When you submit your stuff electronically, title it: Name ATD 3 Reading or Name ATD 3 Paper. Also, later in this class we are going to get a case discussion we won’t discuss in class, but needs to be submitted to Dr. Luo electronically... which is weird because everyone just turned it in to him as they walked out the door at the end of class... hmmm.

**Obesity**
Fei Pang

Something like 40 million people are obese. More than ½ of adults in the US are obese/overweight. There are two types: excessive body fat caused by an excessive number of fat cells and by fat cells that are extremely large.

**Four classifications of obesity:**

- **Simple obesity**
  Often obesity is related to consuming too much, expending too little energy. This has to do with accumulated energy and heat in the fat cells. Each fat cell can supply 9 grams of energy. Too many fat cells results in obesity.

  According to statistics, if you compare familial association you will find that even having one parent overweight will predispose children to also be overweight – a 40% chance of being overweight. If neither parent is overweight the child has only a 10% risk of obesity.

- **Pathological obesity**
  Pathological obesity means obesity due a primary cause. Cushing’s Syndrome for instance is a tumor on the hypothalamus affecting the pituitary and adrenal glands. Too much cortisone is produced resulting in obesity. Look for moon-face and a bull like neck. Weight accumulates in the face and trunk.

  Pituitary tumors can also cause overproduction of steroids or hormones resulting weight gain. Often has visual manifestations also – cannot see objects bilaterally that are on the periphery of the visual field.

  Hypothyroidism can also cause low metabolism and overweight. Look for constipation, edema also. May also have a distended feeling around the neck. Treat the Liver in TCM to help with this.

  Diabetes type I usually results in emaciation. Type II is more associated with overweight.

The following two types have to do with the distribution of the fat.

- **Subcutaneous obesity**
  Fat accumulations under the skin.
Visceral obesity
Visceral obesity is accumulation of fat in the organs. You see greasy yellow tissue attached to organs in this case. People that have central (aka centripetel) obesity, or fat around the abdomen area is more likely to produce visceral obesity. Peripheral obesity – accumulations around the hips and legs – is more likely to be subcutaneous obesity.

Causes of Obesity
- Genetic Factors
  Previously discussed…
- Social, Environmental, Psychological Factors
- Endocrine, Hypothalamus, Hypothyroidism, Diabetes
- Overeating and Overdrinking
- Lack of exercise

Diagnosis

Method 1
BMI/Body Mass Index.
This is the best gauge according the WHO.

Metric formula:
Weight (kg) / Height (m)^2.

Another formula:
Weight (lbs) / Height (in) x 704.5

Males and females are gauged differently. According to WHO, the World Health Organization, the numbers run like this:

<table>
<thead>
<tr>
<th></th>
<th>Male BMI</th>
<th>Female BMI</th>
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</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>&lt;20</td>
<td>&lt;18.7</td>
</tr>
<tr>
<td>Normal</td>
<td>20-25</td>
<td>18.7 – 23.8</td>
</tr>
<tr>
<td>Overweight</td>
<td>25 – 30</td>
<td>23.8 – 28.6</td>
</tr>
<tr>
<td>Obese</td>
<td>30-40</td>
<td>28.6 – 36</td>
</tr>
<tr>
<td>Morbidly</td>
<td>Greater than 40</td>
<td>Greater than 36</td>
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</tbody>
</table>

Have a general understanding of this.

Another calculation formula:
Standard weight in KG = Height (in cm) – 100 x 0.9
Mechanism

**Consumption of more calories than needed**

Generally speaking you should consume no more than 1500 calories per day. 800 calories per day is the low limit – below this you suffer from energy drop and thus productivity drop. This number is moderated by amount of exercise. 1500 – 1600 calories daily for resting activities. For activity, it’s 1800 – 2000 calories.

Fat has more calories per unit (9grams) than sugar or proteins (4grams). Generally speaking, 60% of the diet should be sugars, 30% fat, 10% protein. And of course, sugar doesn’t mean table sugar and donuts, but complex carbohydrate sugars… the other way would be just too fun.

Treatment

Acupuncture, dietary control and more exercise are the best treatment protocols.

Etiology

- **Irregular diet**
  The Chinese word, fei pang, implies that overweight comes from overconsumption of meat. This causes Spleen and Stomach or MJ problems. This causes the over-accumulation of water, damp, and phlegm. In these terms the Spleen is very weak, but the Stomach is very strong. The Stomach wants to eat, but the Spleen can’t process it.

- **Emotional disorder**
  Liver Qi stagnation leads to fire which transfers to the stomach and fuels the appetite.

