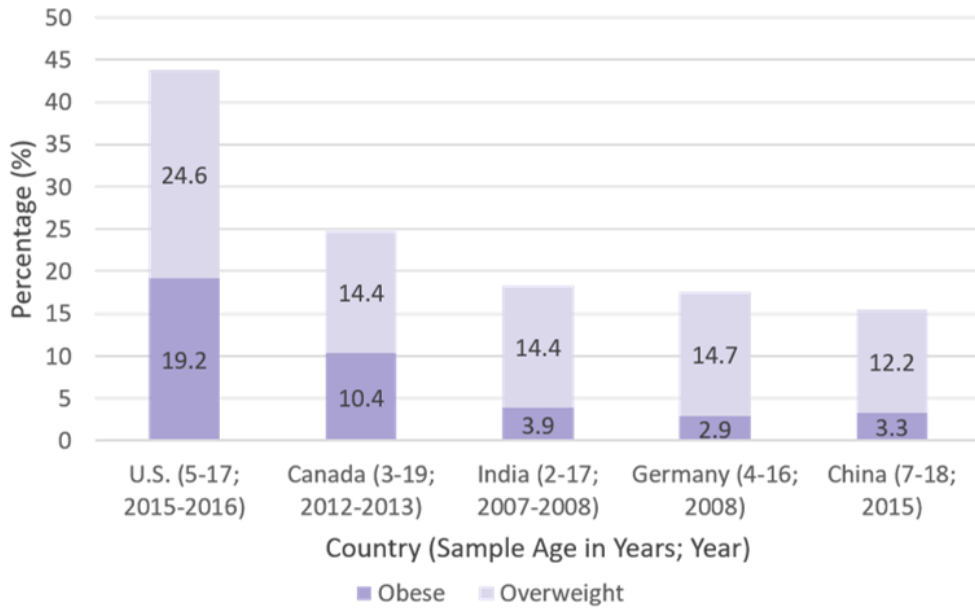


## Prevalence of Overweight and Obesity in Girls<sup>7</sup>



## Risk Factors of Childhood Obesity<sup>5, 6</sup>

- Genetics
- Social Influence
- Unhealthy Diet
- Eating Habits
- Sedentary Lifestyle
- Insufficient Sleep

## Other Factors to Consider<sup>4</sup>

- Social Determinants of Health
  - Education
  - Socioeconomic Status
  - Food Insecurity
  - Housing
  - Chronic Stress
- Medical Conditions
- Mental Health
- Accessibility/Transportation
- Child Marketing

## Effects of Childhood Obesity<sup>2, 6</sup>

### Physical

- Hypertension
- Hypercholesterolemia
- Glucose Intolerance
- Insulin Resistance
- Type II Diabetes
- Menstrual Abnormalities
- Asthma
- Sleep Apnea
- Joint Problems
- Musculoskeletal Discomfort
- Fatty Liver Disease
- Cholelithiasis
- Gastro-esophageal Reflux

### Psychosocial

- Anxiety
- Depression
- Low-Self Esteem
- Low Self-Reported Quality of Life
- Body Dissatisfaction
- Stigmatization
- Bullying
- Social Marginalization
- Eating Disorders

