An introduction to CMDE411
Subject Outline

- Subject rationale
- Learning outcomes
- Subject content (lecture guide)
- Prescribed readings:
  - Kastner, J 2009, Chinese Nutrition Therapy: Dietetics in Traditional Chinese Medicine, Thieme, Stuttgart
## Subject Outline: Assessment

### Assessment Tasks

<table>
<thead>
<tr>
<th>Type</th>
<th>Learning Outcomes Assessed</th>
<th>Session Content Delivered</th>
<th>Session Due</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid Semester Exam</td>
<td>1-4</td>
<td>1-7</td>
<td>8</td>
<td>20%</td>
</tr>
<tr>
<td>Written Assignment (2000 words)</td>
<td>2,3,4,</td>
<td>1-13</td>
<td>Sunday following session 13</td>
<td>30%</td>
</tr>
<tr>
<td>Student Led Tutorial (Formative = Not graded)</td>
<td>1-4</td>
<td>4-13</td>
<td>30 minutes Group activity per Session. 1-2x during semester</td>
<td>Not Graded</td>
</tr>
<tr>
<td>Written Final Examination (2 hour)</td>
<td>1-4</td>
<td>1-13</td>
<td>Final Examination Period</td>
<td>50%</td>
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</table>
Written Assignment

- Choose 1 of 3 case studies to write your assignment on
- Answer **ALL** of the following questions relating to your chosen condition
  - What TCM pattern have you chosen?
  - Western Diagnosis?
  - TCM aetiology, pathology, differential diagnosis, Treatment Principle and Plan?
  - Create a dietary plan for your patient based on Chinese and/or Australian food agents, tailoring your dietary advice to the patient’s lifestyle.
  - Micro-macro nutrient considerations?
  - Core characteristics of each food agent (temperature, taste, direction of action, site of action, pharmacological effects, actions/indications, cautions and contraindications, dosage, cooking times)?
  - Extrapolate, if possible, to determine what would be the core characteristics of an Australian food agent if you choose to use one or more? For example, kangaroo is a lean protein meat that may have characteristics somewhere between beef and venison.
  - Construct a recipe for your patient using the core characteristics of your Chinese/Australian food agents. Tailor it to the patient’s lifestyle and make sure that it has a balance of micro and macro nutrients.
Written assignment Tips

- Read the rubric on the LMS before starting your assignment. Highlight the key words. What exactly are you being asked to do?
- What is your point of view?
- Use formal academic language
- Adhere to the word count
- Proof read for typos, spelling and grammar errors and to make sure that you have answered all parts of the task sheet.
- Harvard Referencing. In text citations are part of the word count
- Decide which case study you will work on based on ideas as to what demographic you are thinking of targeting when you go into practice. For example, if paediatrics is your passion, write your assignment on the paediatric patient
Getting the most out of this class

- Pre-read all readings or look at any internet links before class so that you can discuss them in class time.
- Plan for and then participate in your student led tutorial cooking demonstration. Print out the recipes and core characteristics for that diagnosis, to be distributed in your session for your classmates. At the end you will have the basis for a recipe book that you can use in practice.
- All Chinese Dietary plans that you prescribe for your patients will have to complement their existing Western diets (macro, micro nutrient considerations, current dietary habits) and source available foods in their local contexts.
Student Led Tutorials

- Take some time in this first class to divide into groups. You will be asked to conduct an informal 30 minute student led tutorial from Session 4-13 based on the type of foods that you will be studying in that week. This tutorial is not part of the assessment for this class but will help you with the skills necessary for your assignment.

- Groups will be responsible for using the foods for that week (eg Tonify Qi foods in Session 4) to conduct a cooking and tasting of those foods for a typical patient with that pattern. Construct your own recipe or adapt one and get together with your group to cook the recipe (heat up or finish cooking in class if necessary) or finish off the cooking in class. You must provide your classmates with the recipe, the TCM pattern treated and the Chinese properties of the ingredients.

