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# AAHPER TEST

## Introduction:-

**AAPHER Physical Fitness Test:** This test was designed to help the teachers of physical education and other recreation leaders in the field to find out the performance levels of their students, compare them with national norms and inspire them towards the higher levels of achievements.

**Test Contents:** The test consists of the following six items:

- (a) **Pull ups:** In case of girls, the pull-ups are to be started from a flexed arm hang. This test item judges the arm and shoulder girdle strength.
- (b) **Flexed Leg Sit-ups:** This test is meant to judge the efficiency of abdominal and hip flexor muscles.
- (c) **Shuttle Run:** This test item is meant for judging the speed and change of direction.
- (d) **Standing Long Jump:** For judging the explosive power of leg muscles.
- (e) **50 Yard Dash or Sprint:** For judging speed.
- (f) **600 Yard Run:** For judging endurance.

### **Administration of Tests:**

These tests can be conducted in a gymnasium or out-doors. The only apparatus required in these tests is a horizontal bar having a diameter of approximately 1 ~ inches for pull-ups and flexed arm hang for girls. However, arrangement should be made for the timing and recording of all scores with the help of timers and recorders.

**Item No. 1—Pull up:** This item should be done from a hanging position on the bar by using the overhead grasp (with palms facing outwards). The arms and legs of a subject should be fully extended. From hanging position, the subject should raise his body with his arms until his chin is placed over the bar. Then, he should lower his body to a full hanging position. In doing so, the knees should not be bent and the pull should not be jerky or snap pull. The number of completed pull-ups is the score of the subject. **Item No. 1 (Girls)—Flexed-arm Hang:** In this test item for girls, the subject is required to hang from the bar with flexed arms and overhead grasp. She should raise her body to a position where the chin is above the bar, the elbows are flexed and the chest is close to the bar. The stopwatch is started as soon as a subject assumes such

a hanging position and is stopped when the subject's chin falls below the level of the bar. The time recorded in seconds for which a subject holds the hang position is her score.

**Item No. 2—Sit-ups:** For this test meant for boys and girls, the subject should lie on his or her back with knees flexed and kept not more than 12 inches from the buttocks. The hands of the subject should be placed at the back of the neck, fingers clasped and elbows touching the mat. From this position, the subject should raise his or her head and elbows forward upwards till the elbows touch the knees. This constitutes one sit-up. The number of correctly performed sit ups in 60 seconds from the start of the first sit-up is the score of a subject.

**Item No. 3—Shuttle Run:** For this test item, two parallel lines are drawn at a distance of 30 feet from each other and two blocks of wood are placed behind one of the lines. The subject has to stand behind the other line and on the signal "Ready", "Go" should run to pick up one block, run back to the starting line and place the block behind the line. He should again turn back to pick up the second block and bring it also behind the starting line. Two such trials are given.

The better time of the two trials to the nearest 10th of a second is the score of the subject.

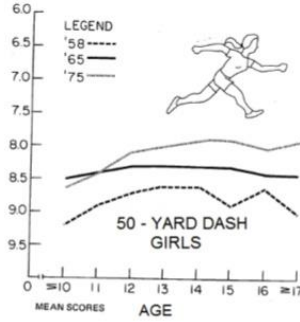
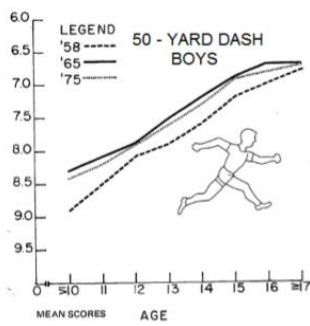
**Item No. 4—Standing Long jump:** In this test, a subject is required to stand behind a take-off line, with feet apart. He takes a jump forward by extending his bent knees and swinging the arms forward.

The best jump recorded, out of the three trials given, is the score of the subject. The jump should be recorded in feet and inches.

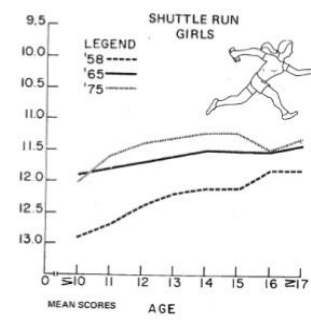
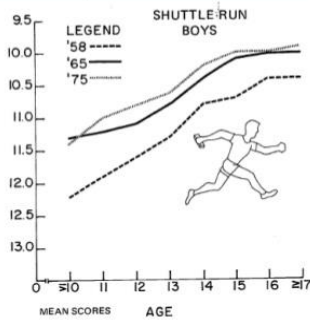
**Item No. 5—50 Yard Run:** Two lines are drawn at a distance of 50 Yards from each other. The subject is made to run from the start line to the finish line and his time taken is recorded in seconds (nearest to the tenth of a second.) This indicates his score.

