



This report is still being tested and may change before being sent statewide.

# ACHI

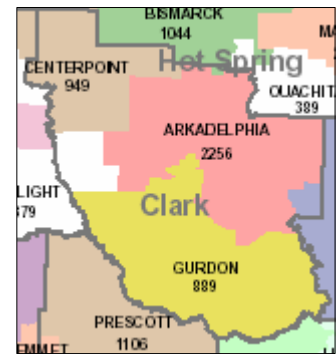
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## Report Information

Obesity is a major health problem that frequently begins in childhood and adolescence. In 2003, Arkansas became the first state in the country to mandate screening for body weight for all public school children. Act 1220 stipulates that Arkansas public schools must provide parents with their child’s body mass index (BMI) as one of several state actions to promote good health practices. The Arkansas Center for Health Improvement is capturing the data for analyses and will issue individual school district reports and an overall state report on child obesity annually.



**Arkadelphia School District**



The Arkadelphia School district is composed of 5 schools (Louisa E. Perritt Primary School, Central Primary School, Peake Elementary School, L. M. Goza Middle School, and Arkadelphia High School) with a total of 2,258 students. Body Mass Index was assessed for 2,051 students (91%) from October 9, 2003 to December 9, 2003. A description of the BMI assessment process for each school follows:

### LOUISA E. PERRITT PRIMARY SCHOOL

The Louisa E. Perritt Primary School is a public elementary school located within the Arkadelphia School District in the southwest part of the state (Clark County). Perritt houses 375 students in pre-kindergarten through 1<sup>st</sup> grade. On the day children were measured (10/9/2003), BMI was not assessed for 15 students (4.0%) primarily due to absenteeism.

Height and weight assessments at Louisa E. Perritt Primary School were conducted in the gymnasium. There were 5 stations set far enough apart so other children were not able to see or hear another child’s measurements. Two classes, Physical Education and Music, were simultaneously measured. There were 2 sets of 5 stations and each station was color-coded.

### CENTRAL PRIMARY SCHOOL

Central Primary School is a public elementary school located within the Arkadelphia School District in the southwest part of the state (Clark County). Central Primary School is comprised of 357 2<sup>nd</sup> and 3<sup>rd</sup> grade

students. On the day children were measured (10/27/2003), BMI was not assessed for 28 students (7.8%) primarily due to absenteeism.

Height and weight assessments at Central Primary School were conducted in the gymnasium. There were 3 stations set far enough apart so other children were not able to see or hear another child's measurements. Two classes, Physical Education and Music, were simultaneously measured. Children watched a drug education video while waiting to be measured.

### **PEAKE ELEMENTARY SCHOOL**

Peake Elementary School is a public elementary school located within the Arkadelphia School District in the southwest part of the state (Clark County). Peake is comprised of 320 4<sup>th</sup> and 5<sup>th</sup> grade students. On the day children were measured (11/18/2003), BMI was not assessed for 32 students (10.0%) primarily due to absenteeism.

Height and weight assessments at Peake Elementary School were conducted in the gymnasium. There were 3 stations set far enough apart so other children were not able to see or hear another child's measurements. Two classes, Physical Education and Music, were simultaneously measured. Children watched a video while waiting to be measured.

### **GOZA MIDDLE SCHOOL**

The L. M. Goza Middle School is a public middle school located within the Arkadelphia School District in the southwest part of the state (Clark County). The school is comprised of 536 students in 6<sup>th</sup> through 8<sup>th</sup> grades. On the day students were measured (11/24/2003), BMI was not assessed for 63 students (11.8%) primarily due to absenteeism.

Height and weight assessments at Goza Middle School were conducted in the gymnasium. There were 5 stations set far enough apart so other students were not able to see or hear another student's measurements. Students remained seated in a chair outside of the measuring station while waiting and were asked to read a book.

### **ARKADELPHIA HIGH SCHOOL**

Arkadelphia High School is a public secondary school located within the Arkadelphia School District in the southwest part of the state (Clark County). The school is comprised of 670 students in 9<sup>th</sup> through 12<sup>th</sup> grades. On the day students were measured (12/9/2003), BMI was not assessed for 69 students (10.3%) primarily due to absenteeism.

