Food As Medicine

Syllabus

The **Food As Medicine** online learning program is a series of 16 educational modules that introduce the most important concepts and practices in nutrition, drawing upon both tradition and modern clinical research. The course is comprised of 16 prerecorded classes that run for a total of 42 hours, in addition to 40 minutes of practical instruction videos, and 48 hours of Q&A webinars run over four semesters, totalling over 90 hours of online training — not including individual study time and course work.

In addition to the video and audio content, registration includes a printed copy of the 352 page book Food As Medicine: The Theory and Practice of Food.

The modules contained within the Food As Medicine program include:

- 1. Digestion and Absorption
- 2. Chemistry and Metabolism
- 3. Micronutrients (vitamins)
- 4. Micronutrients (macrominerals)
- 5. Micronutrients (trace minerals)
- 6. Phytochemistry and Food
- 7. Introduction to Ayurveda
- 8. The Quality and Nature of Food (I)
- 9. The Quality and Nature of Food (II)
- 10. The Quality and Nature of Food (III)
- 11. The Practice of Food (I)
- 12. The Practice of Food (II)
- 13. Herbs and Spices (I)
- 14. Herbs and Spices (II
- 15. Fasting and Detoxification
- 16. Dietary therapeutics

Assessment

Each module contains a comprehensive lesson worksheet to test your knowledge. A passing grade is at least a 75% mark. Upon completion, successful candidates will receive a signed and sealed diploma from the Dogwood School of Botanical Medicine. For more information please contact study@dogwoodbotanical.com.

Syllabus details

Class One: Digestion and absorption: a detailed review of the anatomy and physiology of the digestive system, including clinical insights on digestion and absorption, and a review of gastrointestinal microbiome. Sections covered in this lesson include:

- histology and structure
- mouth, salivary glands, tongue and teeth
- pharynx and esophagus
- stomach and gastric digestion
- pancreas
- liver and gall bladder
- small intestine and absorption
- colon

Hours: 3.5

Assessment: 1 hour

Class Two: Chemistry and Metabolism: a review of the key concepts that underlie modern nutrition, including basic chemistry, the macronutrients, and metabolic function. Sections covered in this lesson include:

- elements and nutrients
- energy transfer and ATP production
- carbohydrate metabolism
- protein metabolism
- lipid metabolism

Hours: 3

Assessment: 1 hour

Class Three: Micronutrients (vitamins): a review of the vitamins. Sections covered in this lesson include:

• A, B, C, D, E, K

Hours: 4.5

Assessment: 1 hour

Class Four: Micronutrients (macrominerals): a detailed review of the eight macrominerals. Sections covered in this lesson include:

• Ca, Cl, Mg, K, P, Si, Na, S

Hours: 3.5

Assessment: 1 hour

Class Five: Micronutrients (trace minerals): a detailed review of the trace minerals. Sections covered in this lesson include:

• B, Cr, Co, Cu, F, Ge, I, Fe, Li, Mn, Mo, Se, Sr, V, Zn

Hours: 3

Assessment: 1 hour

Class Six: Phytochemistry and Food: an introduction to organic chemistry, and the synthesis of primary and secondary metabolites from photosynthesis. Includes a review of key secondary metabolites that play an important role in both food and herbal medicine. Sections covered in this lesson include:

- organic chemistry
- photosynthesis
- primary metabolites
- secondary metabolites
 - o organic acids, alcohols, and esters
 - polysaccharides
 - o glycosides
 - o phenols and polyphenols
 - o glucosinolates
 - o terpenes
 - o resins
 - o alkaloids
 - antinutrient factors

Hours: 3

Assessment: 1 hour

Class Seven: Introduction To Āyurveda: an introduction to Āyurveda, and the key concepts that underlie its usage, including:

- the concept of food in Ayurveda
- the concept of quality (guna)
- the three humors (*tridosha*)
- constitution (*prakriti*)
- disease (vikriti)
- six flavors (rasa)
- climate (deha)
- time and season (*kāla*)
- quantity of food (*rāśi*)
- quality of food (*prakṛti*)
- preparation of food (karana)
- combination of foods (samyoga)
- consumption of food (upayoga)
- recipient (upayukta)

Hours: 5.5

Assessment: 1 hour

Class Eight: The Quality and Nature Of Food (I): a review of the different components of the diet. Sections covered in this lesson include:

- water
- vegetables
- fruit
- meat

Hours: 3

Assessment: 1 hour

Class Nine: The Quality and Nature Of Food (II): a review of the different components of the diet. Sections covered in this lesson include:

- cereal grains
- legumes
- nuts and seeds
- dairy

Hours: 3

Assessment: 1 hour

Class Ten: The Quality and Nature Of Food (III): a review of the different components of the diet. Sections covered in this lesson include:

- fats and oils
- sweeteners
- tea, chocolate and coffee
- salt
- alcohol

Hours: 3.5

Assessment: 1 hour

Class Eleven: The Practice Of Food (I): is an anthropological and historical exploration of the human diet, as well as a review of traditional and modern diets. Sections covered in this lesson include:

- the evolution and history of diet
- the Paleolithic diet
- the Ayurveda diet (*vāta*, *pitta*, *kapha*)
- the vegetarian diet
- the vegan diet
- raw foodism

 modern diets (e.g. Atkins, South Beach, Mediterranean, Zone, DASH, Mayo, Pritikin, Ornish)

Hours: 4.5

Assessment: 1 hour

Class Twelve: The Practice Of Food (II): is a review of the benefits and disadvantages of different types cookware. This class also provides a detailed review of the various methods of food preparation, and discusses their merits and potential problems. Sections covered in this lesson include:

- cookware
 - o ceramics, soapstone, cast iron, copper etc.
- food preparation
 - o raw
 - o germination
 - o steaming
 - o boiling, stewing and braising
 - o baking and roasting
 - o frying
 - o grilling
 - o fermentation
 - o curing

Hours: 3

Assessment: 1 hour

Class Thirteen: Herbs and Spices (I): part one of a review detailing the culinary and medicinal use of >50 different herbs and spices. Also discuss the use of masalas, rubs and marinades, and how to blend herbs and spices together.

Hours: 4

Assessment: 1 hour

Class Fourteen: Herbs and Spices (II): part two of a review detailing the culinary and medicinal use of >50 different herbs and spices. Also discuss the use of masalas, rubs and marinades, and how to blend herbs and spices together.

Hours: 4

Assessment: 1 hour

Class Fifteen: Fasting and Detoxification: is a review of the theory and practice of detoxification within traditional and alternative medicine, including various methods and strategies, and the use of medicinal herbs as adjuncts.

Hours: 4.5

Assessment: 1 hour

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Class Sixteen: Dietary therapeutics: is a review of dietary therapy, providing a review of selected health issues and their treatment and prevention with diet. Sections covered in this lesson include:

- meal plans
- strategic eating
- food allergies
- elimination challenge diet
- review of health issues and dietary treatment

Hours: 4

Assessment: 1 hour

TOTAL PROGRAM HOURS (including assessment): 66 hours

Video and audio versions of each class are available on demand by accessing the Food As Medicine Student page. In addition to these classes, registration in Food As Medicine provides an additional 70-80 contact hours through our weekly Q&A webinar, offered over a two year period of enrollment.

Materia medica (herbs and spices)

- 1. American ginseng root (xi yang shen)
- 2. Amla fruit (Amalaki, Indian gooseberry)
- 3. Asafoetida resin (hing)
- 4. Ashwagandha root
- 5. Asparagus (wild) root (shatavari, tian men dong)
- 6. Basil leaf
- 7. Black Mustard seed (kalirai, sarson)
- 8. Black Pepper fruit (gulki, hu jiao)
- 9. Calendula flower
- 10. Caraway seed
- 11. Cardamom seed (black)
- 12. Cardamom seed, black (badi elachi, xiang dou kou)
- 13. Cardamom seed, green (choti elachi)
- 14. Chickweed herb
- 15. Chili fruit (mirch, la jiao)
- 16. Chinese Angelica root
- 17. Chinese Angelica root (dang gui)
- 18. Chinese Ginseng root (ren shen)
- 19. Chinese yam rhizome (shan yao)
- 20. Cinnamon bark (twak)
- 21. Cassia or Chinese cinnamon (rou gui, dalchini)
- 22. Clove flower (lavang)
- 23. Coriander seed (dhaniya)

- 24. Cumin seed (jeera)
- 25. Curry leaf (karipatti)
- 26. Dandelion (dudal, pu gong ying)
- 27. Dill seed, herb (sowa, shi luo)
- 28. Epazote
- 29. Fennel seed
- 30. Fenugreek seed, herb (methi)
- 31. Garlic bulb (lashun, da suan)
- 32. Ginger rhizome (sonth, gan jiang)
- 33. Goji fruit
- 34. Gotu kola (brahmi, ji xue cao)
- 35. Hemp seed (bhang bij, huo ma ren)
- 36. Holy Basil leaf (tulsi)
- 37. Juniper fruit
- 38. Lavender flower
- 39. Lemon balm leaf
- 40. Lily bulb (bai he)
- 41. Long Pepper fruit (pippali, pipal)
- 42. Mint leaf
- 43. Nettle leaf
- 44. Nutmeg fruit (jaiphal)
- 45. Orange peel
- 46. Oregano leaf
- 47. Peony root (bai shao)
- 48. Pink salt
- 49. Polygonum root (he shou wu)
- 50. Poria fungus (fu ling)
- 51. Prickly Ash berry (tejphal, hua jiao)
- 52. Rehmannia root, cured (shu di huang)
- 53. Rose blossom (gulab, mei gui ha)
- 54. Rosemary leaf
- 55. Sage leaf
- 56. Sage leaf
- 57. Sea salt
- 58. Seaweed
- 59. Slippery Elm
- 60. Solomon's seal root (yu zhu)
- 61. Tamarind fruit
- 62. Tarragon leaf
- 63. Thyme leaf
- 64. Turmeric rhizome (haldi, jiang huang)
- 65. Wild Celery seed (ajwain)