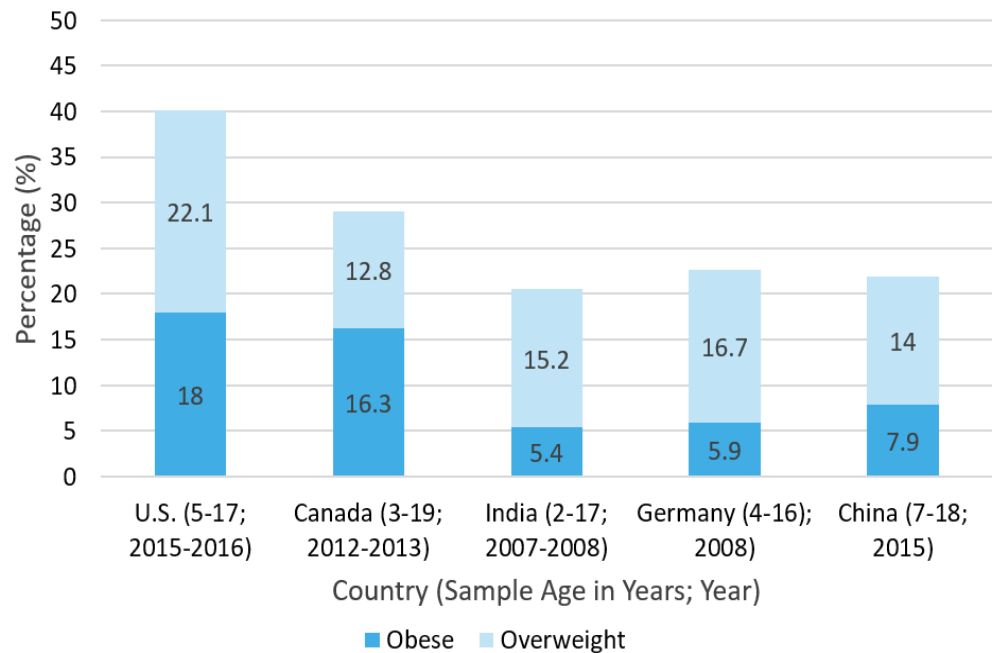
### Other

- Lower Academic Success

## Family & Individual Interventions<sup>1, 5, 6</sup>

- Healthy Diet & Eating Habits
- Meet Physical Activity Recommendations
- Limit TV and Electronics Usage
- Increase Quality Family Time
- Live in Safe Neighbourhoods with Few Fast Food Options
- Find Healthy Adult Role Models
- Breastfeed in Infancy
- Adequate Sleep

## Prevalence of Overweight and Obesity in Boys<sup>7</sup>



## Societal Interventions

- Intersectoral Collaboration
- School Health Curriculum Revisions
- Increase Hours of Physical Education
- Reduce Barriers to Active Extracurricular Activities
- Improve the Quality and Affordability of Cafeteria Food
- Incorporate School Gardens
- Integrate Mandatory Cooking Classes into Schools
- Cultivate an Enriched Play Environment
- Limit Screen-Time During School Hours
- Limit Child-Directed Marketing for Unhealthy Foods<sup>6</sup>
- Increase Accessibility of Grocery Stores
- Sell Blemished Produce at a Discounted Cost in Grocery Stores
- Reduce Portion Sizes in Restaurants and Fast Food Establishments<sup>6</sup>
- Implement Community Gardens and Farmers Markets

~ \$215 billion spent annually on direct and indirect adult & child obesity-related expenses in the U.S.<sup>2</sup>

1 American Academy of Pediatrics. (2012). Breastfeeding and the use of human milk. *Pediatrics*, 129(3), e827-e841. doi:10.1542/peds.2011-3552

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3 Hammond, R. A., & Levine, R. (2010). The economic impact of obesity in the United States. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, 3, 285-295. doi: 10.2147/DMSOTT.S7384

4 Mikkonen, J., & Raphael, D. (2010). *Social Determinants of Health: The Canadian Facts*. Toronto: York University School of Health Policy and Management.

5 Ruan, H., Xun, P., Cai, W., He, K., & Tang, Q. (2015). Habitual Sleep Duration and Risk of Childhood Obesity: Systematic Review and Dose-response Meta-analysis of Prospective Cohort Studies. *Scientific Reports*, 5, 1-14. doi: 10.1038/srep16160

6 Sahoo, K., Sahoo, B., Choudhury, A. K., Sofi N. Y., Kumar, R., & Bhadoria, A. S. (2015). Childhood obesity: causes and consequences. *Journal of Family Medicine and Primary Care* 4(2), 187-192. doi:10.4103/2249-4863.154628

7 World Obesity Federation. (n.d.). *Obesity prevalence worldwide – children*. Retrieved from: <https://www.worldobesitydata.org/map/overview-children#country=>