



K H A R R A Z I A N
I N S T I T U T E

Kharrazian Institute – Course Syllabus

Respiratory and Sinus Conditions Clinical Strategies and Treatment Applications

Course Title: Respiratory and Sinus Conditions Clinical Strategies and Treatment Applications

General Schedule: Livestream September 21, 2024, from 9:00 am – 5:00 pm (6 hours of lectures)

Instructor: Datis Kharrazian, PhD, DHSc, DC, MS, MMSc, FACN

Location: Online livestream and on-demand video replays after the livestream

Course Description

This course will review clinical immunology, pathophysiology, and differential diagnosis of respiratory and sinus conditions. Clinical evaluation of how to evaluate respiratory and sinus conditions will be presented with evidence-based clinical strategies to support these conditions with diet, nutrition, and lifestyle medicine.

Learning Objectives:

1. Understand the pathophysiology of respiratory and sinus conditions.
2. Understand how respiratory conditions can promote degenerative diseases.
3. Understand the principles of individualized medicine as it applies to respiratory and sinus conditions.
4. Understand how lifestyle medicine can impact respiratory and sinus conditions.
5. Understand how various diets may impact respiratory and sinus conditions.
6. Understand how nutraceuticals can be used to impact respiratory and sinus conditions.
7. Review how the medical history, physical exam, and laboratory tests can be used to evaluate respiratory and sinus conditions.

8. Understand how to incorporate principles of lifestyle medicine, diet, and nutraceuticals to support respiratory and sinus conditions.

Course Schedule (6 hours of lectures)

9:00-10:00 - Introduction to Respiratory and Sinus Conditions - (60 minutes)

- Understand the impact of respiratory and sinus conditions within the healthcare system.
- Review of how upper and lower respiratory conditions impact human health.
- Review the physiological impacts of chronic respiratory disorder on aging and chronic disease development.

This presentation will review upper and lower respiratory conditions and how these conditions impact general health and the promotion of disability. The physiological impacts of chronic hypoxemia and inflammation from respiratory conditions will be discussed.

Break 10:00-10:15

10:15-11:15 - Fundamental Concepts of Clinical Immunology of Respiratory and Sinus Conditions - (60 Minutes)

- The pulmonary and nasopharynx barrier
- Mucosal immunity
- Intestinal microbiome impact on respiratory conditions
- Pathogenic reactions in respiratory and sinus conditions
- Allergic reactions in respiratory and sinus conditions
- Oxidative stress mechanisms in respiratory and sinus conditions

This presentation will review the fundamental concepts of clinical immunology of respiratory and sinus conditions. The role of pulmonary mucosal immunity and intestinal microbiome immunity in respiratory conditions will be presented. Pathophysiological mechanisms of infection, allergic reactions, and oxidative stress will be discussed.

Break 11:15-11:30

11:30-12:30 - Evaluation and Clinical Strategies for Upper Respiratory and Sinus Conditions (60 minutes)

- Allergic sinusitis/rhinitis
- Acute sinusitis infection

- Chronic sinusitis
- Nasal polyps and swollen turbinates
- Laryngitis, pharyngitis, and epiglottitis

This presentation will review the clinical presentation of upper respiratory and sinus conditions. Differential diagnosis and clinical evaluation of underlying triggers to these conditions will be discussed. Clinical strategies to address these conditions with diet, nutrition, and lifestyle medicine will be presented.

Lunch Break 12:30-1:30

1:30-2:30 - Evaluation and Clinical Strategies for Lower Respiratory Conditions (60 Minutes)

- Acute pulmonary conditions
 - Acute bronchitis
 - Croup
 - Pneumonia
- Chronic pulmonary conditions
 - Chronic bronchitis
 - Emphysema
- Clinical red flags for pulmonary cancer and referral

This presentation will review the clinical presentation of lower respiratory conditions. Differential diagnosis and clinical evaluation of underlying triggers to these conditions will be discussed. Clinical strategies to address these conditions with diet, nutrition, and lifestyle medicine will be presented.

Break 2:30-2:45

2:45-3:45 - Evaluation and Clinical Strategies for Asthma (60 Minutes)

- Asthma (child or adult-onset)
- Allergic asthma
- Seasonal asthma
- Nocturnal asthma
- Exercise-induced asthma
- Non-allergic asthma
- Occupational asthma

This presentation will review the clinical presentation of asthma. Differential diagnosis and clinical evaluation of underlying triggers to these conditions will be discussed. Clinical strategies to address these conditions with diet, nutrition, and lifestyle medicine will be presented.

Break 3:45-4:00

4:00-4:45 - Summary for Clinical Evaluation and Treatment Strategies for Respiratory and Sinus Conditions – 45 minutes)

- Medical history in respiratory and sinus conditions
- Physical exam of the sinus and respiratory system
- Laboratory tests to evaluate sinus and respiratory systems
- Development of personalized clinical approaches to support respiratory and sinus conditions

This presentation will summarize the essential concepts presented in the course to evaluate upper respiratory, lower respiratory, and asthma conditions. We will discuss how the essential features of these conditions present in the medical history, physical examination, and specific laboratory tests. We will discuss how to develop individualized clinical strategies to support these conditions with diet, nutrition, and lifestyle medicine.

4:45-5:00 - Question and Answer – 15 Minutes