CIRCUMFERENTIAL MEASUREMENTS USING VERNIER TAPE
Circumferential measurements are increasingly used to assess wasting as well as adiposity and risk of noncommunicable diseases. Non stretch fibre glass tapes are used for circumferential measurements; these are readily available. Vernier attachment to the fibre glass tape improves both ease and accuracy of circumferential measurements especially mid upper arm circumference measurements in infants and young children. Vernier tape can readily be made by the students and attached to the fibre glass tape.
Make the person stand straight. Pass the finger on the spine of the scapula and identify the tip of acromion. Request the person to bend their lower arm at right angle to the upper arm. Identify the tip of olecranon processes. Measure the length between these two using a non-stretch tape. Measurement of mid upper arm circumference.
MEASUREMENT OF MID UPPER ARM CIRCUMFERENCE

Mark the midpoint between tip of acromion and olecranon processes.
Wind the non-stretch tape round the arm with lower border of the tape at the midpoint between tip of acromion and olecranon processes.
MEASUREMENT OF MID UPPER ARM CIRCUMFERENCE

Insert the free end of the tape into the slot in the vernier tape so that it fits the mid upper arm snugly.
MEASUREMENT OF MID UPPER ARM CIRCUMFERENCE USING VERNIER TAPE

Read the mid upper arm circumference in the non-stretch tape (23) and the vernier (0). MUAC in this person is 23 cms.
MEASUREMENT OF WAIST CIRCUMFERENCE USING VERNIER TAPE

Waist is identified as the smallest circumference in the trunk between costal margin and iliac crest.

Stand in front of the person and wind the nonstretch tape snugly around the waist.
MEASUREMENT OF WAIST CIRCUMFERENCE USING VERNIER TAPE

The reading in the non-stretch tape is 59cm.
The non-stretch tape main division coincides with vernier tape division 7.
Her waist circumference is 59.7cm.
MEASUREMENT OF HIP CIRCUMFERENCE USING VERNIER TAPE

Hip circumference is measured at the largest circumference in the hip region. Stand to one side of the person to be measured. Wind the nonstretch tape snugly around the largest circumference around the hip.
MEASUREMENT OF HIP CIRCUMFERENCE USING VERNIER TAPE

The vernier tape is wound snugly around the hip.

Fibre glass tape reading is 84.

The non-stretch tape main division coincides with vernier tape division 2.

Her hip circumference is 84.2 cm.