

Growing up Healthy in East Harlem:

An Interactive, Culturally Sensitive Nutrition Curriculum



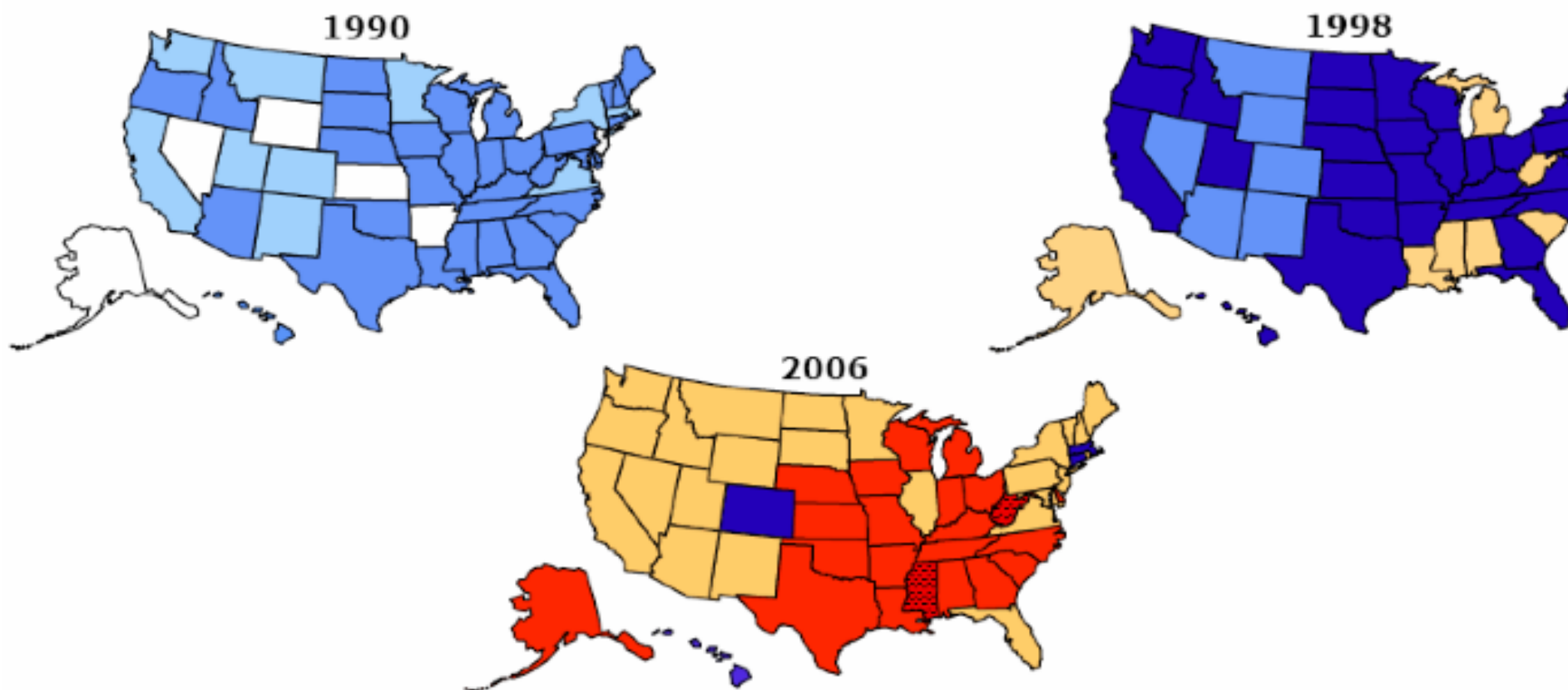
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Obesity Trends* Among U.S. Adults

BRFSS, 1990, 1998, 2006

(*BMI ≥ 30 , or about 30 lbs. overweight for 5'4" person)



CDC. State-Specific Prevalence of Obesity Among Adults
— United States, 2005; MMWR 2006; 55(36); 985–988

