



PowerPoint Presentations

Fitness Myths, Misconceptions, and Misinformation

From lactic acid to stretching, resting metabolism to fat burning, there are many myths and misconceptions that pervade the fitness community. This informative presentation sheds a bright light on the biggest exercise and fitness myths, including resting metabolic rate and strength training, lactic acid and fatigue, exercising on an empty stomach, fat burning zone, and more!

The Great Debate—Resting Metabolism: Is It Hot or Not?

Many people are told that strength training adds muscle, increasing resting metabolic rate and helping them lose weight because muscles are “fat-burning machines.” Although metabolic rate is acutely elevated after a workout as your body recovers, resting metabolic rate is not. This presentation reviews the research on resting metabolic rate to discover the truth about this complex issue.

Exercise and Weight Loss: A Look at the Scientific Research

A review of the scientific research on exercise and weight loss to reveal the most effective weight loss strategies. Includes research-based recommendations for amount, type, and intensity of exercise for maximum weight loss.

The Art and Science of Recovery

Recovery may be the most overlooked aspect of exercise. Improvements in fitness occur during the recovery period between workouts, not during the workout itself. During this presentation, you'll learn optimal post-workout recovery strategies and the secrets of designing recovery intervals during workouts.

5 Lessons I Have Learned from Physiology and How They Can Make You a Better Runner

From VO₂max to carbohydrates, metabolism to muscle fibers, there are many lessons from physiology that can make you a better runner. In this presentation, Dr. Karp delves into some important lessons he's learned for runners.

Exercise and the Female: What's Estrogen Got to Do With It?

Coupled with the many anatomical, physiological, hormonal, and metabolic differences between males and females, the menstrual cycle and its constant fluctuation of hormones influence many aspects of a woman's physiology, including oxygen consumption, body temperature, hydration, bone health, and metabolism, many of which influence females' response to exercise. This exciting presentation delves into the science of a woman, discussing her unique physiology and offering recommendations for training to maximize results.

Chasing Mercury, Battling Hercules: Getting Fitter and Stronger with Periodization Training

Whether you're interested in losing weight or training for a marathon, the best training programs are planned. Periodization is a systematic method of training that improves your fitness and performance. This presentation reviews research, discusses the use of training cycles, and shows you how to build a periodized program.

Energy

We usually talk of energy in vague terms. “I don't have a lot of energy today,” or “You can feel the energy in the room.” But what really is energy? Where do we get the energy to move? How do we use it? How do we get more of it? Ultimately, what controls our movements? This presentation reviews the different metabolic systems that give us energy and shows you how to train each one with different kinds of workouts.

Top 7 Lessons for Coaching Runners

Imperfect training will prevent you from meeting your potential and can even cause injuries. This presentation takes both a scientific and coaching view of the training process and discusses some of the most important lessons for advising and coaching runners.

Busting Through Training Plateaus

Plateaus are boring. They're flat, unchanging, predictable. Many people reach a plateau, during which their fitness level doesn't change and they experience a period of stability. In this presentation, you'll learn how to bust through plateaus to reach higher levels of fitness and achieve greater results!

The Fat Burning Zone: Fact or Fiction?

The most popular myth about exercise may be that there is a specific range of heart rates in which you must exercise to burn fat. Does such a “fat burning zone” really exist? What happens if you venture out of that zone? This enlightening presentation examines the mythical fat burning zone.

Fatigue in Distance Events

What are the causes of fatigue in races from 800 meters to the marathon? This presentation takes an in-depth look at the metabolic, cardiovascular, muscular, and neural causes of fatigue in distance running races and how to train to combat them.

Marathon Training 101: Chasing Pheidippides

From the time the ancient Greek runner Pheidippides ran from Marathon to Athens to announce the Greeks' victory in the Battle of Marathon, humans have had a compelling interest with endurance. This informative presentation discusses the cardiovascular, muscular, and metabolic factors that influence marathon performance and how to best train all of those factors to successfully prepare for a marathon.

Lactate Threshold: Best O₂ Bang For Your Buck

The lactate threshold (LT) is one of the most important physiological variables related to aerobic exercise. Commonly used by endurance athletes, the LT is the highest intensity that can be sustained aerobically and has great implications for improving your fitness. This presentation defines LT, discusses how to determine its intensity, and shows you how to train it.