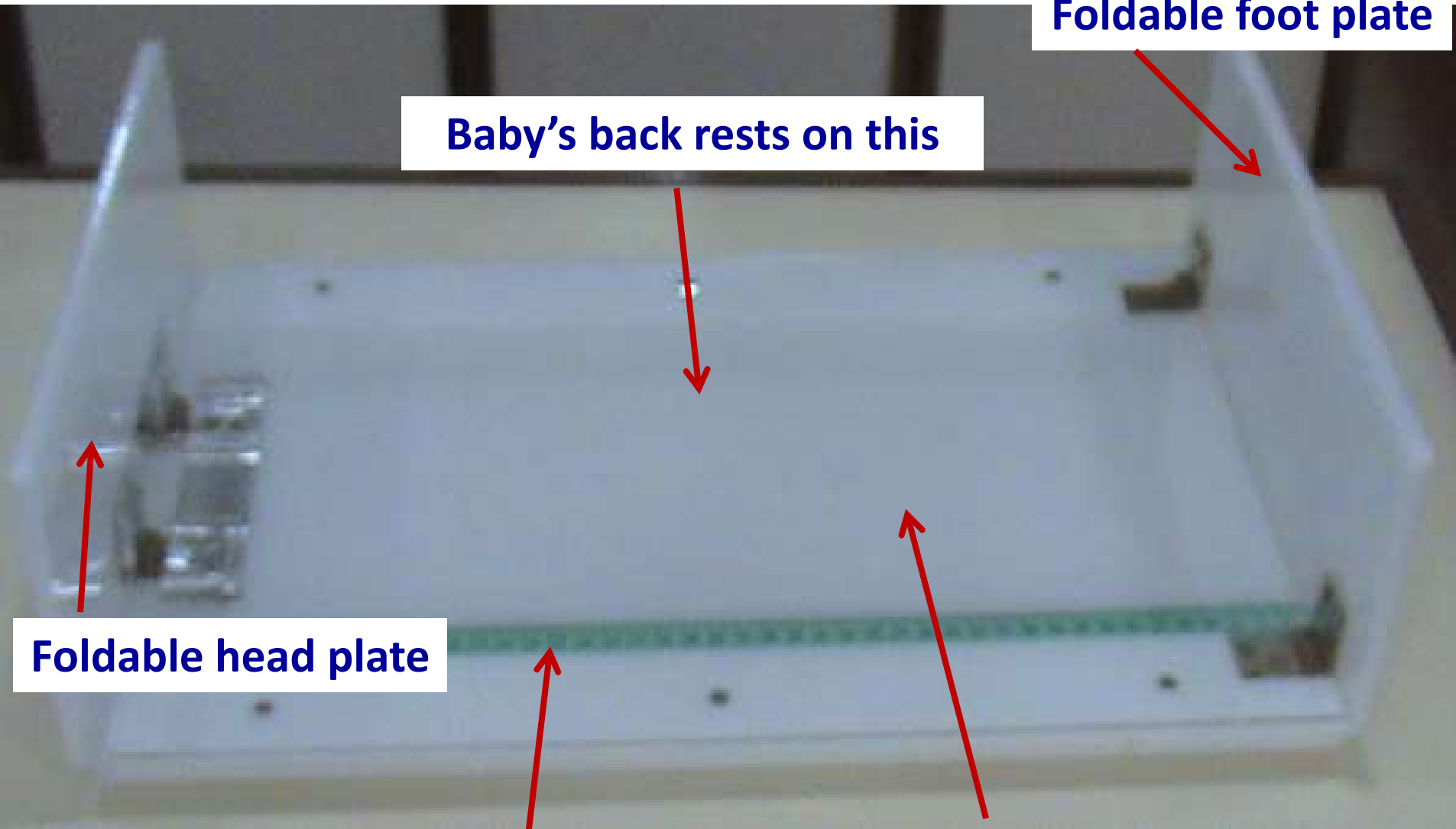


# **MEASURING LENGTH OF INFANTS USING INFANTOMETER**

# INFANTOMETER



**Foldable foot plate**

**Baby's back rests on this**

**Foldable head plate**

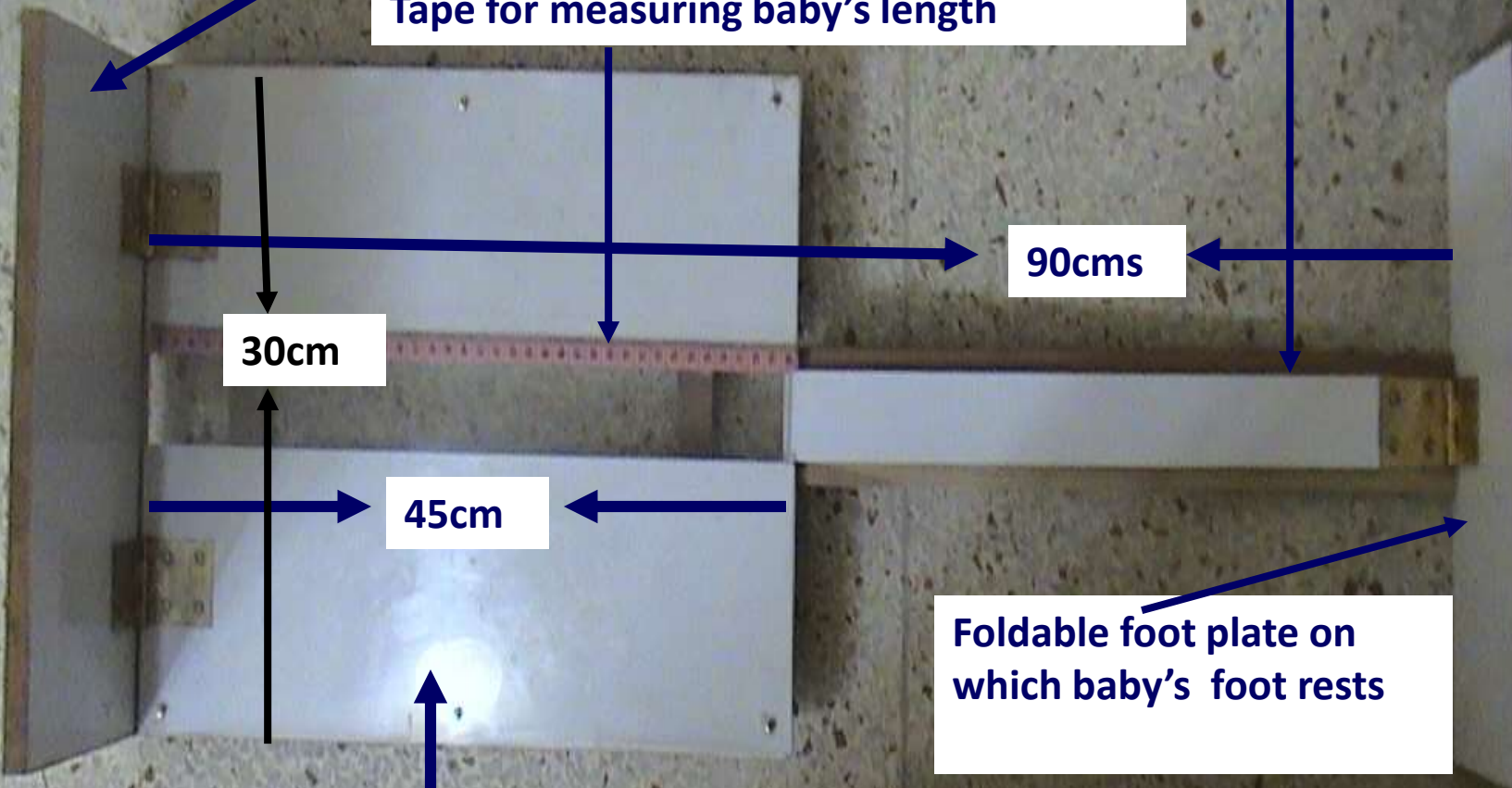
**Tape for measuring baby's length**

**Central sliding panel attached to the foot plate**

**Foldable head plate on which top of baby's head rests**

**Sliding panel on which baby's leg rests**

**Tape for measuring baby's length**



**30cm**

**90cms**

**45cm**

**Foldable foot plate on which baby's foot rests**

**Broad central portion covered with thick plastic plate on which baby lies on its back**

## **INFANTO METER**

**Made of acrylic plates**

**Length 45 cm base and 45 cm sliding central panel**

**Breadth 30 cm**

**Foldable foot and head plates**

**Instrument Accuracy 0.1 cm**

**Measurable length 45 - 90cm**

**Accuracy to be tested against standard infantometer**

# **TESTING ACCURACY OF INFANTO-METERS**

# **TESTING ACCURACY OF INFANTOMETERS**

**Some decades ago accuracy of the infantometer was checked against the stadiometer**

**Experience over the last decade has shown that :**

- Stadiometers are no longer widely used .**
- Taking stadiometer to the small tenement rooms through narrow stair cases in urban tenements was difficult.**
- Older infants were not able to lie comfortably on the narrow stadiometer and hence length measurements were not accurate.**