Health Consequences of Obesity

Cardiovascular/Respiratory

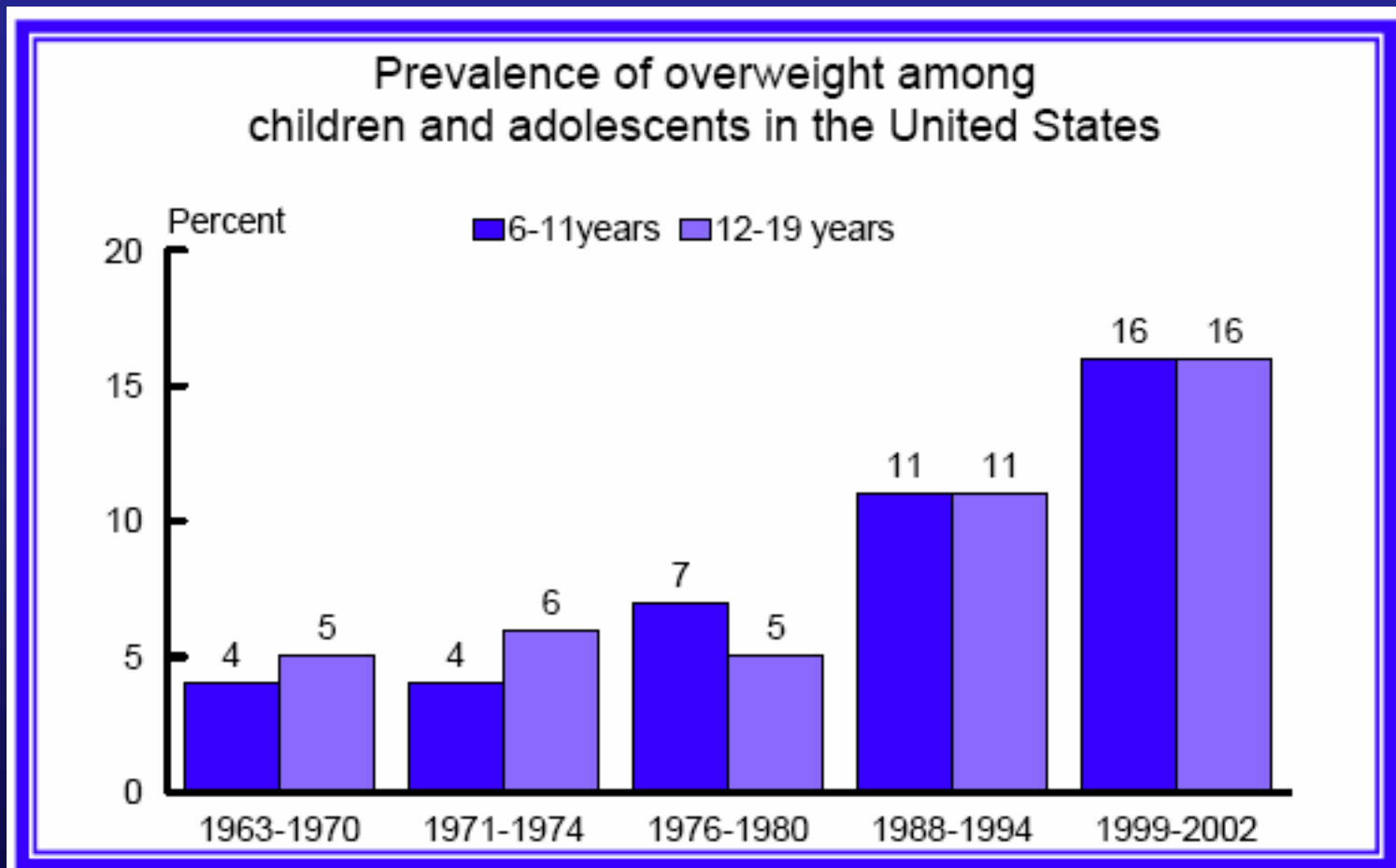
- Hypertension
- Hyperlipidemia
- Type 2 Diabetes Mellitus
- Deep Vein Thrombosis
- Stroke
- Sleep apnea
- Asthma



Other

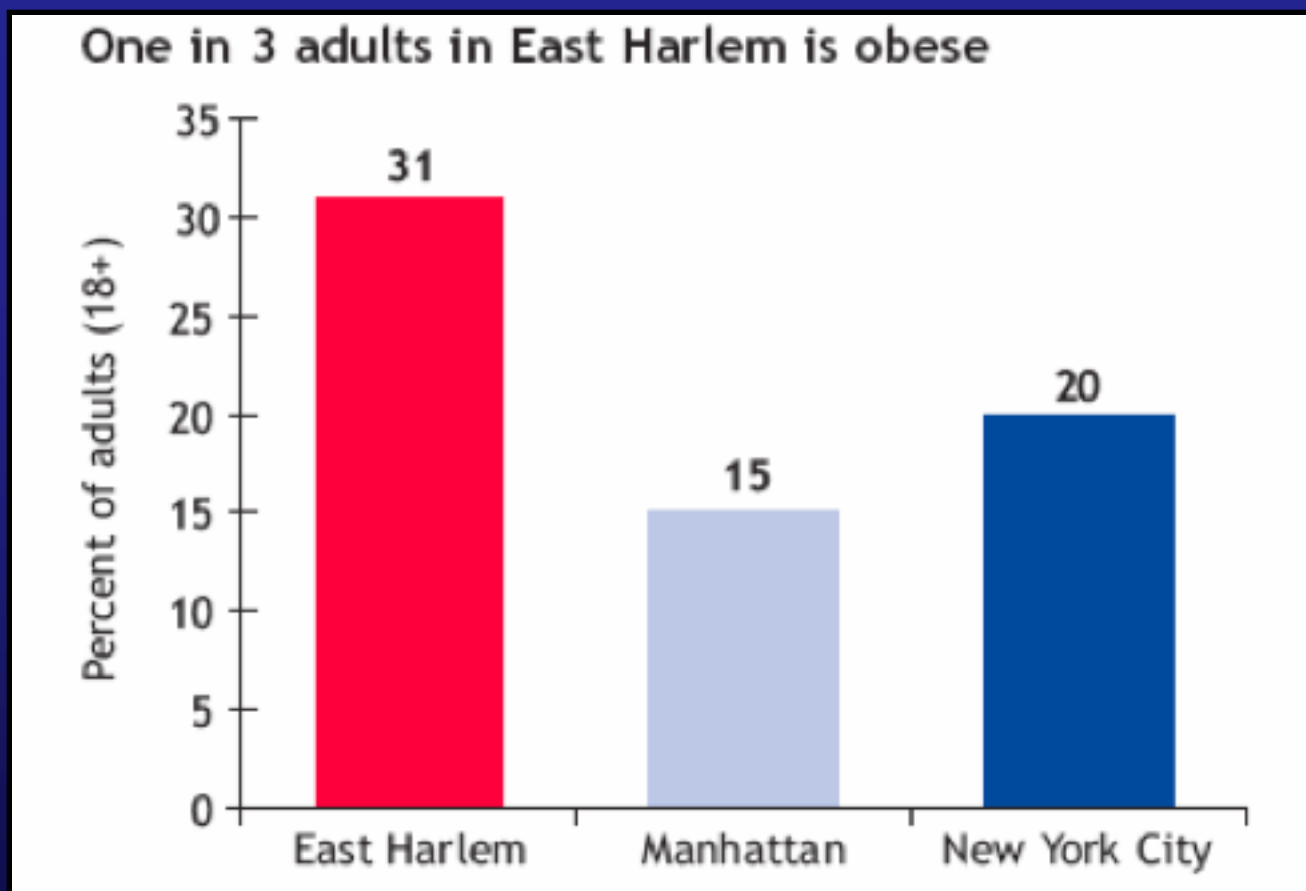
- Osteoarthritis
- Some cancers
- Hepatobiliary
- PCOS
- Psychosocial

