



Course Title: **Blood Pressure, Hypertension, and Exercise**

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) 0.3
(3 Hours) Approved and Accepted by several additional organizations.

Continuing Education:

To receive continuing education for this course you must receive a 75% or higher score on a multiple choice quiz.

Authors:

June Chewing BS MA

June Chewing has been serving the fitness industry since 1978 as a fitness instructor and personal trainer. She taught elementary physical education for 6 years before completing her Master's Degree in Exercise Physiology and Health Enhancement. June served as president and owner of Health Enhancement and Fitness Services (a corporate and community wellness provider) for several years, and owned/managed Harrison Health and Fitness Center (a full service fitness facility) for 18 years. She served as an Aquatic Exercise Association Training Specialist for 18 years, edited the AEA Aquatic Fitness Professional Manual and the Aquatic Fitness Research Journal (a peer reviewed professional journal), served on the AEA Research Committee, and worked as an education consultant. She is 2 time recipient of the Contribution to the Aquatic Fitness Industry Global Award. June served as adjunct Faculty at Cincinnati State College 14 years, and has developed several college curriculums and taught several courses for their Health Fitness Technician degree program. She is president and education director for Fitness Learning Systems, an IACET accredited education company developing and providing quality eLearning continuing education and services for the health-fitness industry.

Tina Schmidt-McNulty BS, MS, RN

Tina Schmidt-McNulty is a Registered Nurse, holds a Masters of Science degree in Clinical Exercise Physiology, and a candidate for her DHSC degree. She is an ACSM Certified Exercise Specialist, AEA Certified Aquatic Fitness Professional, and ACE Certified Group Fitness Instructor. Tina also is an Event Assistant for Tivity HealthSilver Sneaker program and is a full-time Instructor at University of Illinois-Chicago in the Kinesiology and Nutrition Department.

Tina has been involved in the fitness industry since 1993 as a presenter, author, and instructor. She has been a presenter in the past at International Aquatic Fitness Conferences. Tina is author of "Gravity vs. Buoyancy: Friend and Foe", "Essential Exercises for Cancer Patients and Survivors" and "Exercise, Diabetes and Metabolic Syndrome" - all eLearning courses offered through Fitness Learning Systems. In her spare time, she enjoys exercising, teaching, and spending quality time with her husband and two children.

Course Summary:

Blood pressure is an integral part of the function and health of the cardiorespiratory system. High blood pressure (Hypertension), low blood pressure (Hypotension), Pulmonary Hypertension, and Preeclampsia all have implications for safe and effective exercise prescription.

This course provides knowledge for understanding the anatomy and physiology of blood pressure and its role in health. It teaches you how to screen for blood pressure and provides exercise training and special considerations for clients with blood pressure disease.

Learn guidelines to provide individualized exercise recommendations to help clients prevent or delay hypertension. In addition, this course guides the health-fitness professional to help clients with blood pressure disease to safely and effectively exercise to help control the disease.

Objectives:

After completing this course you will be able to:

1. Identify 7 aspects in the anatomy and physiology of the cardiovascular system and their relationship to blood pressure health.
2. Recognize the mechanics and classifications/management of blood pressure.
3. Explain blood pressure assessment and procedures.
4. Identify situations, conditions, or physiological factors that precipitate blood pressure responses and recognize blood pressure responses.
5. Recognize blood pressure responses to exercise assessment and prescription.
6. Discuss the Valsalva maneuver and its effect on blood pressure.
7. Define hypertension and describe 4 aspects of hypertension and treatment.
8. Identify guidelines for exercise and special considerations for clients with hypertension.
9. Describe hypotension, pulmonary hypertension, and preeclampsia as blood pressure diseases.
10. Explain immersion and blood pressure responses in aquatic exercise.

Outline:

Introduction

Objectives

1.1 BP and the Health-Fitness Professional

1.2 Cardiovascular System

Cardiac Muscle

Heart Circulation

Cardiac Conduction

Extrinsic Heart Activity Control

Blood

Blood Distribution

Venous Blood

Review

2.1 Blood Pressure

2.2 BP Classification and Management

Review

3.1 BP Assessment

3.2 BP Assessment Procedures

4.1 BP Responses

Review

5.5 BP and Exercise

6.1 Valsalva Maneuver and BP

7.1 Hypertension

Types of Hypertension

Hypertension and Health

Treatment for Hypertension

Hypertension Medication

8.1 Guidelines for Exercise with Hypertension

Exercise Testing and Hypertension

Exercise Prescription for Hypertension

Exercise Training Considerations

Special Considerations

BP Medications

Review

9.1 Hypotension

9.2 Pulmonary Hypertension

9.3 Preeclampsia

10.1 BP and Aquatic Exercise

Review

Bibliography

About the Author

Media Credits

CEC Quiz

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