**Therefore the current practice is to check**

- Accuracy of tape in the infantometer by comparing it with the standard steel tape certified by the Deptt of Weights and Measures**
- Check the accuracy of test infantometer against the measurements made in the standard infantometer**

## **TESTING ACCURACY OF INFANTOMETERS**

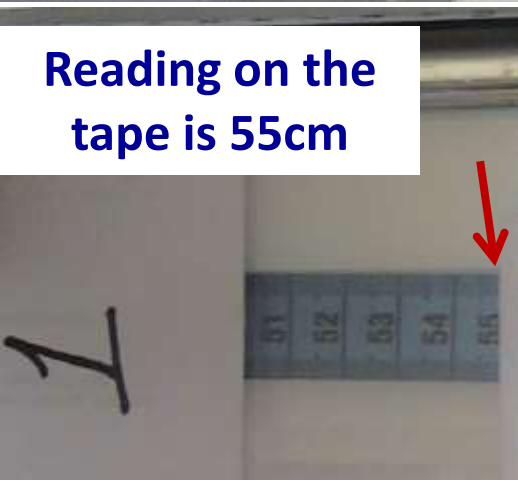
Measure the accuracy using a measured rod/wooden plank or segment of the anthropometry rod to check accuracy of the infantometer in five locations on the infantometer.

Measure two infants once in the test and once in the standard infantometer and compare the length.

This modified procedure is feasible and works well in testing infantometers for accuracy both in clinic and community settings. It is shown in the following slides.