- You may like to gather these recipes into a class ebook that can be distributed at the end of semester and can be used as a resource in your practice.
Reading for This Week: Enjoy

Session 1

- A History of Chinese Dietetics
- Four Energies
- Temperature
- Five Tastes
- Direction of Action
- Locations
Why use Chinese Dietary Therapy

- You can treat a patient daily
- Because it is readily available as food it can lead to good patient compliance and thus the possibility of a daily therapeutic dose of the agents prescribed
- Complements and supplements herbal prescription and CM treatment
- Tastes good. Chinese herbs are typically bitter in their raw form
- Can be administered to a healthy patient to keep them healthy or a patient with the beginnings of pathology like Sp Qi xu or Lu Qi xu to prevent deeper pathology developing
- Can be administered by family and care givers
Taking A Dietary History

- Just as you use your initial intake form to determine what therapies, surgeries, pharmaceuticals, supplements and treatments your patient may have received from health providers in the past or concurrently it is important to learn to take a patient’ dietary history.

- What TCM patterns might a dietary history be critical for as part of an initial intake interview or a scheduled re-evaluation?

- Why might it be important to have a patient keep a food journal/diary in the week after the initial patient visit? Would it be important for this to be done for any specific TCM disorders? Which ones?
Activity

- Form into a pair and write down your typical food intake from yesterday and then take turns to act as the practitioner and interview your “patient”. Share your findings with the class.
Discuss

“When angry it is easy to swallow food, but hard to digest it... When experiencing strong emotions, it is advisable to delay eating until they have disappeared. Foods should all be ingested at the proper time. ... Delaying eating and being able to digest food is better than eating too soon and not being able to digest. Digestive problems are accompanied by trouble, while good digestion frees a person from worry.”

Classic text (Kastner, p 39)
Actvity

- Take a minute to quietly reflect on how you ate a typical meal in the past week.
- Was it eaten in your car or in a student clinic between classes? Was it rushed or was it taken at leisure?
- Now think of a time when you were able to take time to chew your food and share a leisured meal with friends or family?
- Share these two experiences with your partner and share some insights with your classmates.
- Write a list with your class of some of the distractions in modern living that may be contributing to problems with digesting food or indeed with digesting life! How might you advise your patient to limit those distractions?
Rules of Thumb in Chinese Dietetics

- Eat mindfully
- Chew each bite thoroughly
- Eat what is in season
- Meat should be used as a condiment. Food should be predominantly plant based.
- Fresh, unpolluted naturally grown food is best (Kastner, p 40)
- Avoid highly processed and denatured foods, food additives, refined sugars and sweeteners, frozen foods, microwaving (Kastner, p 40)
- To gain the most qi from your food eat with a minimum of distractions. (Kastner, p 39)
- Eat when the organs related to digestion in TCM are open and receiving qi. Why is 1-3 pm a difficult time typically to concentrate, according to TCM?
A History of Chinese Dietary Therapy
From Antiquity

- Concept that Food and Medicine “come from the same source” from antiquity
- Dietary therapy as the first choice for chronic illness?
- Reasoning that it can be taken daily was understood
- Chinese Dietary therapy originally based on combining food agents with medicinal herbs
- First discussed in the legend "Shennong Chang Bai Cao" (Shennong tastes a thousand grasses) of 2800 BC
- Zhou dynasty (11-256 BC) Royal doctors divided into 4 kinds. One was the Emperor’s dietetic doctor who prepared diets for the Emperor for the preservation of health

Shi, Ho et al, 2010, p101)
History

- HuangdiNei Jing (Yellow Emperor’s) 100BC lists several medicated diets
- Shennong Bencao Jing published in the Qin and Han periods (221BC-8AD) first discusses the medicinal use of Chinese dates, sesame seed, Chinese yam, grape, walnut, lily bulb, fresh ginger and Jobs tears.
- Zhang ZhongJing (“Treatise on Febrile and Misc Diseases”) (25-220 AD) the famous physician, prescribes “Soup of Chinese Angelica Root”, “Fresh Ginger and Mutton soup” and “Decoction of Pig Skin”
  - Shi, Ho et al, 2010, p101)
History

