



Solar UV Exposure in Outdoor Sport Activities: Sports Medicine

Vishakha Shewale *

Vellore Institute of Technology, Vellore, India

Sports medicine deals with physical fitness and the treatment and prevention of injuries related to sports and exercise. Although most sports teams have physicians for many years, since late 20th century sports medicine has appeared as a separate field of health care. In some countries Sport and Exercise medicine is a recognized medical specialty with similar training and standards to other medical specialties. Sport and Exercise Medicine (SEM) is now well known in many countries. It can generally refer to doctors and other paramedical doctors who work in a more extensive setting. The various sports medicine specialists often work together as a team to ensure the best recovery plan for the individual. Team members can include orthopedical surgeons, certified athletic trainers, physical medicine, sports physical therapists, and rehabilitation specialists, as well as specialty SEM physicians.

Specializing in the treatment of sportspersons and other physically active individuals, sports and exercise medicine (SEM) physicians have wide education in musculoskeletal medicine. SEM doctors treat injuries such as muscle, tendon, ligament and bone problems, but may also treat chronic illnesses such as diabetes and asthma. SEM doctors also advise on managing and preventing injuries.

SEM advisors also deliver clinical physical activity intrusions, adverse the burden of disease straight attributable to physical inactivity and the compelling evidence for the effectiveness of exercise in the primary, secondary and tertiary prevention of disease. Some countries SEM specialization usually recommend 4 years of professional training in internal medicine with special importance on emergency medicine, cardiology, and clinical nutrition, orthopedics and traumatology, physical and rehabilitation medicine, sports medicine center.

Physical exercise or exercise physiology is one of the connected health professions that involves the study of the acute responses and chronic adaptations to exercise. Understanding the result of exercise involves learning specific changes in muscular, cardiovascular, and neurohumoral systems that lead to changes in functional capacity and strong point due to strength training. The effect of training on the body has been defined as the reaction to the adaptive responses of the body arising from exercise or as "an elevation of metabolism produced by exercise".

Exercise physiologists study the effect of exercise on pathology, and the mechanisms by which exercise can reduce or reverse disease progression.

Accredited Exercise Physiologists (AEP's) are university skilled professionals who advise exercise-based involvements to treat numerous situations using specific dose response prescriptions specific to each individual.

Energy needed to achieve short lasting, high intensity bursts of action is resulting from anaerobic metabolism within the cytosol of muscle cells, as opposed to aerobic respiration which utilizes oxygen, is sustainable, and occurs in the mitochondria. The quick energy sources consist of the phosphocreatine (PCr) system, fast glycolysis, and adenylate kinase.

Plasma glucose is said to be maintained when there is an equal rate of glucose entry into the blood and glucose removal from the blood. In the healthy individual, the rates of entrance and disposal are essentially equal during exercise of moderate intensity and duration; however, continued exercise or necessarily intense exercise can result in an inequity leaning towards a higher rate of disposal than appearance, at which point glucose levels fall producing the onset of fatigue.

Insulin secretion is reduced throughout exercise, and does not play a major role in keeping normal blood glucose concentration during exercise, but its counter-regulatory hormones appear in increasing concentrations.

Exercise is a particularly effective tool for glucose control in diabetes mellitus. In a situation of elevated blood glucose (hyperglycemia), moderate exercise can induce greater glucose disposal than appearance, thereby decreasing total plasma glucose concentrations. The mechanism for this glucose disposal is independent of insulin, which makes it particularly well-suited for people with diabetes. Type II diabetes is also involuntarily linked to overweightness, and there may be a connection between type II diabetes and how fat is stored within pancreatic, muscle, and liver cells. Exercise and diet tend to increase insulin sensitivity and weight loss in the majority of people.

Strong physical activity increases the body's demand for oxygen. The first-line physiological response to this demand is an increase in breathing rate, heart rate and depth of breathing.

Dehydration induced prior to exercise and to exercise-induced dehydration that develops during exercise increases body temperature, heart rate, perceived exertion, and possibly increased reliance on carbohydrate as a fuel source. Hypohydration reduces aerobic endurance, but its effects on muscle strength and endurance are not consistent and require further study.

***Corresponding author:** Vishakha Shewale, Research Scholar, MSc Biotechnology, VIT University, Vellore, India, Tel: +9403463930; E-mail: shewalev8@gmail.com

Received September 8, 2020; **Accepted** September 18, 2020; **Published** September 25, 2020

Citation: Vishakha S (2020) Solar UV Exposure in Outdoor Sport Activities: Sports Medicine. *Biochem Physiol* 9: 271.

Copyright: © 2020 Vishakha S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.