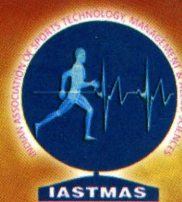


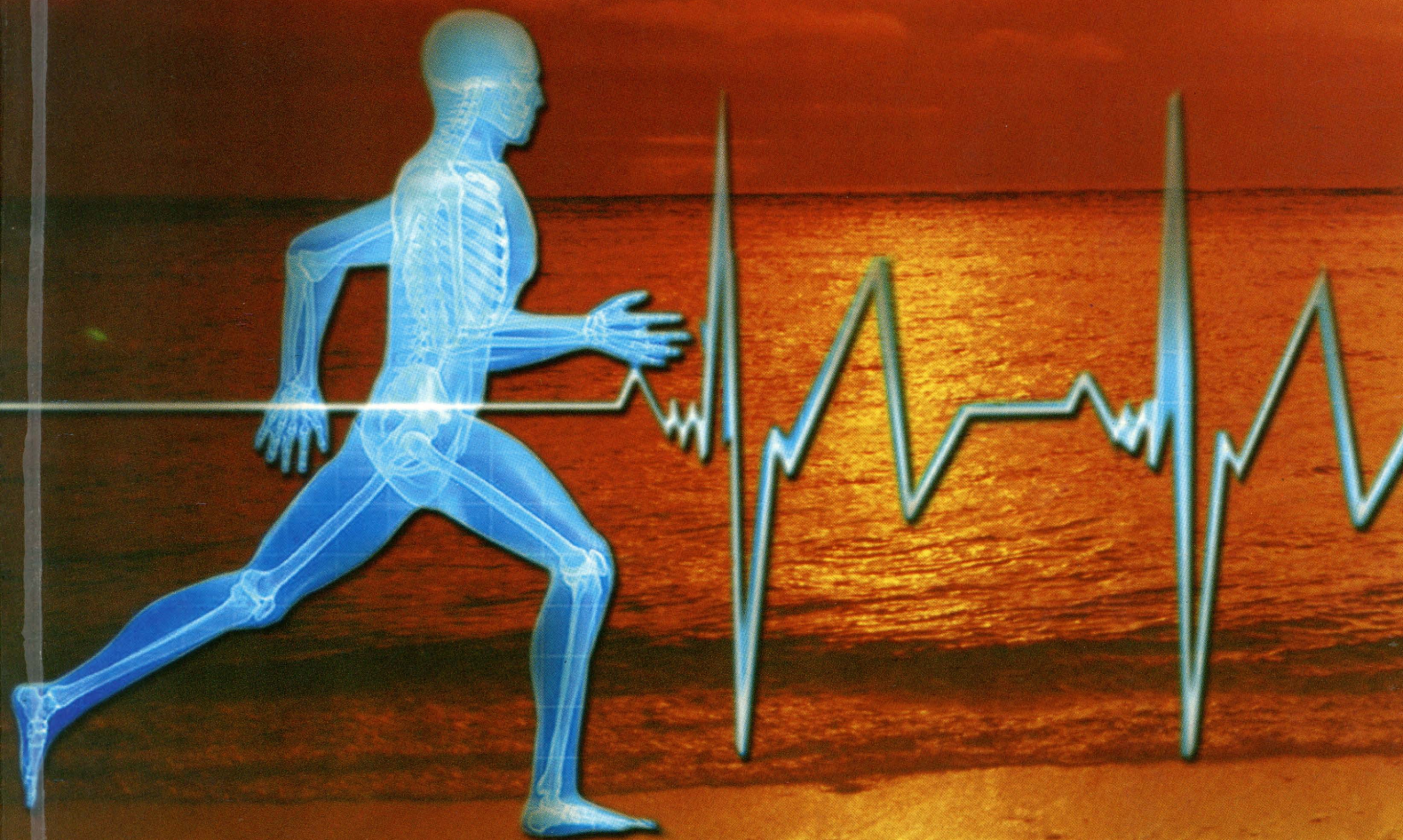
**INTERNATIONAL CONFERENCE ON MODERN TRENDS
IN SPORTS TECHNOLOGY, MANAGEMENT &
ALLIED SCIENCES**



