


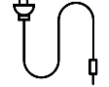


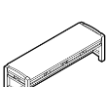
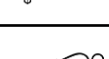











Fitness Testing

		C.O.F	FITNESS TEST	UNITS	EQUIPMENT	PROCEDURE	
1.		FLEXIBILITY	SIT AND REACH	cm / inches	- Sit and reach box	1. Warm up 2. Sit down, legs straight, feet flat to board 3. Both hands reach forward to maximum	4. Repeated x3 and record best result 5. Compare to normative data
2.		SPEED	35M SPRINT	seconds	- Stopwatch - Tape measure - Stop watch	1. Warm up 2. Measure 35m & mark using cones 3. "Go" = Run at max speed & start clock 4. Cross finish line = Stop clock	5. Repeat x3 with 5 min break between 6. Record the best score 7. Compare to normative data
3.		BODY COMPOSITION	BMI (BODY MASS INDEX)	kg/m ²	- Weighing scales - Tape measure	1. Measure weight (Kg) using scales 2. Measure height (m) using tape	3. Calculate: Mass (Kg) / height (m) ² 4. Compare to normative data
			BIA (BIOELECTRICAL IMPEDANCE ANALYSIS)	% of body fat	- BIA Machine - Alcohol Pads - Weighing scales - Tape measure - Electrodes	1. Lie down on your back 2. Clean testing sites with a wipe 3. Attach electrodes to right ankle & wrist	4. Turn on the BIA machine 5. Record result shown on the machine 6. Compare to normative data
			JACKSON-POLLOCK SKINFOLD TEST		- Skinfold callipers - An assistant	Remove clothing 2. Chest, abdominal, thigh: Men 3. Tricep, suprailiac, thigh: Women	4. Mark the sites on the individual 5. Take 3 readings at each site 6. Calculate average & compare
4.		AEROBIC ENDURANCE /VO ₂ Max	MULTI-STAGE FITNESS TEST	ml/kg/min	- Tape measure - Cones - MSFT CD & speaker - An assistant	Warm up 1. Measure 2 points, 20m apart 2. Must be on/over the line on each beep	3. The test is over if they miss 3 in a row. 4. Compare level/stage to normative data
			FORESTRY STEP TEST		- 33cm bench (F) - 40cm bench (M) - Weighing scales - Metronome - Stopwatch	Warm up 2. 33cm: Women 40cm: Men 3. Set metronome to 90bpm 4. Step in time with the beat for 5mins	5. Rest for 15 seconds 6. Measure radial pulse for 15 seconds. 7. Use test data in the published table
5.		MUSCULAR ENDURANCE	1 MIN PRESS-UP	No. of reps	- Mat - Stopwatch	Warm up 1. Start with arms locked 2. Bend elbows to 90° and extend to start	3. Count how many reps are done in 1 min 4. Compare to normative data
			1 MIN SIT-UP		- Mat - Stopwatch	Warm up 2. Start lying down on your back 3. Raise until elbows touch knees & lower	4. Count how many reps are done in 1 min 5. Compare to normative data
6.		MUSCULAR STRENGTH	GRIP DYNAMOMETER	KgW	- Grip dynamometer	Warm up 2. Hold dynamometer in dominant hand 3. Adjust grip until comfortable 4. Hold horizontally & squeeze for 5 secs	5. Repeat x3 with 1 min rest in between 6. Record the best results 7. Compare to normative data
7.		AGILITY	ILLINOIS AGILITY TEST	seconds	- Tape measure - Stopwatch - Cones x8	Warm up 2. Set up course as shown 3. Start lying face down 4. "Go" = Run & start clock	5. Run round the course 6. Cross finish line = Stop clock 7. Compare to normative data
8.		POWER	VERTICAL JUMP	cm	- Vertical jump board	Warm up 2. Stand dominant-side on to the board 3. Reach up as high as possible 4. Feet together, jump as high as you can	5. Measure distance between 6. Repeat x3 and record the best result 7. Compare to normative data

FITNESS TESTS: PRE-TEST PROCEDURES

		Key-term		Definition	Example
12.		PRE-TEST	INFORMED CONSENT	Participants are told what's involved before doing a test and they agree to take part.	- Knowing if a test is a maximal exertion test
14.			EQUIPMENT CALIBRATION	Check equipment to make sure it's working properly and it is measuring accurately.	- Set scales to 0
9.		RELIABILITY		A test is reliable if the same results can be gained when it is repeated.	- Different surfaces - Time of the day
10.		VALIDITY		If a test measures the type of fitness it's meant to & it links to the athlete & their sport.	- 35m sprint is not valid for a cyclist.
11.		PRACTICALITY		How easy the test is to carry out for an athlete or group of athletes.	- Equipment cost - Time taken