Height and weight assessments at Arkadelphia High School were conducted in the gymnasium. There were 4 stations set far enough apart so other students were not able to see or hear another student's measurements. Students were called over the intercom system and were measured in alphabetical order by grade.

### **Body Mass Index Definition (BMI)**

Body Mass Index (BMI) is calculated by the following formula: 
$$\text{BMI} = \frac{\text{Wt (lbs)}}{\{\text{Ht (inches)}\}^2} \times 703$$

According to the Centers for Disease Control and Prevention (CDC), boys and girls differ in their body mass as they mature. BMI for children, also referred to as BMI-for-age, is gender and age specific. BMI-for-age is used for children and teens 2 – 20 years of age and can be plotted on BMI charts (see appendix A). BMI charts contain four categories of weight based on the calculated BMI. The four categories are Underweight, Normal Weight, Risk of Overweight, and Overweight with a higher BMI indicating greater risk.

Healthcare professionals use the following established percentile cutoff points to identify underweight and overweight in children:

<b>Underweight</b>	BMI-for-age < 5th percentile
<b>At risk of overweight</b>	BMI-for-age 85th percentile to < 95th percentile
<b>Overweight</b>	BMI-for-age $\geq$ 95th percentile

### BMI Classifications

The BMI classifications for male and female students in each grade (Kindergarten through 12th grade) are presented in **Table 1**. The classifications are shown graphically for each school in **Figures 1-10**.