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Walking is one of the easiest and most popular types of exercises. It is a safe, gentle and low-impact exercise that anyone can start at any time. It is a suitable physical activity for most people. It offers numerous health benefits and physical fitness. Walking lowers the levels of bad cholesterol (low-density lipoprotein) and increases good cholesterol (high-density lipoprotein) and, thus keeps your heart healthy. Regular walking maintains a normal blood pressure and decreases the risk of heart attack, as high blood pressure is one of the contributing factors to heart disease. Walking improves the cardiovascular and pulmonary fitness. If you already are suffering from hypertension, regular walking reduces high blood pressure and keeps it normal. Overweight people are at higher risk of diabetes. For such people, walking is an excellent exercise. It improves the body's ability for glucose tolerance (to process sugar). Walking effectively reduces the risk of osteoporosis. The post menopausal women who regularly walk about 1 mile everyday have higher bone density than the inactive women. Women who have a regular exercise of brisk walking are at a reduced risk of developing breast cancer. This simple exercise also prevents the development of colon cancer. Walking is one of the best exercises for weight loss. It burns excess calories and body fats. It helps to maintain the healthy body weight. Regular walking minimizes the need of gallstone surgery by 20-30%. Walking significantly improves the cognitive function. It also reduces the symptoms of depression and stress. Regular walking enhances the blood circulation. It improves the strength and flexibility of muscles and joints. It gives a relief from fatigue, arthritis pain and backache. Thus, walking plays a significant role in improving your physical fitness and overall health.

C7

CRITICAL ANALYSIS TO ASSESS VO₂ MAX.*** BHAVANLAHILAN, **Dr.V.GOPINATH.**

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Maximal oxygen consumption (VO₂ max) is an important clinical and physiological parameter because it is associated with critical variables that range from cardiovascular (CV) disease risk to performance in endurance-based competitive athletic events. This study was designed to describe and understand the critical analysis to assess VO₂ it has been defined as "the highest rate of oxygen consumption attainable during maximal or exhaustive exercise" Aerobic power, aerobic capacity, cardio respiratory fitness/cardio respiratory endurance and maximal oxygen uptake are all interchangeable with VO₂ max. It varies widely among individuals, and a person's habitual physical activities levels clearly account for a substantial proportion of these inter individual differences. However, after accounting for the effect of different habitual levels of physical activity, there is still substantial variability in VO₂ max among individuals. Clearly, genetic factors also play a role in determining a person's VO₂ max Maximum oxygen consumption can be estimated from performance on standardized protocols on the treadmill, cycle ergometer, or arm ergometer. Sub- maximal or field tests may be more practical for estimating or categorizing aerobic capacity on 12- Minute field performance test, one-mile walk test, single- stage sub-maximal treadmill walking test, sub-maximal cycle ergometer test, and sub maximal step test method. Direct measurement of oxygen consumption during a maximal exercise test provides the most accurate assessment of aerobic power. However, measuring maximum oxygen consumption (VO₂max) requires sophisticated equipment and trained staff. Due to the expense, the time required, and the risks associated with maximal exercise, direct measurement of VO₂max is not practical in many situations, such as fitness testing in health clubs or testing large populations. Hence improvised method are used to assess VO₂max. Among various method, using of treadmill is the best system followed by Coopers 12 minute Run and walk test for the assessment of VO₂max.

C8

ROLL OF COMPUTERIZED SPEED MEASUREMENTS DEVICES IN COMPETITIVE SPORTS***A. MATHIVANAN **K. RAJESHKUNAR**

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The purpose of the study was to find out the roll of computerized speed measurement devises in competitive sports. Speed is the rate of motion or equivalently the rate of change of distance. Units of speed measurement used in sports is meters per second, (symbol ms⁻¹; m/s), the required data for the present study were collected from the literary sources and they were qualitatively analyzed on its usage and special features. The study reveals that the primary speed measuring devices used in competitive sports are Electronic stop watches, speedometer clocks, radar, average, speed computers, LIDAR guns (Light Detection and Ranging), Slit video system, Finish Lynx's Photo Finish Timing, Disposable Chip Timing System, Shoe / Mat Based Chip Timing System.