

# Anthropometric Measurements

[🕒 30 min]



# Session Objective

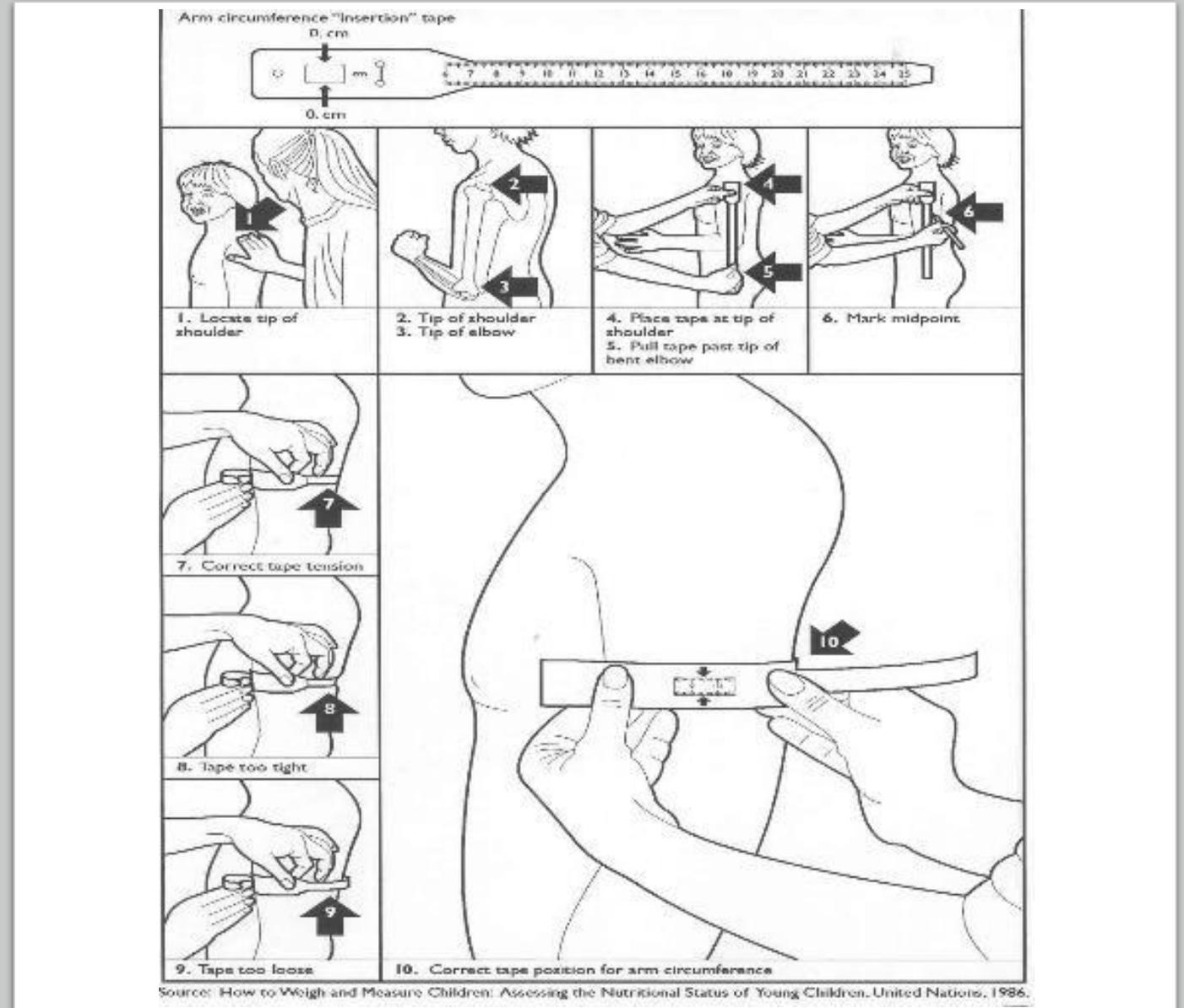
- Brief orientation on MUAC measurement and Oedema checking
- Different variables and data to be collected
- Common mistakes during anthropometric measurements

# Information/ variables to be collected during MUAC and Oedema Screening

1. Child Age (in months) preferably, otherwise by  $\geq$  or  $<$  2 years
2. Child Sex (m/f)
3. MUAC data (in mm) preferably, otherwise by thresholds
4. Oedema (Y/N)
5. Screening in community (HH) or in Health facility
6. Screening area information (e.g. village/ township, district)
7. Total number of children in the screening location (e.g. village, township) and total number of children screened

# Mid-Upper Arm Circumference (MUAC)

- Measures amount of soft tissue in the arm, reflects muscular density.
- Measurements taken to the **closest mm**.
- Measurements taken on the **left arm**.



# Measuring MUAC

1. Explain the procedure to the child's mother or caretaker.
2. If possible, the child should stand straight and sideways to the measurer.
3. Bend the left arm at 90 degrees to the body.
4. Place a measuring tape along the upper arm and find the mid-point of the upper arm. The mid-point is between the tip of the shoulder and the elbow.
5. Mark the mid-upper arm point with a pen.
6. Let the left arm hang relaxed at the side of the body.
7. Place the MUAC measuring tape on the midway point.
8. Pull the tape until it fits securely around the arm. The tape should not be left too slack nor pulled too tightly. The tape should touch the skin all the way around the arm, but not make a dent in the skin.
9. Read the measurement at the window of the MUAC measuring tape.
10. Record mid-arm circumference to the nearest millimetre (mm).

# Video Demonstration

- <https://drive.google.com/drive/folders/1FI4PmyB5tqUhq6uPaDoOHHdg0Az8zNvU>

# Common MUAC Measurement Mistakes

- Measuring MUAC on the right arm.
- Estimating (rather than measuring) the mid-point of the upper arm.
- Bending the MUAC tape when measuring the midpoint.
- Not measuring the midpoint from the tip of the shoulder to the elbow bend.
- Pulling the MUAC tape too tight.
- Not pulling the MUAC tape tight enough (too slack).
- Not reading the tape accurately (to nearest mm).

# Diagnosing Bilateral Oedema

- ❑ Oedema results from an accumulation or an excess of extra-cellular fluid in the body due to severe nutritional deficiencies.
- ❑ **Count to 3** when administering the test for edema “One-one thousand, two-one thousand, three-one thousand”.
- ❑ Edema must be **bilateral (both feet)**.
- ❑ Tested MUAC measurements.
- ❑ Hard pressure is ***not*** required to test for edema.

# Diagnosing bilateral edema: Thumb Pressure Test



# Video Demonstration

☐ <https://www.youtube.com/watch?v=t4dholcfl84>

[Time at: 11:03]

# Oedema

- Edema is a VERY RARE event.
- Most common source of errors.
- Be careful of misclassifying edematous child.
- If possible, show Oedematous child at training.
- Outreach workers should always verify Oedema children with higher level technical staff.

# Age Estimation

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- Age should be taken in months for children and in years for PLWs
- Always probe age, especially for children U5
- Check immunization card to find exact DoB
- If exact DoB not available, then use an updated event calendar to correctly identify child age
- Ask mother/ caregiver if she can remember child age, but always verify with event calendar



# Example of an Event Calendar



Microsoft Excel  
Worksheet

Any Question?