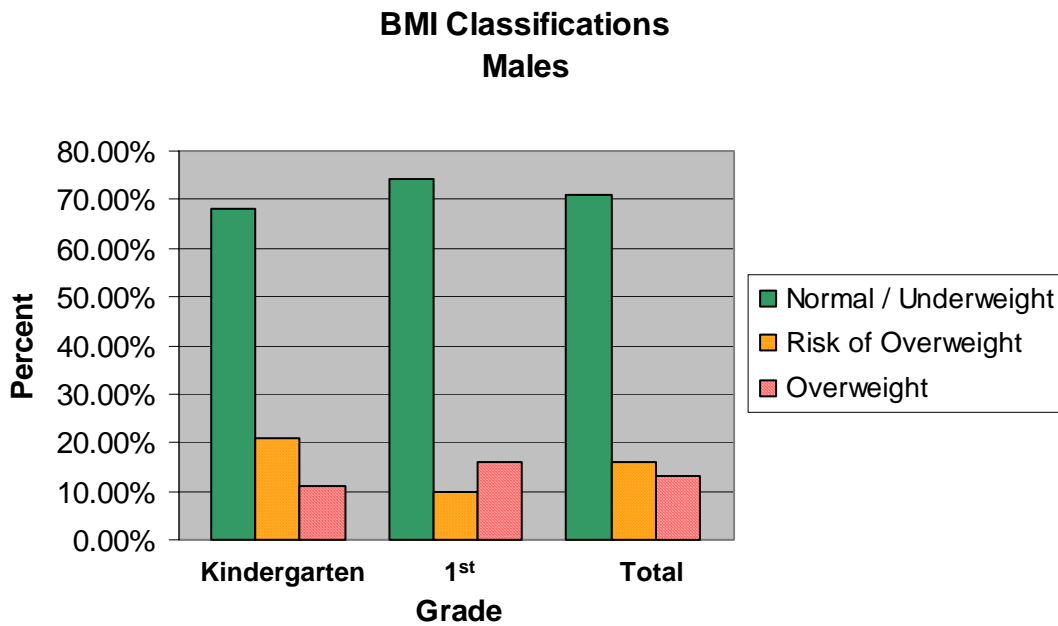
**Table 1. BMI Classifications**

Arkadelphia School District								
Males					Females			
Grade	N	Normal or Underweight	Risk of Overweight	Overweight	N	Normal or Underweight	Risk of Overweight	Overweight
<b>K</b>	100	68.0%	21.0%	11.0%	100	72.0%	19.0%	9.0%
<b>1</b>	82	74.4%	9.8%	15.9%	78	74.4%	9.0%	16.7%
<b>2</b>	86	60.5%	12.8%	26.7%	78	61.5%	19.2%	19.2%
<b>3</b>	86	55.8%	19.8%	24.4%	79	55.7%	26.6%	17.7%
<b>4</b>	78	66.7%	15.4%	17.9%	81	56.8%	23.5%	19.8%
<b>5</b>	74	58.1%	16.2%	25.7%	55	49.1%	23.6%	27.3%
<b>6</b>	79	46.8%	26.6%	26.6%	88	62.5%	18.2%	19.3%
<b>7</b>	76	68.4%	9.2%	22.4%	71	69.0%	14.1%	16.9%
<b>8</b>	80	55.0%	21.3%	23.8%	79	64.6%	13.9%	21.5%
<b>9</b>	76	56.6%	19.7%	23.7%	80	62.5%	17.5%	20.0%
<b>10</b>	83	63.9%	16.9%	19.3%	83	57.8%	20.5%	21.7%
<b>11</b>	74	66.2%	13.5%	20.3%	71	70.4%	19.7%	9.9%
<b>12</b>	70	55.7%	18.6%	25.7%	64	78.1%	12.5%	9.4%
<b>TOTAL</b>	1044	61.4%	17.0%	21.6%	1007	64.3%	18.2%	17.5%

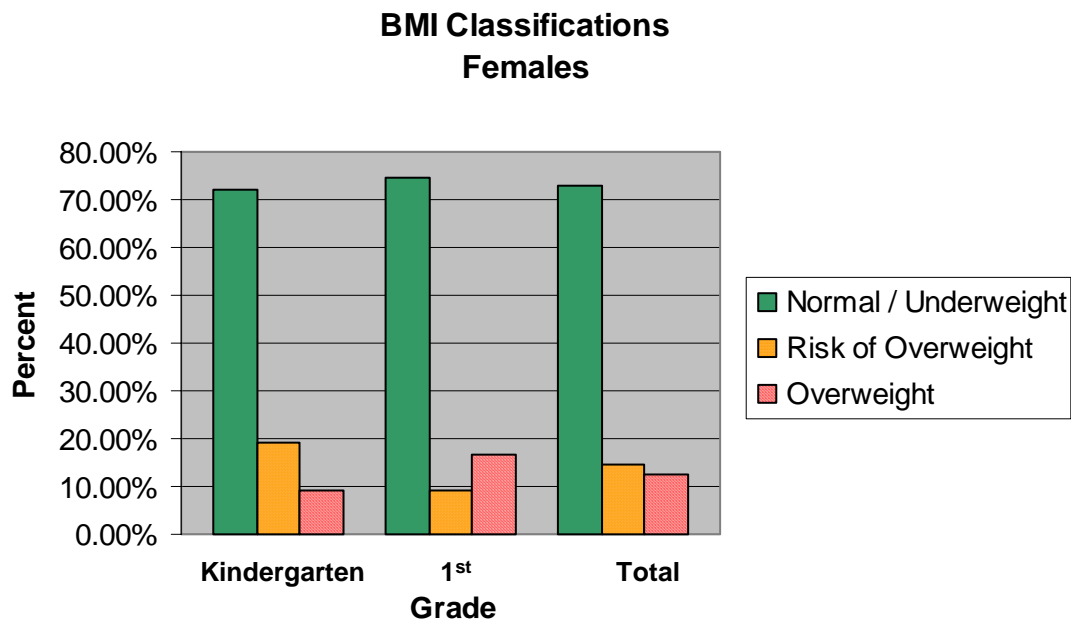
\* Due to government recommendations on reporting sensitive health information, the small number of children in the underweight category were not separately reported