Childhood Obesity



Hedley et al. Prevalence of overweight and obesity among US children, adolescents, and adults, 1999-2002. *JAMA*. Vol 291, No 23 (June 2004), pp. 2847-50.

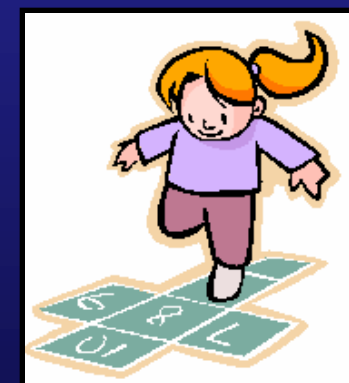
East Harlem: Higher Risks



Olson EC, Van Wye G, Kerker B, Thorpe L, Frieden TR. Take Care East Harlem. NYC Community Health Profiles, Second Edition; 2006; 21(42):1-16. www.nyc.gov/html/doh/html/tcny/index.shtml

School-based Interventions

“School-based health promotion has sustainable effects on nutritional knowledge and remission of overweight.”



Danielzik et al. School-based interventions to prevent overweight and obesity in prepubertal children. Acta Paediatr Suppl. 2007

An Interactive, Culturally Sensitive Nutrition Curriculum

- Interactive:
 - Engaging
 - Age-appropriate
 - Enjoyable
- Culturally Sensitive
 - Respectful
 - Adaptable
 - Relevant

