



Course Title: **Exercise, Diabetes, and Metabolic Syndrome**

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.

Author:

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Tina Schmidt-McNulty is Registered Nurse and also holds a Masters of Science degree in Clinical Exercise Physiology. She is an ACSM Certified Exercise Specialist, AEA Aquatic Fitness Professional, and ACE Group Fitness Instructor. She is an instructor trainer for the Arthritis Foundation for both land and aquatic exercise programs and plays an integral part in the Purdue University Calumet Bachelor of Science degree in Fitness Management as an Adjunct Professor. Tina has been involved in the fitness industry for over 15 years as a presenter, author and instructor. She has been a presenter in the past at AWKA conventions and has also created the Gravity vs. Buoyancy: Friend and Foe eLearning course through FLS. In her spare time, she enjoys exercising, teaching and spending quality time with her husband and 2 children.

Course Summary:

According to the American Heart Association, over 47 million Americans have metabolic syndrome. That is approximately one out of every six people (“What is Metabolic Syndrome?” 2011). Metabolic syndrome is a collection of risk factors (high blood pressure, high blood sugar, unhealthy cholesterol levels, and abdominal fat) and not a single disease. Fortunately, these risk factors can be controlled with the main staples of a healthy diet and regular exercise. Positive lifestyle changes also need to be considered and complimented with recommendations by a personal physician, dietician and fitness professional for success. The role health-fitness professionals play is important to help facilitate these positive changes that keep this metabolic syndrome in check, improve the quality of life, and help save lives.

Objectives:

After completing this course you will be able to:

1. Identify and discuss 5 risk factors for metabolic syndrome.
2. Recognize signs and symptoms for high blood pressure and diabetes.
3. Discuss the causes of metabolic syndrome.
4. Discuss statistics, symptoms, and 3 stages of diagnosis for diabetes.
5. Identify and discuss 3 common forms of diabetes.
6. Describe 5 components for managing diabetes.
7. Discuss physical activity goals and exercise and weight management recommendations for diabetes.
8. Explain 6 ways to prevent diabetes and metabolic syndrome including lifestyle changes.

Outline:

Metabolic Syndrome

Metabolic Syndrome Risk Factors

Abdominal Obesity

Measuring Waist Circumference

Calculating BMI

Hypertension

Hyperglycemia

Elevated Triglyceride Levels

Low HDL Cholesterol Level

Risk of Disease

Signs and Symptoms

Causes

Diabetes Statistics

About Diabetes

Symptoms for Diabetes

Diagnosis for Diabetes

Forms of Diabetes

Type 1 Diabetes Mellitus

Type 2 Diabetes Mellitus

Gestational Diabetes (GDM)

Other Types of Diabetes

Management of Diabetes

Oral Medications

Insulin

Hypoglycemia

Recommended Pre-exercise Carbohydrate Intake

Complications of Diabetes

Exercise and Diabetes

Physical Activity Goals

Cardiorespiratory Exercise

Resistance Training

Weight Management

Exercise Program

Prevention and Lifestyle Changes

Scenarios

Scenario 1

Scenario 2

Scenario 3 Summary

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