**Item No. 6—600 Yard Run:** This run can be organized on a track, on a football field or an open area marked for this purpose. In this test item, a subject runs a distance of 600 Yards, the subject takes a standing start from the start line. The subject may walk in between. However, the objective is to cover the distance in the shortest time, when he crosses the finish line, he is informed of his time. The time taken to run the distance is recorded in minutes and seconds.

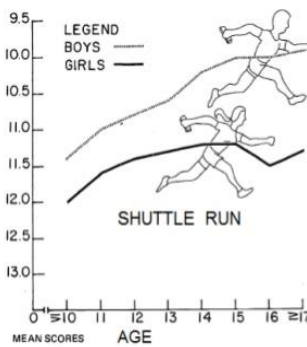
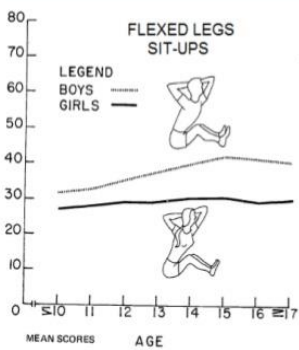
### AAPHER Motor Fitness test



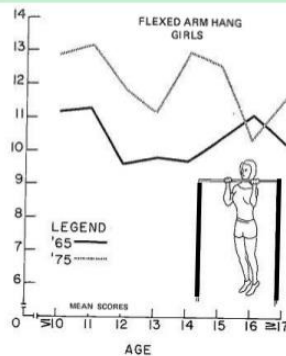
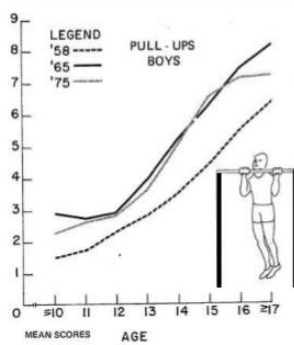
### AAPHER Motor Fitness test



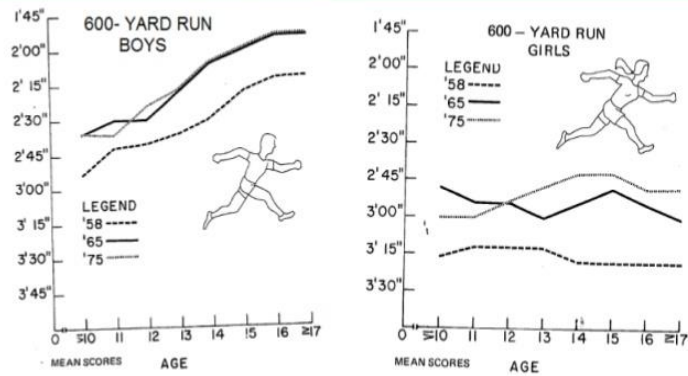
### AAPHER Motor Fitness test



### AAPHER Motor Fitness test



## AAPER Motor Fitness test



**\*\*The above pictures are the graphs plotted for various types of AAHPER Motor Fitness Tests for both boys and girls.**

# BARROW FITNESS TEST

## Introduction:-

The Barrow Motor Ability Test was developed by Dr. Harold M. Barrow in 1953 for partial fulfilment of the degree of Doctor of Physical Education in the School of Health, Physical Education, and Recreation at Indiana University. Dr. Barrow is now head of the Physical Education Department at Wake Forest College, Winston-Salem, North Carolina.

## Objective:-

The purpose of his study was to develop an easily administered test of motor ability of college men. The results may be used for classification, guidance, and measurement of achievement.

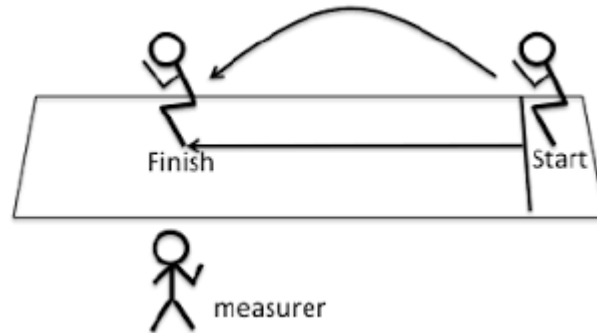
## Methods of the test:-

For measuring general motor fitness, the three-item test battery of Barrow is used. In this test, battery of three items such as standing broad jump, zig-zag run and medicine ball are used to measure the general motor ability of an individual. The details of administration of these tests are described below:

### **1. Standing Broad Jump (for measuring leg strength)**

**Equipment and material:** A mat of 5x12 feet and a measuring tape, if the mat is unmarked.

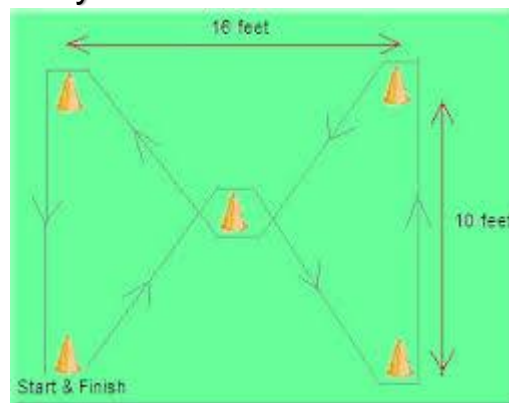
**Procedure:** A take-off line is marked on the ground. Subject stands just behind the take-off line with the feet several inches apart. The subject swings the arms and bends the knees to take a jump in the long jump pit. Three trials are given to the subject. The distance is measured from the take-off line to the heel or other part of the body that touches the ground nearest to the take-off line. All jumps are measured and the best one is recorded.



## 2. Zig-Zag Run (for measuring agility and speed)

**Equipment and material:** Stopwatch, five obstacles and space enough to accommodate the 16x10 feet course.

**Procedure:** The subject begins from a standing start on the command to run. The subject runs the prescribed pattern stated to him as quickly as he can run. The subject runs the prescribed pattern stated to him as quickly as he can without gasping. Three complete circuits are run. The stopwatch is started when the command to run is given and stopped immediately when the subject crosses the finish line. The time is recorded to the nearest tenth of a second. Before running the zig-zag run, the subject should warm up properly. The subject should wear proper fitting shoes with good traction to avoid blisters and slipping. Demonstration of the pattern of the course should be given by the administrator before the beginning of the run.

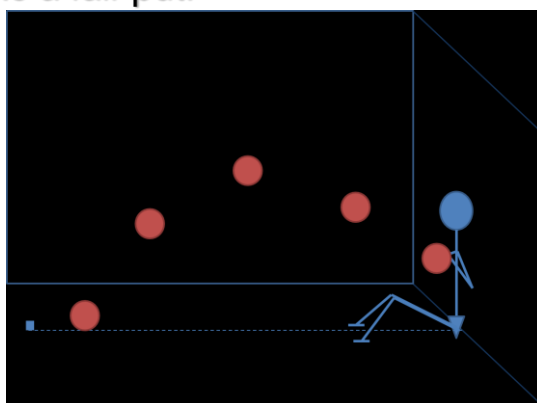


## 3. Medicine Ball Put (for measuring arm and shoulder strength)

**Equipment and material:** A medicine ball and measuring tape.



**Procedure:** The subject stands between two restraining lines which are 16 feet apart. In case of girl, a medicine ball of 1 kg is provided, whereas in case of boys a medicine ball out as far as possible without crossing the restraining line. He/she should hold the medicine ball at the junction of the neck and shoulder then the ball should be put straight down the course. Three trails are given to him/her. The best of three trails is recorded. The distance is computed to the nearest foot. A put in which the subject commits a foul is not scored. However, if all the trails are foul, subject he/she should try until he/she make a fair put.



Sl. No.	Name	Jump	Zig-Zag Run	Medicine Ball
1.	Anup Singh	1.95 m	39 s	12 ft
2.	Arpan Sen	1.89 m	42 s	11.52 ft
3.	Ritesh Saha	2.03 m	30 s	12.95 ft
4.	Ankit Karmakar	2.00 m	45 s	12 ft
5.	Anupam Goswami	1.93 m	50 s	10 ft
6.	Varun Bhalla	1.98 m	51 s	10 ft
7.	Swarup Ghosh	2.00 m	43 s	12 ft
8.	Vivek Singh	1.94 m	43 s	11.98 ft
9.	Ramesh Paul	2.09 m	30 s	13 ft
10.	Mohit Aggarwal	1.99 m	41 s	11.39 ft



# ASANAS

## VAJRASANA:-

**Vajrasana** वज्रासन (/vədʒ' rɑːsɪnɪ/; IAST: vajrāsana), "vajra Pose", is a sitting asana in yoga. It is a kneeling position sitting on the heels. A person need not be sitting in an erect position to do it.

### Description

The practitioner sits on the heels with the calves beneath the thighs. There is a four finger gap between the kneecaps, and the first toe of both the feet touch each other and sit erect.

### Benefits

This asana may help in digestive issues like constipation. It also strengthens the muscles of the legs and back.

### Contraindications and cautions

Some orthopaedic surgeons claim Vajrasana may be harmful to knees. It has also been linked to damage to the common fibular nerve resulting in foot drop, where dorsiflexion of the foot is compromised and the foot drags (the toe points) during walking; and in sensory loss to the surface of the foot and portions of the anterior, lower-lateral leg. In this context, it has been called "yoga foot drop".



# **PADA HASTASANA:-**

**Padahastasana** or the Hand Under Foot pose is a 'forward bend asana'. This pose requires a considerable amount of flexibility in the back, abdomen, and legs which is why it is not considered to be one of the best yoga poses for beginners. However, this does not mean that yoga beginners cannot do this pose, it simply means that you need to have some level of physical fitness before you attempt this asana.

The term Padahastasana is a combination of the words pada (the Sanskrit word for 'foot'), hasta (which means 'hand'), and asana (meaning posture). Padahastasana strengthens the muscles of the limbs as well as the core and promotes good form which is why it is one of the most commonly recommended yoga postures for people who are interested in overall fitness and muscle flexibility. Once you are proficient in basic yoga poses and yoga exercises for beginners, you can try more challenging asanas such as Padahastasana.

## **How to Perform Padahastasana:-**

Padahastasana must be performed at least 4-6 hours after a meal and it is preferable that your stomach (and bowels) are empty at that time. You should perform a few preparatory asanas as this will prepare you both physically and mentally to perform Padahastasana. You can learn a few Padahastasana prep poses such as Adho Mukha Shvanasana (Downward Facing Dog pose), Paschimottanasana (Seated Forward Bend), Janusirsasana (Head-to-Knee pose), and Supta Padangusthasana (Reclining Hand-to-Big-Toe pose) before you learn how to do Hand Under Foot pose. These prep poses for Padahastasana are basic yoga poses that will gently stretch and strengthen the muscles of your calves and thighs as well as stretch and strengthen your back and abdominal muscles. These are the 7 Hand Under Foot pose steps:

1. Stand on the floor in an upright position with your hands held loosely at your sides.
2. Lift your hands straight up and allow your palms to lightly touch each other.

3. Exhale and stretch your arms out while slowly bending at your waist.
4. Keep bending until your hands reach your toes. Your chin should come in contact with your knees.
5. Slide your fingers under your toes and hold this position for 5-15 seconds.
6. Exhale and bend downwards from your hips until your hands reach your toes.
7. Hold the toes with your hands and remain steady. Relax.

Follow these Padahasthasana steps carefully and do not make any changes to them. It is important to follow the Padahasthasana sequence of steps to maximise the effects of this asana and to ensure that you do not place any unnecessary strain on your thighs and lower back.

### **Benefits of Padahasthasana:-**

Strengthens the thighs and calves as well as the lower back.

Firms the buttocks and abdomen by working on your core stomach muscles.

Improves posture and balance.

Improves the ability to sustain forward bending poses for a longer period of time.

It helps to control digestive problems.

Yoga brings together physical and mental disciplines to increase muscle flexibility and body tone while also eliminating stress and anxiety. Yoga for strengthening thigh and calf muscles will also help to increase stamina and will enhance your overall fitness levels. While there are many benefits of Padahasthasana and it is undoubtedly one of the best thigh strengthening yoga asanas, you should ensure that you are doing it correctly as doing it incorrectly can put a great deal of stress on your thigh and calf muscles as well as your ankles.

There are several Padahasthasana variations depending on whether you are a beginner, intermediate, or advanced practitioner. This pose can also be done where you touch the tips of your fingers to your big toes – this is one of the best modifications of Chaturanga Dandasana for beginners and people who are not as flexible. While there are several yoga poses that work wonders for pregnant women, it is advisable to avoid this pose when you are pregnant. Padahasthasana is physically

challenging as well as mentally taxing as it requires immense focus and determination. Most yoga beginners lose their focus within a few minutes as their minds start to wander and this is one of the most common mistakes made by yoga beginners. However, with regular yoga practice you will be able to overcome this problem.

### **Contraindications of Padahastasana:-**

While the benefits and importance of Padahastasana are immense, there are certain circumstances when you should avoid this pose. Avoid practicing this asana if you have hypertension or any kind of heart problem. Padahastasana is also not recommend for people with lower back pain or any sort of spinal problem. The Hand Under Foot pose for beginners generally consists of the same steps but the amount of time spent in this position is much shorter.

### **PADAHASTASANA**



## **Trikonasana:-**

**Trikonasana** (/ˈtrɪkɒsˈnɑːsənəː/ trik-oh-NAH-sə-nah; Sanskrit: त्रिकोणासन; IAST: trikoṇāsana) or Triangle Pose is an asana. Variations include utthita trikonasana (extended triangle pose), baddha trikonasana (bound triangle pose) and parivrtta trikonasana (revolved triangle pose).

### **Description:-**

Trikonasana is usually performed in two parts, facing left, and then facing right. The practitioner begins standing with the feet one leg-length

apart, knees unbent, turns the right foot completely to the outside and the left foot less than 45 degrees to the inside, keeping the heels in line with the hips. The arms are spread out to the sides, parallel to the ground, palms facing down; the trunk is extended as far as is comfortable to the right, while the arms remain parallel to the floor. Once the trunk is fully extended to the right, the right arm is dropped so that the right hand reaches the shin (or a block or on the floor) to the front (left side) of the right foot, with the palm down if flexed. The left arm is extended vertically, and the spine and trunk are gently twisted counter clockwise (i.e., upwards to the left, since they're roughly parallel to the floor), using the extended arms as a lever, while the spine remains parallel to the ground. The arms are stretched away from one another, and the head is often turned to gaze at the left thumb, slightly intensifying the spinal twist. Returning to standing, the bend is then repeated to the left.

### **Benefits:-**

Iyengar claims practice of this asana improves the flexibility of the spine, corrects alignment of the shoulders; relieves backache, gastritis, indigestion, acidity, flatulence; massages and tones the pelvic organs, corrects the effects of a sedentary lifestyle or faulty posture, assists treatment of neck sprains, reduces stiffness in the neck, shoulders and knees, strengthens the ankles and tones the ligaments of the arms and legs. A book from Sivananda Yoga Vedanta Centre claims the asana can reduce or eliminate pain in the lower back, tone the spinal nerves and abdominal organs, improve the appetite, digestion and circulation. Swami Satyananda Saraswati claims the asana stimulates the nervous system and alleviates nervous depression, strengthens the pelvic area and tones the reproductive organs.

### **Contraindications and precautions:-**

This side bend may cause issues in practitioners with lower back problems. Farhi warns that those with posterolateral disc herniation may find the twisting in this asana challenging the back. Iyengar advises: those prone to dizzy spells, vertigo, or high blood pressure do not look down at the floor in the final asana or turn the head; those with cervical spondylosis do not look up for too long; those with a cardiac condition practise against a wall and do not raise the arm, but rest it along the hip;

and those with stress-related headaches, migraine, eye strain, diarrhoea, low blood pressure, psoriasis, varicose veins, depression or extreme fatigue do not practise this asana. Satyananda Saraswati states that the asana should not be practiced by those suffering from severe back conditions.



## Ardhmatseyendrasana:-

**Ardhmatseyendrasana** (Sanskrit: अर्धमत्स्येन्द्रासन; IAST: *Ardha Matsyendrāsana*), Half Lord of the Fishes Pose, Half Spinal Twist Pose or Vakrasana is an asana. The asana usually appears as a seated spinal twist with many variations, and is one of the twelve basic asanas in many systems of Hatha Yoga.

### Description:-

One foot is placed flat on the floor outside the opposite leg and torso twists toward the top leg. The bottom leg may be bent with the foot outside the opposite hip or extended with toes vertically. The arms help leverage the torso into the twist and may be bound (*Baddha Ardha Matsyendrāsana*) in a number of configurations by clutching either feet or opposite hands.

### Benefits:-

*Ardha Matsyendrāsana* allows the spine to be twisted all the way from the base of the spine to the very top. This asana tones the spinal nerves and ligaments, and improves digestion, and also improve liver and pancreas health.



## Contraindications:-

People suffering from severe back or neck pain should practice with caution, and with close supervision. Those with slip disc problems should avoid this pose completely. Those with internal organ issues may find this pose difficult and painful. Should be avoided by pregnant women as it can press the foetus.



## Tadasana:-

Tadasana (IPA: [tɑːdɑːsənə]; Sanskrit: ताडासन; IAST: Tāḍāsana) and Samasthiti (IPA: [səməstʰiːt̪iːh]; Sanskrit: समस्थिति; IAST: samasthitiḥ) are two names for a common standing yoga posture. Depending on the Yoga lineage practiced, Samasthitiḥ and Tāḍāsana may refer to the same asana or two similar asanas.

## Procedure:-

Stand with feet together. Ground down evenly through feet and lift up through the crown of your head. Lift your thighs. Lengthen up through all four sides of your waist, elongating spine. Breathe easy. Although Tāḍāsana is a very basic asana, it is the basis and starting point for many standing asanas. As such, Tāḍāsana is important in the context of other āsanās because it allows the body and consciousness to integrate the experience of the preceding āsanā and prepare for the next. Further, as a common and fundamental asana, Tāḍāsana can help develop habits for further practice and asanas.



Asanas that help prepare for Tādāsana include Adho Mukha Svanasana and Uttanasana. Urdhva Hastasana is a very similar asana with the hands raised above the head.

### **Benefits:-**

The asana strengthens the abdomen and the legs. It may help relieve sciatica, reduce flat feet,[citation needed] and help plantar fasciitis and heel spurs by improving the strength of deeper foot muscles which support your foot, and reducing the load on the less suited plantar fascia.

### **Contraindications:-**

Unable to Stand: This yoga pose cannot be beneficial to anyone who finds it difficult to stand for long with feet together or otherwise.

Severe Migraine or Giddiness: Someone who is suffering severe migraine or giddiness would find this pose a challenge.

Weak Leg Muscles: Weak muscles of the legs will not help standing in Tadasana even in the simplest of the pose without variation.

Knee Locking: Locking the knee can be challenging for long periods and so one must be wary of this.

Strain on Spine: Avoid putting too much strain on the spine by carrying the entire body weight. This can bring more stress to the spine.

Don't Hurry: Initially don't work hard on raising the body and remaining still, but first work on just standing still even if the spine is not expanded and stretched. When the body is ready then move towards a little stretch and not too much. Slowly work on this.

TADAASANA



# SENIOR CITIZEN FITNESS TEST

The Senior Fitness Test was developed at Fullerton University, by Dr. Roberta Rikli and Dr. Jessie Jones. As such, the test is sometimes known as the Fullerton Functional Test. It is a simple, easy-to-use battery of test items that assess the functional fitness of older adults. The test describes easy to understand and effective tests to measure aerobic fitness, strength and flexibility using minimal & inexpensive equipment.

The individual fitness test items involve common activities such as getting up from a chair, walking, lifting, bending, & stretching. The tests were developed to be safe & enjoyable for older adults, while still meeting scientific standards for reliability & validity.

## List of Equipment Required

The following is a complete list of the equipment you will need to complete the Functional Fitness Test:

A Chair Without Arms - preferably a folding chair for greater stability

A Stopwatch or Watch with a second hand

5 Pound Weight for women

8 Pound Weight for men

Piece of String or Cord about 30" in length

Visible, bright colour duct tape

Counter - to track number of repetitions completed or paper and pencil to track manually

Ruler that goes up to 12"

Measuring Tape

Small Orange Cone

Functional Fitness Tests

## CHAIR STAND TEST – Testing Lower Body Strength

Daily Benefit: Lower body strength is important for activities such as getting out of a chair, on the bus, out of the car, & rising up from a kneeling position in the

house or garden. The strength of your lower body can directly affect the ease with which you perform the activities you do every day.

**Equipment:** Chair without arms, Stopwatch

**Test Steps:**

Place the chair against a wall where it will be stable.

Sit in the middle of the chair with your feet flat on the floor, shoulder width apart, back straight.

Cross your arms at the wrist and place them against your chest.

The test partner will tell you when to begin and will time you for 30 seconds, using the stopwatch. You will rise up to a full stand and sit again as many times as you can during the 30-second interval.

Each time you stand during the test be sure you come to a full stand.

When you sit, make sure you sit all the way down. Do not just touch your backside to the chair. You must fully sit between each stand.

Do not push off your thighs, or off the seat of the chair with your hands to help you stand unless you have to.

Keep your arms against your chest crossed and do not allow the arms to swing up as you rise.

If you are on your way up to stand when time is called you will be given credit for that stand.

**Risk Zone:** Less than 8 unassisted stands for men & women.



**Fig:- Chair-Stand test**

## ARM CURL TEST – Testing Upper Body Strength

Daily Benefit: Upper body strength is important for activities such as carrying laundry, groceries, & luggage. It is also important for picking up grandchildren & giving them a big hug! A lack of upper body strength could keep you from pouring milk from a jug, being able to go grocery shopping for yourself & maintaining your independence.

Equipment: 5 lb Weight & an 8 lb weight, stopwatch & a straight-back chair with no arms.

Women will curl a 5-lb. weight in this test and Men will curl an 8-lb. weight for their test. It is extremely important to the accuracy of the test that you use the appropriate weight for men & women in this test.

### Test Steps:

Your test partner will tell you when to begin and will time you for 30 seconds, using the stopwatch or a watch with a second hand.

Do as many curls as you can in the allotted 30-second time period, moving in a controlled manner.

Remember to do a Full Curl, squeezing your lower arm against your upper arm at the top of each curl and returning to a straight arm each time. Keep your upper arm still.