**LOUISA E. PERRITT PRIMARY SCHOOL**

**Figure 1. Male BMI Classifications**



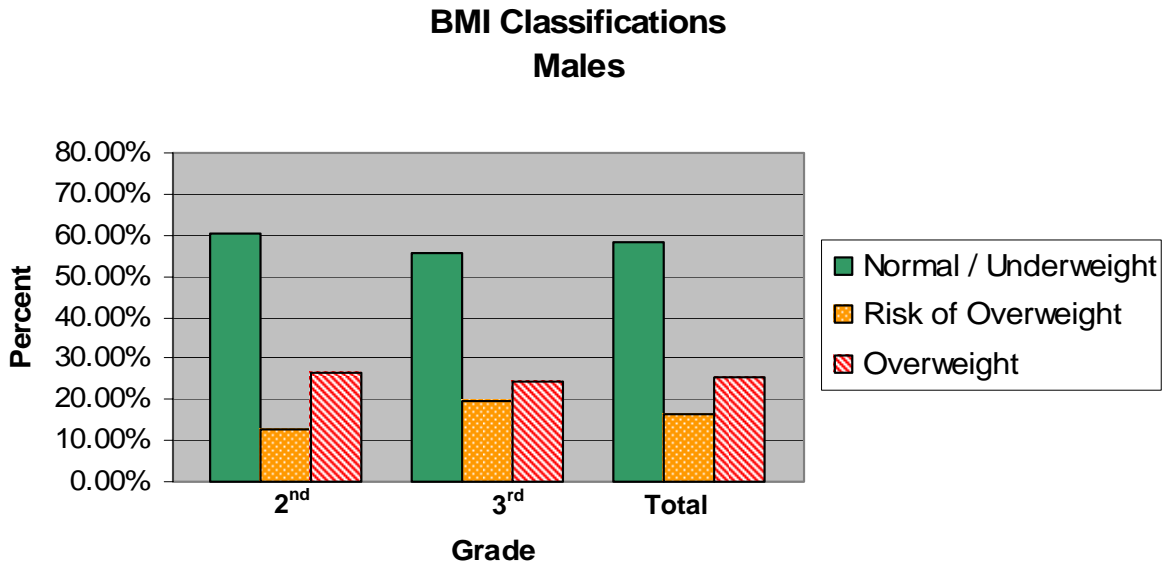
**Figure 2. Female BMI Classifications**



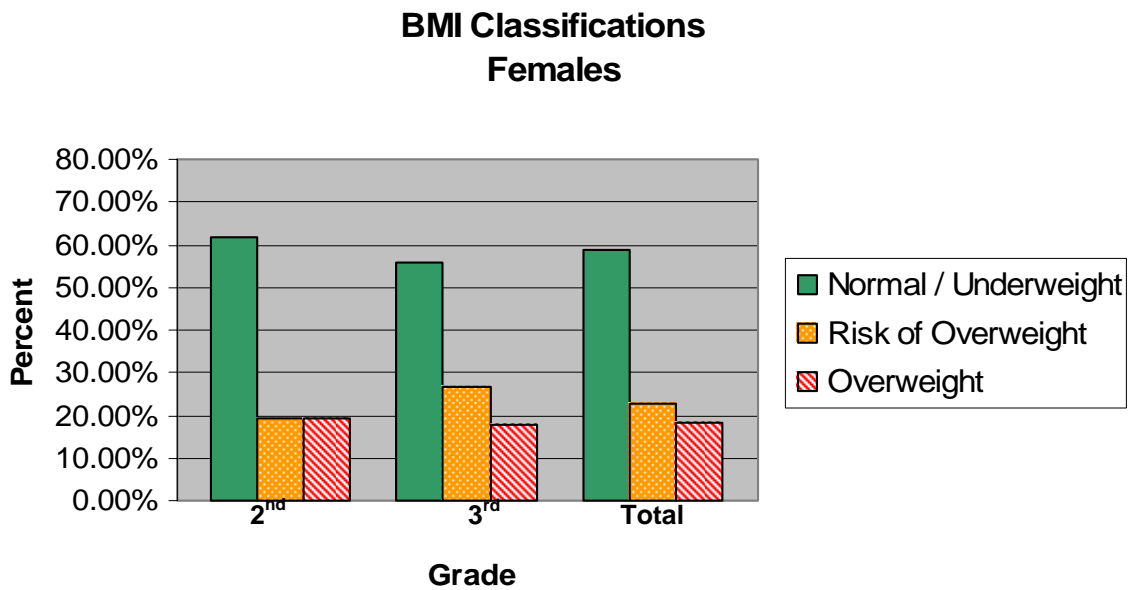
\* Due to government recommendations on reporting sensitive health information, the small number of children in the underweight category were not separately reported

