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Research Informing Policies & Practices
for Healthy Youth

Trends in the Nutritional Content of TV Food Advertisements Seen by Children in the US

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Presentation Outline

- Overview of Advertising Data
- Nutritional Measures
- Advertising Content
- Nutritional Content
- Policy Implications

Overview of Advertising Data

Nielsen Media Research Ratings Data

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Advertising Data

- Targeted Ratings Points (TRPs) data on exposure to ads seen on TV obtained from Nielsen Media Research
- Ratings cover all programming seen by children
- Ratings points measure the reach and frequency of advertising. For example, a commercial with 80 TRPs for 2-5 year olds per month is estimated to have been seen an average of one time by 80% of children 2-5 over the defined period
- Ratings by:
 - Year: 2003, 2005, 2007, and 2009
 - Age Groups: 2-5y, 6-11y, and 12-17y
 - Race: All children, separately by white and black. Study does not include separate ratings for Hispanic children nor does it cover Spanish Language TV
- Food-related advertising categorized as:
 - Cereal, Sweets, Snacks, Beverages, Fast Food Restaurants, Full-service Restaurants, and Other

Advertising Content

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Number of Food-Related Ads Per Day, By Year and Age

| Food-Related | 2003 | 2005 | 2007 | 2009 | % Change 2003-2009 |
|------------------------|------|------|------|------|--------------------|
| Children Age 2-5 | 13.3 | 12.1 | 11.5 | 10.9 | -17.9% |
| Children Age 6-11 | 13.6 | 13.5 | 13.1 | 12.7 | -6.9% |
| Adolescents Ages 12-17 | 13.1 | 13.4 | 13.6 | 14.5 | 10.4% |

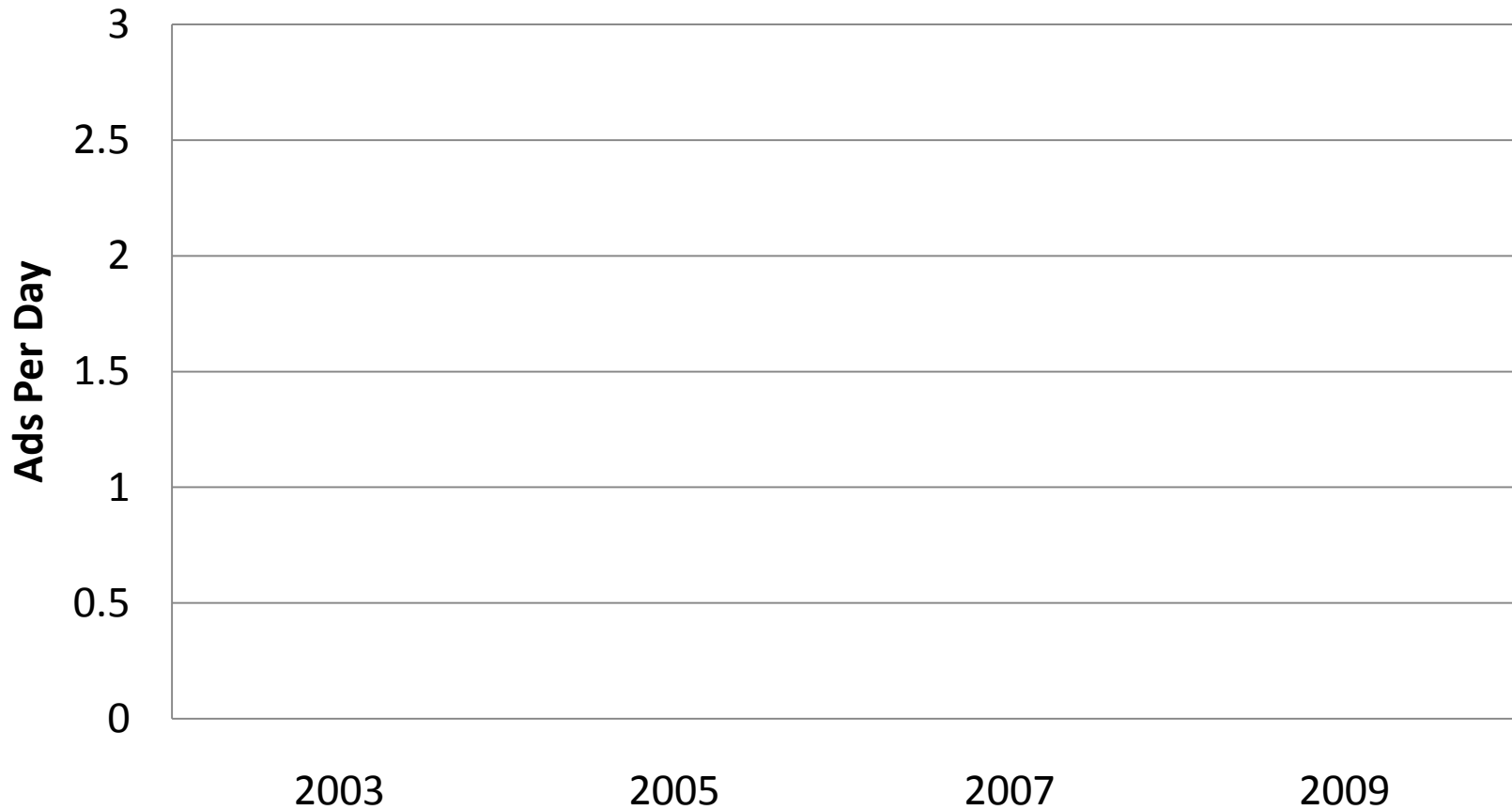
| Food & Bev Products | 2003 | 2005 | 2007 | 2009 | % Change 2003-2009 |
|------------------------|------|------|------|------|--------------------|
| Children Age 2-5 | 10.1 | 8.7 | 7.9 | 6.8 | -32.5% |
| Children Age 6-11 | 10.1 | 9.7 | 8.9 | 7.9 | -21.7% |
| Adolescents Ages 12-17 | 8.8 | 8.5 | 8.2 | 8.4 | -4.4% |