**DO NOT SWING THE WEIGHT.**

If you have started raising the weight again and are over halfway up when time is called, you may count that curl!

**Risk Zone:** Less than 11 curls in correct form for men & women.



Fig:- Arm-Curl test

## **CHAIR SIT AND REACH TEST – Lower Body Flexibility Test**

Daily Benefit: Lower body flexibility is important for preventing lower back pain. It also plays a role in your balance, posture, in fall prevention, and in your gait, or walking. Lower body flexibility is important for maintaining an active, independent lifestyle.

Equipment: Chair, Ruler

Test Steps:

Place the chair against a wall so it will be stable.

Slide forward in your chair until you are able to straighten one of your legs. The ankle of your straight leg should be flexed at about a 90-degree angle. Your other foot should be flat on the floor.

Place one of your hands directly on top of the other so that they are stacked with your fingers extended.

Exhale as you bend forward at the hip and try to reach your toes. If the extended leg begins to bend, move back in your chair until the leg is straight.

Hold the stretch for at least 2 seconds and **Do Not Bounce** or jerk as you reach.

Take two practice reaches on each leg. Determine which side is more flexible.

You will measure and record only your most flexible side on your scorecard.

Be sure you have a stable chair so that the chair will not tip forward as you reach for your toes.

After you have completed the practice reaches, your test partner will hold a ruler across the toe of your shoe. The centre of the toe of your shoe is considered to be a measurement of “0”.

Reach forward toward your toes. Mark your score to the nearest half-inch

If you reach past this “0” point at the middle of your toe, you receive a positive score of as many inches as you reach past it, measured to the nearest half-inch.

If you cannot reach your toes, you receive a negative score of as many inches as you are short of the “0” point at the middle of the toe of your shoe, measured to the nearest half-inch.

Try the reach twice and record the better of the two measurements.

Risk Zone: Men: Minus (-) 4” or more; Women: Minus (-) 2” or more.

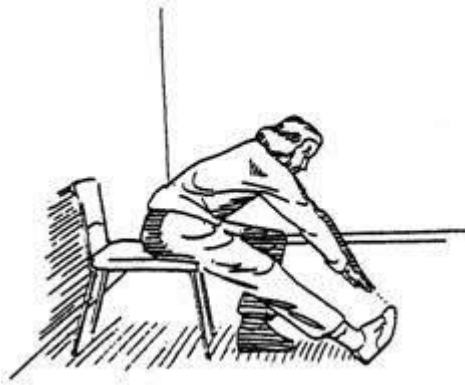


Fig:- Chair Sit and Reach test

### **BACK SCRATCH TEST – Upper Body Flexibility Test**

**Daily Benefit:** Upper body flexibility affects your ability to reach for items that may be high on a shelf, change a light bulb, or do any activity that requires arm and/or shoulder movement.

Maintaining flexibility in your upper body will assist you in continuing to live independently.

**Equipment:** Ruler

**Test Steps:**

Place your left arm straight up in the air above your left shoulder.

Bend your left arm at the elbow to reach toward your back, with your fingers extended. Your elbow pointed toward the ceiling.

Place your right hand behind your back with your palm out and your fingers extended up.

Reach up as far as possible and attempt to touch the fingers of your two hands together. Some people are not able to touch at all, while others' fingers may overlap.

Take two practice stretches with each arm, determining which side is more flexible.

You will be measuring and recording only your most flexible side.

You are now ready to be measured. Perform the stretch as outlined above.

Without shifting your hands, your test partner will position your fingers so that they are pointing toward each other.

The distance between the fingertips of one hand and the other is measured to the nearest half inch. If your fingers overlap, the amount of the overlap will be measured.

Fingertips just touching receive a score of “0”.

If your fingers do not touch, you receive a negative score of the distance between your fingers, measured to the nearest .5 or half inch.

You receive a positive score if your fingers overlap, measuring the overlap to the nearest .5 or half inch.

If you are able to touch your fingers together, do not grab your fingers together and pull, as this will affect the accuracy of your score.

Do the stretch twice, recording the best score and remember to indicate if the score was positive or negative.

**Risk Zone: Men: Minus (-) 4” or more; Women: Minus (-) 2” or more.**



Fig:- Back Scratch test

### **8-FOOT UP AND GO TEST – Speed, Agility & Balance Test**

**Daily Benefit:** Important for activities such as walking through crowds, moving in unfamiliar environments & across changing terrain, & crossing the street before the light changes. The better your balance is, the more confident you will be traveling outside your home & living an active life. Your speed & balance directly affect your self-assurance as you go about your daily activities.

