Herbal Medicine *Materia Medica* 1

WHMF112

Session 1: Introduction
Session 1

Introduction to Herbal Medicine *Materia Medica* 1

- Outline
- Rationale
- Assessment
- Student Resources

- History of *Materia Medica*
- Therapeutic Actions: A
Introduction
Herbal Medicine *Materia Medica* 1

Subject Outline
Course is 13 sessions: 2 hour lectures & 1 hour tutorial

Content: Herbs that primarily support these systems

- Respiratory system (weeks 4-6)
- Immune system (weeks 6-7)
- Integumentary system (weeks 8-9)
- Circulatory system (weeks 10-11)
- Digestive system (weeks 12-13)
Herbal Medicine *Materia Medica* 1

Rationale:

- Herbs are delivered in one system that they support even though they each support many.
- This grouping is to introduce you to the herbs for ease of learning and reduce repetition.
- Individually, the herbs are explored by actions & indications, dose & administration for clinical application.
- This information is based on traditional, historical & current research.
Herbal Medicine *Materia Medica* 1

**Preparation:**

- **Pre-read for each session:** lectures are delivered at a level where this is assumed.
- **Tutorials need to be completed:** adds clinical context to the subject & prepares you for the exams as the case studies are loosely based on the tutorial work.
- **Self-study the herbs** (Google, Youtube, texts, journal articles) & complete your **Worksheets:** Herbal Actions & Herbal *Materia Medica*.
Herbal Medicine *Materia Medica* 1

**Assessment: Open Book Mid-Semester Exam**

- 1 hour + 5 minutes reading time (short answer & case study) conducted in week 7.

Printed documents & no electronic devises:
- Printed powerpoint notes, Session 1 Worksheet - Herbal Actions, Session 4 Worksheet - Herbal Materia Medica & hand-written or typed notes.
- Set texts

The mid-semester exam will be based loosely around the tutorials and activities from session 1-6.

You will still be expected have a knowledge of **all** symptoms, conditions, diseases & concepts covered in tutorials 1-6.
Assessment: Herbal Monograph

• Choose 1 (one) herb that is studied in WHMF112 only and write a herbal monograph using traditional and modern texts and current research.

• Please watch this video on Academic writing:
  • https://www.youtube.com/watch?v=aVckGxQvGeA&feature=youtu.be

• Session 8: library research tutorial on researching. Requires you to have started your monograph.

• Assignment sheet has live links to a Herbal monograph exemplar, Library guide for Herbal medicine, tutorials on referencing and the APA guide.
WHMF112 Assessment

Final Examination
• 1.5 hour closed book examination (exam week)
• Multiple choice, short answer & case study.
• Herbal dosages table (Latin binomials only) will be included in the exam for student reference.
• Content covered is session 1-13.

Exam preparation:
• Review all learning material utilized
• Weekly practice review quizzes on the LMS are similar to the multiple choice in the final exam.
History of *Materia Medica*
History of *Materia Medica*

*Materia medica* means a group of ‘medicinal plants and other materials’. (van Wyk & Wink, 2010)

Every culture has utilized herbs from their surroundings to support health.

Before the earliest reporting, this was passed by word of mouth from generation to generation. (Potterton, 1983; van Wyk & Wink, 2010; Bone & Mills, 2013)

All traditional healing systems explored energetic herbalism for the holistic management of health. (Wood, 2004)
History of *Materia Medica*

**Ayurvedic Herbalism**

- Over 5,000 years old & explores all aspects of being to maintain health. Songs and poems (*Rig Veda*) were transcribed into text called the *Veda* around 2000BC. *(van Wyk & Wink, 2010)*

- Energy management of a person is defined in terms of *dosha* characteristics.

- Disease and subsequent herbalism addresses the imbalances between nervous energy (*vata*), metabolic catabolism (*pitta*) and metabolic anabolism (*kapha*). *(Frawley & Lad, 1986)*
History of *Materia Medica*

**Middle Eastern & Arabian Herbalism**

- Groundings in Babylonian, Assyrian & Sumerian cultures (2600-4000BC). Existing clay tablets, wall paintings and papyrus scrolls recording medicinal herbs were found in Egyptian tombs & in Ebers Papyrus scrolls (3000-1500BC).  
  