- Sun Simiao (581-682 AD) writes about diet as part of “Prescriptions Worth a Thousand Gold Pieces”
- Li Chi and Sun Shiang, physicians in the Tang Dynasty (618-907 AD) write that, by this time, 60 dietary books had been written and they discussed dietetic prescriptions to maintain health in old age.
- Meng Seng (Tang Dynasty) wrote the 3 vol “Diet Bencao” (Dietary Materia Medica) where foods are identified for their medicinal characteristics and for their nutritional value. Medicinal diets are described for malnutrition and for the deficiency of some food agents in patient diets.
History

- "Old Preserve Health and Your Kith and Kin Prolong Lives" written in the Song Dynasty (960-1279 AD) says "dietetic therapy should go first for any senile diseases and then be followed by medicine if they are not cured"

- In the Yuan Dynasty (1271-1368 AD) in the book "Principles of Correct Diet" by a royal physician, Hu Sihui it was first outlined contraindicated foods for pregnancy, nursing, drinking etc.

- In the Ming Dynasty (1368-1644 AD) in the Ben Cao Kong Mu" by Li Shizhen food groups were classified alongside herbs. The use of medicated gruels and wines was documented.

- Qing Dynasty (1644-1911 AD) food therapy continued to be an integral part of herbal prescription.
Sun Si Miao on Diet

“Food can dispel pathogens and harmonise the zangfu... delight the spirit, relax the mood and support blood and qi.. The foundations of health must come from good diet.. Doctors should know the course for the illness, treat it first with diet and then give medicine.. Do not eat excessively, too much food causes accumulation, too much drink causes phlegm. Chronic alcohol drinking rots the intestines and stomach, soaks the marrow and steams the tendons, harms the spirit and reduces life span.... (Buck, 2015, p155)
Sun Si Miao on Diet continued

- ...After a light breakfast use warm hands to rub your stomach, take a fifty yard walk and then rest. After lunch again rub your stomach and walk one or two hundred yards, going slowly and taking time. Do not let the qi rush. After walking return to bed to lie down, spread hands and feet, don’t sleep, in a minute the qi becomes sufficient.. then sit up. When the stomach feels empty attend to this instantly, don’t be starved. During autumn and winter we should keep a warm stomach. If stomach feels upset take HouPo Sheng Jian decoction. Keep to a lifestyle like this and we avoid premature death.”
Four Energies

- **Ascending:** Moves Yang upward. From lower (below the waist) to upper body regions to counteract downward movement diseases like prolapse or diarrhoea. Mostly sweet and pungent, warm and neutral. Best if used in Spring: eg shallots, garlic.

- **Descending:** Moves Qi downward and inward, keeps qi and body fluids in the interior. Moves downward from above the waist to below the waist: for lower patterns that rebel upward. Eg Nausea/vomiting, hiccups, coughing, some asthma patterns. Mostly cooling, neutral, sour and sometimes salty or bitter. Eg these foods act to lower ascendant Lv Yang with dizziness and headaches. Eg Yogurt and Lemon.
Four Energies

- **Floating**: Moves Qi upwards and outwards, expels external pathogens, dissipates cold and wind. From the centre to the bodies' periphery. E.g. helps to induce sweating, to reduce fever. These foods have a strong/hot thermal nature and are sweet and pungent e.g., cinnamon, pepper. Used in summer they can cool and detoxify.

- **Sinking**: Has a laxative and diuretic effect. Promotes movement towards the centre and inwards which means that they help to move foods out through the stool and can help to clear abdominal swelling. Cooling or cold with a strong salty or bitter flavour eg crayfish, Epsom salts.
Why warm or cool a patient with food?