**Anthropometry rod at one edge of the infantometer**



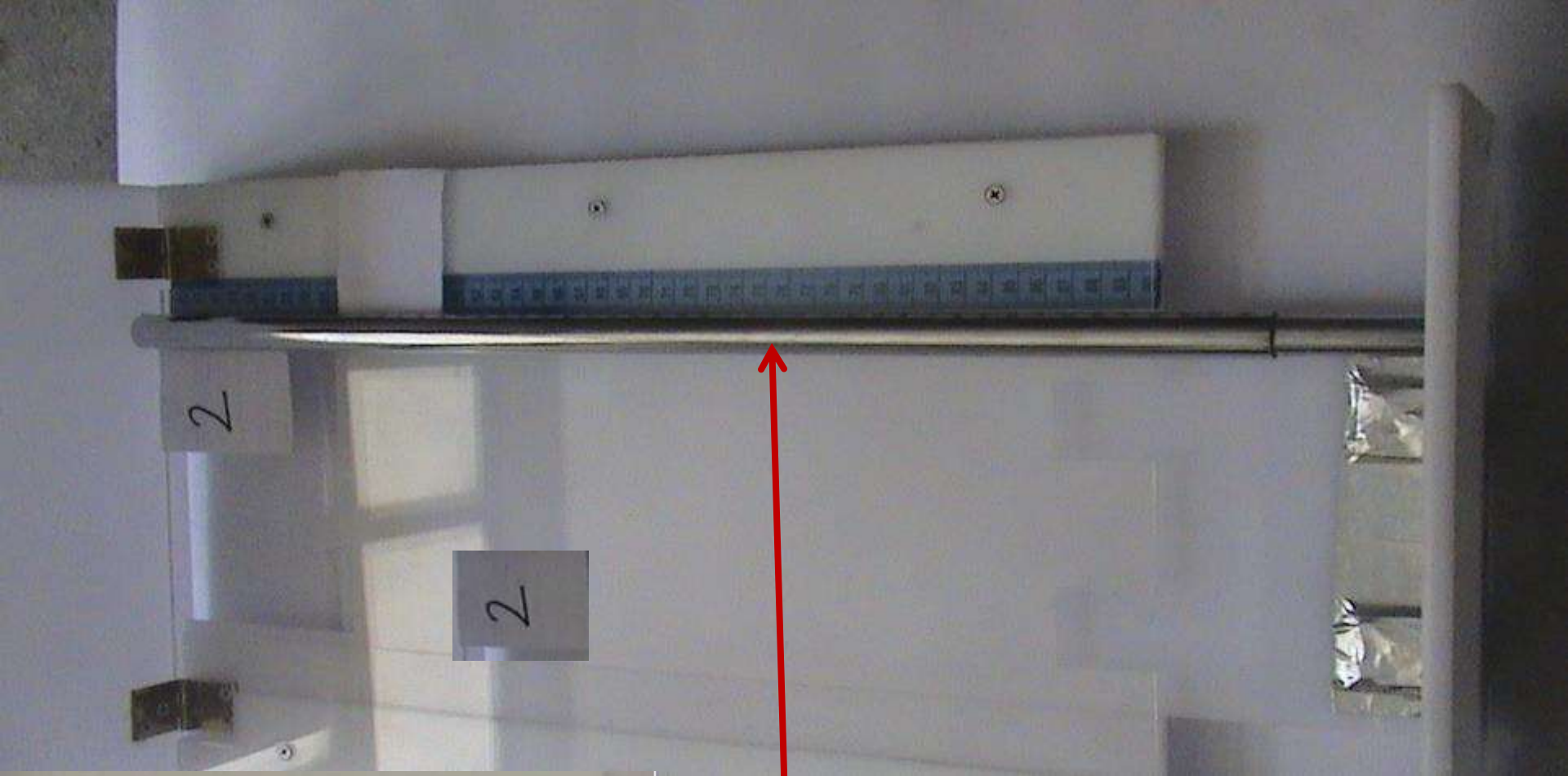
**Reading on the  
tape is 55cm**

### **TESTING ACCURACY OF INFANTOMETERS USING ANTHROPOMETRY ROD**

**A segment of the anthropometry rod measuring 55 cms was used to test the accuracy of the infantometer.**

**The anthropometry rod was placed on two edges of the infantometer, on either side of the central sliding panel and at the centre of the sliding panel and the length measured on the tape in the infantometer.**

