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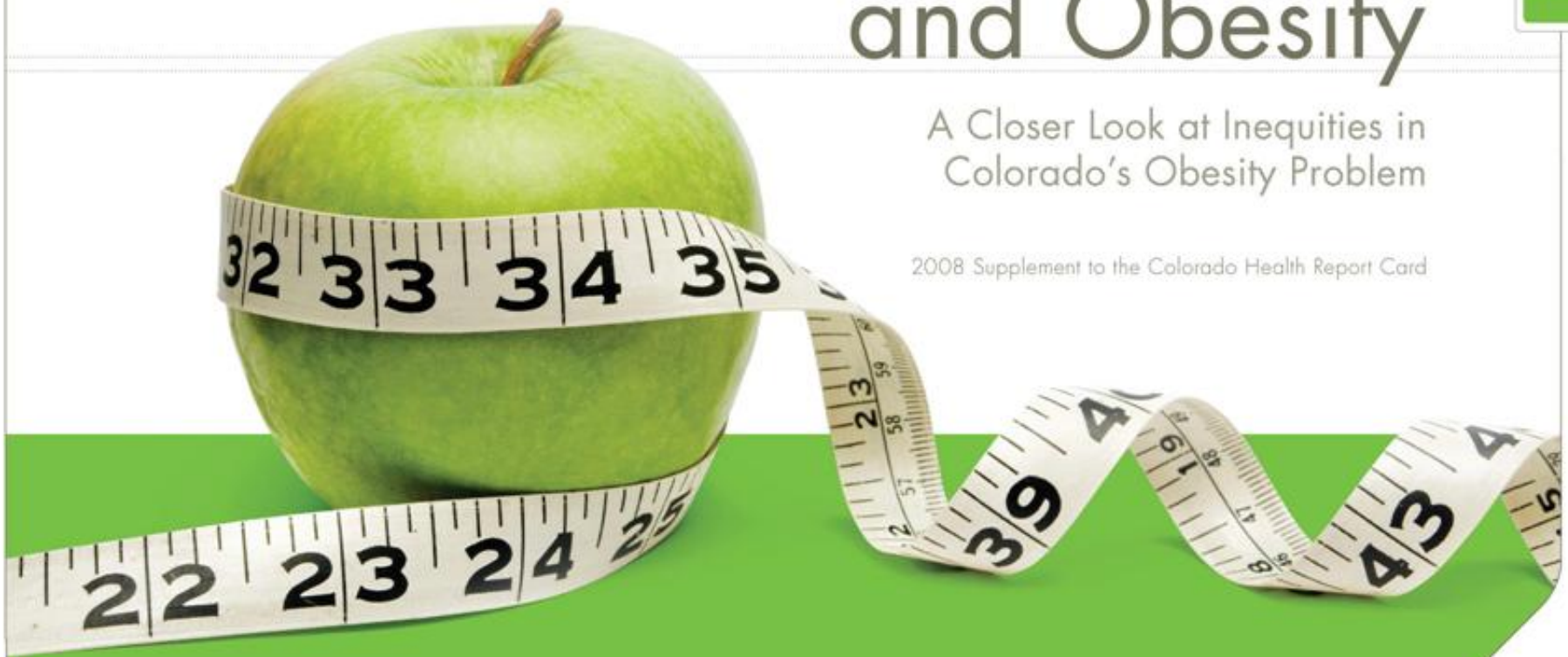
Income, Education and Obesity

