

**ANDHRA PRADESH RANDOMIZED EVALUATION STUDY
SCHOOL HEALTH PROJECT**

**NUTRITIONAL ANTHROPOMETRY
BASELINE FIELD MANUAL**

11TH AUGUST 2009

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I. EQUIPMENT CHECKLIST

- 1 Weighing Scale (with weights nearest to 0.1 kg)



- 1 Stadio-meter/Stature-meter (height nearest to 0.1 cm)



- 1 roll of double sided tape
- 1 pair of scissors

- Permanent marker pen
- 12” wooden or plastic ruler

II. STANDARDIZATION & CALIBERATION

Weighing Scale Standardization Line

Before arriving at the first school, the research team needs to draw a standardization line on the weighing scale as follows:

- Examine Image 1 below. It is a close up of the reading pane of the weighing scale. Observe the blue plastic inside the clear pane, on either side of the red marker line.



- Take a 12” wooden or plastic ruler and place it so that it is exactly over the blue plastic, and then using the permanent marker draw the standardization line on either side of the reading pane on the smooth surface of the weighing scale.

- The final result should look like Image 2.

Weighing Scale Calibration

- Check the weights of the scales using standard weights to see that the difference is not greater than 0.1 Kg.
- **If the different is greater than 0.1 Kg. please report this to the Hyderabad office immediately.**

Stature Meter Standardization

- Drag the tape of the stature meter till the '0' mark is seen.
- Using a permanent marker, draw a line corresponding to '0' mark on the outer part of the tape.
- Measure the heights of research personal the values of which are already known, prior to taking them to the schools.
- **If there is a discrepancy of more than 0.1 cm then please report this to the Hyderabad office immediately.**

III. HEIGHT MEASUREMENT PROTOCOL

Installing the Stadio-meter/Stature-meter

- Upon entering the school, the RA/DC/MC should identify a wall, which has smooth leveled surface, without any rough protrusions or indentations. The wall must also meet the floor at a right angle.

- The stadio-meter/stature-meter should be fixed against the wall by pulling it to the '0' mark which has been marked previously using a marker pen. The upper end of stadio-meter/stature-meter should be firmly secured to the wall using a double-sided tape.

Measuring the Child's Height

- The child should be made to stand in an erect position against the wall.
- The shoulders should be touching the wall.
- The back of the head should also be touching the wall and the child must be looking straight ahead.
- The child's feet should be together in an "attention" position.
- The child's heels should be pushed firmly against the wall, but the feet must be flat on the floor.
- The child's head should be positioned so that the top of the external auditory meatus is in level with the inferior margin of the bony orbit.
- The headpiece of the stadio-meter/stature-meter should be positioned so that the tape is perpendicular to the floor. It should not be diagonally shifted during the process of measurement.

Recording the Height

- Height should be measured to the nearest 0.1 cms and should be reported in Section 2 of Schedule 2: Child Health Hygiene and Anthropometry.

- **For Example:** If the red line on the headpiece of the stature meter indicates a value 9 lines after 116 then the value should be reported as follows:

1	1	6	.	9	0
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IV. WEIGHT MEASUREMENT PROTOCOL

Installing the Weighing Scale in the School

- Identify an empty unused classroom or a balcony in the school where the surface is leveled.
- The weighing scale must be placed on an even leveled surface with adequate light to facilitate reading the dial clearly.
- Test this by lightly placing a hand on each side of the weighing scale and ensuring that there is no wobbling.
- Ensure that the red marker line is exactly over the “0” in the reading dial.

Weighing the child

- Ask each child in turn to come forward and stand on the scale.
- Their large toes should be placed on the Standardization Line and should be touching the dial from the outside.
- The child should be balancing evenly on the scale, and not leaning more on one side or the other.

- The child should look straight ahead, and not be looking down or sideways.

Recording the Weight

- Standing facing the child the researcher/DC/MC should sit/bend in the direction of the child and carefully examine red marker reading.
- Cord the weight of the child in Section 3 of Schedule 2: Child Health, Hygiene and Anthropometry.
- **For example:** If the red-marker is settled on a point 2 notches ahead of the 18 Kg. mark then it should be recorded as follows:

1	8	.	2	0
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- **PLEASE DO NOT RECORD THE VALUE AS:**

1	8	.	0	2
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