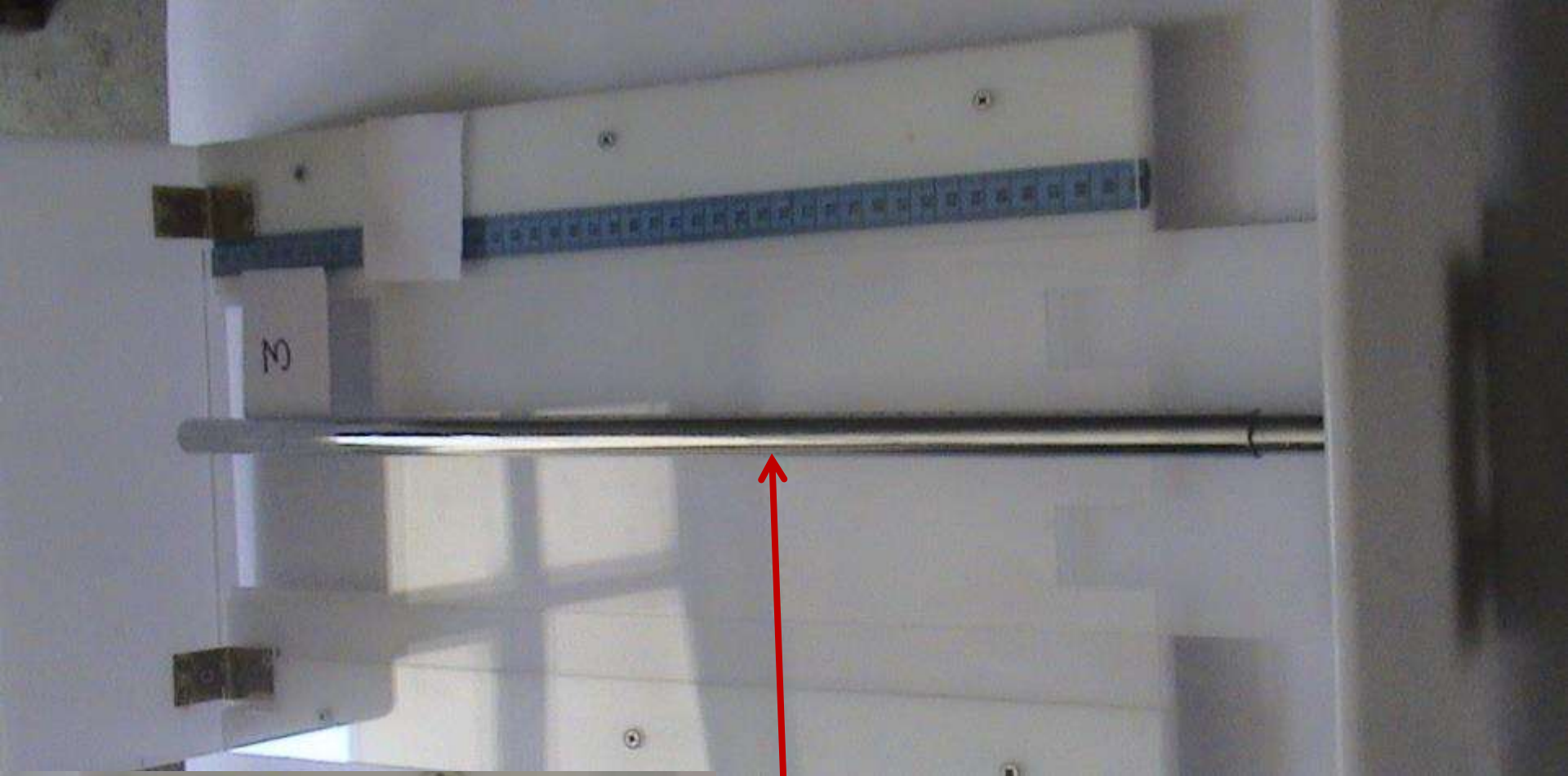




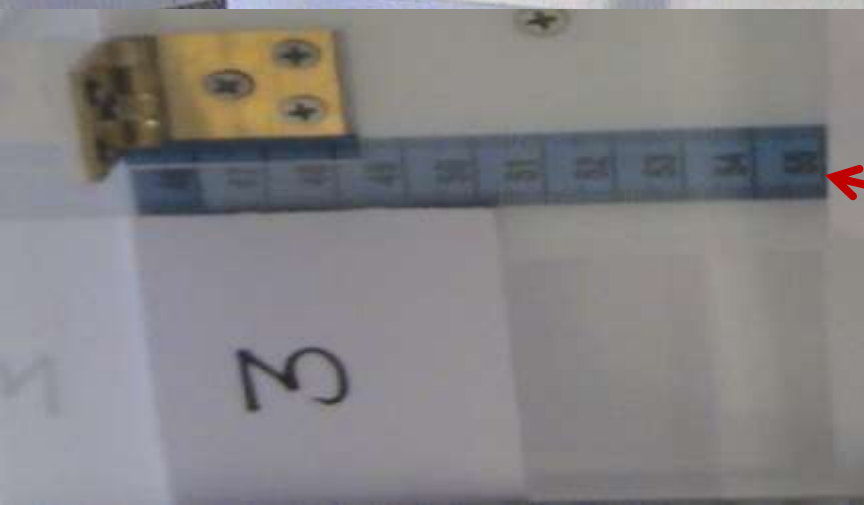
**Anthropometry rod at one side of the central sliding panel of the infantometer**