  (van Wyk & Wink, 2010)

- Arabic medicine utilized the four qualities of hot, cold, wind, damp, dry & summer heat (humid heat) to analyze health and disease.  
  
  (Wood, 2004)
History of *Materia Medica*

**Traditional Chinese Medicine**

- Over 5,000 years old & contextualizes the internal and external elements effects on health.
- Chinese emperors (Shen Nong 2800 BC), Huang Di Nei Jing (Yellow Emperor ~100-200BC) and more recently Li Shizhen (1590 AD) defined the healing system into text. *(van Wyk & Wink, 2010)*
- Chi/Qi is both material and energy. Herbs are classified in terms of temperature and their curative properties on organs and meridians.*

*(Tierra, 1988)*
History of *Materia Medica*

**Greek Herbalism**

- Hippocrates (460-377BC) and Aristotle (384-322BC) utilized cultural traditions of ancient India and Egypt to influence European herbal healing traditions.  
  (van Wyk & Wink, 2010)

- Early medical models that defined four humors defined by Hippocrates. This model emphasized balance and a holistic approach to healing.  
  (Griggs, 1981)
History of *Materia Medica*

**Roman Herbalism**

- Galen (AD 131-199) incorporated Greek and Roman medicinal principles into a medicinal system while Dioscorides (C1st) began classifying herbs into healing actions and wrote the book *De Materia Medica*.

  (van Wyk & Wink, 2010; Spitzer, 2012)

- Biological humors had elemental characteristics of temperature (hot/cold) and fluid levels (moist/dry)

  (Tierra, 1988)
History of *Materia Medica*

**European Herbalism**

- Paracelsus (1493-1541) explored the Doctrine of Signatures (like cures like) and began exploring the dosages of herbs to generate healing. Jakob Bohme (1575-1624) expanded on this work.
- This work then went on to influence the work and writings of Nicholas Culpepper (1616-1654) who was the ‘founder of English language herbalism’ and other European herbalists.

  (Wood 2008; van Wyk & Wink, 2010; Spitzer, 2012)
History of *Materia Medica*

- Samuel Thompson (1769-1843) and Wooster Beech (1794-1868) explored the herbal remedies and native practices of North America.

- The Physiomedicalist movement influenced European herbalism and is still evident today.  
  (van Wyk & Wink, 2010)
History of *Materia Medica*

- Traditional African, Central & South American and Australian herbalism was diverse and are unique to the various regions and tribes but poorly recorded.
- Herbs from these regions are in common use.  
  (van Wyk & Wink, 2010)

- It is surmised that almost 25% of all plant species has some sort of medicinal use somewhere in the world.  
  (Verpoorte, 2009)
History of *Materia Medica*

The exploration of medicinal material or *Materia Medica* has evolved into the modern day each with it’s origins in these traditional teachings:

1. Pharmacology of allopathic medicine: The primary method of treatment of modern medicine is *Materia Medica*.
2. Homeopathy which uses minute dosages of *Materia Medica* in its medicines.
3. Herbalism that uses herbal medicine.
Therapeutic Actions
Therapeutic Actions

• Through the world-wide evolution of herbal usage common characteristics of herbs and their efficacy for conditions and disease states have been identified.

• Once such way of exploring herbs and their effects is to categorize according to commonly defined actions within the body as created by Traditional herbalists.

• This is the form of classification system that will be utilized in this unit and throughout the rest of your study at Endeavour.
Therapeutic Actions

• Due to this the next three sessions, in part will be dedicated to exploring and understanding these herbal actions.

• For ease of reference these actions have been delivered in alphabetical order.

• The Session 1 Worksheet has space for you to define the action in your own words, and then list the system where this action would work.

• Note, some actions are specific to some systems but others will work in many systems highlighting the versatility of herbs.
Actions Activity

• Open the WHMF112_SN01_Herbal Actions Worksheet

• As your lecturer discusses each action fill in the worksheet. Session 1 covers: Actions: A.

• Create a memory key (something that you uniquely identify with the action), and give examples of herbs that present with this action.