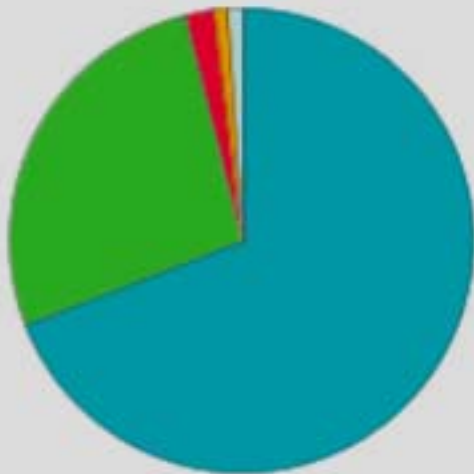


Isaac Newton Middle School



Student Ethnicity

Student Ethnicity

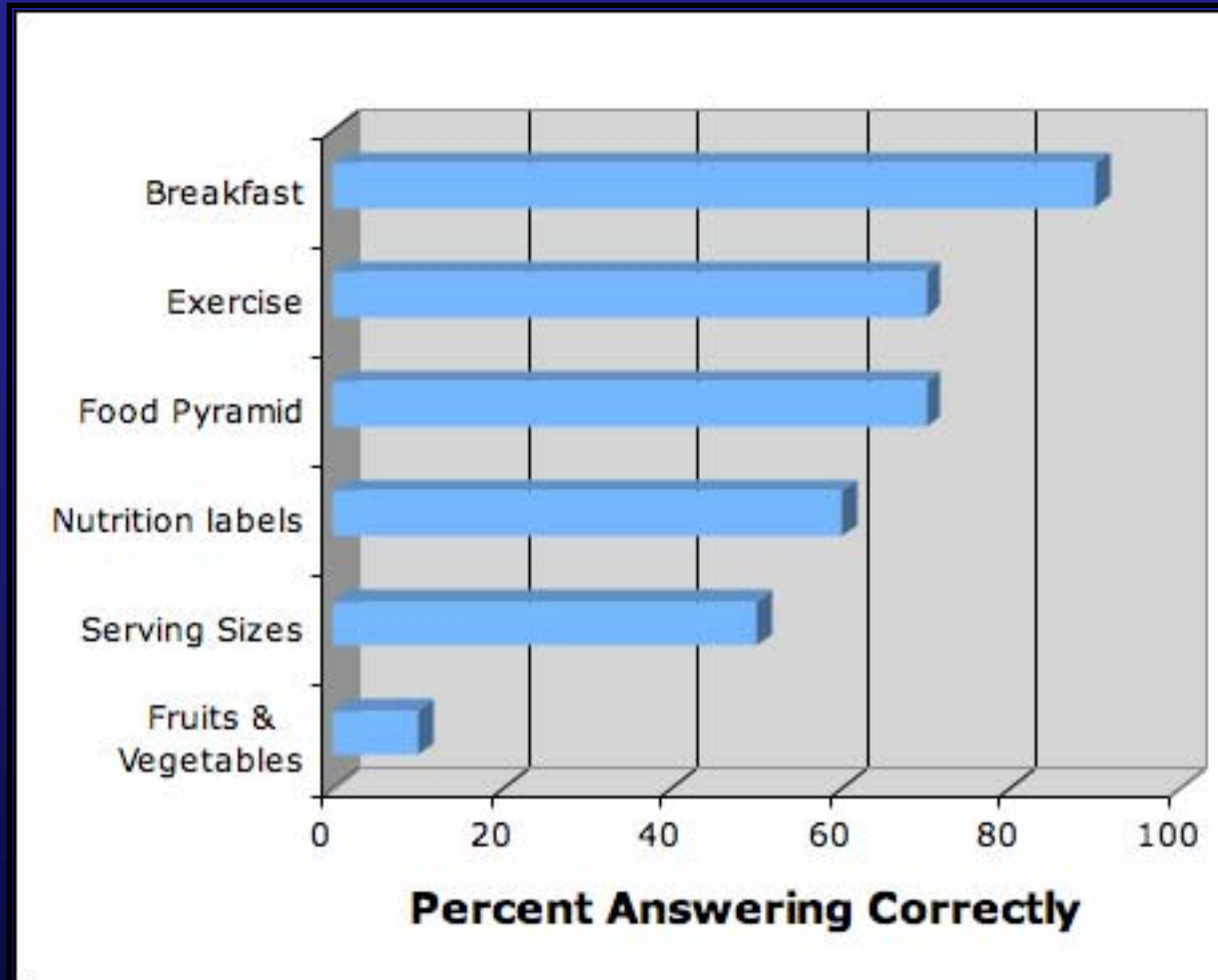


Ethnicity	This School	State Average
Hispanic	69%	20%
Black, not Hispanic	27%	20%
American Indian/Alaskan Native	2%	<1%
White, not Hispanic	1%	53%
Asian/Pacific Islander	<1%	7%