**CENTRAL PRIMARY SCHOOL**

**Figure 3. Male BMI Classifications**



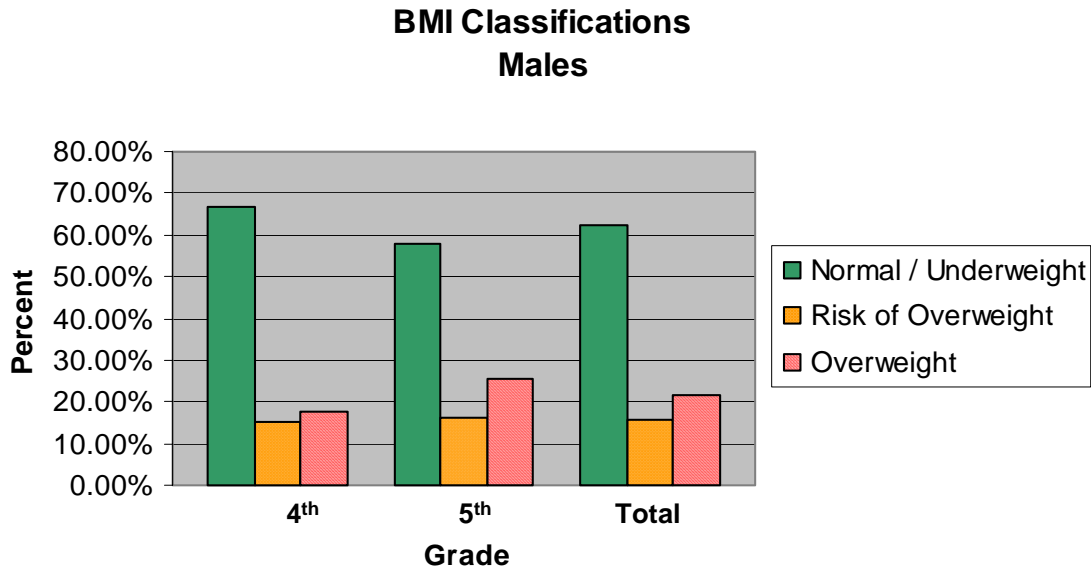
**Figure 4. Female BMI Classifications**



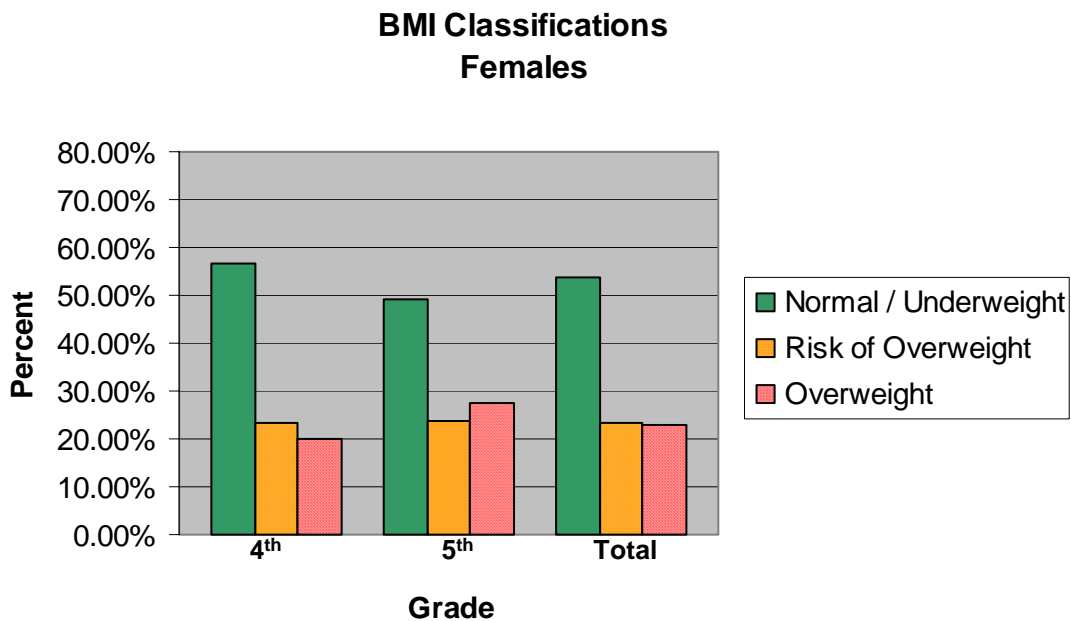
\* Due to government recommendations on reporting sensitive health information, the small number of children in the underweight category were not separately reported

