



Course Title: **Introduction to Alzheimer's Disease**

Produced by: **Fitness Learning Systems**
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Course Type: **e-Learning Home Study**

Credit hours: IACET (International Association for Continuing Education and Training) 0.5 (5 Hours) Approved and Accepted by several additional organizations.

Author:

Author Biography:

Dharma Singh Khalsa, M.D.

President & Medical Director

Alzheimer's Research & Prevention Foundation

Since he founded the Alzheimer's Research and Prevention Foundation (ARPF) in 1993, he has been serving as its President and Medical Director. The ARPF is the original voice in the integrative or holistic medical approach to Alzheimer's prevention and treatment, and is dedicated to fighting Alzheimer's disease and finding a cure through research and prevention.

Dr. Khalsa graduated from Creighton University School of Medicine in 1975, and received his postgraduate training in anesthesiology at the University of California, San Francisco where he was chief resident. As chief resident, he conducted highly acclaimed research on anesthesia for cardiac surgery and obstetrical anesthesiology. He is also a graduate of the University of California, Los Angeles Medical Acupuncture for Physicians Program, and has studied mind/body medicine at Harvard Medical School's Mind/Body Medical Institute. Dr. Khalsa is board certified in anesthesiology and pain management, and he is a diplomat of the American Academy of Anti-Aging Medicine.

After founding the ARPF in 1993, he became the first physician to advocate a lifestyle approach to the prevention and treatment of memory loss, including Alzheimer's. He is among the world's leading authorities on integrative medicine, and has written extensively on a wide range of health and healing issues.

In March 2015, Dr. Khalsa was appointed Clinical Associate Professor, Division of General Internal Medicine, Geriatrics, and Integrative Medicine at the University of New Mexico Health Sciences Center in Albuquerque, New Mexico, where he continues innovative research work on behalf of the ARPF. He also serves as Associate Editor for the Journal of Alzheimer's Disease.

Course Summary:

As the world population continues to grow and live longer, the issues of accompanying cognitive decline, dementia, and fatal Alzheimer's disease are becoming more prevalent. Statistics indicate that 5.4 million Americans and 47.5 million people have dementia worldwide, significantly impacting quality of life, health care systems, and the economy of many countries. Dementia impacts society and families, putting strain on family members and care givers. Alzheimer's

disease, the most prevalent form of dementia, is the 6th leading cause of death in the United States.

Research indicates that mental decline is not necessarily a normal part of the aging process, and intervention can be preventive and may also be used to slow the progression of diagnosed disease. By managing the known risk factors and using the 4 Pillars of Alzheimer's Prevention, you may prevent, reduce your risk of developing, delay the onset, and slow progression of cognitive decline and Alzheimer's disease.

This course provides important information to help you understand cognitive decline and Alzheimer's relevant to anyone working as a health-fitness professional. It focuses on causes, risk factors, diagnosis, care partners, The 4 Pillars of Alzheimer's Prevention™, and preventive mental exercise.

Objectives:

After completing this course you will be able to:

1. Discuss the statistics for Alzheimer's disease, and the social, economic, and care partner impacts.
2. Discuss statistics and demands for care partners, including tips to overcome 8 obstacles that may be encountered in the care giving process.
3. Identify 8 parts of the brain and describe the basic function of each part.
4. Define 4 terms related to cognitive decline: dementia, subjective cognitive decline, mild cognitive impairment, and Alzheimer's disease.
5. Explain 7 potential causes that may contribute to cognitive decline and Alzheimer's disease.
6. Identify 8 risk factors for cognitive decline.
7. Explain 4 ways to reduce risk factors to optimize brain health.
8. Identify the symptoms for cognitive decline using the 3 stage model.
9. Describe how subjective cognitive decline, mild cognitive impairment, and Alzheimer's disease are diagnosed.
10. Identify the stages of disease using the seven stage model.
11. Explain 3 current medical approaches used for Alzheimer's disease.
12. Identify 2 studies supporting an integrative medical approach to preventing and treating dementia and related disease.
13. Describe The 4 Pillars of Alzheimer's Prevention.
14. Explain how to use brain aerobics and the practice of Kirtan Kriya as preventive mental exercise.

Outline:

Learning Outcome 1	
Discuss the statistics for Alzheimer's disease, and the social, economic, and care partner impacts.	
Pages: 8	Videos: 0
Audio: TBD	Interactive Material: Pictures and Tables, PDF Printable
Subtopics:	
1.1 Cognitive Decline	