| Fast Food | 2003 | 2005 | 2007 | 2009 | % Change 2003-2009 |
|------------------------|------|------|------|------|--------------------|
| Children Age 2-5 | 3.2 | 3.3 | 3.6 | 4.1 | 28.7% |
| Children Age 6-11 | 3.5 | 3.8 | 4.2 | 4.8 | 35.4% |
| Adolescents Ages 12-17 | 4.4 | 4.9 | 5.5 | 6.1 | 40.4% |

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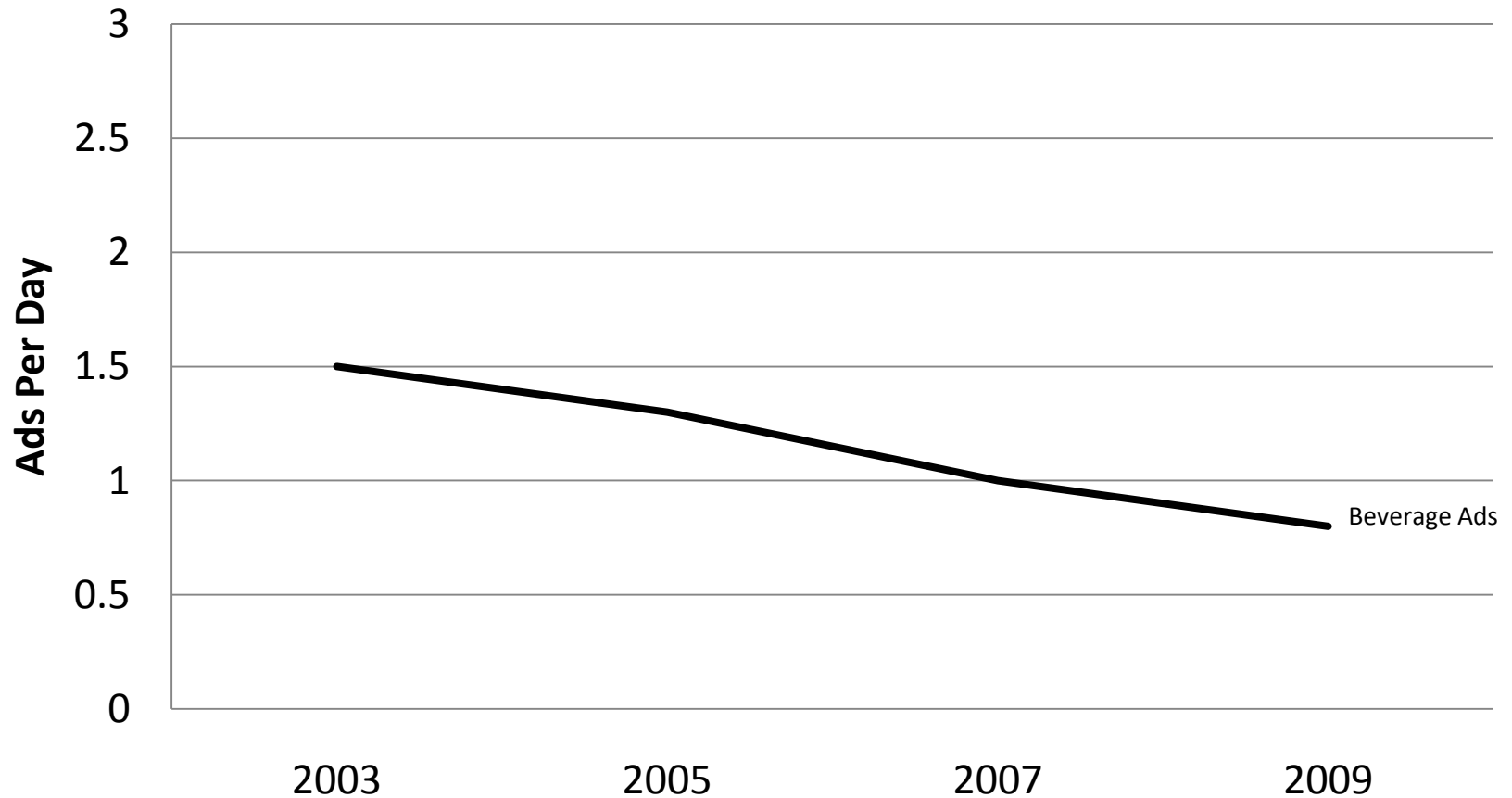
Exposure to Food Advertisements per Day for Children by Year