Source: NCES, 2005-2006

National Center for Education Statistics, 2006

Pre-test Results

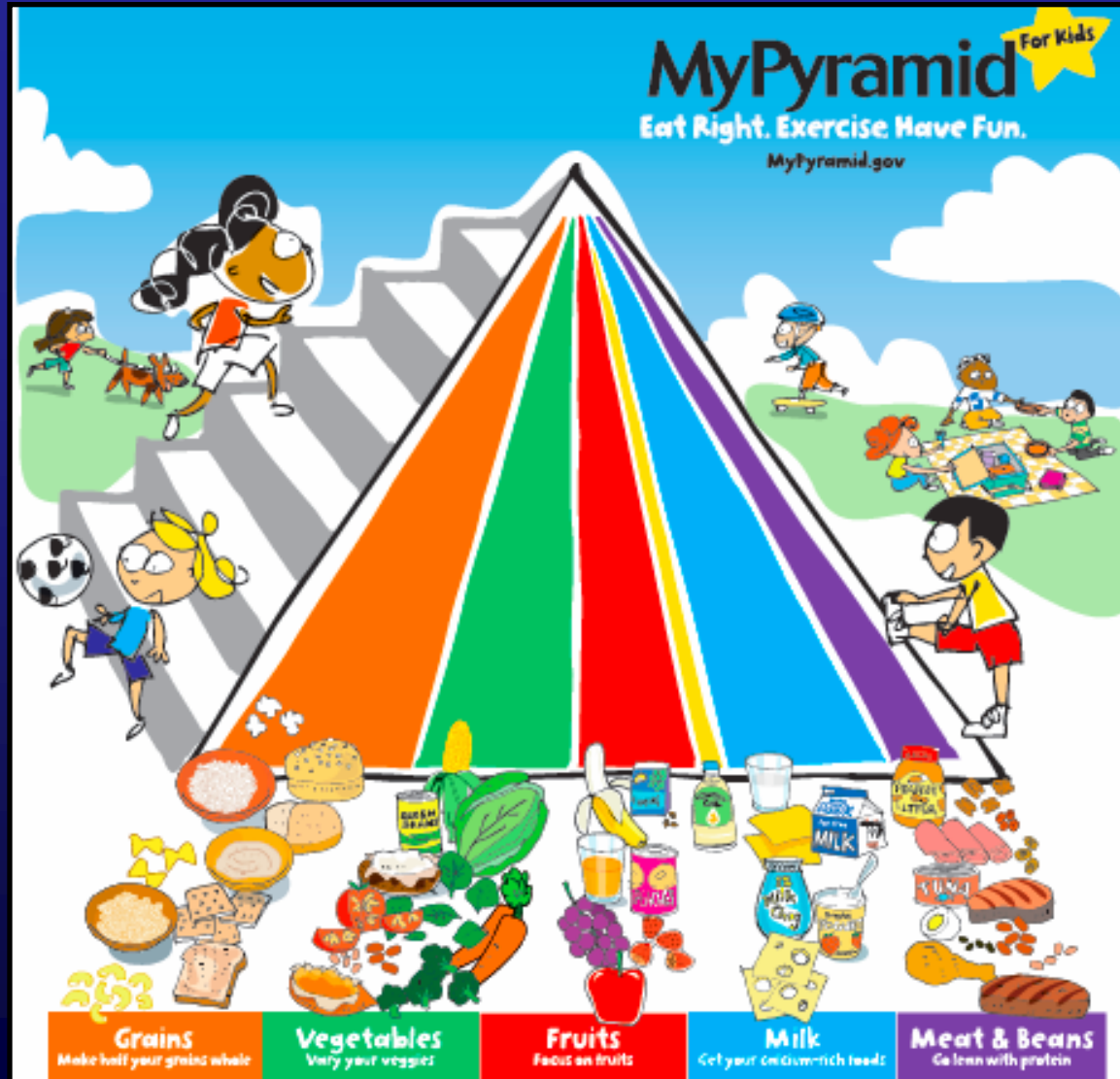


Curriculum Modules

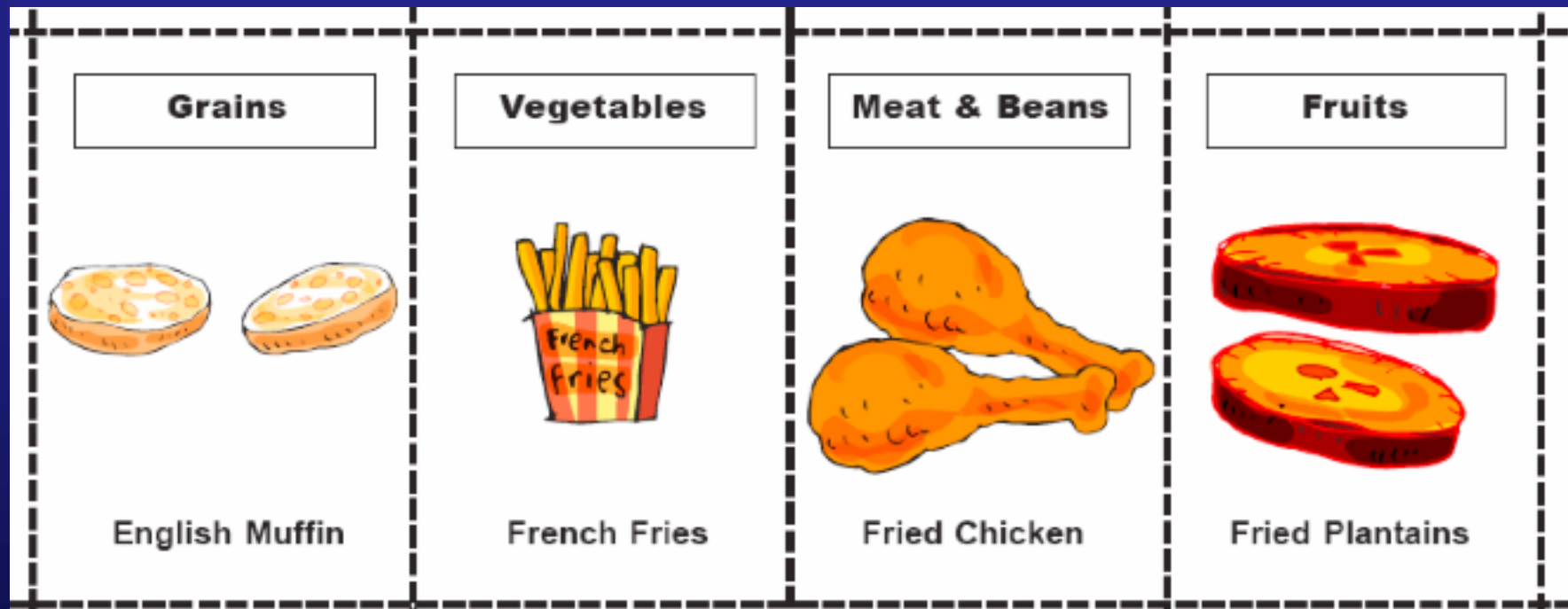
1. What should I eat?
2. What's in my food?
3. Listening to my body
4. Being active!
5. Making good choices
6. Moving forward