- Each food has an inherent temperature. A food either warms or cools the body.
- We should strive to prescribe foods that leave the body in a neutral temperature: not too hot or cold.
- If a patient is too hot or cold in temperature we should add foods with properties that can cool or warm them to bring them back to balance.
- In prescribing foods for our patients we should seek to balance the five flavours, the hot and cold nature of food and respond to current seasonal variables.
Temperature

- **Cold**: Yin in nature. Creates cold, cools internal heat, calms Shen. E.g., watermelon, orange, dandelion
- **Cool**: Yin in nature, supplements body fluids and blood, slows down qi, clears heat: e.g. Yogurt, soy milk
- **Neutral**: Builds qi and body fluids, stabilises and harmonises the body. E.g. honey, rice, potatoes
- **Warm**: Yang in nature. Strengthens the Yang and the qi, warms body, bowels and organs, reinforces the middle Jiao. E.g., fennel, chicken, oats
- **Hot**: Yang in nature. Increases Yang, quickens qi, activates warms and moves upward and outward. Warms, eliminates internal and external cold. Mobilizes bodies' defences. E.g. ginger, cinnamon, lamb
The Yellow Emperor Says..

“ If people pay attention to the five flavours and blend them well their bones will remain straight, their muscles will remain tender and young, breath and blood will circulate freely, the pores will be fine in texture, and consequently breath and bones will be filled with the Essence of life”

Sounds Good!!

- Huang Di, “Yellow Emperors Classic of Internal Medicine“ 2500 BC
## Five Tastes

<table>
<thead>
<tr>
<th>Yang</th>
<th>Taste</th>
<th>Phase</th>
<th>Location/Organ Network</th>
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<tbody>
<tr>
<td></td>
<td>Sweet</td>
<td>Earth</td>
<td>Sp/St</td>
</tr>
<tr>
<td></td>
<td>Pungent</td>
<td>Metal</td>
<td>Lu/L.I</td>
</tr>
<tr>
<td>Yin</td>
<td>Bitter</td>
<td>Fire</td>
<td>Ht/ S.I</td>
</tr>
<tr>
<td></td>
<td>Salty</td>
<td>Water</td>
<td>Ki/ Bl</td>
</tr>
<tr>
<td></td>
<td>Sour</td>
<td>Wood</td>
<td>Lv/ Gb</td>
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Bitter

- Bitter: Dries dampness, cools heat, treats mental restlessness. For example, almonds, bitter melon, rye, thyme, dandelion and tea. Improves digestion (think digestive bitters used in many European cuisines and taken to improve the digestion of fatty, meaty meals). Improves appetite.

- Reduces excess conditions so use judiciously for xu or cold conditions. Can also deplete qi and fluids if used in excess.
Sweet

- Sweet (and Umami) Relaxes, harmonises. Supplements the Sp and St. For example, eggplant, honey, corn, pumpkin, rice, beef. Arguably all foods have a little sweetness. The sweet flavour harmonises all the other flavours. Stimulates qi and xue circulation. Tonifies and strengthens. Good for treating deficiency and moistening dryness.

- C.I In excess it can contribute to the formation of phlegm and heat and lead to damp. Too much sweet can damage the SP/ST, weaken bones, thin head hair and damage the Ki. Limit use of sweet when tumours, obesity and oedema are present.

- Attunement with the season of late summer but appropriate to every season as it is the taste of the SP/ST and thus the focus of digestion.
Sweet

- Uses: Complex carbohydrates energize and relax the body, nerves and brain and treat a cold / xu patient
- Most dairy and animal products are considered sweet and can be used for very xu patient to build.
- Soothes aggressive Liver emotions
- Moistens dry Lung conditions
- Quietens the Shen
- Softens the harsh taste of bitter foods
- In Spring warm, sweet, pungent foods with their outward Spring-like warming and ascending action can attune a patient to the change of season (spearmint, sweet rice, sweet potato, rice syrup)
- Full sweet: Tonifies and strengthens. Many grains and legumes
- Empty sweet: Cleanses and cools. Most fruits (Pitchford, p314/315)
Pungent

- Pungent: Scatters, moves Qi and stagnations, moves obstructions. Moves the blood. For example, shallots, ginger, black pepper.

