Measuring Mid-Arm Circumference and Body Mass Index (BMI)

Measuring the Mid-Arm Circumference

Why should I get a mid-arm circumference?
Mid-arm circumference (MAC) is an important measure of nutritional status. Following a patient’s nutritional status is key for establishing eligibility for hospice care. This measurement should be taken at the time of admission and then on a monthly basis or PRN. The MAC should be obtained even when you are able to obtain a weight as, in many cases, patients later reach a point where obtaining a weight is no longer possible. Having a MAC for comparison can sometimes be the key element in ensuring that the patient remains eligible for hospice services.

How do I measure the mid-arm circumference?
- Always measure on the right arm unless there is a specific reason why this is not possible (i.e. lymphedema following mastectomy.) At the time of the first measurement, note the side used and use the same side for all subsequent measurements.
- Locate the olecranon process, the tip of the elbow.
- Locate the acromial process, the tip of the shoulder.
- Measure on the posterior aspect of the arm between these two points, being careful to keep the tape straight.
- Divide the length by 2 and mark this midpoint on the arm with a pen.
- Ask the patient to relax the arm at their side with the palm facing inward. Make certain that the patient is not flexing the muscles in the arm.
- Place the measuring tape around the arm at this midpoint, holding the tape perpendicular to the length of the arm.
- The tape should be touching the skin continuously and should follow the contours of the tissue but it should not compress the skin or tissue. Do not attempt to compress skin folds, just lay the tape measure gently around the arm.
- Record measurement in centimeters using a decimal point if the measurement does not fall on an exact number.
- Repeat the circumference measurement a total of 3 times and take an average of the 3 to get the most accurate mid-arm circumference measurement.
- Report the MAC at IDT and record your measurement in a consistent place in the patient’s chart.
- Include the MAC from admission, the most current MAC, and the trend on the reassessment for eligibility form.

Body Mass Index (BMI)

Body mass index (BMI) is a measure of body fat based on height and weight that applies to adult men and women.

Calculating Body Mass Index
Go to the NIH (National Heart, Lung, and Blood Institute) website below to calculate the body mass index. Simply enter the height and weight (in standard or metric) and then click on the tab “Compute BMI.”
http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm

You will also be able to view the following on the website:
- View 2 BMI tables
- Limitations of the BMI
- Assessing your risk
- Controlling your weight
- Recipes
You can also download the BMI calculator app to your iPhone or Android phone.