Physical Activity and Nutrition
for Alaska's Kids

Weight Matters

Section 1: Module 1

What you will learn

- How to determine overweight and at-risk of overweight
- Overweight children may not grow out of it
- Causes and health concerns of overweight
- Areas where Early Child Care Centers can make a difference
- How to interpret growth charts
- How to share growth chart information with parents

HEIGHT IN INCHES

WEIGHT IN POUNDS	5'	5'1"	5'2"	5'3"	5'4"	5'5"	5'6"	5'7"	5'8"	5'9"	5'10"	5'11"	6'0"	6'1"	6'2"	6'3"	6'4"
100	20	19	18	18	17	17	17	16	15	15	14	14	14	13	13	12	12
105	21	20	19	19	18	17	17	16	16	16	15	15	14	14	13	13	13
110	21	21	20	19	19	18	18	17	17	16	16	15	15	15	14	14	13
115	22	22	21	20	20	19	19	18	17	17	17	16	16	15	15	14	14
120	23	23	22	21	21	20	19	19	18	18	17	17	16	16	15	15	15
125	24	24	23	22	21	21	20	20	19	18	18	17	17	16	16	16	15
130	25	25	24	23	22	22	21	20	20	19	19	18	18	17	17	16	16
135	26	26	25	24	23	22	22	21	21	20	19	19	18	18	17	17	16
140	27	26	26	25	24	23	23	22	21	21	20	20	19	18	18	17	17
145	28	27	27	26	25	24	23	23	22	21	21	20	20	19	19	18	18
150	29	28	27	27	26	25	24	23	23	22	22	21	20	20	19	19	18
155	30	29	28	27	27	26	25	24	24	23	22	22	21	20	20	19	19
160	31	30	29	28	27	27	26	25	24	24	23	22	22	21	21	20	19
165	32	31	30	29	28	27	27	26	25	24	24	23	22	22	21	21	20
170	33	32	31	30	29	28	27	27	26	25	24	24	23	22	22	21	21
175	34	33	32	31	30	29	28	27	27	26	25	24	24	23	22	22	21
180	35	34	33	32	31	30	29	28	27	27	26	25	24	24	23	22	22
185	36	35	34	33	32	31	30	29	28	27	27	26	25	24	24	23	23
190	37	36	35	34	33	32	31	30	29	28	27	26	26	25	24	24	23
195	38	37	36	35	33	32	31	31	30	29	28	27	26	26	25	24	24
200	39	38	37	35	34	33	32	32	30	30	29	28	27	26	26	25	24
205	40	39	37	36	35	34	33	33	31	30	29	29	28	27	26	26	25
210	41	40	38	37	36	35	34	33	32	31	30	29	28	28	27	26	26
215	42	41	39	38	37	36	35	34	33	32	31	30	29	28	28	27	26
220	43	42	40	39	38	37	36	34	33	32	32	31	30	29	28	27	27
225	44	43	41	40	39	37	36	35	34	33	32	31	31	30	29	28	27
230	45	43	42	41	39	38	37	36	35	34	33	32	31	30	30	29	28
235	46	44	43	42	40	39	38	36	36	35	34	33	32	31	30	29	29
240	47	45	44	42	41	40	39	37	36	35	34	33	33	32	31	30	29
245	48	46	45	43	42	41	40	38	37	36	35	34	33	32	31	31	30
250	49	47	46	44	43	42	40	39	38	37	36	35	34	33	32	31	30