- Can break “crack” phlegm accumulations

- Take care when choosing the temperature of pungent foods. If the food is too spicy (pungent) it may eventually cool the body through excess sweating. Sometimes this will be the desired application

- Warm pungent foods will benefit cold conditions

- If dampness and stagnancy also have an underlying deficiency you will need to supplement the use of pungent foods with a tonifying diet. Too much pungent flavour in the diet can exhaust qi and xue.
Pungent

- "Moistens the kidneys" and increases fluids in the body. Saliva and sweat volume increases with acrid herbs like ginger.
- Stimulates cardio function.
- Clears obstructions and slow Liver function.
- Hot pungent for cold in the body: cayenne, ginger, pepper.
- Good for a cold, lethargic, damp, dull patient.
- Good for wind conditions characterised by restlessness and nervousness: seeds like dill, caraway.
- Pungency can be diminished by prolonged cooking. Try eating raw, steamed or pickled.
Pungent: Acrid, Spicy, Aromatic

- Offers protection against mucous producing foods
- Offsets the effects of mucous producing foods like dairy and meat and to a lesser degree nuts, legumes, grains, seeds
- Diaphoretic (w/c or w/h ext attack)
- Disperses stagnant blood
- Increases the circulation of Qi
- Expels parasites (garlic, mugwort, cayenne)
- Expels intestinal gas and digestive function
- C.I Do not use warming pungents when heat is present. Can worsen the condition of a “dry, windy, nervous or thin person” (Pitchford, p 311)
Salty

- Salty: Disperses stagnation, softens accumulations, supports Ki and urinary fx and moistens the intestines. For example sea cucumber, scallops and kelp. The salty flavour moves inward and downward to the centre (Sp/St) and the root (Ki) of the body. It moistens, softens and detoxifies to soften muscles and glands. It regulates the body’s moisture balance, stimulates digestion and improves concentration.

- It rehydrates (think the use of electrolytes after losing body fluids through excess vomiting and diarrhoea) but in excess can cause the body to retain excess water (think oedema and Heart conditions).
Sour

- Sour: Astringes and secures body fluid leakage (urinary, excess sweat, haemorrhage, diarrhoea) Strengthens sagging tissue (flaccid skin, haemorrhoids and uterine prolapse) Cools hot emotions (anger/Lv) Treats empty heat sweating and diarrhoea, For example plum, tomato, olives, lemons and lychees, citrus, sauerkraut, pickles, hawthorne berry, vinegar
- Its astringent effect makes it useful for conditions in which body fluids have been lost. Helps to stimulate gallbladder and pancreatic secretions. Lowers intestinal acidity.
- Used in excess could cause too much moisture retention
- Sour derives from acidity (citric, tannic and ascorbic acid)
Sour

- Helps digestion. Breaks down fats and proteins in the Lv/Gb.
- Helps strengthen weak lungs
- “Organises scattered mental patterns” (Ht) (Pitchford, p 313)
- Attunes a body to Autumn and the necessary contraction called upon in the cooler coming months
- Cautions: Patients with tendon issues should not use the sour flavour. Damp patients and constipated patients should use this flavour judiciously
- View in your own time the recipe below for pickling
  - [http://healingwithwholefoods.com/articles/spring-into-summer/](http://healingwithwholefoods.com/articles/spring-into-summer/)
How to use the Five Tastes in Practice

- Tastes do not occur by themselves. When prescribing foods we must consider their direction, action, thermal nature and the organs that they enter.

- Some foods have two or more tastes: eg Vinegar (bitter/sour) Use only if both tastes are indicated.