- **Lack of exercise**
  Exercise moves the Qi of the Spleen (because SP controls muscles, move muscles and move Qi). Also moves the tendons which are associated with Liver. Liver is less likely to overact on the middle jiao and transfer fire to the Stomach. Bones are also moved and stressed – activates the Qi of the Kidney. Kidney also controls the Will. You can use ear points to stimulate the Kidney and thus the Will not to overeat and to exercise.

- **Aging**
  Aging is KI related. Kidney is one of the 3 organs related to water metabolism – water discharge problems and more damp/phlegm. Another reason is that aging means less Kidney Yang energy, so less steaming of the water and more water retention.

There is a way to classify the face into 3 parts.

Chin: related to the stomach
Abdomen: spleen  
Buttocks: kidney

Above eye: upper jiao  
Nose area: middle jiao  
Just below nose area and down: lower jiao

The lower division has to do with the meridian distribution.  
Upper gum is stomach channel, lower gums are related to large intestine. Ergo, the chin is more stomach related.

### Differentiation and Treatment

<table>
<thead>
<tr>
<th>Basic Points</th>
<th>REN-17, 12, 6, 3; SP-9, 6; ST40; P-6 + SJ-5 (for water metabolism, threading or needle each pt); KID-2 + UB-63 (promote urination)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuina</td>
<td>Chili powder massage: (use gloves &amp; cotton ball in navel) – massage the dry powder on local area until they feel warm or until area is pink-red; or use chili oil</td>
</tr>
</tbody>
</table>
| E-stim       | Electro-acupuncture: 32#, 3 cun needles, subcutaneous insertion:  
ST-32 – ST-34: insert/thread towards each other – alternate between left/right  
ST-36 – ST-40: insert/thread towards each other – alternate between left/right  
SP-15: needle towards each other (can e-stim across abdomen) – always use |
| Ear          | ST, SJ, Shenmen, hunger, endocrine |

Water metabolism is due to Lung, Spleen, Kidney. You can thus use  
• LU 7 to disperse the Qi  
• SP 9 to address damp.  
• KI5 – “water spring” helping with water retention.  
These are 3 key points for water metabolism.

Electrical stimulation. ST 25 and SP 15 or ST 25 and Ren 12. Never cross the midline. Pick e-stim based on fat distribution of the client. Electricity helps burn the fat. Use 30 minutes at a frequency dependent upon whether you want to tonify spleen or reduce phlegm. High frequency (30-50 Hz) is good for large abdominal or hip area fat, 20Hz is also fine especially when there is heart disease and hypertension. And of course, don’t cross the midline!

Fire needle is also used for phlegm damp obesity. Heat the needle until very red, insert at ST 40. YOW! Pretty frightening. Dr. Luo says it’s not that bad…uh huh. Pull the other leg!

Ear points area good too. If genetic, choose KI. If simple, choose SP/ST points.
Two types of stomach heat: excess and deficiency. Excess is more likely to cause obesity. Stomach xu heat is more yin xu of the stomach – chronic gastritis, hungry but doesn’t want to eat. Excess will “more” of all the sx above.

| ST Heat w/ retention of phlegm | - Fat more on face; cheek; lower chin; neck  
- Eat excessive, hungry a lot; constipation; hemorrhoids; acid regurgitation; chest tightness; bad mouth odor, thirst, desire for drink; profuse mucous, high cholesterol  
T: Red or dark red, yellow thick, or greasy coat  
P: Slippery & fast, full |
|-------------------------------|---------------------------------------------------------------------------------|

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| SP Qi Xu w/ retention of dampness | - Fat more in abdomen  
- Pale face; puffy face; stiff joints; feel like retention of dampness; a lot of nausea, vomiting; poor appetite; don’t go bathroom often (not constipated) |
|-------------------------------|---------------------------------------------------------------------------------|

Gassy, bloating, loose stool. Abdomen will more likely be fat – centripetal obesity.

| KID Qi & KID Yang Xu w/ Retention of water | - Fat distribution on lower body - fat more on buttocks & thighs  
- Over 40 y.o. or after child birthing; cold extremities; edema on lower extremities; weakness of low back & knee joints; difficulty in urination or retention of urine  
- Moxa is good |
|-------------------------------|---------------------------------------------------------------------------------|
Acupuncture is very effective for toothache. **Key point is LI 4.** Board will test you on this. If due to heat, use ST 44. Tooth pain is the major symptom, but is often due to pulpitis, periapical abscess, impacted teeth or cavities.

Remember that the lower jaw is **Large Intestine,** the upper is **Stomach** per the meridian distribution. Since most of the tooth is bone, it’s related to **Kidney,** as is the marrow.

The nerve and blood supply is also called the root canal. The pulp has a lot of small nerves distributed inside. If decay or damage reaches this level the result is a whole boatload of pain.