**Equipment:** Chair, Cone (or another marker), Stopwatch

**Test Steps:**



Sit in the chair with your hands on your thighs, your feet flat on the floor with one foot slightly ahead of the other.

Your test partner will hold the stopwatch and stand near the place where you will walk around the marker on the floor.

Your test partner will signal, “go” and start the watch. For test accuracy, your test partner must start the watch on the signal, “go.” Do not wait to start the watch after the participant has started to move.

The test is timed to the nearest tenth (.1) of a second, so it is important to be as accurate as possible when starting and stopping the watch.

Upon the signal “go” rise from the chair and walk as quickly as possible out to the marker. You may press off your thighs of the chair when you rise. Do not run. Walk around the outside of the marker and return to your seat as quickly as possible, being sure to be safe in your movements.

As soon as you are fully seated again your test partner will stop the watch and record your time to the nearest tenth of a second.

If you would like to take a practice test before testing for a score you may. You may then take the test twice, recording your best score.

Remember to record the score to the nearest tenth, for example 4.9 seconds or 8.9 seconds.

Risk Zone: More than 9 seconds.



Fig:- 8 Foot Up and Go test

**WALK TEST (6 MINUTES) & STEP IN PLACE TEST (2 MINUTES)\* –**  
Physical Stamina/Endurance Test

Daily Benefit: Endurance is important for activities such as shopping, walking for a distance, and traveling. The more physical stamina you have, the more energy you will have to do the things you enjoy. You will also be able to do more with

less fatigue. Your endurance affects your ability to perform many of your daily activities and to maintain your independence.

Equipment: Stop Watch, Measuring Tape, Visible Tape (i.e. masking tape or painter's tape)

Set Up:

Begin by setting the minimum knee or stepping height for each participant. This is at the level even with the midway point between the kneecap and the front hipbone (Iliac crest). It can be determined using a tape measure or by stretching a cord from the middle of the kneecap (patella) to the hipbone. Then you can fold it over and mark this point on the thigh with a piece of tape.

Test Steps:

Your test partner will tell you when to begin and will time you for two full minutes using the stopwatch.

Begin stepping, being careful to lift your knees to the appropriate height each time so that your knee is level with the tape mark on the wall. Your entire foot must touch the ground on each step to ensure that you are not jogging, you need to "step".

Your test partner will count each time you raise your right knee, counting each full stepping cycle. A full step cycle is when both the right and the left foot have lifted off the floor and come back down.

Your test partner should alert you at each 30 second interval to allow you to gauge how you feel. If you cannot complete the full 2 minutes that is fine, just complete as much time as you can comfortably complete.

If you wish to rest during the test you may stop stepping, rest and then resume the test. The stopwatch will continue to run and you may start stepping again as long as you are still within the two-minute test period.

Risk Zone: Walk Test: Less than 350 yards for men & women; Step Test: Less than 65 steps for men & women.

\*The Walk Test is used to assess aerobic fitness unless the person uses orthopaedic devices when walking or has difficulty balancing, in which case they do the Step in Place Test

Fitness is very important for those in their senior years. Older adults need to have adequate strength, flexibility, and endurance to accomplish everyday tasks. Assessing these components of fitness can detect weaknesses which can be treated before causing serious functional limitations.



Fig:- 6 mins Walk test



Fig:- Step in place test

**TABLE FOR SENIOR CITIZEN FITNESS TEST FOR 10 ELDERLY PERSONS:-**

Sl. No.	Name	Age (in years)	Chair Stand (no. of stands)	Arm Curl (no. of reps)	6-min walk test (in yards)	2-min step test	Chair Sit and Reach test (in inches)	Back Scratch (in inches)	8 foot up and go step (in seconds)
1.	Anup Roy(M)	63	18	20	629	102	1.2	-4.0	5.2
2.	Rupa Ghosh(F)	65	13	12	620	75	3.5	0.1	5.9
3.	Ankit Sharma(M)	72	15	15	590	83	-1.6	-3.0	5.1

4.	Arundhati Sen(F)	76	10	15	495	72	-0.9	-3.1	5.2
5.	Raman Kumar(M)	81	10	13	562	84	0.3	-1.2	6.8
6.	Roshni Sinha(F)	85	8	10	402	63	2.0	-3.0	9.6
7.	Varun Kapoor(M)	92	7	11	400	52	-6.5	-10.5	9.1
8.	Shilpa Ghosh(F)	77	15	11	486	71	0.2	-4.4	7.3
9.	Santu Ghosh(M)	60	18	21	709	110	3.9	0.0	3.9
10	Rupsha Ganguly(F)	82	9	13	421	75	1.0	0.0	7.0