- In prescribing diet we must strive for tastes in balance but Sweet should predominate. (Earth element, Sp/St as central to digestion and assimilation, carbs, legumes, grains, nuts, seeds, fruit/vege are mostly “sweet”) with small amounts of bitter, salty, sour and pungent foods. (Pitchford, pp 309)

- The Quantity of a taste is important: a small amount of a taste is medicinal while a large amount can weaken a patient. eg Type 2 Diabetes and the Sweet taste.
Seasons

- **Spring**: Warming and outward movement. Lv nourishing foods should be eaten. The eating of shoots and dietary cleanses are recommended.
- **Summer**: Hot. The Ht craves coolness. Concentrate on dispelling Heat and generating body fluid foods (watermelon, mung bean soup)
- **Autumn**: Cool and dry. Emphasis on reinforcing and moistening the Lu
- **Winter**: Cold. Food choices should reinforce the Ki and warm the Yang.
Chinese and Australian Climate Zones

- Have a look at the following Australian Climate zones in your own time.

- Compare them to the Climate zones in China.
  - [http://www1.chinaculture.org/library/2008-01/08/content_21794.htm](http://www1.chinaculture.org/library/2008-01/08/content_21794.htm)
  - [http://www.topchinatravel.com/china-guide/china-climate.htm](http://www.topchinatravel.com/china-guide/china-climate.htm)

- Chinese Dietary therapy developed in China and is based on food grown in different climate zones. How can we adapt this information to the Australian context? Discuss.
Prescriptions for Regional Climactic Variations

- Australia has large regional variations in climate like China. TCM says that different climate zones can give rise to different illnesses. Have a look at these climactic variables and dietary prescriptions in China and decide which regions correspond to similar Australian climactic zones. Is there even more variation of climate zones in Australia than China and if so what TCM patterns might be prevalent in each of these zones?

- South East coastal China: warm, wet and humid. Damp heat is prevalent. TXP. Drain Damp

- North West China: Cold, dry. Cold, dry illness prevalent. TXP. Dispel cold and moisten dryness (Liu, p 33)
Cooking Methods

- Foods are considered to have an inherent quality that can be partly modified through the way in which they are prepared. Different cooking methods can increase the Yin or Yang qualities of food.

- Cooking is believed to consume the Yin and increase the Yang of a food. The faster it is cooked/the more direct contact the food has with a heat source the more moisture evaporates and thus the more the Yin is consumed.

- Cooking in TCM starts off the digestive process or “pre-digests” food. E.g breaks down cellulose packets in vegetables for easy absorption. (Rossi, p 173)

- Food itself is Yin, of the earth while fire/cooking source is Yang. Cooking methods can increase the Yin or Yang characteristics of a food

- The Yin or Yang characteristics of foods can modified by employing assisting foods: e.g. Cooking in milk can enhance Yin’s inherent nourishing and moistening properties while adding warming spices can add the Yang properties of warming and movement (Rossi, p 174)
Yin and Yang Cooking Methods

**Yin**
- Nourishes and moistens
- Raw foods
- Only slightly modifies the structure and characteristics of a food so conserves its nourishing and moistening properties
- Water based cooking methods

**Yang**
- Warms and moves
- Cooked foods
- Cooking method enhances and strengthens the Yang characteristics of food, making it more energizing, warming and outward moving
- Fire based cooking methods
- Can increase Yang tendencies in Yang pattern patients
- Oil is often used
Activity

- As a class put the following cooking methods on a continuum from the most Yin to the most Yang.

- Stewing, frying, poaching, steaming, roasting, blanching, grilling, blanching, sautéing, boiling, baking, coddling, dehydrating, barbequing, char-grilling, simmering…

- Are there any cooking methods that might be missing and where would they go on this continuum?
Reading for Next week

- [http://www.newyorker.com/magazine/2012/10/22/germs-are-us](http://www.newyorker.com/magazine/2012/10/22/germs-are-us)
References