Figure 1a
Understanding BMI

Body Mass Index

18 OR LESS	UNDERWEIGHT (BLUE)
24 OR LESS	NORMAL (GREEN)
25-29	OVERWEIGHT (YELLOW)
30 AND OVER	OBESE (ORANGE)

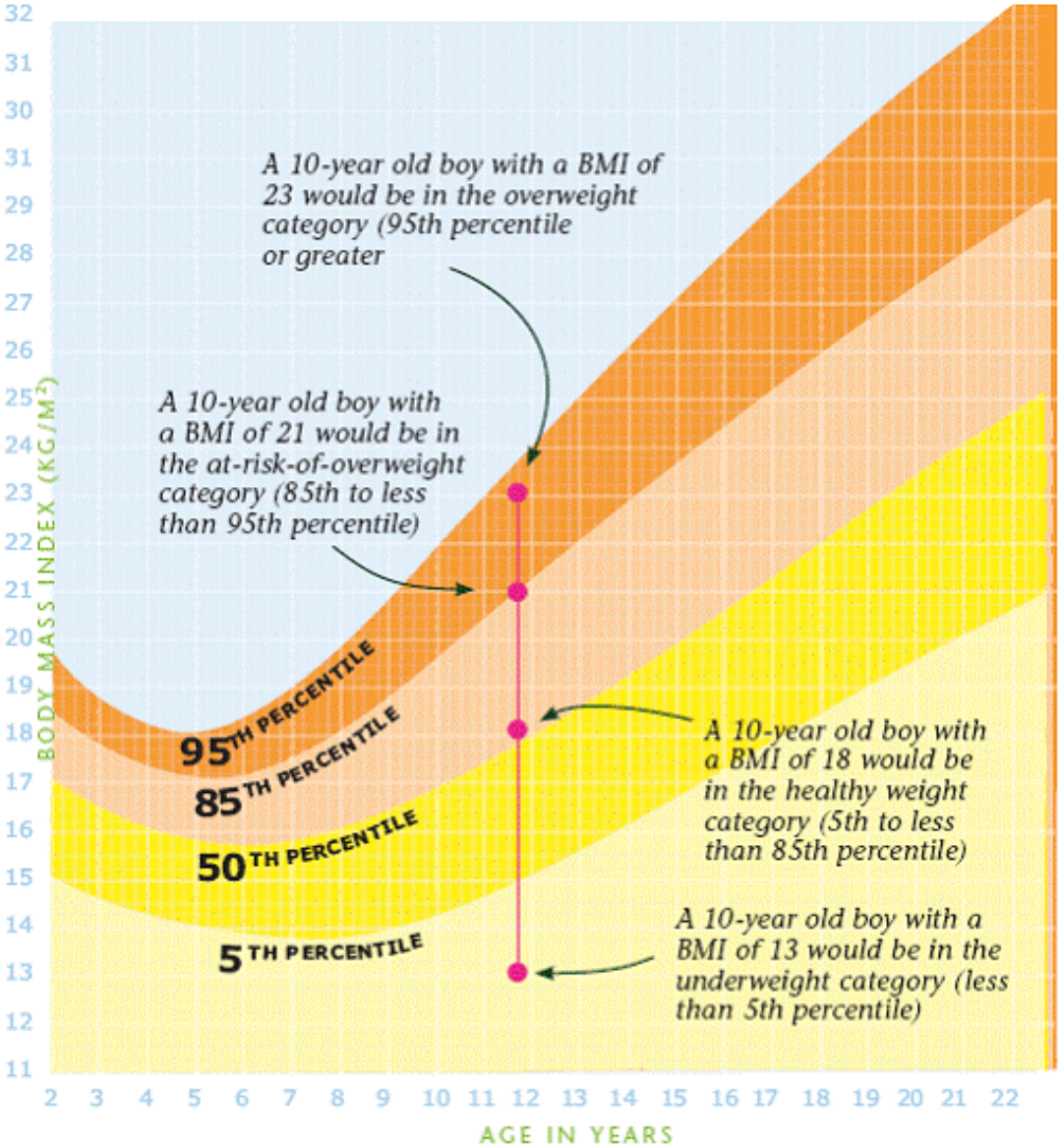


Figure 1b

BMI for Boys 2- 21 Years

- BMI is calculated for children
- BMI for children is plotted on a growth chart.
- Growth chart are age- and gender-specific
- Body fat changes with age and differs between genders

Figure 1c: Anchorage School District
BMI Status of Kindergarten and 1st Grade Students: 1998-2003