Oral hygiene is the best preventative. Brushing before or after breakfast and before bedtime + flossing daily removes plaque so bacteria has no place to hang on and eat at the enamel. After the fact when the teeth are already damaged they are treated with fillings, root canal treatments, tooth extraction and/or crowns.
"Ya tong" means tooth pain. The Du and Stomach go to the upper teeth. The Ren and Large Intestine go to the lower teeth.

**Mechanism**

More Yang and excess in nature.

You can have a toothache with either excess or xu fire. When excess, strong smell. If deficient will see dry teeth, atrophied gums. With Kidney deficiency will see teeth loose in the head.

Board Q: what is the difference in symptoms between Yangming meridian disorder and Yangming organ: organ will have constipation, meridian won’t.

If Lung xu, the white of the teeth won’t be white. Smokers, for instance, will have yellow teeth. This reflects the condition of the fire in the lung. Another form of differentiation using the mouth is a map of the teeth using the tooth distribution and what’s wrong where. Front teeth for instance reflect Kidney

| Basic Points | LI-4; SJ-5  
| ST-3 (upper teeth), ST-6 (lower teeth), ST-5, 7  
| SI-18; SI-44  
| ST-9, LI-18 (bridges local and distal pts – window of sky pt and acts as anesthesia)  
| Electro-acupuncture for anesthetic: SJ-5 + LI-4; + ST-6, 9, 3  
| *LI-4: needle upwards towards head [hold index finger to prevent energy from going downward] |

Clear the stomach heat!

<table>
<thead>
<tr>
<th>Invasion of Wind-Heat</th>
<th>Remove Wind-heat; Benefit teeth</th>
</tr>
</thead>
</table>
| - Acute onset – hx of common cold (often after fever & chills)  
- Toothache with burning; swelling of gums  
- Preference for cold foods; headache; fever or high fever & chills; dry mouth; thirst prefer cold drinks  
T: Red body, thin, yellow coat  
P: Superficial, fast or deep slippery | Basic points +  
GB-20; UB-12; SJ-17; DU-14 |

Burning sensation (fire), moving around (wind).
| Accumulation of Stomach Heat | - Acute onset; history of irregular diet: overeating spicy foods  
- Bad mouth odor; thirst w/desire for cold drinks; acid regurgitation  
- Gum bleeding or swelling of gum or cheek, maybe pus; acne; red face; fever or high fever w/no chills (yangming)  
- Dark yellow urine; constipation  
- Restlessness, tossing and turning  
T: red or dark red  
C: thick, yellow, dry  
P: forceful or slippery and deep | Remove Stomach Heat; Open Yangming Meridian; Benefit Teeth  
-------------  
Basic +  
ST-45; LI-11, SI-6; UB-40 (removes heat from Qi and Xue levels)  
GB-41 |

This can be excess or deficient heat.  
ST 45 is for emergency. Take care!

| Deficient Fire from Kidney Yin Xu | - Chronic onset with intermittent tooth pain;  
- Worse in afternoon esp. at night, dull pain  
- Atrophy of gums; loose teeth  
- Tinnitus or deafness; low back pain; hot flash; night sweat; palm heat  
T: Small & red w/cracks  
C: Less coat or peeled (mapped) or thin yellow  
P: Thin, rapid; maybe superficial | Nourish KID Yin, Remove Deficient Fire, Benefit Teeth  
-------------  
Basic +  
KID-3, 6; UB-52; GB-39, UB-11  
KID-1 w/ moxa - very good to bring deficient fire back to its origin |

Chronic atrophy with loose teeth – KI.  
UB 11 because is hui of bone.
Final review:

☯ Yangming meridian vs. yangming organ
☯ Weak pulse (deep, thin, no strength) versus deficient pulses (may be all 3 loc very weak)

APPENDIX B

☯ Different headaches: Liver yang rising (more shen – deeper colored tongue) versus Liver fire (vertigo, dizziness, bitter taste, yellow urine, red tongue w/ yellow coat.

☯ All mechanisms
☯ 4 needle technique
☯ 24 hour clock, meridians
☯ 100 questions. Covers back pain, arthritis, HA, tooth ache, Bi syndromes, asthma, anxiety, stiff neck, upper respiratory infection, palpitations, insomnia, cough.

☯ All da in this term.
☯ Lower chin – what organ? (stomach)
☯ Itching/skin disease, general itching.
☯ What meridian meets at the shoulder and related to shoulder pain– yang qiao and du. Bi syndrome class.
☯ Taiyang syndrome –manifestations: Taiyang xu/excess, water/blood retention. Blood retention is shen disturbed.
☯ Disease where you don’t want to talk/eat: what channel? Shaoyang. SEE APPENDIX A

☯ Review all cases…though there will be a lot of new ones. Great. I need that so much when I also have a Singles 3 exam the next day. May I just say “fuck?”

NO FILL IN THE BLANKS! Woot!