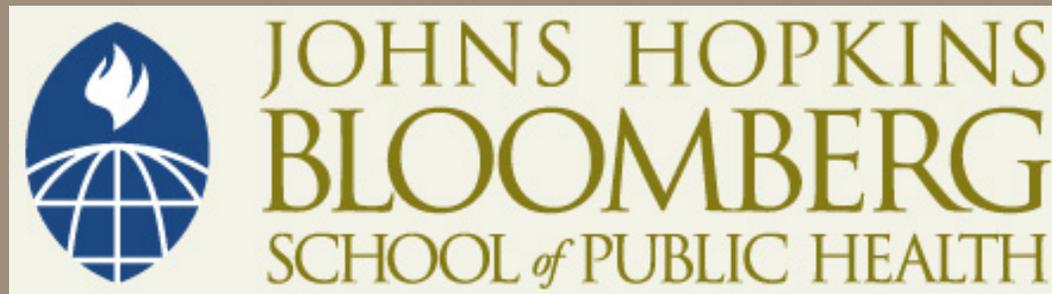


This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike License](https://creativecommons.org/licenses/by-nc-sa/4.0/). Your use of this material constitutes acceptance of that license and the conditions of use of materials on this site.



Copyright 2011, The Johns Hopkins University and Kevin Frick. All rights reserved. Use of these materials permitted only in accordance with license rights granted. Materials provided "AS IS"; no representations or warranties provided. User assumes all responsibility for use, and all liability related thereto, and must independently review all materials for accuracy and efficacy. May contain materials owned by others. User is responsible for obtaining permissions for use from third parties as needed.



JOHNS HOPKINS
BLOOMBERG
SCHOOL *of* PUBLIC HEALTH

Consumers, Incentives, and Weight

Kevin Frick, PhD

Johns Hopkins University

Consumers, Incentives, and Weight

- Weight is a function of many things
 - Income
 - Prices
 - Environment
 - Preferences
 - Living arrangements
- Begin with an exploration of prices and income putting most of the responsibility on the consumer



JOHNS HOPKINS
BLOOMBERG
SCHOOL *of* PUBLIC HEALTH

Section A

Incentives and Choices that Affect Weight

Effects of Changes in Prices

- What do people do when prices go up?
 - Consume less of the good or service because it is relatively more costly
 - Consume less of the good or service because it is like having less income when prices go up and income does not

Consider Changes in Food Prices

- These are documented in *The Fattening of America*
- Since 1983 what has happened to the prices of “healthy foods”
 - Fresh fruits: 190% increase
 - Fresh vegetables: 144% increase
 - Fish: 100% increase
 - Dairy: 82% increase
- And not so healthy foods...
 - Fats and oils: 70% increase
 - Sugars and sweets: 66% increase
 - Carbonated beverages: 32% increase
- The foods with larger percentage increases are now relatively more expensive

Responses to Price Changes

- We find price changes as incentives easy to grasp for some things
 - Entertainment
 - Travel
- Do we find price changes as incentives easy to grasp for food?
 - Regardless, what are the facts
 - ▶ There have been very large increases in consumption of carbonated beverages, fats, and sweets
 - ▶ People now buy larger portions

Effects of Changes in Time Costs

- The cost of time is the value of what the person would be doing if not taking time to worry about weight
 - Time to worry about weight can be through food preparation, exercise, etc.
- Key question is to understand how time costs change

More Families with Two Earners

- Less time for other things
- Perceived (or real) higher cost of spending time on food preparation
- Perhaps people would rather have the money from earnings rather than worry about weight
- Families have more money and less time to prepare home cooked meals
- Families rely more on restaurant and prepared foods
 - Trend toward bigger proportions and higher calories
- Could add to that the many out-of-home and out-of-neighborhood activities in which children are involved

Children's Consumption

- Kids are constrained to consume some of the same things as their parents
 - When parents consume more restaurant food, kids will too
- Children are less constrained in their consumption of foods during the day
 - Kids have greater access to unhealthy snacks in schools

Paradox with Physical Activity and Obesity Prevalence

- Why do physical activity and obesity prevalence increase at the same time?
 - People have more money
 - People purchase more restaurant and prepared food
 - People consume more calories
 - People gain weight
 - This gives people an incentive to increase activity level
 - The key is whether the increase in activity is enough to offset the increase in calories

Modern Life

- Many modern conveniences lead to us burning fewer “accidental” calories
- Much of our leisure time is spent watching television or otherwise in front of a screen
- Even some active leisure is less active
 - Golf carts instead of walking the course
- Less manual labor
- Living in more spread out ways that require us to travel distances in cars rather than walking