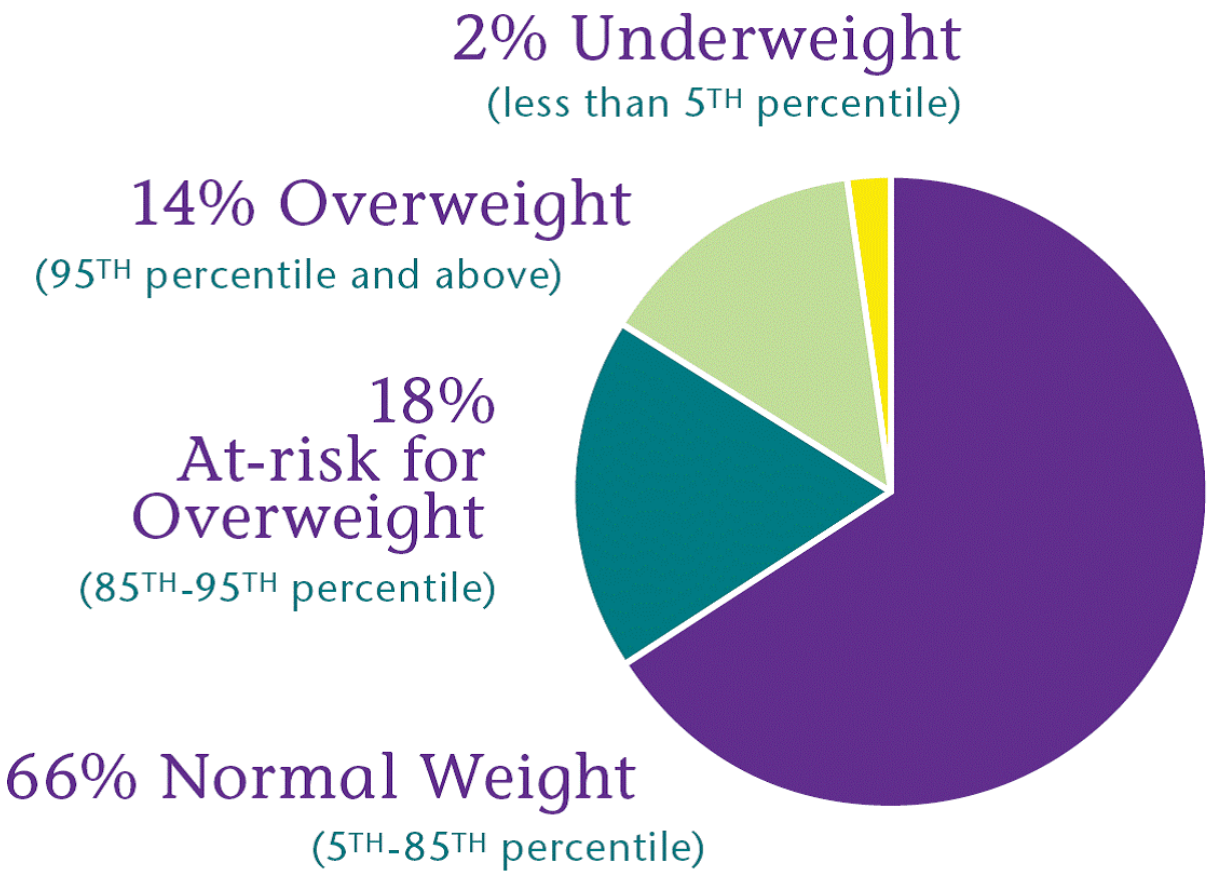
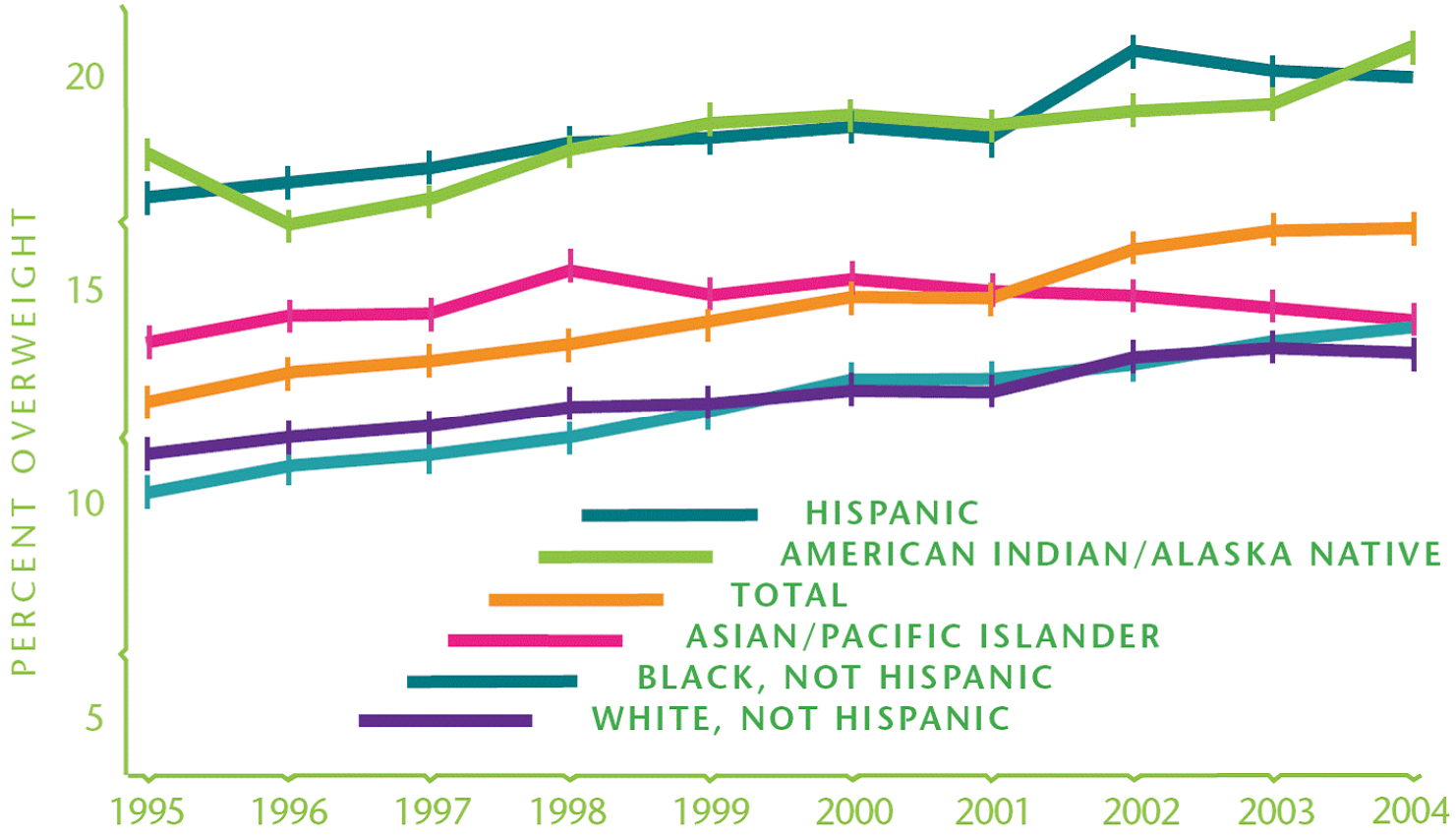


Figure 1d: Trends in Prevalence of overweight* among U.S. children aged 2-5 years, by race and ethnicity



Parents Perception of Overweight

Parent's with overweight children

- 27% of parents accurately described their female child as overweight
- 14% accurately described their male child as overweight

Staff when talking with parents

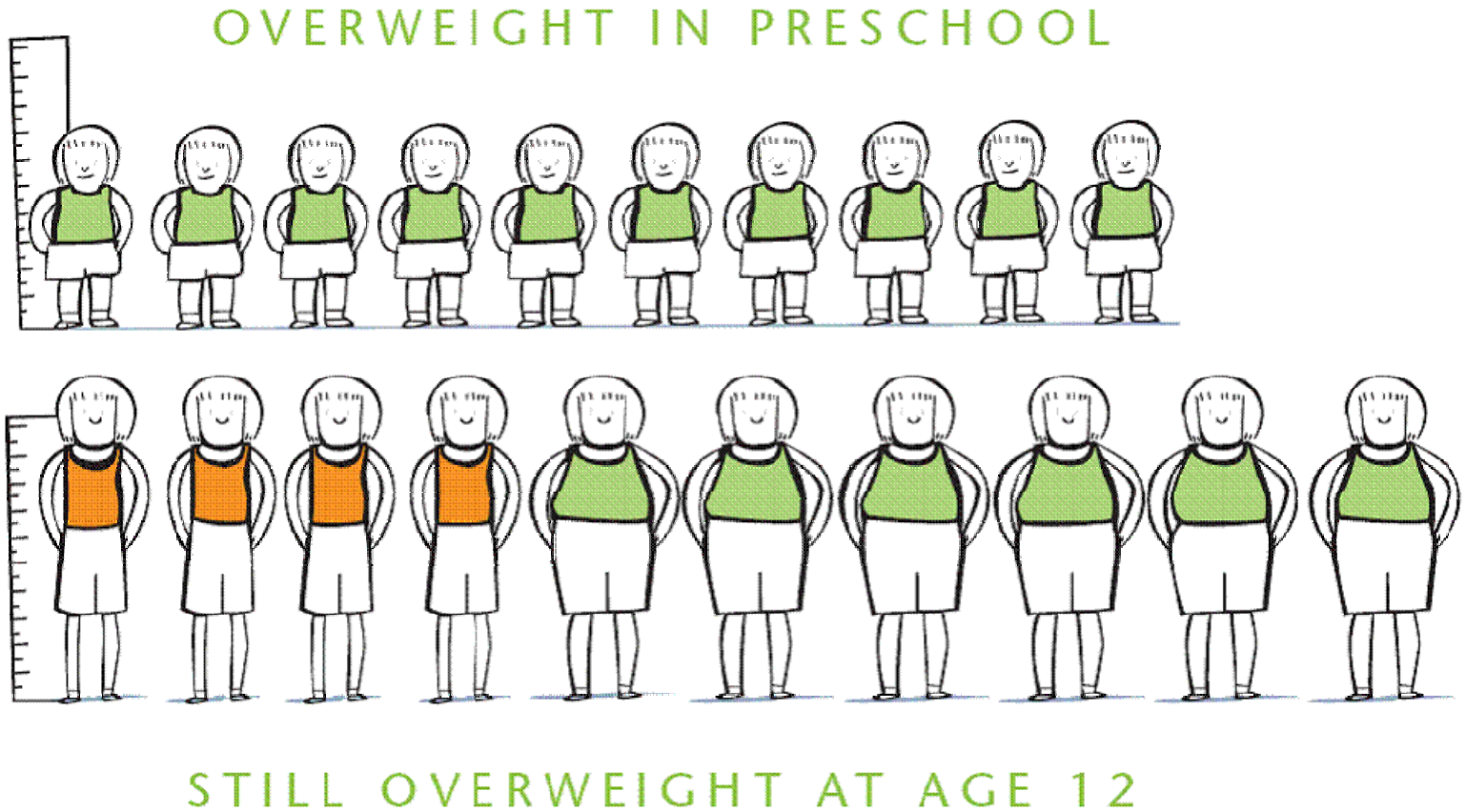
- Consider the parent's view of their child
- Increase understanding of overweight
- Provide solutions
  - healthy, lifelong diet and physical activity habits

