Key Concepts:

- Body Mass Index (BMI) is calculated from weight and height measurements. It is an indicator of body fatness.
- BMI for children and teens can be plotted on BMI growth-for-age charts from the Centers for Disease Control (CDC).
- BMI percentiles can be used to determine weight status categories of underweight, healthy weight, overweight and obese.

Materials/Equipment Needed:

- Health professional to take measurements of height, weight, blood pressure and pulse
- Height and weight scale
- Blood pressure and pulse monitor
- Pencils or pens
- Calculator
- Poster Exhibits (Dietary Guidelines and Food & Activity Pyramid)
- Educational Fact Sheet (Understanding Your Child’s Health Report Card – Body Mass Index)
- Health Report Card worksheets for Boys and Girls
- 2 tables with table cloths

Advanced Preparation:

- Review activity instructions.
- Check number of fact sheets and worksheets to make sure you have enough and make copies if needed.
- Have all needed materials available at the station.
- Set up accompanying poster exhibits.
- Set up computers with website open (Optional)
Talk **Talking Points:**

- Body Mass Index or BMI is a number calculated from a child’s weight and height. BMI is a reliable indicator of body fatness for most children and teens. For children and teens, BMI is age and sex specific and is often referred to as BMI-for-age. After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts. There are different growth charts for boys and girls. The charts give a percentage ranking based on the BMI number. The percentile is an indicator used to assess growth patterns of children in the U.S.

- The growth charts show the weight status categories used with children. This includes underweight, healthy weight, overweight and obese. BMI is used as a screening tool to identify possible weight problems for children. However, BMI is not a diagnostic tool. If a child has a high BMI for age and sex, a health care provider would need to perform further assessments to determine if excess fat is really a problem.

**Activity:**

- Have a health professional take measurements of height, weight, blood pressure and pulse.

- Use the height and weight measurements to calculate BMI using the online calculator for children and teens at [http://www.cdc.gov/healthyweight/assessing/bmi/](http://www.cdc.gov/healthyweight/assessing/bmi/) or by using the following formula manually: Formula: weight (lb) / [height (in)]² x 703 (Note: When using English measurements, ounces (oz) and fractions must be changed to decimal values. Then, calculate BMI by dividing weight in pounds (lbs) by height in inches (in) squared and multiplying by a conversion factor of 703.)

- Use the CDC Growth Chart to plot the BMI-for-age and sex and determine the BMI percentile. Use the BMI categories on the Health Report Card to determine which category the percentile falls into: underweight, healthy weight, overweight or obese.

- Complete the Risk Factors section of the Health Report Card.

**Summary:** By following a healthy eating plan and getting plenty of physical activity, children and teens can reduce their risk of health and weight problems such as heart disease, high blood pressure, diabetes and certain types of cancer. Knowing your BMI and weight category can help assess risk for health problems.
References

Centers for Disease Control – http://www.cdc.gov/healthyweight/assessing/bmi/

Background Resources
(Sources of Additional Information for the Presenter if Needed)

<table>
<thead>
<tr>
<th>Resource</th>
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<tbody>
<tr>
<td>American Dietetic Association’s Complete Food and Nutrition Guide</td>
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<tr>
<td>LSU AgCenter – <a href="http://www.lsuagcenter.com">www.lsuagcenter.com</a></td>
</tr>
<tr>
<td>Centers for Disease Control – <a href="http://www.cdc.gov">www.cdc.gov</a></td>
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</tbody>
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