FACTORS EFFECTING FITNESS TEST RESULTS

	Test	Validity	Reliability	(DIS) Advantages
15.	SIT & REACH	The test only measures the flexibility of the back and hamstrings.	If the sports performer doesn't keep their legs straight during the test, they will get a better score. This makes the result less reliable.	Specialist equipment required Assistant required to administer the test Minimal equipment and simple to set up Can be conducted almost anywhere
16.	35M SPRINT	This is a valid test of speed for sports that involve running.	If the reaction rates of the person stopping the stopwatch are slow, the results will be slower.	Specific facilities required - non-slip surface Assistant required to administer the test Timing errors can produce inaccurate results. Minimal equipment and simple to set up Can be conducted almost anywhere
17.	BMI	People with more muscle have a higher body mass. Pregnant women carry more weight due to the baby	If height and weight are measured inaccurately the results will be less reliable	Doesn't take into consideration muscle mass Simple calculations are required from standard height and weight measurements.
18.	BIA	Dehydration leads to fat levels being measured inaccurately and time scale of when you last If a person is dehydrated, their body fat is overestimated.	Calibration of equipment Client doesn't follow pre test procedures with regard to alcohol consumption and physical activity	The equipment is relatively expensive There is a lot of pretest procedures that can effect the reliably and validity of the fitness test results Simple and quick perform
19.	JACKSON-POLLOCK SKINFOLD TEST	It is important to maintain correct calibration of the calipers	Bad technique of measuring the results	Specialist equipment required - Skinfold calipers Assistant required to administer the test Minimal equipment required Simple to set up and conduct Can be conducted almost anywhere
20.	MULTI-STAGE FITNESS TEST	The multi-stage fitness test (MSFT) is a maximal test. If the performer stops before they are too tired to carry on, the results are not valid.	Motivation levels can affect test results It depends on the test being administered correctly – calibration (correct measurements, a 2 nd person)	Practice and motivation levels can influence the score attained, and the scoring can be subjective. As the test is often conducted outside, the environmental conditions can affect the results. Large groups can be tested at once. Minimal coasts The test continues to maximum effort unlike many other tests of endurance capacity.

FACTORS EFFECTING FITNESS TEST RESULTS

	Test	Validity	Reliability	(DIS) Advantages
21.	FORESTRY STEP TEST	The forestry step test (FST) is a submaximal test. This means that the FST will only estimate the athletes' aerobic endurance	The FST is submaximal the same levels of motivation to push themselves to the limit is not so important. It depends on the test being administered correctly – calibration (correct measurements, a 2 nd person)	Some subjects may not have the fitness or coordination to maintain the required stepping rate. This simple test requires minimal equipment and costs, can be performed indoors or out. It is possible to self-administer this
22.	1 MIN PRESS-UP	The test only measures the muscular endurance of the upper body – pectorals, biceps and triceps. It isn't a valid test of overall muscular endurance	A bad technique can affect the score (number of reps) on the test	Assistant required to administer the test No equipment required Simple to set up and conduct The athlete can administer the test can be conducted almost anywhere
23.	1 MIN SIT-UP	The test only measures the muscular endurance of the abdominal muscles This means it isn't a valid test of overall muscular endurance	No equipment required Simple to set up and conduct The athlete can administer the test Can be conducted almost anywhere	Assistant required to administer the test No equipment required Simple to set up and conduct The athlete can administer the test Can be conducted almost anywhere
24.	GRIP DYNAMOMETER	The test only measures muscular strength of the lower arm and hand muscles.	The dynamometer may need to be calibrated regularly to ensure consistent results. Having consistent technique and adequate rest is required too.	Specific facilities required Assistant required to administer the test Minimal equipment required Simple to set up and conduct The athlete can administer the test Can be conducted almost anywhere
25.	ILLINOIS AGILITY TEST	It's a valid test for speed and agility for the sports that involve running. It is a less valid test of speed and agility for sports that don't involve running. For example, kayaking.	A change in the weather can affect the results and make the less reliable. The surface of in which the test is being carried out on. Footwear	Footwear and running surface can effect times greatly. You need an assistant to help carry out the test Minimal equipment required Simple to set up and conduct The athlete can administer the test Can be conducted almost anywhere
26.	VERTICAL JUMP	The test only measures power of the leg muscles	A bad jumping technique can lead to a lower score on the test.	Technique plays a big part in achieving a good score because the performer must the wall at the top of the jump. It's a quick and easy test to perform