• Discuss your findings with the group.
Therapeutic Actions: A’s
Therapeutic Actions

Adaptogen

• Supports hypothalamus function. Improves endocrine regulation aiding an appropriate stress response. (Wood, 2008)

• Beneficial for depleted adrenal cortex stress hormones. (Mills, 1985)

• Stressors include physical, environmental, emotional or biological agents. (Hechtman, 2012)
Therapeutic Actions

Adrenal Tonics / Restoratives

• Support and reinvigorate the action of the adrenal glands.  
  (Hechtman, 2012)

• “Improves the tone, histology, and function of the adrenal glands (especially the cortex)”  
  (Bone, 2003 p. 481)

Therapeutic Actions

Alterative / Depurative

• Improves elimination & reduces the accumulation of metabolic wastes from tissues.  
  (Mills, 1985; Hechtman, 2012)

• Removes toxins, mucus & mucopolysaccharides from the lymph & blood.  
  (Wood, 2008)

• “Supports elimination via kidneys, liver, lungs or skin.”  
  (Hoffmann, 2003 p. 605)

© Endeavour College of Natural Health
Therapeutic Actions

Analgesic/ Anodyne

- Reduces or relieves the sensation of pain.
  (Hoffmann, 2003)
- Effect occurs thorough altering the sensations of the nerves, spinal cord and/or the brain.
  (Hechtman, 2012)

Therapeutic Actions

Antacid

• A substance that neutralizes acid.  
  (Hoffmann, 2003)

• Regulates the production of hydrochloric acid (HCl$^-$) in the stomach. This will lower the overall acidity within the gastrointestinal tract.  
  (Hechtman, 2012)
Therapeutic Actions

Anthelmintic

• Greek *anti* (against) *helmins* (worms). Evidence of this being used in Egyptian and Roman cultures.
  
  (Hechtman, 2012)

• Eradicates & eliminates intestinal worms from the gastrointestinal tract.
  
  (Mills, 1985)
Therapeutic Actions

Anti-allergic

• Down-regulates the allergic response by stabilizing the membranes of mast cells.
  
  (Bone, 2003)

• This in turn may reduce the secretion of histamine.
  
  (Hechtman, 2012)

Therapeutic Actions

Anti-bacterial

- Destroys bacteria (bactericidal) or inhibits the growth of bacteria (bacteriostatic).

  (Bone & Mills, 2013)

- This action was not coined until the 19th century when the microscope was invented.

  (Hechtman, 2012)
Therapeutic Actions

Anti-catarrhal / Mucolytic

• Reduces the formation of excessive mucus.
  (Bone & Mills, 2013)

• This can occur by encouraging the body to produce less viscous mucus so it is easier to expel or by reducing the quantity produced.
  (Hoffmann, 2003)
Therapeutic Actions

Anti-depressant

• Aids in alleviating depression.
  (Bone & Mills, 2013)
• Traditional terminology would refer to depression as ‘melancholy’.
  (Hechtman, 2012)
Therapeutic Actions

Anti-emetic

• Prevents or reduces nausea & vomiting.
  (Braun & Cohen, 2010; Bone & Mills, 2013)

• Usually herbs with a high volatile oil content making them antispasmodic to the smooth muscle of the digestive tract
  (Hechtman, 2012)
Therapeutic Actions

Anti-hyperhydrotic / Refrigerant

- Reduces excessive sweating.
  (Bone & Mills, 2013)
- Locally cools, lowers body temperature and may reduce excessive thirst sensations.
  (Fisher, 2009)

**Therapeutic Actions**

**Anti-inflammatory**

- Reduce inflammation or the severity of inflammatory diseases. *(Mills, 1985)*
- The body’s normal response to infection / damage is inflammation.
- Anti-inflammatory herbs support the body processes within the affected tissue or organ. *(Hoffmann, 2003)*


© Endeavour College of Natural Health  endeavour.edu.au  38
Therapeutic Actions

Anti-lithic

- Reduces the formation of stones (calculi) within the urinary tract or gall bladder

(Fisher, 2009; Bone & Mills, 2013)
Therapeutic Actions

Anti-microbial/ Antiseptic

• Work directly on destroying micro-organisms or indirectly via enhancing the immune system response to the presence of these agents.