Overweight children

do not always

"grow out of it"

6 of 10 overweight preschoolers were still overweight at age 12*



- Reference Nader et al, *Identifying Risk for Obesity in Early Childhood. Pediatrics Vol. 118 No. 3 September 2006

Overweight children are at increased risk for:

- High blood pressure
- High cholesterol
- Joint disorders
- Type 2 diabetes
- Psychosocial disorders
- Social discrimination
- Adult obesity

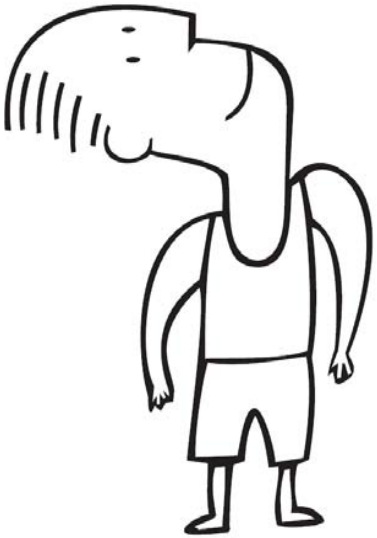
Childhood obesity threatens to make this generation of American children the first to have a shorter life span than their parents

Source: Ohshansky, SJ, et al. A Potential Decline in Life Expectancy in the United States in the 21st Century. New England Journal Of Medicine 2005; 352:11.

Figure 1f: **Levels and Factors Influencing Nutrition & Physical Activity**

Change to Real Foods

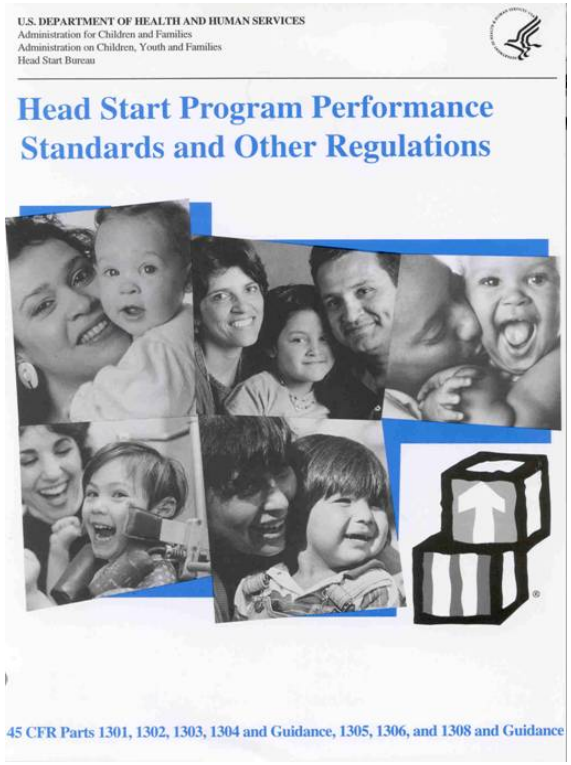
Increase Physical Activity



Physical Activity and Nutrition
for Alaska's Kids

- Health System
- Media
- Child Care Providers
- Parents & Family
- Businesses Worksites
- Community Programs

Head Start Performance Standard § 1304.23 Child nutrition


U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Administration for Children and Families
Administration on Children, Youth and Families
Head Start Bureau

Head Start Program Performance Standards and Other Regulations

45 CFR Parts 1301, 1302, 1303, 1304 and Guidance, 1305, 1306, and 1308 and Guidance

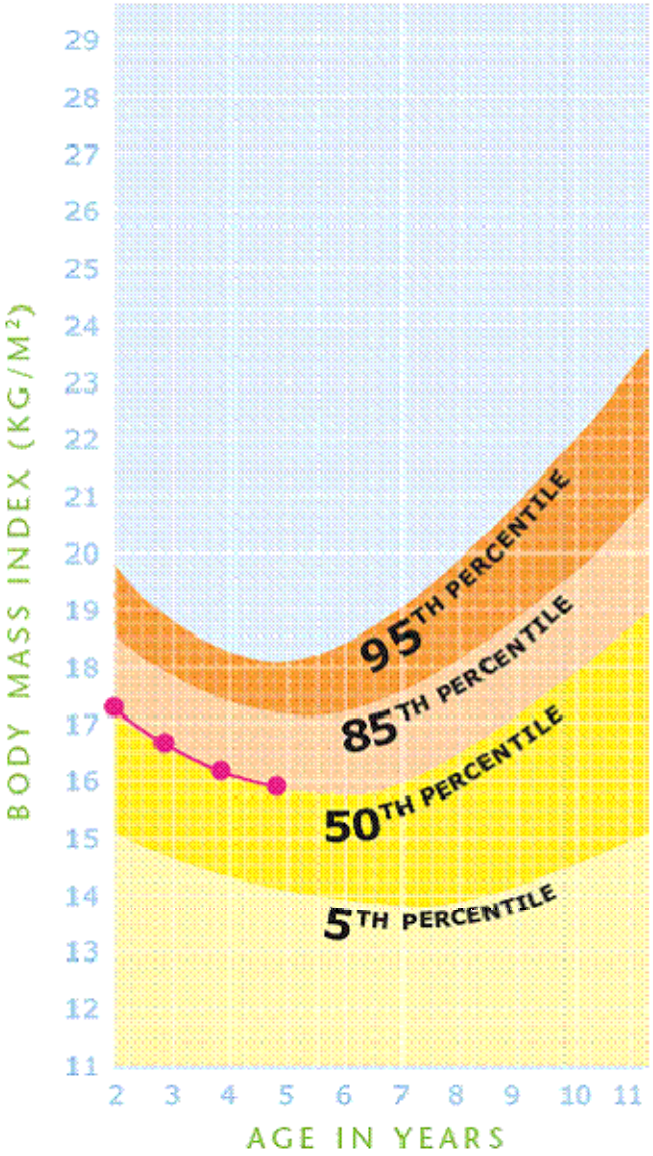
(a) Identification of nutritional needs

- (1) Any relevant nutrition-related assessment data (height, weight);

Figure 1h

Normal Growth Pattern

BMI for Boys age 2-11



Accurate Measurement

- Ensure accurate height and weight
- Use same equipment each time
- Use same technique
- Train staff & provide refresher course each year

