Why should our fitness center administer fitness tests?

There are two basic reasons for administering fitness tests:

1. Assessing a participant's current fitness.
2. Measuring fitness improvement over time.

Why should we assess a participant's current fitness?

1. You can screen participants to determine who should see a doctor and get a medical clearance before beginning a conditioning program. This is not only of benefit to the participant, but also protects you and your facility from possible future liability.
2. It isolates each person's strength and weaknesses so you can offer better personalized advice to each participant for improving those areas that need improvement. Once you enter the results of the fitness tests into the software, the participant's Fitness Profile Report indicates which fitness components have weaknesses that need to be addressed.

Why measure fitness improvement over time?

1. Unless you measure each participant's fitness component scores when they start and periodically thereafter, you will never know if that participant has improved because of your program.
2. With the Red Canyon Systems software program, you can print the Individual Fitness Test Comparison Report for each participant. This report shows for each fitness component, the amount of improvement that has occurred between test dates. You can use this report to validate that working out in your center has been successful for the participant. The is an excellent means of motivating the participant to continue working out.
3. In addition to the report that shows individual participants their improvements, the software can print a Group Comparison Report. It shows how much the entire membership or selected groups have improved over a period of time. You can use this information to evaluate the success of your center overall and statistically validate to others - prospective members, board of trustees, department heads - that the center is successful at improving participant fitness.

Which fitness tests should we administer?

At a minimum, you should administer at least one test each for the five basic fitness components:

- **Body Composition** ratio of fat, bone, and lean muscle mass
- **Cardiovascular** efficiency of the heart, circulatory and respiratory systems
- **Strength** amount of weight a muscle can lift
- **Endurance** muscle's ability to repeat a task
- **Flexibility** body part's range of motion or ability to stretch

Each fitness component has various tests that can be administered and assessed. The nine most-common tests are:

Body Composition

1. Weight
2. Body Fat % - via skin fold or electrical impedance machine

CardioVascular

3. Resting Pulse
4. Blood Pressure
5. Step Test

Strength

6. One Repetition Max Lift of an upper body exercise, such as bench press
7. One Repetition Max Lift of a lower body exercise, such as seated leg press

Endurance

8. Number of curl-ups or sit-ups that can be performed in one minute

Flexibility

9. Sit and reach for hip flexibility

The above 9 fitness tests are easily administered in the field and offer a fairly comprehensive assessment of a participant's overall fitness.

Most participants are not only concerned about their fitness, but also their appearance. These participants will be looking for an assessment of changes in their physical appearance. The following measurements are recommended as part of the fitness test battery. Reports show the amount of improvement for the following body parts:

- Waist
- Hips
- Thigh

Some participants may want to measure change in biceps, calves, and chest. You can define other areas for which improvement is to be tracked. We recommend that you administer the 9 fitness component tests listed above, the three body measurements of waist, hips and thigh, and measure height. An adult's height changes little, if any, over time. However, height for younger participants does change. Height is used in different formulas measuring fitness, such as the Body Mass Index (BMI), a ratio of height to weight.

The recommended basic fitness tests are:

- Weight
- Resting Pulse
- Step Test
- One RM leg press
- Height
- Hips
- Body fat
- Blood Pressure
- One RM Bench Press
- Sit ups per minute
- Waist
- Thigh

How often should we administer fitness tests?

As often as you want to measure improvement. Normally, you should allot enough time between tests for improvement to occur. In the case of school fitness centers, testing at the start and end of each school term are natural times to test. This time frame allows for measurable improvement between tests.

Other sites may want to test participants after a specified amount of time - 3 months, 4 months, 6 months. Some sites test participants after the participant as made a specific number of visits to the center since the last test date. In each of these cases, the software can print a list of participants who are due for testing.

What if we want to administer a test that the software doesn't include?

If you develop a test of your own, or find an existing test you'd like to use that is not listed in the software's fitness test master list, contact us. We will add the test to the software's master test file and send you the new file. You can then add the test to your site test list and begin recording participants' results for the test.

If you have norms for the test that you want added, send them to us. We will add the norms to the software so the fitness profile can provide members with assessments of their scores for the new test.

What if we design our own test and want to assess participants' scores, but being a new test, there are no norms established yet to use in determining assessments?

Initially, you won't be able to provide members with assessments of the results of that test, since there are no norms yet to compare the results to. However, after you have administered and recorded in the software the results of a sufficient number of this new test, you can send an electronic copy of the test results to us - either via floppy disk or in an e-mail attachment.

We will analyze the results and develop norms tables from them. We will then send you a new file with norms tables to add to our software program. Our software can then assess all prior and future results of that test using the norm tables based on your own sites test results.

What does the word "Weight?' mean when it appears beside a test result on the Fitness Profile in the column marked "Assessment"?

This happens when the fitness profile is trying to print out an assessment for a fitness test that requires a member's body weight and no body weight has been entered in their fitness test. This can occur in the One Rep Max lift tests. For theses tests a participant's lift weight is divided by their body weight. The software compares the result to the norm table. If you do not use weight as a test for your site or you have not entered the participant's weight in the fitness test, the assessment cannot be done. In this case, you will need to return to the member's fitness test, enter a body weight, and reprint the report. The assessment should then appear on the report.

How can we prevent a participant's ID number from showing on the screen when they log in, so other participant's can't see their ID number?

1. Click Set Up on the Main Menu
2. Click LogIn SetUp on the Set Up Form
3. On the left column is an item called Log In Character. Key into that item whatever character you'd like to display instead of the participant's ID number when they key their number in.

   If you entered a "Z", then for every character participants enter in as their ID, the letter "Z" appears instead. The computer recognizes the actual keys entered, but displays Z's.

   The most commonly used character in this case is the "#", but you can use any character you want.

What if participants realize that entering all 9's, exits the Log In program?

1. Click Set Up from the Main Menu
2. Click LogIn Set Up tab
3. Change the Exit ID to whatever set of numbers you want to use to exit LogIn. Be sure this new Exit ID is:
   - ✓ Something you can remember
   - ✓ Something that would never be a valid ID number

Does it matter in what order the fitness tests are given?

Yes. You should be sure that when a participant takes a test that the activity involved in that test does not affect the results of the next test.

As an example, you don't want to take someone's blood pressure or resting pulse, right after they've done the step test, sit ups per minute or max lift tests. All of those affect the members pulse and blood pressure and would result in invalid data.

Likewise, you wouldn't have a participant do the step test right after doing the max lift leg press, since the participant's legs would be fatigued and would affect the results of the step test.

Do all your static measures first: These can be done in any order. Blood pressure is often done first. If a person's blood pressure indicates they are at risk, you can avoid any additional testing for that participant and advise them that they must see a doctor and get written clearance from their doctor prior to continuing the fitness testing and working out in the center.

- Static Tests
- Resting Pulse
- Height
- Blood pressure
- Weigh
- Girth Measures (Waist, hips thigh)

Dynamic Tests

There is no specific, 'best' order to do these tests in. Try to alternate tests that use the same major muscle groups. Also try to provide some rest between each test. If you are testing in small groups at the same test station, most participants should be able to get enough rest between tests while waiting their turn.

1. Step Test
2. Bench Press - One RM
3. Leg Press - One RM
4. Sit Ups Per Minute

Do the fitness tests have to be defined in the software in the same order as the tests are given?

No. The order can be different. For ease of data entry, it's most convenient when the order in which test items are listed on the form is the same as on the Fitness Test Screen displayed by the software.

Since you define your own test items for the software, you can arrange them in the software to display on the Fitness Tests Form screen to match whatever order you have them on your test form that participants fill in.