

Foundations of Health & Disease (FHD) – FOM1

FM – 112 30 course hours

Updated November 2021

Foundation of Health & Disease (FHD) can be thought of as two tightly woven compartments: Nutrition/Metabolism and Vascular Health and Disease. Multi-system diseases explored in these components demonstrate homeostasis and its disruption using specific diseases that focus on nutritional components — such as diabetes mellitus, obesity, and vitamin deficiencies — and blood vessels — such as hypertension and atherosclerosis. Examples are discussed in depth with attention to etiologic mechanisms, clinical perspectives, and population-level considerations and preview principles of pathophysiology and disease that are explored in depth throughout all systems in the FOM2 Organ System Diseases and Brain courses. The course is also tightly coordinated and overlaps with Cancer Concepts and Determinants of Health.

After completion of the FHD course, the MS1 will be able to:

- Identify the metabolic pathways that govern nutritional homeostasis (Physician as a Scientist)
- Describe the pathobiologic mechanisms underscoring pervasive diseases such as obesity, diabetes, atherosclerosis, and hypertension (Physician as a Scientist)
- Describe the fundamental mechanisms in pathologic processes involving aberrant vascular flow and how these disorders lead to downstream tissue and end-organ damage (Physician as a Scientist)
- Explain how the major drug classes are involved in regulating nutritional and metabolic homeostasis and vascular health (Physician as a Scientist)
- Describe how vitamin deficiencies manifest clinically (Physician as a Scientist and Clinical Problem Solver)
- Identify what special considerations exist for nutrition and vascular disease health over the lifespan (Physician as a Scientist and Clinical Problem Solver)
- Describe the social determinants of vascular and nutritional health, as well as the strategies for limiting disease and disease effects in individuals and populations (Physician as an Advocate and Communicator)

FHD is assessed through a series of individual and group exercises, quizzes, and examinations to demonstrate knowledge, application of principles, and clinical problem-solving.

Course co-leaders

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