**Reading on the tape is 55cm**

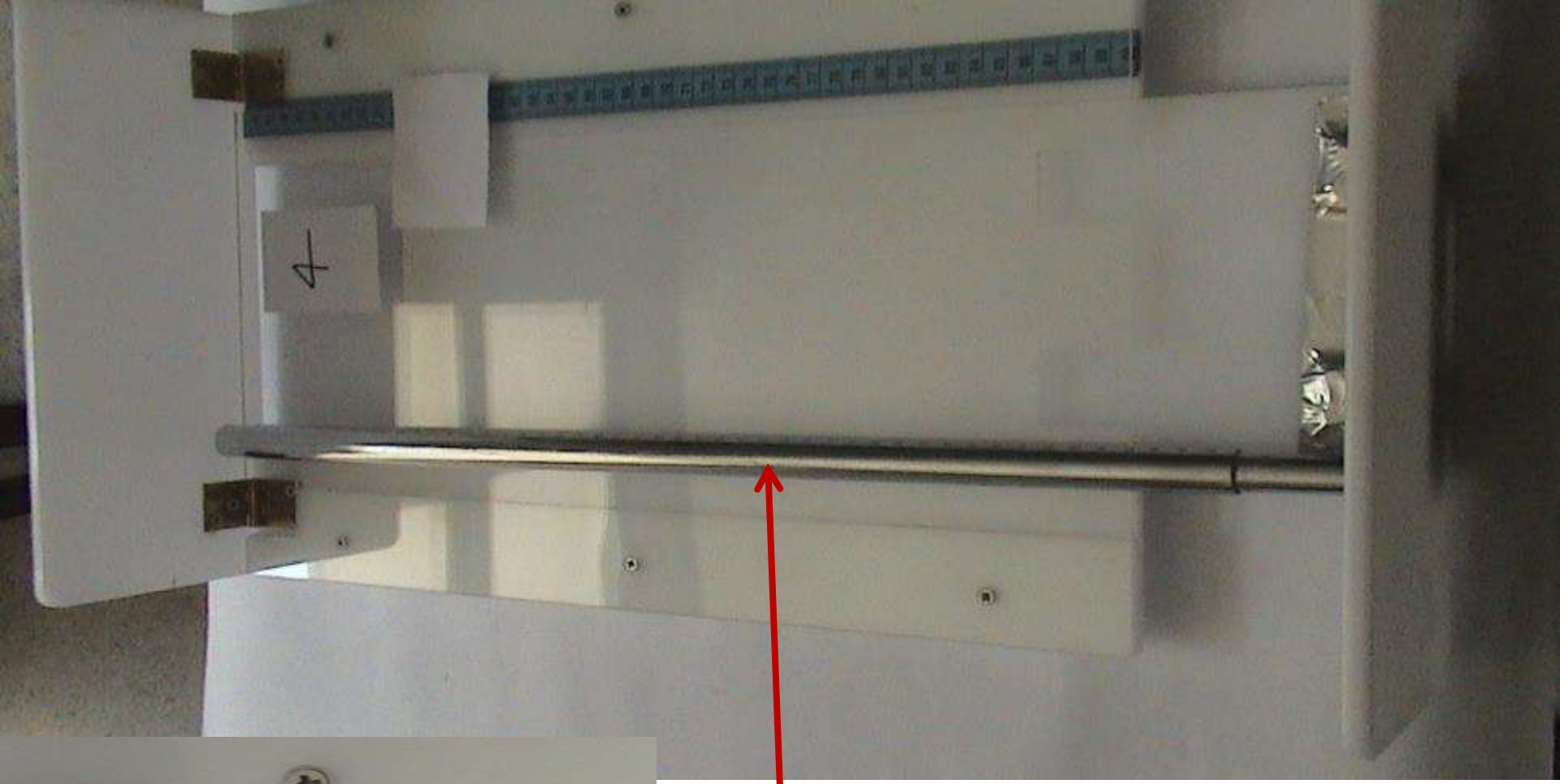




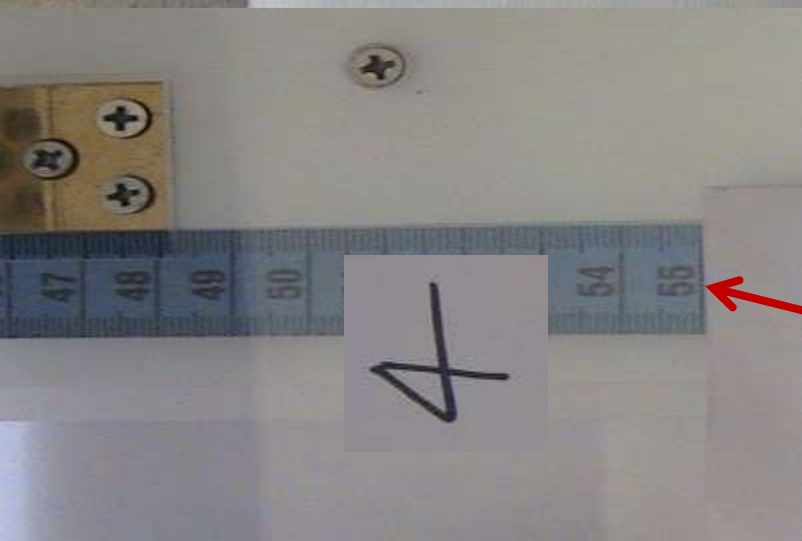
**Anthropometry rod at centre of the central sliding panel of the infantometer**