• Micro-organisms can be bacteria, fungi, parasites, viruses, or protozoa

(Hoffmann, 2003; Bone & Mills, 2013)
**Therapeutic Actions**

**Anti-oxidant**

- Protect or minimize damage to cells against oxidation and free radical damage.
  
  (van Wyk & Wink, 2010)

- Oxidation damage to cells is indicated as one of the primary factors in the generation of many diseases.
  
  (Fisher, 2009)
Therapeutic Actions

Anti-platelet

• Reduces platelet aggregation within the blood.

• This reduces thrombus formation and increases bleeding time.

(Bone & Mills, 2013)
Therapeutic Actions

Anti-pruritic

- A substance that relieves or prevents itching.

(Braun & Cohen, 2010)
Therapeutic Actions

Anti-pyretic / Febrifuge

• Used to reduce or prevent fever.

(Bone & Mills, 2013)
Therapeutic Actions

Anti-rheumatic

• A substance that prevents or relieves rheumatic symptoms. 
  (van Wyk & Wink, 2004)

• This action characterizes a group of actions that specifically support this disease state. These include anti-inflammatory, analgesic, alterative actions. 
  (Hoffmann, 2003)
Therapeutic Actions

Antitussive

• Reduce coughing by suppressing the cough reflex.  
  (Hechtman, 2012)

• Most often herbs containing cyanogenic glycoside constituents act to suppress the cough reflex.  
  (Mills, 1991)
Therapeutic Actions

Antiviral

- Inhibits the growth, destroys or increases the immune system's response to the presence of a virus.
- Modern action given the recent understanding of viruses (since the 18th Century).

(Hechtman, 2012)
Therapeutic Actions

Anxiolytic / Thymoleptic

• Aids in reducing or treating anxiety states.

( Braun & Cohen, 2010; Hechtman, 2012)
Therapeutic Actions

Aromatic Digestive

• Herbs high in volatile oils that are pleasant in smell and/or taste (pungent or spicy) and are warming.

• These herbs reduce spasm and increase circulation to the digestive tract

(Tierra, 1988; Wood, 2008; Bone & Mills, 2013)
Therapeutic Actions

Astringent

• Localized action of tannins binding to proteins. 
  (Hoffmann, 2003)

• Contracts tissues thereby reducing excretions, creating a short-term barrier to inflammation and irritation. 
  (Mills, 1985; Fisher, 2009)
References


References


Tutorial: Session 1
Tutorial

Break into groups of 1-3 (max).
Each group is assigned a condition:
• Group 1: Tonsillitis
• Group 2: Laryngitis
• Group 2: Common cold (nasopharyngitis)
• Group 3: Sinusitis
• Group 4: Allergic rhinitis
• Group 5: Acute bronchitis
• Group 6: Influenza
Tutorial

In your groups define your condition:

• What are the common symptoms?
• What generally makes it better or worse?
• What systems are involved?
• What actions would be relevant to the management of this condition? Why?

• Discuss your findings with the group.
• Take notes from the findings of the other groups as they report.
• Hint: one or more of these conditions are used in examinations for this unit.
Recommended Readings

- Video: A history of herbal medicine, Medical herbalism
  https://www.youtube.com/watch?v=S8SHvgM1bMc

- Mountain rose blog 2013, *Understanding & Identifying Basic Herbal Actions*. Viewed 15/12/2015
  http://mountainroseblog.com/understanding-herbal-actions/

- American botanical council, 2013 *Terminology* Viewed 15/12/2015
  botanicahttp://abc.herbalgram.org/site/PageServer?pagename=Terminology

COMMONWEALTH OF AUSTRALIA

Copyright Regulations 1969

WARNING

This material has been reproduced and communicated to you by or on behalf of the Australian College of Natural Medicine Pty Ltd (ACNM) trading as Endeavour College of Natural Health, FIAFitnation, College of Natural Beauty, Wellnation - Pursuant Part VB of the Copyright Act 1968 (the Act).

The material in this communication may be subject to copyright under the Act. Any further reproduction or communication of this material by you may be the subject of copyright protection under the Act.

Do not remove this notice.