CO

08

A Closer Look at Inequities in
Colorado's Obesity Problem

2008 Supplement to the Colorado Health Report Card



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Pamela Hanes, PhD

President and CEO

Colorado Health Institute



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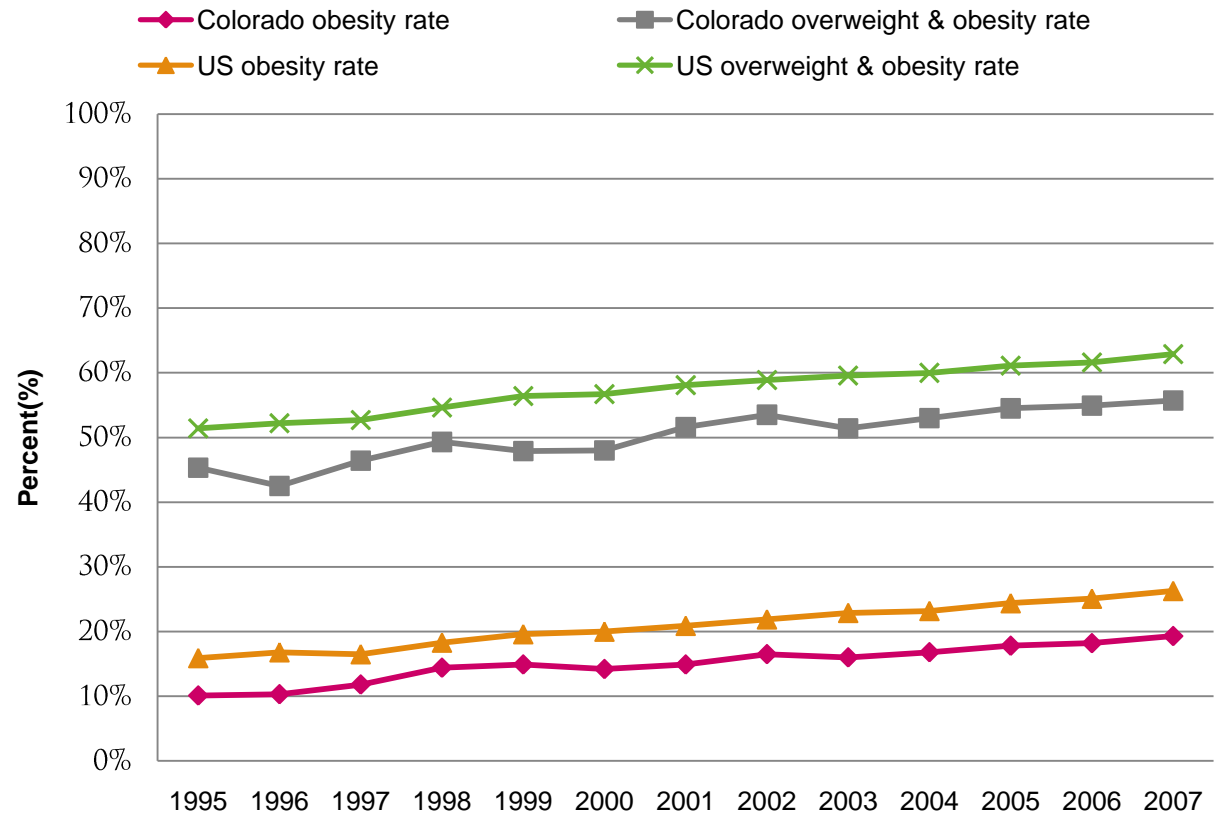
Is obesity a public health problem in Colorado? For whom?

- Obesity rates have more than doubled in Colorado since 1995
- In 2007, 19% of adult Coloradans (18 years and older) were obese compared to 14% in 2000
- If current trends continue, only 35% of Colorado adults will be at a healthy weight by 2017
- Although stabilized from a rate of 15% in 2006, 13% of Colorado's children were considered obese in 2007
- Increasing rates of obesity are more prevalent among less educated and low-income children and adults



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Trends in overweight and obesity rates, adults 18 years and older, 1995-2007



Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention, 1995-2007

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The economic and personal costs of obesity: What do the data tell us?

- 11% of obese adults have diabetes versus 2.3% of normal weight
- In excess of 36% of obese adults have high blood pressure versus 13% of normal weight
- Obesity is linked to a broad range of chronic physical and psychological conditions
- A 2004 study estimates \$874 million in obesity-related medical expenditures in Colorado



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Weight , health behaviors and adult onset chronic disease rates in Colorado, 2007

Age (years)	Weight status	Fruit and vegetable intake (% CI)	Adequate physical activity (% CI)	Diabetes (% CI)	Cardiovascular disease (% CI)	Hypertension (% CI)
Children (1-14)	Normal weight	7.5 (5.6-9.3)	57.9 (54.1-61.8)			
	Overweight	7.5 (3.9-11.1)	50.0 (40.9-58.3)			
	Obese	8.6 (4.3-12.5)	55.9 (45.9-66.0)			
Adults (18+)	Normal weight	29.8 (28.1-31.5)	60.2 (58.3-62.1)	2.3 (1.8-2.7)	3.9 (3.4-4.4)	12.7 (11.7-13.7)
	Overweight	24.4 (22.7-26.1)	55.6 (53.5-57.6)	5.5 (4.7-6.3)	7.0 (6.1-7.8)	23.6 (22.1-25.1)
	Obese	19.2 (17.2-21.2)	42.6 (40.0-45.3)	11.4 (10.1-12.8)	6.9 (5.8-8.0)	36.1 (33.8-38.5)

Source: 2007 Child Health Survey (children), 2007 Behavioral Risk Factor Surveillance System (adults). Analysis conducted by the Colorado Department of Public Health and Environment and the Colorado Health Institute.



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Health disparities affect the whole community ...

