

# Jamie Oliver's Food Revolution in WV: An Evaluation of School-based Meal Changes

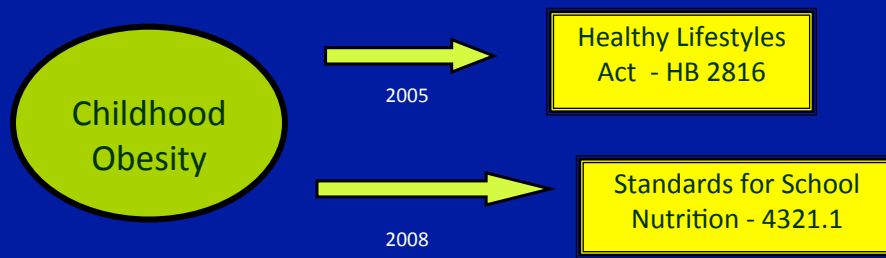
April 13, 2011

Carole V. Harris, Ph.D.

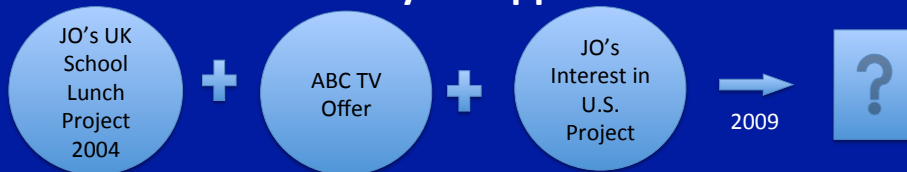
WVU Health Research Center



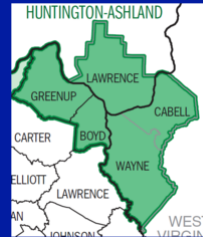
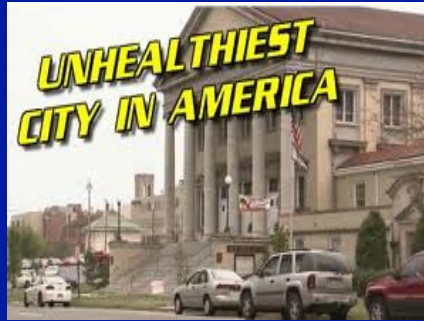
## West Virginia's Approach



## Reality TV Approach



## Why Huntington?



- Cabell and Wayne Counties, WV
- Lawrence County, Ohio
- Boyd and Greenup Counties, KY



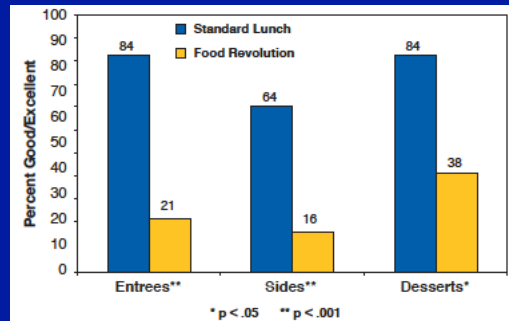
## Evaluation Questions

1. Are the new menu items acceptable to the students?
2. Do the new menus impact lunch participation?
3. Does removal of flavored milk impact milk consumption?
4. How do teachers perceive the new menus?
5. Do the new menus impact the workload for food service staff?
6. Do the new menus impact meal costs?
7. Do the new menus meet the federal and state nutrition guidelines?
8. How does cooking the new menus impact the cooks' satisfaction with their cooking skills and their positions?

## Evaluation Methods

- *Student Surveys*: 58-items assessed perceptions of 2 weeks of Food Revolution and standard lunch meals, including 10 entrées, 10 side dishes, and 4 dessert items for each lunch program.
- *Teacher Surveys*: 17-items assessed perceptions of the Food Revolution and standard lunch items.
- *Cook Surveys*: 23-items assessed perceptions of Food Revolution and standard lunch items, time needed for food preparation, food safety concerns, cooking skills and job satisfaction.
- *Food Service Director Survey*: 29-items assessed purchasing of ingredients, meal preparation, and perceptions of Food Revolution and standard lunch items.

## Acceptability to Students



- 77% were “very unhappy” with the FR offerings

- 66% reported having tried new foods

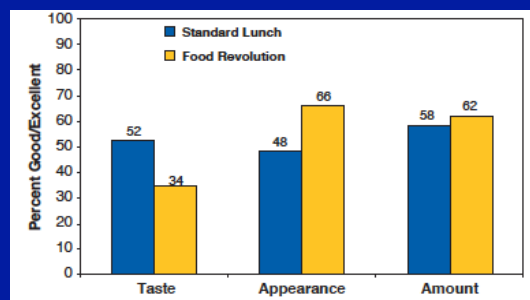
## Lunch Participation

- Average participation rate was **75%** during the 2 months of standard meals
- Average participation decreased to **66%** during the 2 months of FR meals

## Milk Consumption

- Consumption averaged **632** units daily during the 2 months of standard lunch meals
- Consumption averaged **472** units daily during the Food Revolution meals.
- **25% decrease** in milk consumption by students during the initial Food Revolution period.

## Teacher Perceptions



- Teachers perceived FR meals to be more nutritious than standard school meals ( $p < .001$ )

There were no statistically significant differences in teacher perceptions of taste, appearance, and amount of food served.

## Food Service Workload

- 83% of cooks reported higher preparation time for FR (~1 hour per day)
- 100% of cooks perceived the meal preparation to be more difficult
- 67% of cooks reported food safety concerns

## Meal Costs

- True costs were difficult to determine
  - Specialized items
  - Some labor supplied by ABC television
  - First month costs > \$5.00/meal
- Labor and ingredient costs were higher
- New equipment was required

## Compliance with Nutrition Guidelines

Nutrient	Target	Food Revolution Meal
Total fat	< 30%	31.24%
Saturated fat	< 10%	12.87%
Sodium	< 1100 mg	924 mg
Fiber	> 6 gm	8.51 gm

• Calcium, Vitamin A, Vitamin C, and iron were well above the USDA targets.

## Cook Satisfaction

- Confidence in cooking skills
  - 100% reported no change
- Job satisfaction
  - 1 reported somewhat greater satisfaction
  - 2 reported the same satisfaction
  - 2 reported somewhat less satisfaction
  - 1 reported much less satisfaction

## Conclusions

*This evaluation presents only the short-term effects of the Food Revolution program at Central City Elementary*

1. Students evidenced a strong preference for standard school meals
2. Student participation in the lunch program and student consumption of milk decreased significantly with FR meals

## Conclusions

3. Students tried new foods as a result of the FR program
4. Teachers perceived the new meals as more nutritious
5. FR meals were associated with increased labor and food costs
6. Evaluating the program over a longer period is recommended