



Standard Operating Procedures Clinical and *Translational Research Center*

Title:	Measurement of Height		
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Number of Pages:	Page 1 of 3	Revised Date:	

Policy: Each patient's nutritional status is reassessed as necessary in the course of care.

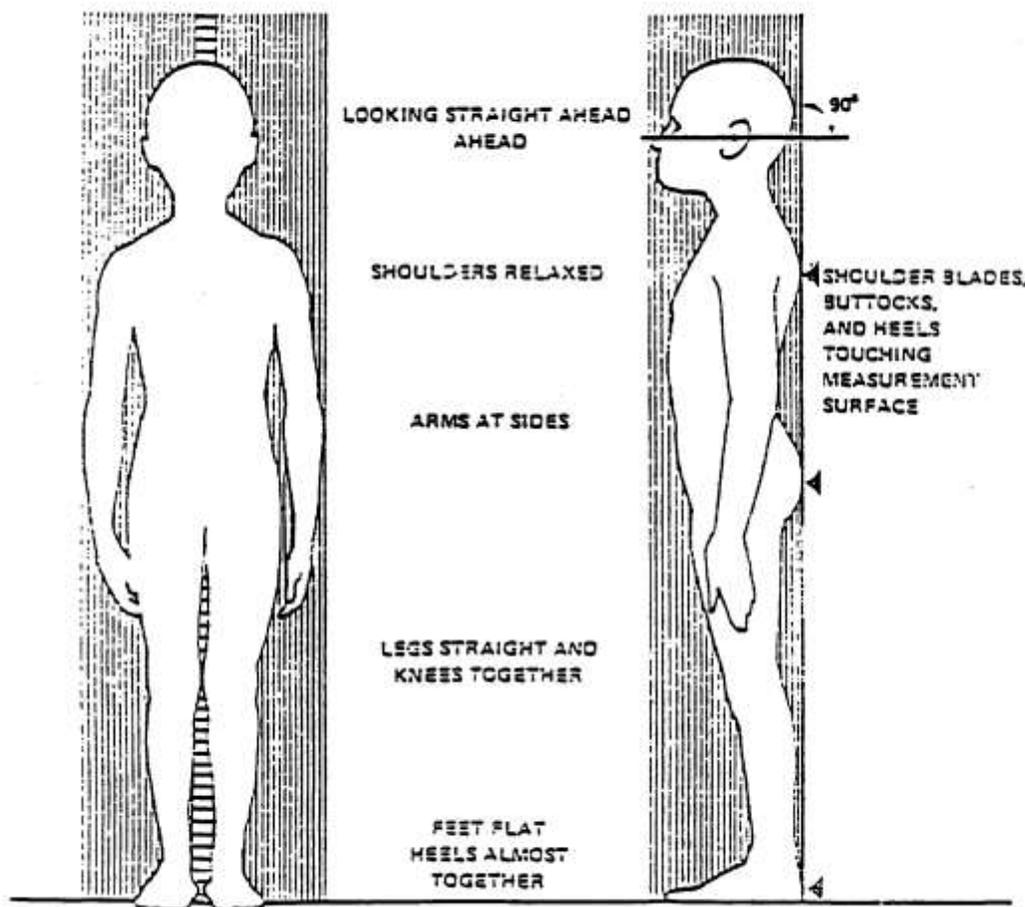
Purpose: Accurate height measurement is important in the clinical research setting. Clinical centers are required to use a wall-mounted stadiometer. A participant's standing height is the distance from the soles of the feet to the top of the head with the participant standing erect and looking straight ahead. The measurement of height is recorded in centimeters.

Procedure:

1. Standing height is measured with a fixed stadiometer with a vertical backboard and a moveable headboard.
2. Identify the subject and explain the procedure.
3. Have the patient remove hair ornaments, ponytails, buns, braids, etc.
4. Ask the subject to remove shoes.
5. Have the patient stand on the floor with the heels of both feet together and the toes pointed slightly outward. Body weight is evenly distributed and both feet are flat on the floor.
6. Check the position of the heels, buttocks, shoulder blades, and the back of the head for contact with the vertical backboard. It may not be

possible for some subjects to place their heels, buttocks, scapulae and the posterior aspect of the head against the backboard while maintaining normal stature. Subjects are positioned so that only the heels and buttocks are in contact with the vertical board, and the body is positioned vertically above the waist.

7. Align the patient's head in the Frankfort horizontal plane (the horizontal line from the ear canal to the lower border of the orbit of the eye is parallel to the floor and perpendicular to the vertical backboard).
8. Arms should hang free at the sides with palms facing the thighs.
9. Measurer's eyes should be level with the headboard. Measurer should stand on a stool/ladder if the subject is taller.
10. Lower the headboard and instruct the patient to take a deep breath and stand as tall as possible. Subject should look straight ahead, take a deep breath, and hold that position while the horizontal headboard is brought down firmly on top of the head.
11. Position the headboard firmly on top of the head with sufficient pressure to compress the hair.
12. The measurement is recorded to the nearest 0.1cm.
13. Repeat for a total of three measurements and record average.



References:

1. NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III Body Measurements (Anthropometry) Manual 1988 Download on 9-8-2011 from <http://www.cdc.gov/nchs/data/nhanes/nhanes3/cdrom/nchs/manuals/anthro.pdf>
2. Anthropometric Standardization Reference Manual by Timothy G. Lohman, Alex F. Roche, Reynaldo Martorell

Appendices: