

Meal satisfaction and perceived health risks in youth in Massachusetts juvenile correctional facilities

Kimberly Dong, DrPH Candidate, MS, RD

Timothy Joost, MS, RN

Alice Tang, PhD, MS

Tufts University School of Medicine

Department of Public Health and Community Medicine

Massachusetts Department of Youth Services

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WORKING ACROSS DISCIPLINES AND GLOBAL BOUNDARIES

Objectives

- Understand factors that contribute to youths' perception of meal satisfaction.
- Identify poor health outcomes that youth perceive to be associated with dietary intake.

Outline

- Background
- Methods
- Results
- Conclusions

Nutrients	Breakfast	Lunch	Dinner
Calories (2,000kcal) ^{1 2}	500-600 kcal	600-700 kcal	600-700 kcal
Sodium (<2300mg) ^{1 2 3}	500-690 mg	500-805 mg	500-805 mg
Fat (≤30%kcal)	≤ 22g	≤ 22g	≤ 22g
Saturated fat (<10%kcal)	<7g	<7g	<7g
Fiber (>28g) ^{1 2 *}	>8g	>10g	>10g
Fiber (1-4 years)*	>5g	>7g	>7g
Fiber (4-19 years)*	>6g	>9g	>9g
Protein (10-35% of kcal)	15-52g	18-61g	18-61g
Carbohydrate (45-60% of kcal)	68-90g	79-105g	79-105g
Cholesterol ³ (<300mg)	<100mg	<100mg	<100mg
Nutrients			
Potassium	4,700mg (proportional to calories (kcal) served)		
Calcium	1,000mg (proportional to calories (kcal) served)		
Iron	> 8mg (18mg Female, 8mg Male, proportional to calories (kcal) served)		
Meal Standards	Breakfast	Lunch	Dinner
Fruits & Vegetables (minimum)	1 Serving (ex: ½-1 cup or 1 med apple)	2 Servings (ex: 2 cup salad green or 1 c salad plus 1 med fruit)	2 Servings (ex:1 cup cooked broccoli; ½ c cooked spinach)
Dairy **	1 Serving (ex: 8 oz non-fat milk; 1 oz low-fat cheese or yogurt)	1 Serving(ex: 8 oz non-fat milk; 1 oz low-fat cheese or yogurt)	1 Serving(ex: 8 oz non-fat milk; 1 oz low-fat cheese or yogurt)
Meat & Beans **	1-2 oz.	2-3 oz.	2-3 oz.
Whole Grains (minimum)	2-3 servings (ex: 1 sl bread or 2/3 c dry cereal or ½ c cooked rice or pasta)	2-3 servings	2-3 servings (ex: 1 c rice and beans; sm. handful oyster crackers(for soup)

¹ Each meal served meets appropriate range of calories, sodium and fiber: 25-30% for breakfast

² Each meal served meets appropriate range of calories, sodium and fiber: 30-35% for lunch and dinner

³ Daily Limit REGARDLESS of total calorie (kcal) intake.