1.2 Statistics 1.3 Impact	
Assessment Questions: 5	
Learning Outcome 2 Discuss statistics and demands for care partners, including tips to overcome 8 obstacles that may be encountered in the care giving process.	
Pages: 18	Videos: 0
Audio: TBD	Interactive Material: Pictures and Tables
Subtopics: 2.1 Care partners <ul style="list-style-type: none"> • Statistics and Demands • Recognize Personal Obstacles <ul style="list-style-type: none"> ○ Exercise ○ Stress Reduction ○ Goal Setting ○ Identify Solutions ○ Communication ○ Asking and Accepting Assistance ○ Communicating with the Physician ○ Learn from Emotions ○ Summary 	
Assessment Questions: 4	
Learning Outcome 3 Identify 8 parts of the brain and describe the basic function of each part.	
Pages: 9	Videos: 0
Audio: TBD	Interactive Material: Pictures
Subtopics: 3.1 Function of the Brain <ul style="list-style-type: none"> • Cortex • Frontal Lobes • Parietal Lobes • Temporal Lobes • Occipital Lobes • Additional Structures 	
Assessment Questions: 6	

Learning Outcome 4 Define 4 terms related to cognitive decline: dementia, subjective cognitive decline, mild cognitive impairment, and Alzheimer's disease.	
Pages: 5	Videos: 0
Audio: TBD	Interactive Material: 0
Subtopics: 1.1 Cognitive Decline: Definitions <ul style="list-style-type: none"> 1.1.1 Dementia 1.1.2 Subjective Cognitive Decline (SCD) 1.1.3 Mild Cognitive Impairment (MCI) 1.1.4 Alzheimer' Disease 	
Assessment Questions: 3	
Learning Outcome 5 Explain 7 potential causes that may contribute to cognitive decline and Alzheimer's disease.	
Pages: 6	Videos: 0
Audio: TBD	Interactive Material: Pictures
Subtopics: 5.1 Causes of Dementia <ul style="list-style-type: none"> • Vascular Dementia • Dementia with Lewy Bodies • Frontotemporal Dementia • Alzheimer's Disease • Age • Family History • Genetics 	
Assessment Questions: 4	
Learning Outcome 6 Identify 8 risk factors for cognitive decline.	
Pages: 3	Videos: 0
Audio: TBD	Interactive Material: Pictures
Subtopics:	

6.1 Risk Factors

1. Age
2. Family History
3. Genetic Predisposition
4. Stroke
5. Depression
6. Head/Brain injury
7. Lack of Adequate Sleep
8. Cardiovascular Disease and CVD Risk Factors

Assessment Questions: 3

Learning Outcome 7

Explain 4 ways to reduce risk factors to optimize brain health.

Pages: 6

Videos: 0

Audio: TBD

Interactive Material: Pictures

Subtopics:

8.1 Reducing Risk Factors

- Reduce Stress
- Nutrition and Diabetes
- Optimize Cardiovascular Function
- Be Proactive

Assessment Questions: 2

Learning Outcome 8

Identify the symptoms for cognitive decline using the 3 stage model.

Pages: 2

Videos: 0

Audio: TBD

Interactive Material: PDF Printable

Subtopics:

8.1 Symptoms

Assessment Questions: 3

Learning Outcome 9

Describe how subjective cognitive decline, mild cognitive impairment, and Alzheimer's disease are diagnosed.

Pages: 2	Videos: 0
Audio: TBD	Interactive Material: Pictures
Subtopics: 9.1 Diagnosis of SCD/MCI/Alzheimer's	
Assessment Questions: 2	
Learning Outcome 10 Identify the stages of disease using the seven stage model.	
Pages: 3	Videos: 0
Audio: TBD	Interactive Material: PDF Printable
Subtopics: 10.1 Stages of Disease Progression	
Assessment Questions: 2	
Learning Outcome 11 Explain 3 current medical approaches used for Alzheimer's disease.	
Pages: 5	Videos: 0
Audio: TBD	Interactive Material: Pictures
Subtopics: 11.1 Current Medical Approaches to AD <ul style="list-style-type: none"> • Drug Therapy for AD • Physical Activity • Other Factors 	
Assessment Questions: 3	
Learning Outcome 12 Identify 2 studies supporting an integrative medical approach to preventing and treating dementia and related disease.	
Pages: 3	Videos: 0
Audio: TBD	Interactive Material: Pictures

Subtopics:	
12.1 Integrative Medical Approach	
Assessment Questions: 2	
Learning Outcome 13	
Describe The 4 Pillars of Alzheimer's Prevention.	
Pages: 12	Videos: 0
Audio: TBD	Interactive Material: Pictures
Subtopics:	
13.1 Prevention of Alzheimer's Disease	
<ul style="list-style-type: none"> • Pillar 1: Diet and Supplements • Pillar 2: Stress Management • Pillar 3: Physical and Mental Exercise • Pillar 4: Spiritual Fitness 	
Assessment Questions: 7	
Learning Outcome 14	
Explain how to use brain aerobics and the practice of Kirtan Kriya as preventive mental exercise.	
Pages: 13	Videos: 1
Audio: TBD	Interactive Material: Pictures, PDF Printables
Subtopics:	
14.1 Preventive Mental Exercise	
<ul style="list-style-type: none"> • Brain Aerobics • Kirtan Kriya 	
Assessment Questions: 5	
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