1. What Should I Eat?



1. The Food Groups









“Go Fish Game”

http://teammnutrition.usda.gov/resources/go-fish_color.pdf

1. Keeping a Food Journal

FOR KIDS

Check how you did yesterday and set a goal to aim for tomorrow

Write In Your Choices From Yesterday	Food and Activity	Tip	Goal (Based On a 1800 Calorie Pattern)	List Each Food Choice In Its Food Group*	Estimate Your Total
Breakfast: _____ _____ _____	Grains 	Make at least half your grains whole grains.	6 ounce equivalents (1 ounce equivalent is about 1 slice bread, 1 cup dry cereal, or ½ cup cooked rice, pasta, or cereal)		____ ounce equivalents
Lunch: _____ _____ _____	Vegetables 	Color your plate with all kinds of great tasting veggies.	2½ cups (Choose from dark green, orange, starchy, dry beans and peas, or other veggies).		____ cups
Snack: _____ _____	Fruits 	Make most choices fruit, not juice.	1½ cups		____ cups
Dinner: _____ _____ _____	Milk 	Choose fat-free or lowfat most often.	3 cups (1 cup yogurt or 1½ ounces cheese = 1 cup milk)		____ cups
_____ _____ _____	Meat and Beans 	Choose lean meat and chicken or turkey. Vary your choices—more fish, beans, peas, nuts, and seeds.	5 ounce equivalents (1 ounce equivalent is 1 ounce meat, chicken or turkey, or fish, 1 egg, 1 T. peanut butter, ½ ounce nuts, or ¼ cup dry beans)		____ ounce equivalents
Physical activity: _____ _____ _____	Physical Activity 	Build more physical activity into your daily routine at home and school.	At least 60 minutes of moderate to vigorous activity a day or most days.		____ minutes

2. What's in My Food?

Nutrition Facts

Serving Size 1 cup (236ml)
Servings Per Container 1

Amount Per Serving

Calories 120 Calories from Fat 45

% Daily Value*

Total Fat 5g 8%

Saturated Fat 3g 15%

Trans Fat 0g

Cholesterol 20mg 7%

Sodium 120mg 5%

Total Carbohydrate 11g 4%

Dietary Fiber 0g 0%

Sugars 11g

Protein 9g 17%

Vitamin A 10% • Vitamin C 4%

Calcium 30% • Iron 0% • Vitamin D 25%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Nutrition Facts

Serving Size 1 cup (236ml)
Servings Per Container 1

Amount Per Serving

Calories 80 Calories from Fat 0

% Daily Value*

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol Less than 5mg 0%

Sodium 120mg 5%

Total Carbohydrate 11g 4%

Dietary Fiber 0g 0%

Sugars 11g

Protein 9g 17%

Vitamin A 10% • Vitamin C 4%

Calcium 30% • Iron 0% • Vitamin D 25%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

3. Listening to My Body:

- **Strategies for Success**
- **Sharing with others**
- **Saving for later**
- **Serving Sizes**
- **Simple Goals**



3. Serving Sizes



4: Being Active!

Assessing Jumping Jackers Cardiovascular Fitness Level Heart Rate Recovery

.....
Jumping Jacker I _____
put initials here

3 Minute Recovery Heart Rate:

$$\frac{\quad}{\text{3 minute recovery heart rate}} - \frac{\quad}{\text{resting heart rate}} = \boxed{\quad}$$

See note below

10 Minute Minute Recovery Heart Rate:

$$\frac{\quad}{\text{10 minute recovery heart rate}} - \frac{\quad}{\text{resting heart rate}} = \boxed{\quad}$$

See note below



4. Exercise Ideas

Move It! Choose your FUN!

Your body counts on you to be active to help strengthen your bones and heart, and build muscles.

How much physical activity do kids need?

- GET AT LEAST 60 minutes a day of moderate activity, most days of the week.

Do...

- LESS**
Spend less time sitting around watching TV or using the computer.
- ENOUGH**
Do enough strengthening activities to keep your muscles firm.
- MORE**
Do more intense activities that warm you up and make you glow!
- PLENTY**
Walk, wiggle, dance, climb the stairs. Just keep moving whenever you can.

United States Department of Agriculture
Food and Nutrition Services
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See us on the web: www.fda.gov/oc/foodsafety

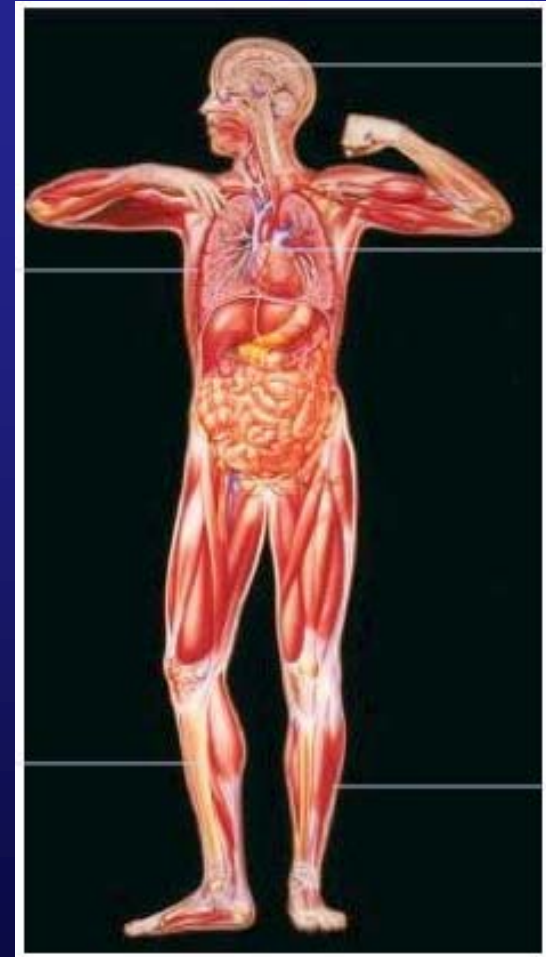
USDA is an equal opportunity provider and employer.

