

Expanding Waistlines: How Microeconomics explains why you are fat

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Who's fat?

Body Mass Index (BMI)

Below 18.5

Underweight

18.5 – 24.9

Normal

25.0 – 29.9

Overweight

30.0 and Up

Obese



Am I fat?

How To Calculate BMI

$$\text{BMI} = \frac{(\text{weight in pounds} * 703)}{\text{height in inches}^2}$$



Obesity in America

■ 142 million (47%) are overweight or obese

■ 73.0 million men

■ 69.0 million women

■ 67.3 million (22.3%) are obese

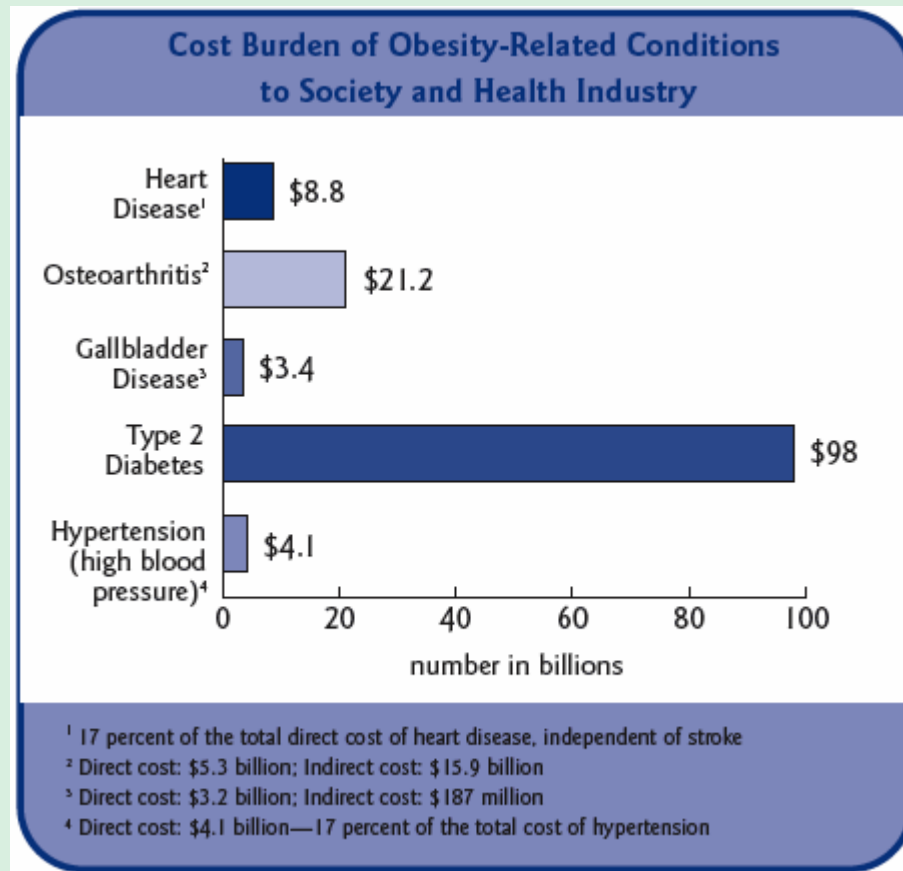
In 2000:

■ Obesity was associated with 112,000 excessive deaths relative to normal weight

■ 41,821 people were killed in auto accidents

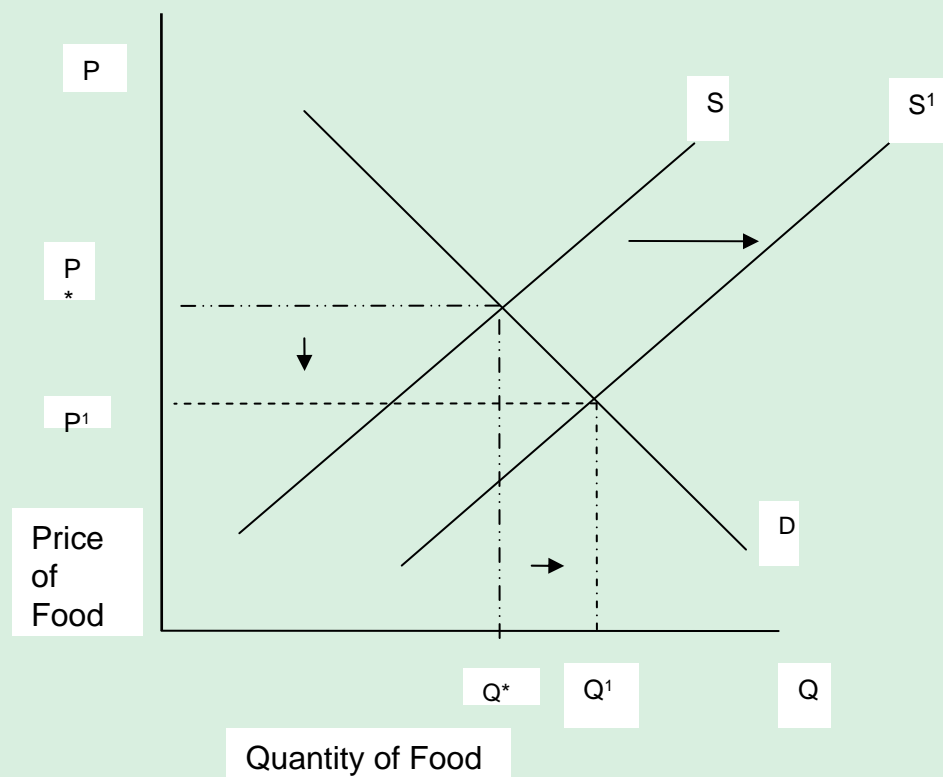


Health Care Costs of Obesity



<http://weight-loss.emedtv.com/obesity/obesity-statistics.html>

How America gained weight: Food supply 1900-1960



Rise of convenience food

- Drop in the full cost of food ($\$ + T$)
 - Prior to 1960: home cooking from scratch
 - Women in workforce demand convenience
 - New technology: flash freeze, preservatives
 - Manufacturers take on food prep

Today convenience food is cheaper than raw, whole food.

Compare \$ cost:

McDonald's v. Frozen Dinner v. Safeway raw ingredients



What to eat?

How much you make determines what you can eat:

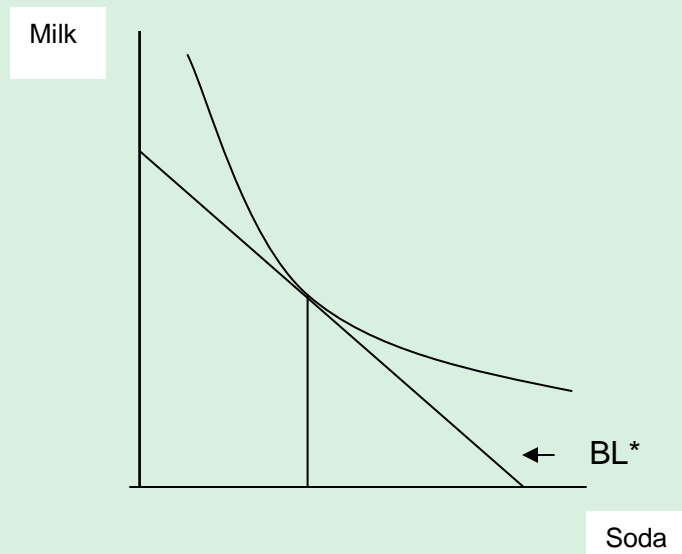
Normal Food v Inferior Food

- Normal Good: Income $\uparrow \Leftrightarrow$ Demand \uparrow
 - Grocery Food: milk, vegetables, fish
- Inferior Good: Income $\downarrow \Leftrightarrow$ Demand \uparrow
 - Convenience food: soda, burgers, candy