- Obese Coloradans have higher rates of chronic disease that compromise the quality of life and continued participation in community life
- Chronic disease, when not controlled, can result in permanent disability, loss of employment and incomes spiraling downward
- The societal and personal costs of chronic illness is great in both dollars and quality of life lived
- Children who eat well, maintain a healthy weight and exercise regularly do better in school and are more likely to progress to graduation



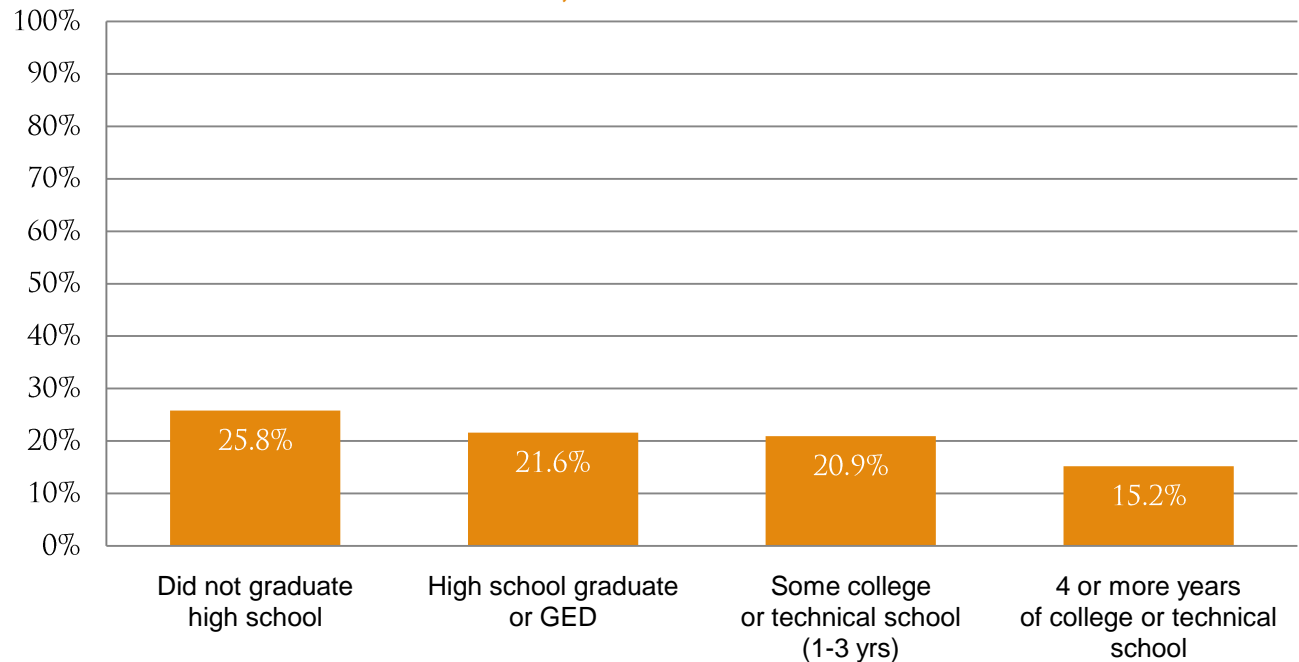
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Obesity rates for CO adults who have gone to 4 or more years of college or technical school are significantly lower compared to adults with less than a high school education

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Obesity disparities in adults by education, 2007

Percentage of Colorado adults who are obese by educational attainment, 2007



Source: 2007 Behavioral Risk Factor Surveillance System, Colorado Department of Public Health and Environment