4. Incorporating Exercise

Feel Your Pulse!

- ✓ Jumping Jacks
- ✓ Chair Push-ups
- ✓ Wall Push-ups
- ✓ Wall Sits
- ✓ Walking

Whole Body Benefits



5: Making Good Choices



5: Making Good Choices

Candy

Candy

Candy

Candy



Yogurt

Apples

5. Storewide Scavenger Hunt

BREAKFAST MENU

2 EGG W/CHEESE	ROLL 1.50	HERO 2.25
2 EGG W/BACON or SAUSAGE or HAM	ROLL 2.00	HERO 2.75
	W/CHEESE ROLL 2.25	HERO 3.00
2 EGG W/BACON ON SAUSAGE	W/FRIES or HASH BROWN	2.50

STUDENT SPECIAL B/E/C 1.50
UNTIL 1 PM

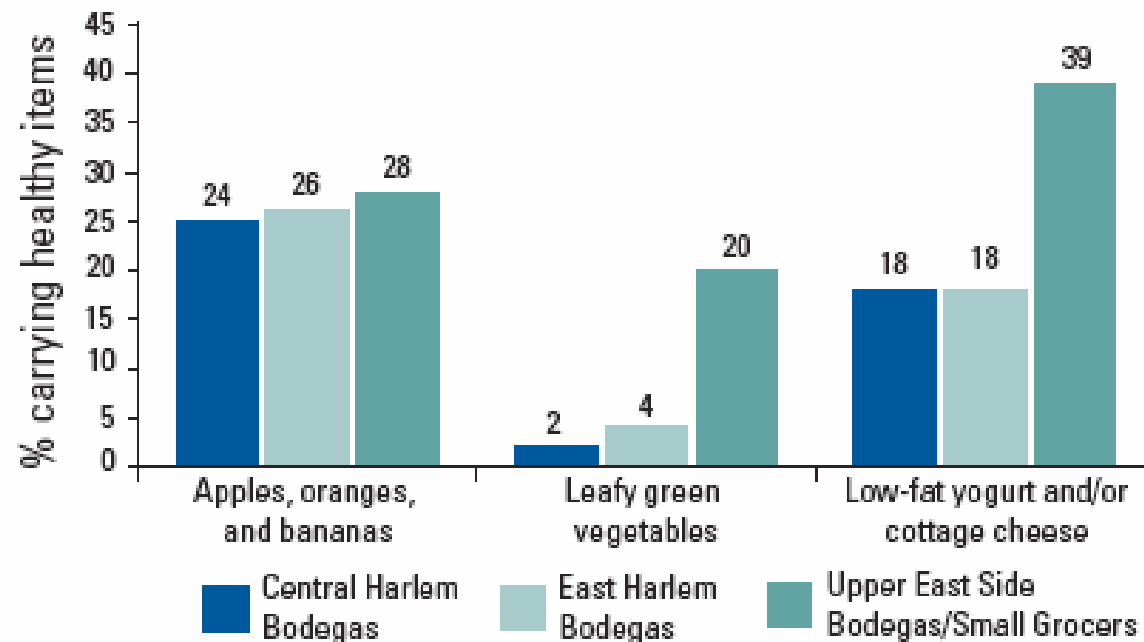
BUTTER ROLL	50¢	BUTTER BAGEL	60¢
BAGEL CREAM CHEESE	75¢	W/JELLY	1.00
CORN MUFFIN W/BUTTER	1.25	W/JELLY	1.50
COFFEE, CHOCOLATE OR TEA	SM. 60¢	LG. 1.00	

LUNCH MENU

HAMBURGER	1.50	W/LET & TOM	2.00	DLX. 2.75	W/FRIES
CHEESEBURGER	1.75	W/LET & TOM	2.25	DLX. 3.00	W/FRIES
CHOP-CHEESE	2.25	COMBO (FRIES, CAN SODA)	3.50		
	FRENCH FRIES	1.00	W/CHEESE	1.25	
GRILLED CHICKEN	W/CHEESE, LET, TOM,	ROLL 3.75	HERO 4.75		
GRILLED STEAK	W/CHEESE, LET, TOM,	ROLL 3.75	HERO 4.75		
ANY COLD CUT SANDWICH (HOT OR COLD)	ROLL 2.75	HERO 3.75			
	W/LET & TOM	ADD 50¢			
HOT DOG					1.00
CHICKEN NUGGETS (6)	W/ FRIES				2.50
CHICKEN TENDERLOINS (2)	W/FRIES				2.25
CHICKEN QUESADILLA					4.00

5. East Harlem

Figure 3. Leafy greens and low-fat dairy products are easier to find in bodegas on the Upper East Side than in bodegas in East and Central Harlem.