**PEAKE ELEMENTARY SCHOOL**

**Figure 5. Male BMI Classifications**



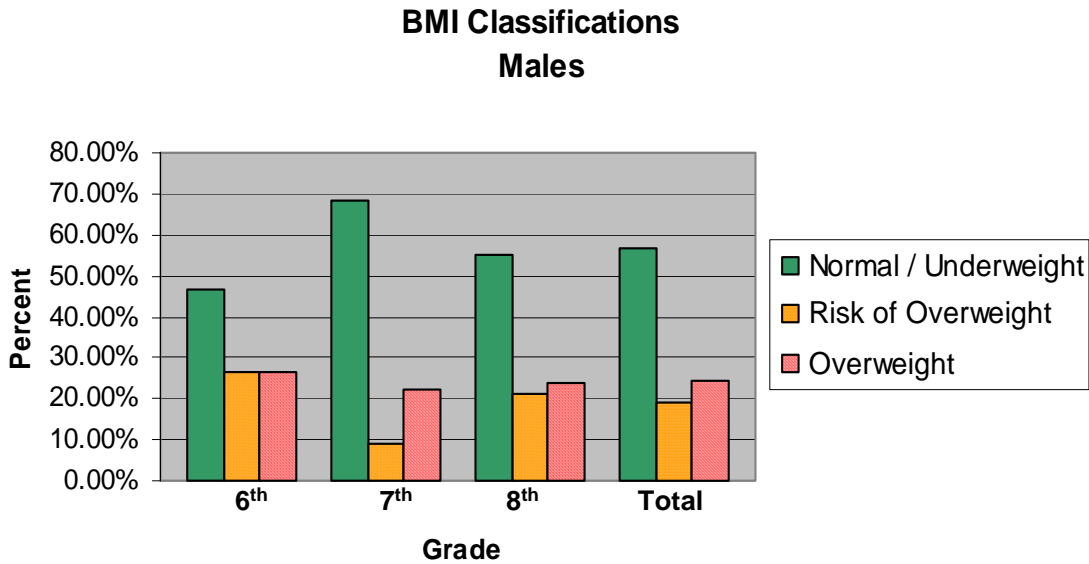
**Figure 6. Female BMI Classifications**