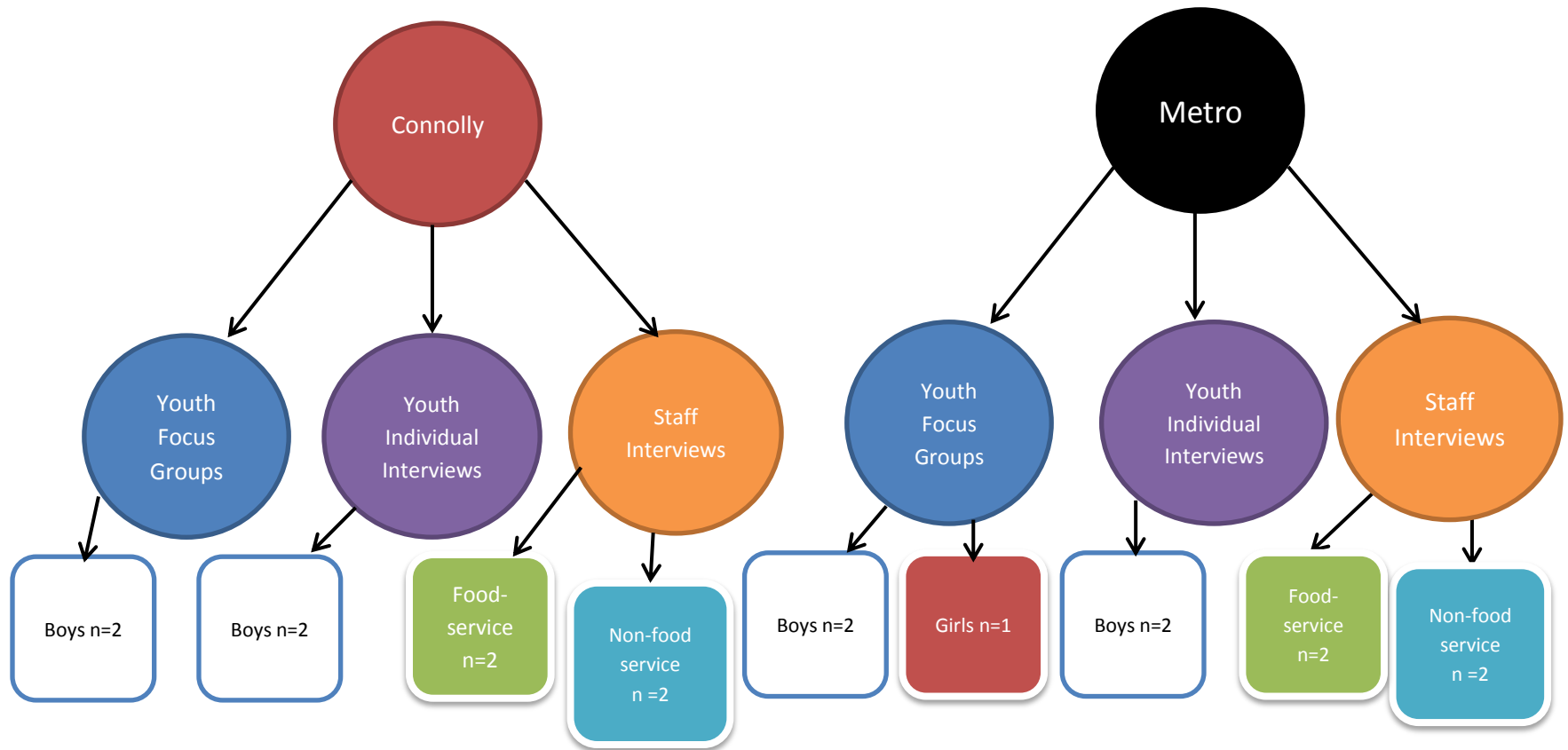
* REQUIRE fiber be ≥ 25g per day for agencies serving populations with a majority of children 4 to 19 years old. For agencies serving children 1-4 years old, REQUIRE fiber ≥ 19g per day. These requirements are for agencies serving 3 meals per day

Agencies serving less than 3 meals should follow the appropriate range for fiber per meal.

**Choose low fat, low sodium, “extra lean” versions of these food groups

Executive Order 509 is part of the **Mass in Motion** statewide initiative. Materials were developed by the Nutrition and Physical Activity Obesity Initiative, Bureau of Community Health Access and Promotion, MA Department of Public Health. Updated 10/2012

Qualitative Methods



Results

- Youth associated dietary intake to poor health outcomes
 - weight gain, diabetes, and high blood pressure
- Youth want healthier foods
- Youth want favorite foods and beverages that are high in calories, fat, sugar, and sodium

Significance

- Youth in juvenile correctional facilities are at increased risk for unintentional weight gain and other non-communicable diseases.
- **Key factors:**
 - Understanding meal satisfaction of youth,
 - Ability of foodservice staff to prepare healthy and balanced meals that youth will consume and enjoy
- This should assist with the pursuit of positive development of youth in juvenile correctional care.
- Knowledge about youths' perceptions of health risks and associations with dietary intake will allow for targeted nutrition education and messaging that can assist with the uptake of healthier meals and snacks.

Conclusions

- The qualitative information gathered from this study highlights the need for **nutrition education** in this population in order to bridge youths' **perceived health risks** and dietary improvements as part of a wellness initiative.
- In order for the wellness policy efforts to be effective, youth must have foods that bring **satisfaction** to improve overall dietary intake as well as lead to **sustainable** dietary habits once released to contribute to better longer term health and **well-being**.