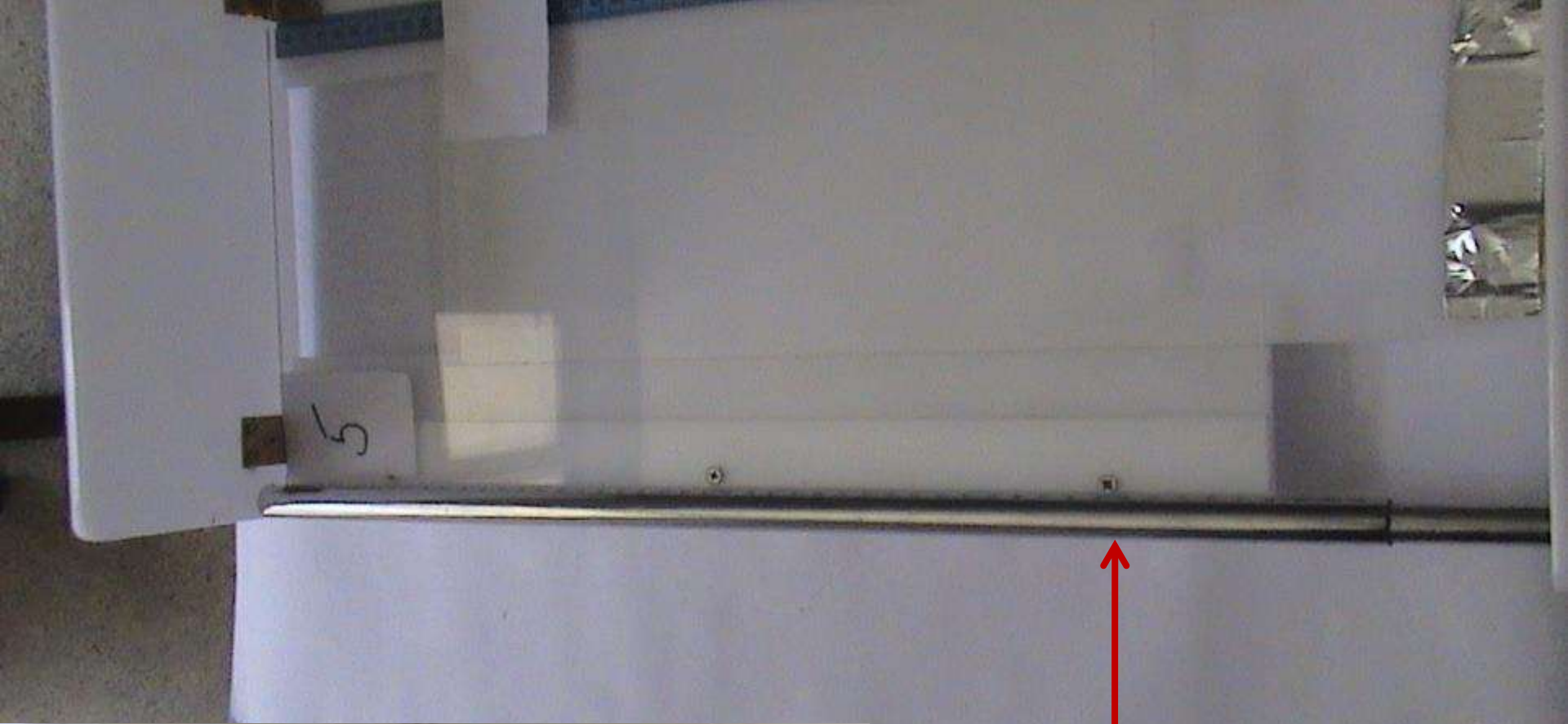
**Reading on the tape is 55cm**



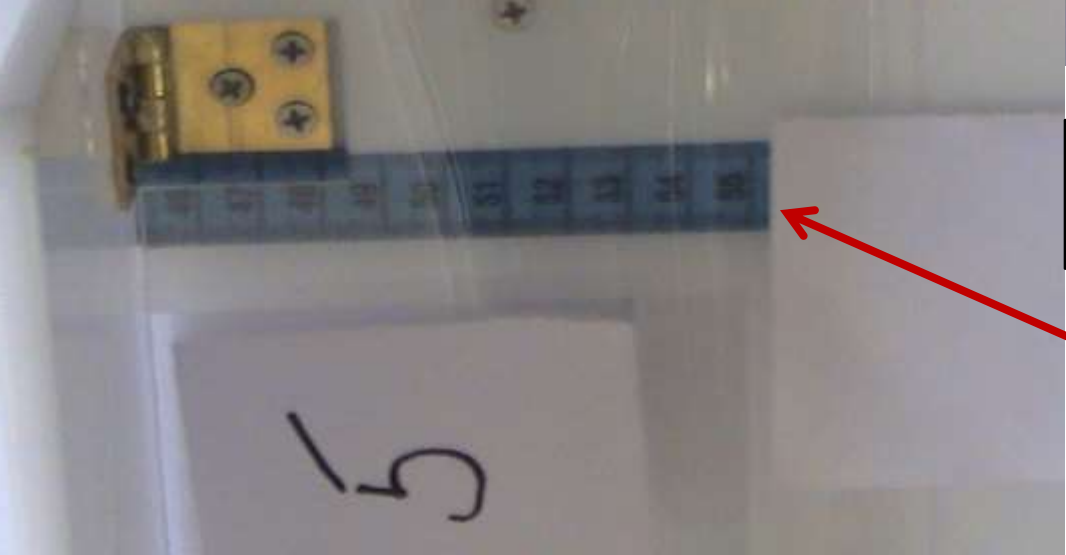
**Anthropometry rod at other side of the central sliding panel of the infantometer**