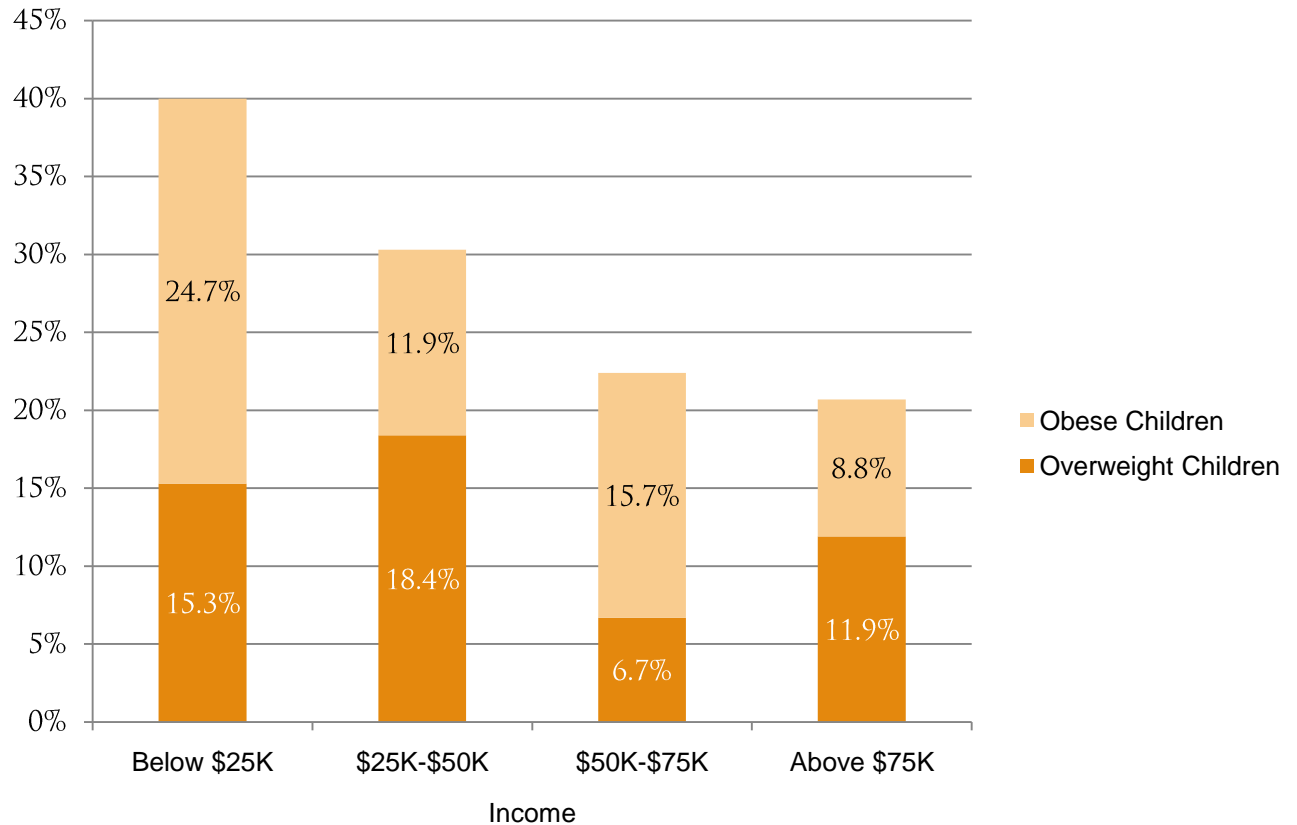


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Children in the poorest families were significantly more likely to be obese than children in the wealthiest families (yearly incomes at or above \$75,000)

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Overweight and obesity disparities among children by income, 2007



Source: 2007 Child Health Survey, Colorado Department of Public Health and Environment



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Overweight and obesity disparities among children by ethnicity, 2007

Race/ Ethnicity	Normal weight (%, CI)	Overweight (%, CI)	Obese (%, CI)	Fruit and vegetable intake (%, CI)	Adequate physical activity (%, CI)
Non- Hispanic White	78.6 (75.9-81.3)	10.7 (8.7-12.6)	10.7 (8.6-12.8)	7.8 (6.2-9.5)	55.8 (52.0-59.6)
Hispanic	61.6 (55.4-67.8)	19 (14-24.1)	19.3 (14.4-24.3)	8.9 (5.5-12.3)	55.0 (47.7-62.3)

Source: 2007 Colorado Child Health Survey. Analysis conducted by the Colorado Department of Public Health and Environment.

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Adult weight disparities by race and ethnicity, 2007

Race/ Ethnicity	Normal weight (%, CI)	Over- weight (%, CI)	Obese (%, CI)	Fruit and vegetable intake (%, CI)	Adequate physical activity (%, CI)	Cardio- vascular disease (%, CI)	Diabetes (%, CI)	Hypertension (%, CI)
Non- Hispanic White	47.2 (45.9- 48.5)	35.2 (34.0- 36.4)	17.6 (17.0- 18.6)	26.3 (25.2- 27.4)	57.1 (55.8- 58.4)	5.6 (5.2-6.1)	4.5 (4.1-4.9)	21.8 (20.9-22.7)
Hispanic	32.5 (29.1- 35.9)	41.9 (38.3- 45.4)	25.6 (22.7- 28.5)	23.2 (20.3- 26.1)	46.6 (43.1- 50.2)	4.9 (3.8-6.0)	7.7 (6.3-9.1)	18.1 (15.9-20.3)
Non- Hispanic Black	29.8 (22.2- 37.4)	43.8 (36.1- 51.5)	26.4 (19.7- 33.1)	19.6 (13.8- 25.5)	43.0 (35.2- 50.9)	8.9* (5.2- 12.6)	10.3* (6.3- 14.2)	32.5 (25.9-39.2)

Source: 2007 Behavioral Risk Factor Surveillance System (BRFSS). Analysis conducted by the Colorado Health Institute.

* These percentages reflect samples with fewer than 50 observations, use caution in their interpretation

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