Fitness tests for a swimmer research paper example

Health & Medicine, Body

Maximal Strength Assessment (1-RM)

The maximal strength assessment or one repetition maximum (1-RM) test is a popular technique for assessing muscular strength among athletes. It is still considered the " gold standard" that is used by coaches to test their athlete's work capacity. The 1-RM test usually consists of compound exercises such as the bench press, back squat, military press, and dead lift and executing them with one's maximum weight capacity for 1 repetition (Beachle & Earle, 2008). These compound exercises incorporate and utilize many large muscle groups of the upper and lower body. The test would assess and measure an athlete's aerobic capability, muscle strength, muscle power, muscle endurance, and flexibility. This type of test would benefit swimmers since they need the strength and power for explosive start off the blocks and quick, powerful turns that the test would assess.

Strength Endurance Test

Strength endurance tests allow the athletes to measure their muscular endurance (Beachle & Earle, 2008). Besides muscular endurance, the test can assess the athlete's anaerobic and aerobic capacity, agility, speed and anthropometry. Strength endurance assessment is a vital exam that a swimmer must undergo since it is important for them to maintain a high heart rate throughout the race, particularly in long distance events. This test usually consists of bodyweight exercises that are done in quick repetitions under a time limit. This test would measure how long the body can go with continual lactic acid build up in a specific area of the body. Swimmers need to know this since they repeat the same movement over and over in a quick

manner during a race or a swim. This test would also provide information on

the limit of one's slow and fast twitch muscles, which aid swimmers.

References

Baechle, T., & Earle, R. W. (2008). Essentials of strength training and

conditioning (3rd Edition).

Champaign, IL: Human Kinetics.