

Test Sets: Monitoring the Progress of Swimmers

By Brent Rutemiller

Test sets are an important component of the coaching environment and the swimmer-coach relationship. Coaches usually administer test sets during the course of a season to measure a swimmer's endurance, speed, training thresholds and strength. The type of tests varies from program to program.

Swimming World Magazine spoke with Gennadijus Sokolovas, USA Swimming's director of physiology, to discuss some of the basic test sets used today by coaches. Following are some tests that USA Swimming clubs use to determine training and strength levels.

Be sure to check out the April issue of Swimming World Magazine to learn about these additional tests: T-30, Step Tests and Tests to Determine Constant Swimming Velocity.

There are more tests that USA Swimming uses to determine training and strength levels.

The Lactate Recovery Test, says Sokolovas, is a test to determine how quickly lactate is removed from the muscles through a series of swim-downs after a race.

In this test, the swimmer swims a certain distance and a blood sample is taken after each swim in the series. The swimmer may start out with a reading of 12 ml of lactate and slowly have it reduce to 2 ml after a series of swims.

The coach uses this information to determine how quickly a swimmer can recover between races and to determine the warm-down yardage that the swimmer needs to swim after each race.

Genadijus also discussed the Land-Water Strength Test. This test measures strength on land, then measures the same strength in water by using a tension meter.

If a swimmer is weaker in the water than on land, recommendations can be made regarding technique or training. Drag chutes, paddles and surgical tubing all are tools that are often used to help correct these differences in the water.