>Gabapentin (neurontin)</td>
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<tr>
<td>Depression</td>
<td>Amitriptyline</td>
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<tr>
<td>Heart</td>
<td>Metoprolol (Beta Blocker)</td>
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<td></td>
<td>Isosorbide (nitrate)</td>
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Lasix Side Effects

Beta Blockers Side Effects
A 2007 study revealed that diuretics and beta-blockers used for hypertension increase a patient's risk of developing diabetes....
Zelda, age 79 – first visit 12/21 – signs

**Abdominal Diagnosis:**
Generally lax, large belly
Tension above the pubic bone
Tension under the ribs

**Tongue**
Reddish purple tongue body with a normal moss

**Pulse**
“Cord-like”

**Complexion and Face**
Dark and saggy

**Legs**
Dark dry areas with lots of spider veins
Zelda, age 79 – first visit 12/21

Diagnosis

Liver Qi and Blood stasis with Depressive Heat
Kidney Deficiency

Treatment Principle

Regulate Liver Qi and Vitalize Blood to improve blood quality
– in a cool way
Supplement the Kidneys
Treatment: Xue Fu Zhu Yu Tang modified
(In KPC powder form – 3 gm - 3x/day)

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<thead>
<tr>
<th>Xue Fu Zhu Yu Tang</th>
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<tbody>
<tr>
<td>Du Hou</td>
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<td>Fu Zi</td>
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<tr>
<td>Dan Shen</td>
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<td>Shi Hu</td>
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<tr>
<td>Fu Ling</td>
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This includes Dr. Huang’s Si Wei Jian Bu Tang (4 flavor supplement walking decoction)
Equal doses of Dan Shen, Huai Niu Xi, Shi Hu and Chi Shao
After one week Zelda’s cough stopped and her sleep was better. I noticed water sounds in her stomach and she informed me that she frequently had a dry mouth and hesitant urination.

<table>
<thead>
<tr>
<th>Xue Fu Zhu Yu Tang</th>
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<tr>
<td>Wu Ling San</td>
<td>20</td>
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<tr>
<td>Fu Zi</td>
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<tr>
<td>Dan Shen</td>
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<td>Shi Hu</td>
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After two weeks Zelda’s sleep was deep and she had reduced her insulin to 7 from 8 units

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<td><strong>Xue Fu Zhu Yu Tang</strong></td>
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<td>Ze Xie</td>
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<td>Fu Zi</td>
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<td>Dan Shen</td>
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<td>Shi Hu</td>
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<tr>
<td>Fu Ling</td>
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After three weeks her energy was much better and her sleep still deep. Her general pain had improved greatly and she could walk further.

After four visits and seven weeks (snow storms galore!) her insulin was down from 8 to 5 units

I increased Fu Zi to 5 and added Zhi Gan Cao 4

After five visits and eight weeks Zelda developed a bad cold that moved quickly into her lungs. I had her take a break from the formula until she was better.
After 6 visits and 11 weeks Zelda had been feeling really good and her insulin was stable at 5 and sometimes 4. She could go up and down stairs with ease. She got a cortizone shot in her knee which made her sugar very unstable (sometimes high and sometimes very low) but then it leveled off again.

After 7 visits and 12 weeks Zelda and I talked about reducing her statin drugs and lasix. She is planning on talking with her doctor about how to do this during the next week. Spring is here and she is now able to walk outside.
Jillian is a large woman with a dusky facial complexion. She came in complaining of insomnia and hypertension. Her doctor recommended ambien and a diuretic. She wanted to see if she could avoid going on these medications. Her blood pressure was hovering between 161/100 to 143/78.

Jillian’s blood sugar and cholesterol were both within normal ranges. She generally feels healthy with good digestion and respiratory function. She exercises 5 times a week with walking. She feels that she is generally emotionally well balanced though her husband has been recently diagnosed with Alzheimer’s which is tremendously stressful for her.
Jillian: age 69

Jillian has a history of bone degeneration in her hips and a hip replacement. She now has pain in the leg that did not have the hip replacement. There is a family history of both parents having hypertension. She has a history of painful menstruation and ovarian cysts.

Other symptoms
- Easy Bruising
- Fatigue
- Easily chilled
- Seasonal allergies
- Headaches
- Easy sweating with a slight feeling of feverishness
- Almost monthly “feeling of coming down with something” with sore throat, runny nose, cough, achy body
Jillian: age 69

Signs:

Choppy pulse, slightly slow
Tongue: pale purple with a very red tip and a dip in the rear

Abdomen lax and large. Tension under rib-side and Oketsu pain areas.

Darkish complexion and dry dark lower legs.
### Jillian: age 69

<table>
<thead>
<tr>
<th>Da Chai Hu Tang Modified</th>
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<tbody>
<tr>
<td>Chuan Niu Xi</td>
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<tr>
<td>Chai Hu</td>
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<td>Zhi Shi</td>
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<td>Huang Lian</td>
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<td>Mu Dan Pi</td>
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<td>Hong Hua</td>
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<td>Tao Ren</td>
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<tr>
<td>Chi Shao</td>
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</tbody>
</table>
Jillian: age 69

Treatment outcome: Blood pressure normalized and sleep became deep.

We will be switching to a formula that supplements Qi with Huang Qi while improving the quality of the blood.
Links

Class Links
Vermont Weekend on this Topic
Graduate Mentorship Program
On line courses approved for CEU’s/PDA’s

Blog Entries
Anemia in Pregnancy
Toxemia in Pregnancy
Postpartum Dizziness and Tetany
Healing Crises