Children Ages 2-5 Years



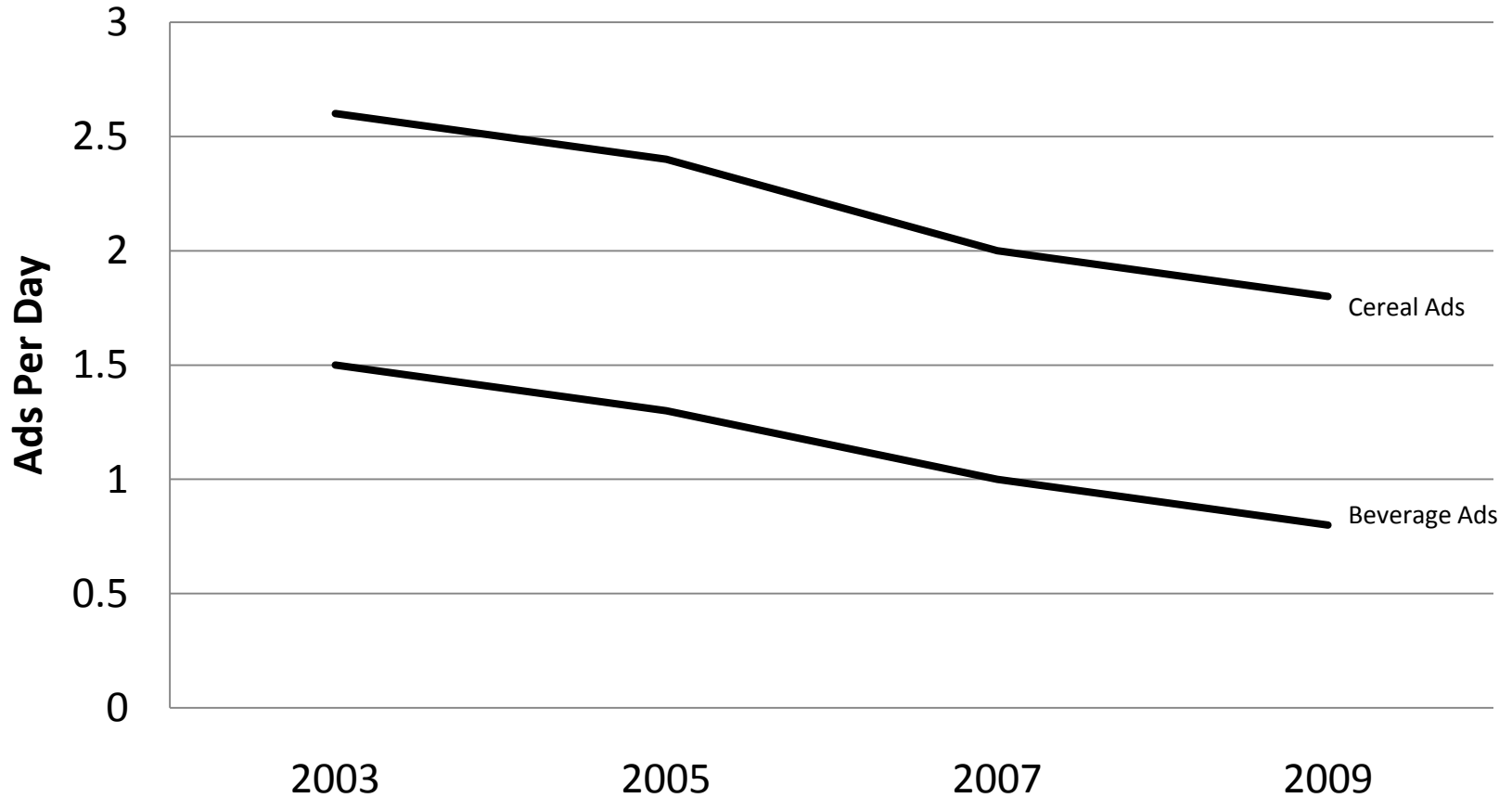
Exposure to Food Advertisements per Day for Children by Year