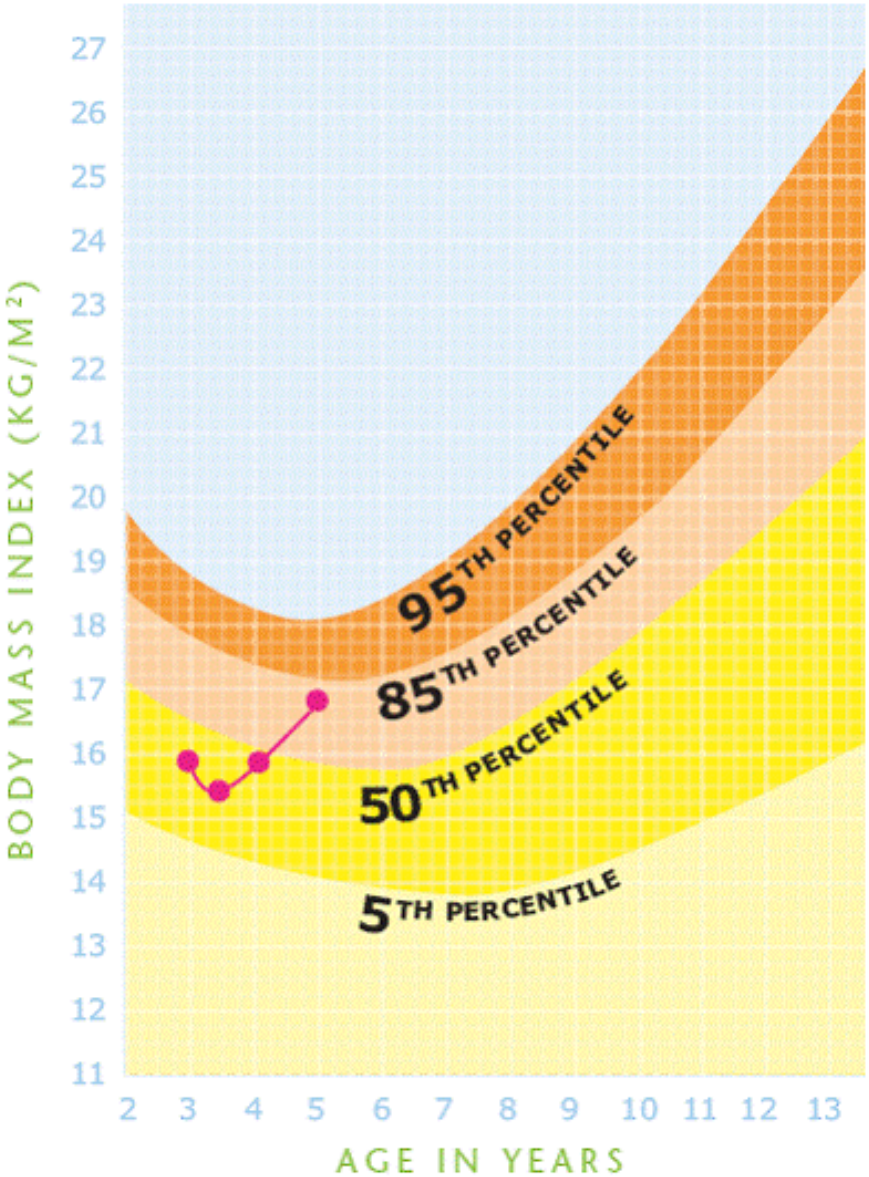


Figure 1i: **Concerning Growth Pattern**

BMI for Boys age 2-13

Check if

- Correct BMI calculation
- Age calculated correctly
- BMI Plotted correctly

Still Suspicious

- Re- weigh and measure child

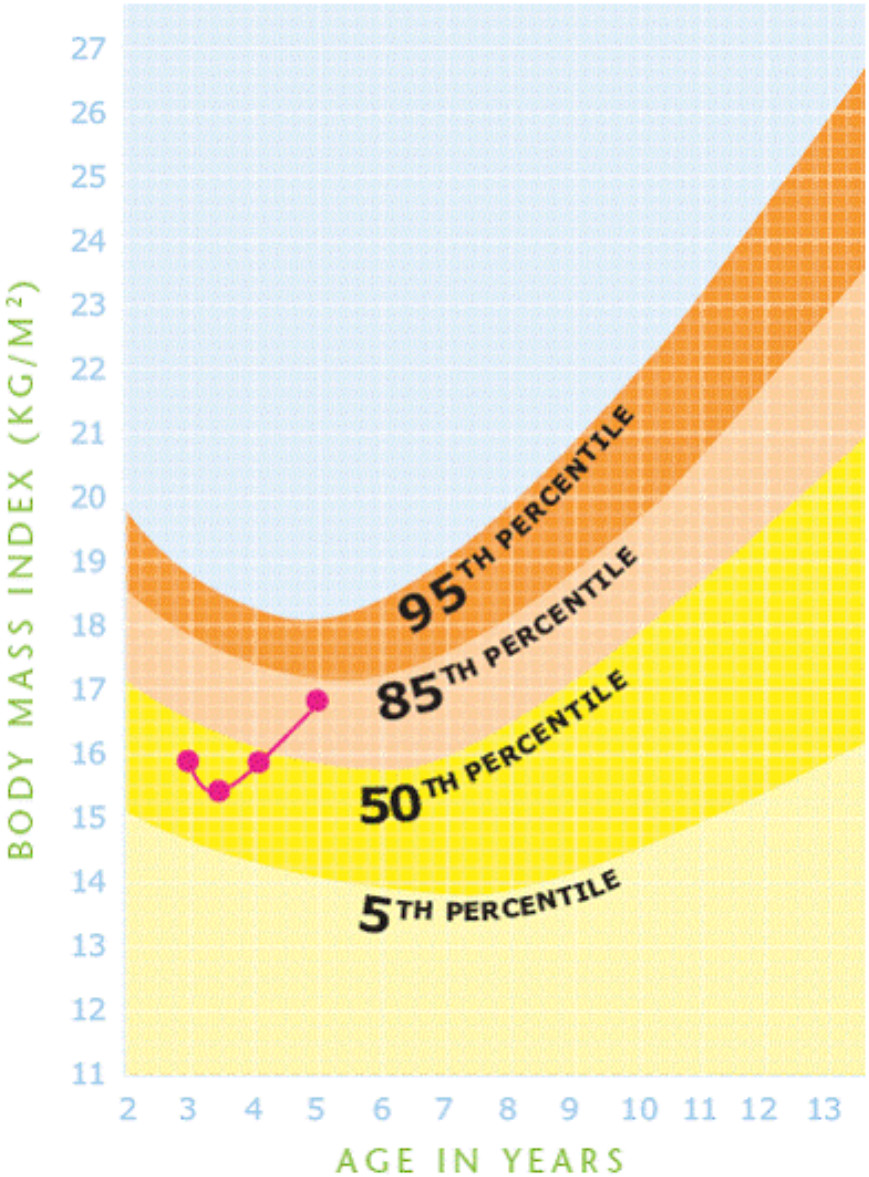


Figure 1i: **Concerning Growth Pattern**

BMI for Boys age 2-13

- If this pattern of growth is accurate, the change in the percentile is what causes concern about the child's growth
- Refer the child to a health care provider

