The Science of Nutrition: A Microscopic to Macroscopic Exploration

Food is a major part of our lives from its day to day necessity to its cultural impact.  This course will take both a scientific and cultural approach to understanding food and nutrition.  We will start at the basic building blocks of nutrients and work our way up to dietary trends and marketing of food through the media. Students will walk away as introspective consumers better able to make choices about what they eat.

Topic 1:  Macronutrients & Energy

Energy Systems

Carbohydrates

Lipids

Proteins/Protein Metabolism

Topic 2:  Micronutrients & Microorganisms

Vitamins & Minerals

Vitamins & Minerals in Diet

Nutritional Density

Gut Bacteria

Topic 3: Small Molecules

Sugar & Artificial Sweeteners

Sodium & Blood Pressure

Topic 4: Diet Trends

Shifts in Global Diet

Portion Distortion

Specialized and Fad Diets

Vegan Diet

Topic 5: Diet & Disease

Heart Disease

Obesity

Diabetes

Benefits of Exercise

Topic 6: Mental Aspect of Eating

Food Psychology

Appetite

Topic 7: Conscious Consuming

Food Marketing

Food Advertising

Misleading Labels

Topic 8: Big Food

Food Policy

Big Food v Big Tobacco

GMOs