**Reading on the tape is 55cm**



**Anthropometry rod at other edge of the infantometer**



**Reading on the tape is 55cm**

# TESTING ACCURACY BY MEASURING LENGTH OF INFANTS IN TEST AND STANDARD INFANTOMETER

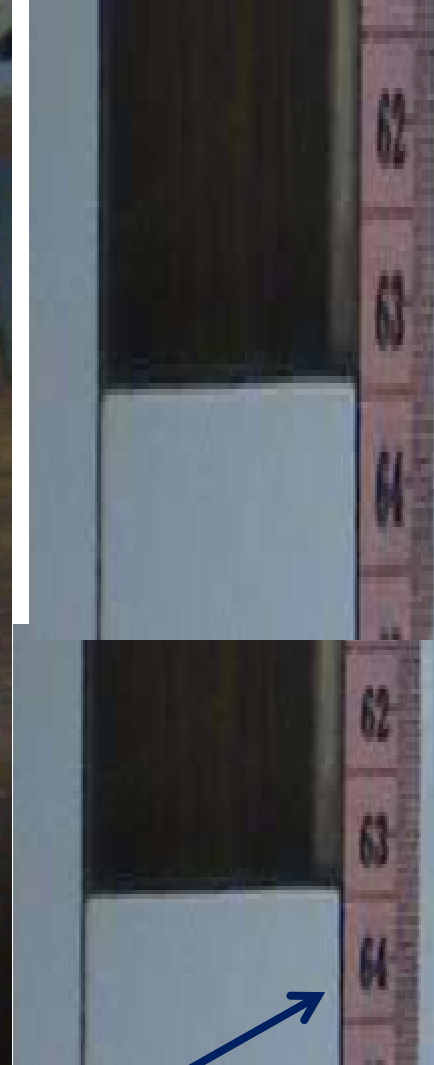


Head correctly positioned against head plate

Foot correctly positioned against head plate

Measure two infants both in the standard infantometer and the test infantometer





**Infant being measured – head held vertical against the head plate by the mother; back straight on the infantometer; knees straightened and foot positioned by the nutritionists vertically against the foot plate. Length of the baby is 63 cm in both standard and test infantometers .**

# **MEASURING LENGTH IN INFANTS USING INFANTOMETER**

**Infants will want to be carried by the mother and not like to lie on the infantometer**

**Request the mother to lay the infant on the infantometer with head abutting on the head plate**

**Request her to play with the infant until he/she settles down and lies comfortably on the infantometer**

**Request the mother to move near the head plate**

**Adjust the infant's head against the head plate so that the lower orbital margin and tragus lie on the same plane.**

**Request mother gently to hold the head in this position and keep talking to the infant so he does not move his head away**



**Infants will keep the knees bent while lying on their back**

**With your left hand gently press the bent knee on to the central board. The knee will straighten and the foot will push the foot plate out**

***Infant's foot should not be pulled to straighten the leg***

**Press the dorsum of the foot on to the foot plate so that there is no gap between the foot and the foot plate**

**Request the mother to pick the baby from the infantometer**

**Place a white sheet on the infantometer at the level of the top of the central sliding panel (to prevent parallax errors in taking the reading) and read the measurement on the tape**



**Baby's head is correctly positioned and held by mother**

**In spite of baby's legs is slightly bowed, the foot is correctly resting on the foot plate and held by nutritionist.**





**Error – foot not resting on foot plate**



**Foot correctly resting on the foot plate**



**Baby's length is 65.8cms**