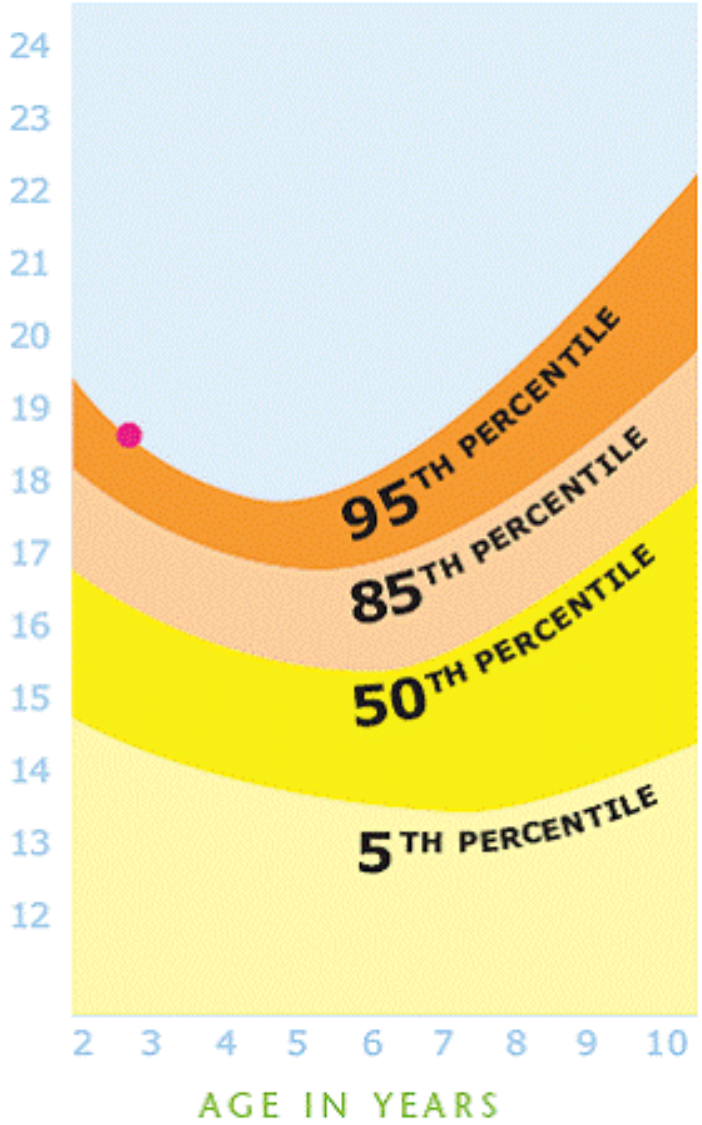


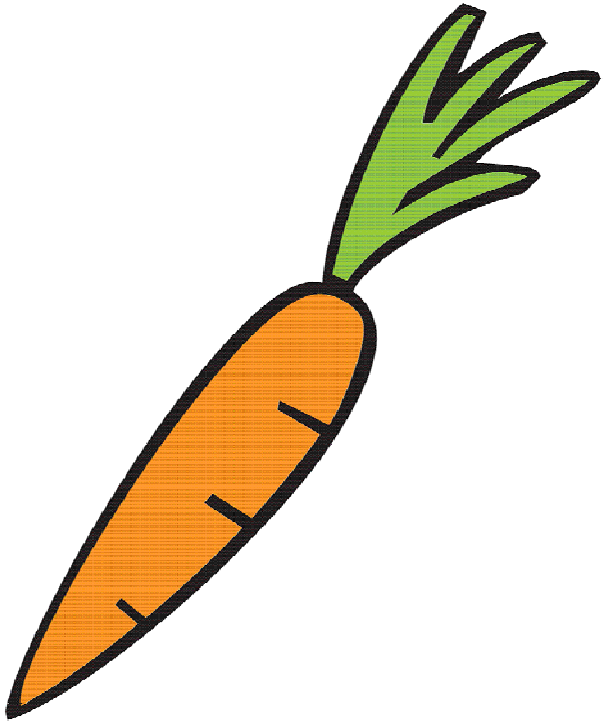
Figure 1j: **Single BMI Mark**

BMI for Boys age 2-10

- A health care provider is the only one that should diagnosis a child as overweight.
- Use the growth charts to
  - open a discussion about healthy weight, healthy eating and active play.
- Provide the family
  - local resources
  - information about healthier eating and physical activity.

What Child Care Providers Can Do

- Increase the level of education on physical activity and nutrition
  - Parents
  - Children
- Continue to serve healthy foods
- Increase the amount of active play



Training Manual

- **Child Care Staff**
  - Improving the nutrition environment
  - Increasing physical activity
- **Food Service Staff**
  - Serving nutritious meals
  - Use of traditional food
- **Parents**
  - Increase the number of meals eaten together,
  - Improving selection of healthy snacks and meals
  - Increase the amount of physical activity at home