Gordon C et al. Eating Well in Harlem: How Available Is Healthy Food? New York, NY: New York City Department of Health and Mental Hygiene, 2007.

6. Healthy @ Home

Tacos from [REDACTED]

Ingredients:

Tortilla

Vegetable Oil

Chicken

Lettuce

Tomatoes

Onion

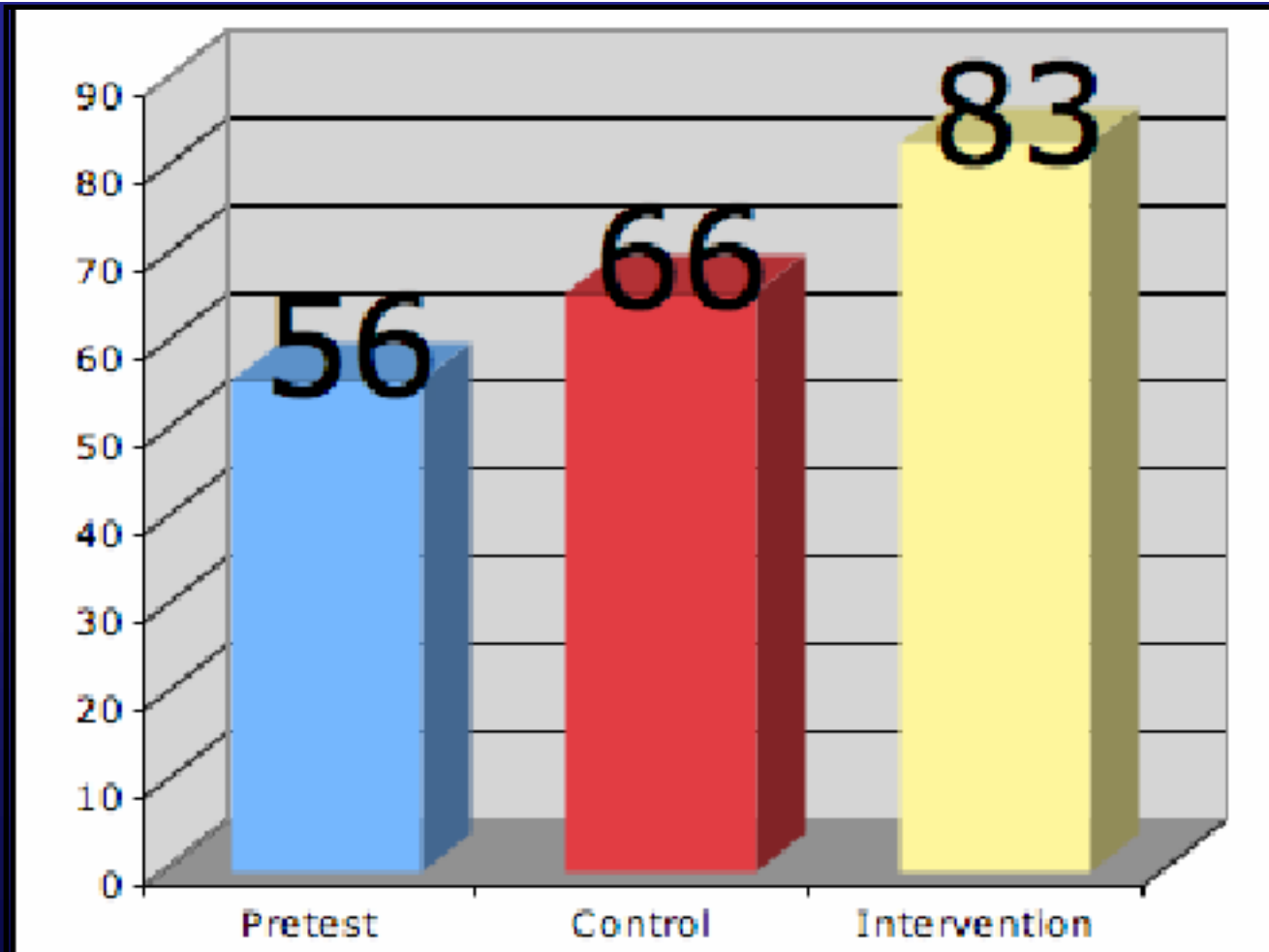


Instructions: Lightly grease the pan with oil. Put the tortilla on the pan. In another pan, put tablespoon of oil and add the cut-up chicken. Stir-fry the chicken. Put together the tortilla with the chicken and vegetables and enjoy!

What are the healthy things about this dish?

Great balanced meal. Chicken is a low fat protein, especially if you take off the skin. Go easy on the oil and pile on the vegetables!

Post-Test Results



$p < 0.0001$

Challenges & Limitations

- Knowledge → Attitude → Behavior
- Influences: peer pressure, family, media
- Range of math and literacy skills
- Access to healthy choices
- “Slim = healthy” vs “slim = beautiful”



Conclusions

- Adapt resources to population, age
- Incorporate culture into curriculum
- Emphasize relevance, importance
- Encourage healthy habits
- Partner with communities
- Simplify messages



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