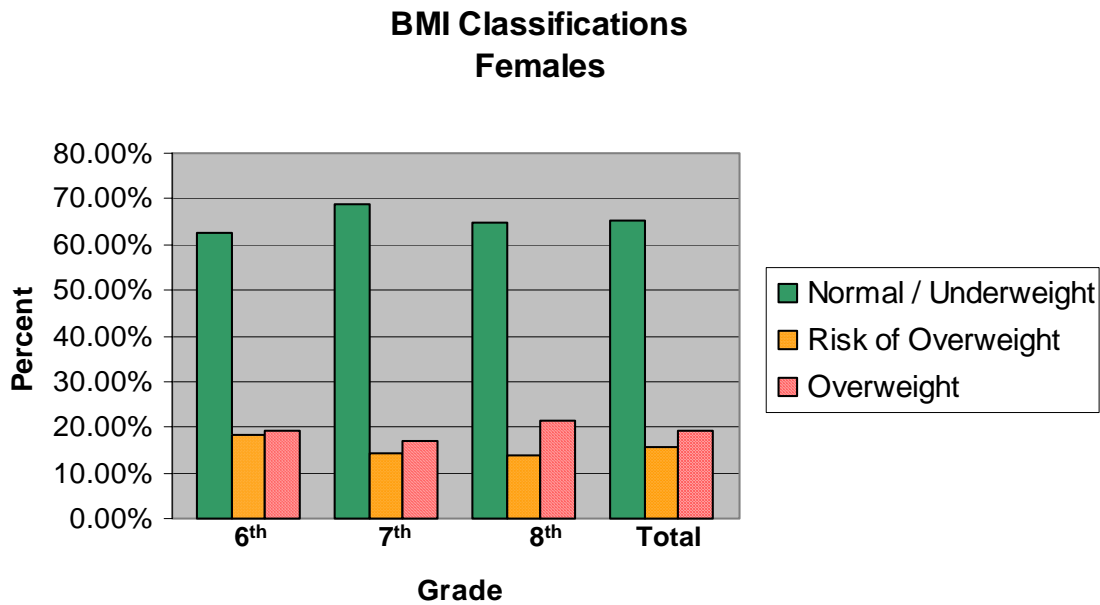
\* Due to government recommendations on reporting sensitive health information, the small number of children in the underweight category were not separately reported

**GOZA MIDDLE SCHOOL**

**Figure 7. Male BMI Classifications**



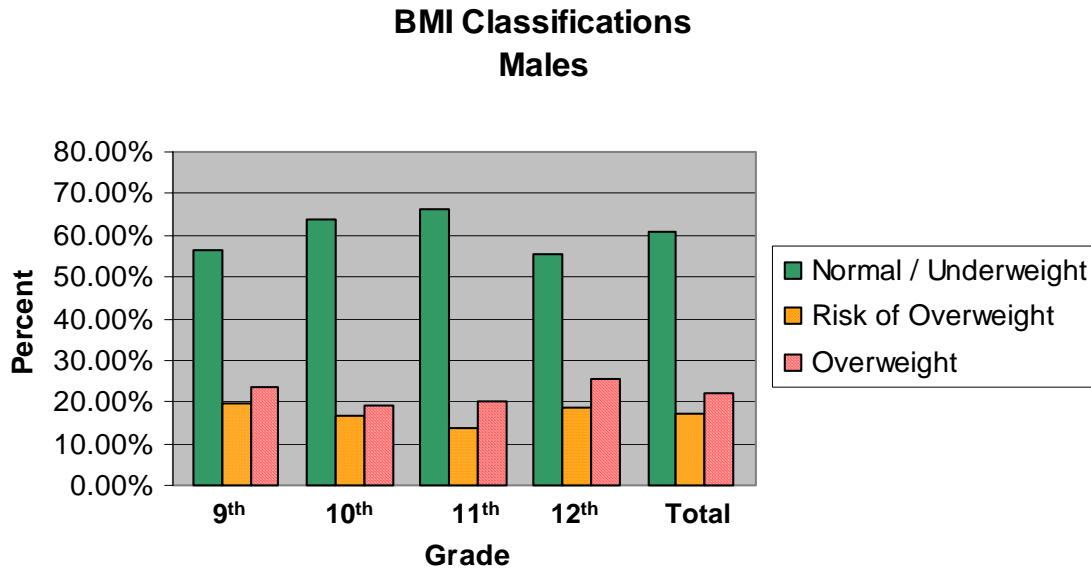
**Figure 8. Female BMI Classifications**



