This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike License. Your use of this material constitutes acceptance of that license and the conditions of use of materials on this site.
Section C

Life Course Approaches to Obesity
Globally and Locally

- Globally, 22 million children under 5 years of age are overweight; 10% of adolescents are overweight or obese.

- In the United States between the years 2000 and 2010, childhood obesity increased by 0.5% per year; in Canada and England it has increased by 1.0%.
### US Prevalence of Obesity, by Age (Bray, 2008)

<table>
<thead>
<tr>
<th>Age</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-11 years old</td>
<td>18%</td>
</tr>
<tr>
<td>12-19 years old</td>
<td>17%</td>
</tr>
<tr>
<td>20-39 years old</td>
<td>30%</td>
</tr>
</tbody>
</table>
Obesity: Once Obese, Always Obese?

- **Obesity persistence**
  - 35% of obese 5-year-olds become obese adults
  - 75% of obese 11-year-olds are obese adults
  - 90% of obese 17-year-olds are obese adults
The Four Components of a Life Course Perspective

1. **Linked lives**: parents’ choices, behaviors, and genetics effect their children

2. **Life events can be viewed as a trajectory**: influences have a differential impact at various stages of the life course

3. **People have agency**: individuals make choices influenced by the social worlds in which they live (e.g., family, peers, neighborhood, etc.)

4. **Historical context matters**: an historical perspective provides a context for understanding current forces and factors
Factors Associated with Obesity across the Lifespan

What are the factors associated with obesity across the lifespan?

Consider the various stages
- Preconception
- Pregnancy
- Infancy
- Childhood
- Adolescence
- Adulthood
Preconception

- Pre-pregnancy weight
- Socio-economic status
- Pre-pregnancy nutritional status
- Maternal education
- Historical events
Pregnancy

- Maternal weight gain
- Gestational diabetes mellitus
- Maternal smoking
- Poor prenatal nutrition (e.g., high sugars, low protein)
- Maternal food preferences
Infancy

- Low birth weight with rapid “catch up”
- Breastfeeding
- Infant formula and food supplementation
- Maternal depression and caretaking
- Eating patterns
- Taste acquisition
Childhood

- Genetics
  - Syndromes
  - Body type (adiposity rebound of middle childhood)
  - Basal metabolic rate

- Chronic diseases
  - Medications

- Food preferences and eating patterns

- Food insecurity
Childhood—Parental Influences

- Education
- Feeding practices
- Employment
- Income
- Attitudes toward food and nurturance
Childhood—The Environment

- School
  - Recess
  - Physical education
  - School meals, vending machines, treats
  - Walkways and paths to school

- Parks and recreation

- Neighborhood safety
Childhood—The Environment

- School
  - Recess
  - Physical education
  - School meals, vending machines, treats
  - Walkways and paths to school

- Parks and recreation

- Neighborhood safety
Childhood—Behaviors

- TV viewing
  - Advertising exposure
  - Sedentary lifestyle
  - Snacking

- Eating behaviors (e.g., skipping breakfast)

- Sports and activities
Adolescence

- Puberty
- Sleep patterns
- Medications
  - Antidepressants
  - Oral contraception
  - Antipsychotics
- Substance use
  - Marijuana
  - Alcohol consumption
  - Tobacco
- School factors
- Food preferences
Adolescence

- Puberty
- Sleep patterns
- Medications
  - Antidepressants
  - Oral contraception
  - Antipsychotics
- Substance use
  - Marijuana
  - Alcohol consumption
  - Tobacco
- School factors
- Food preferences
Adolescence

- Depression
- Medical conditions
- Eating disorders and disordered eating
- Employment
- Activity level, sports participation
- Eating as a social behavior
- Peer networks and the contagion effect
Adult

- Activity level
- Consumption
- Type of employment
- Partner selection
- Friendships and social networks
- Menopause
- Chronic diseases: lupus, thyroiditis, tumors
- Alcoholism
- Genetics (e.g., lymphatic rupture)
Obesity from a Life Course Perspective

- Maternal education
- Maternal weight
- SES

Pre-conception
- Gestational diabetes mellitus
- Maternal smoking
- Poor prenatal nutrition

Pregnancy
- Breastfeeding
- Infant formula & food suplementation
- Maternal depression and caretaking

Infancy
- Chronic diseases
- Food preferences & eating patterns
- Food insecurity

Child
- Puberty
- Sleep patterns
- Medications

Adolescent
- Activity level
- Consumption
- Employment
- Partner selection
- Social networks
- Menopause

Adult