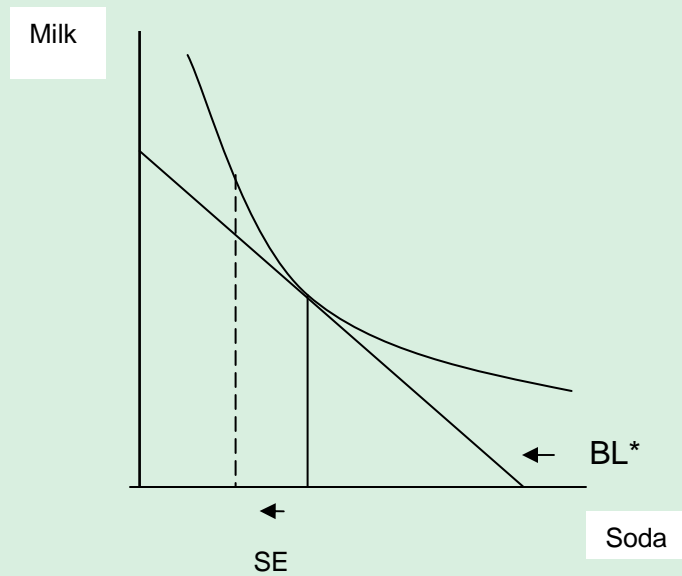
Milk v. Soda



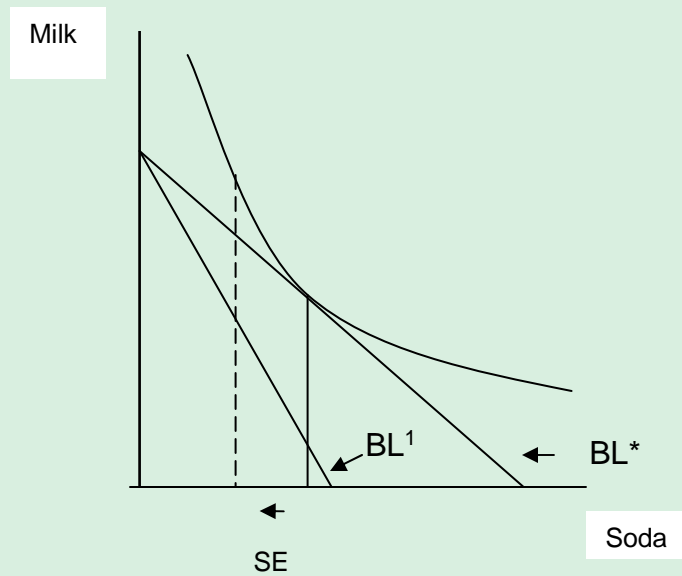
Income Effect on Weight – Normal Good



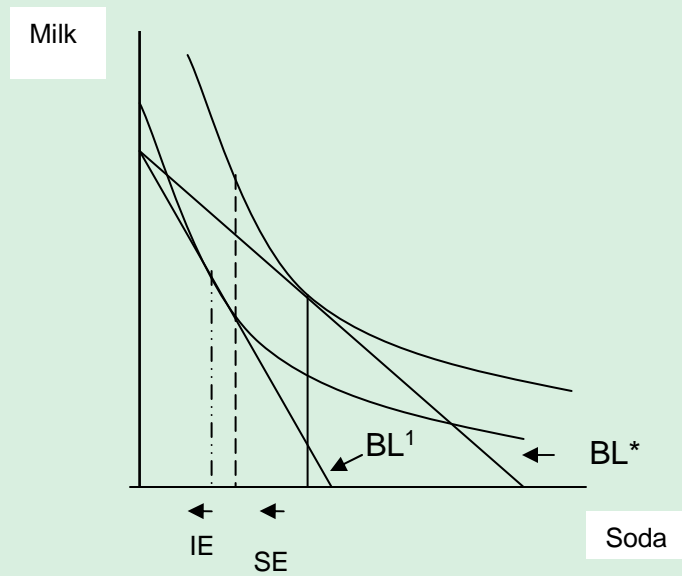
Income Effect on Weight – Normal Good



Income Effect on Weight – Normal Good

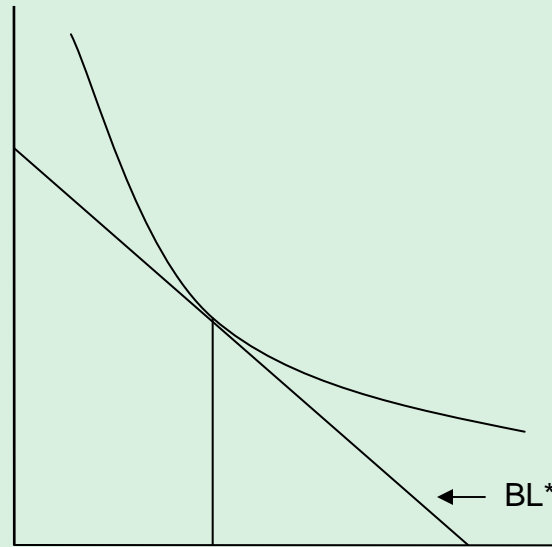


Income Effect on Weight – Normal Good



Income Effect on Weight – Inferior Good

Milk

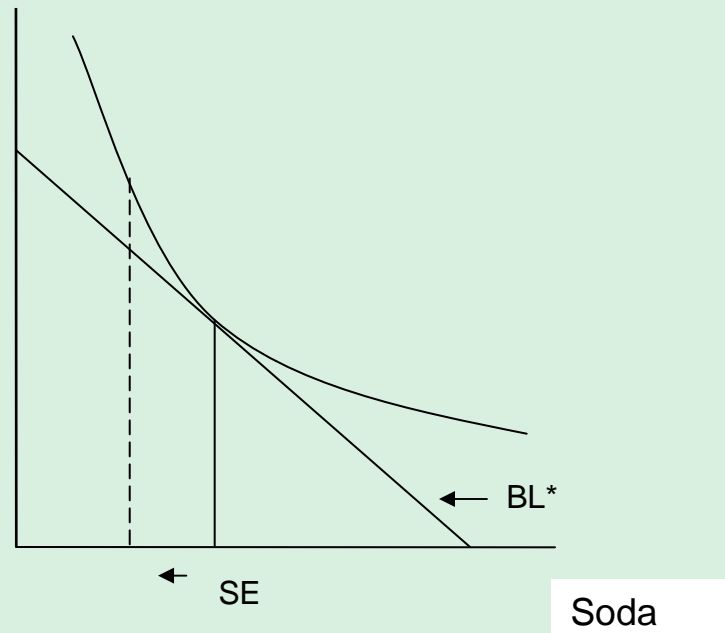


Soda



Income Effect on Weight – Inferior Good

Milk



Income Effect on Weight – Inferior Good

Milk