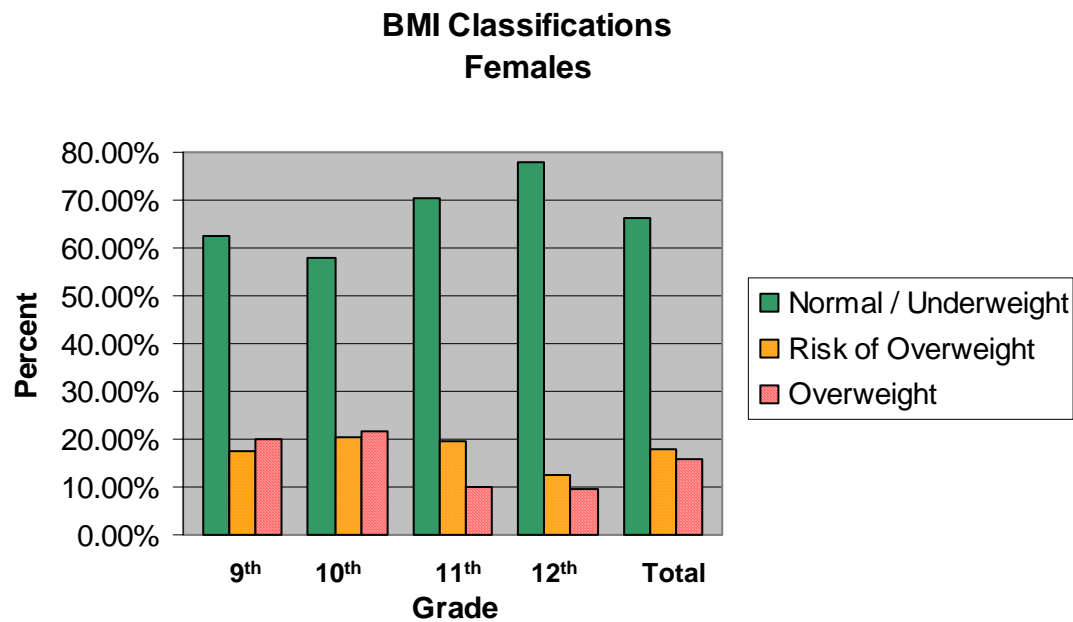
\* Due to government recommendations on reporting sensitive health information, the small number of children in the underweight category were not separately reported

**ARKADELPHIA HIGH SCHOOL**

**Figure 9. Male BMI Classifications**



**Figure 10. Female BMI Classifications**

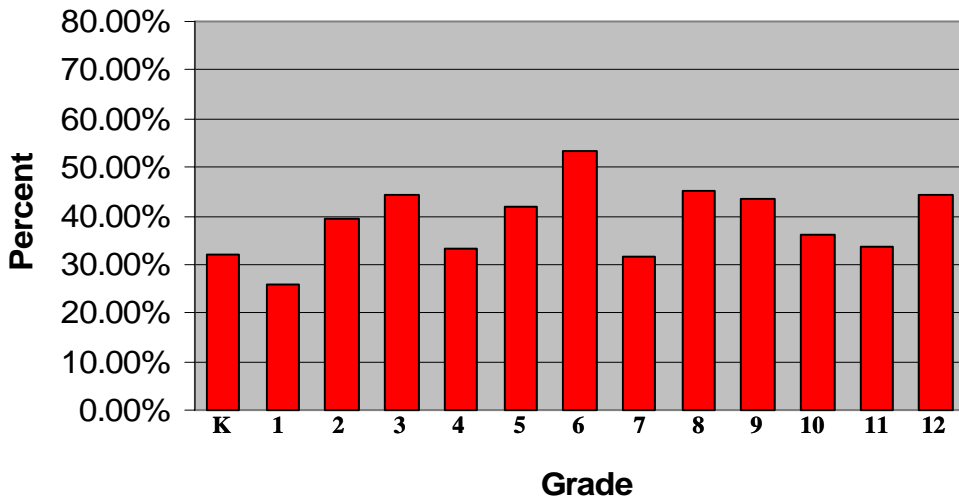


\* Due to government recommendations on reporting sensitive health information, the small number of children in the underweight category were not separately reported

The percentage of male and female students in each grade (Kindergarten through 12th grade) with a BMI Classification of Risk of Overweight or Overweight are presented in **Figure 11** and **Figure 12**.

**Figure 11. Male BMI Classification of At Risk of Overweight or Overweight**

### BMI Classification of At Risk of Overweight or Overweight Males



**Figure 12. Female BMI Classification of At Risk of Overweight or Overweight**

### BMI Classification of At Risk of Overweight or Overweight Females