Children Ages 2-5 Years



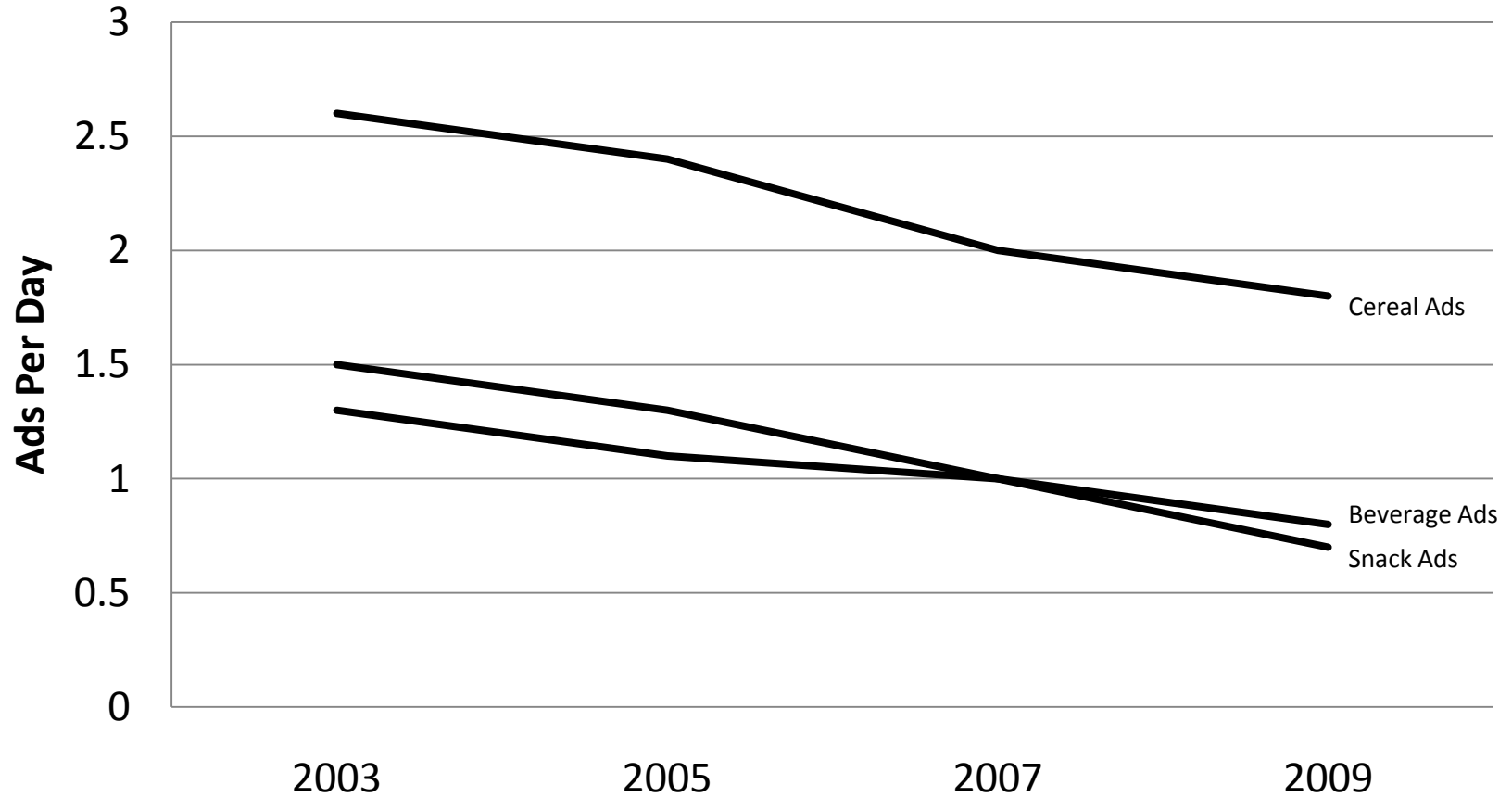
Exposure to Food Advertisements per Day for Children by Year

Children Ages 2-5 Years



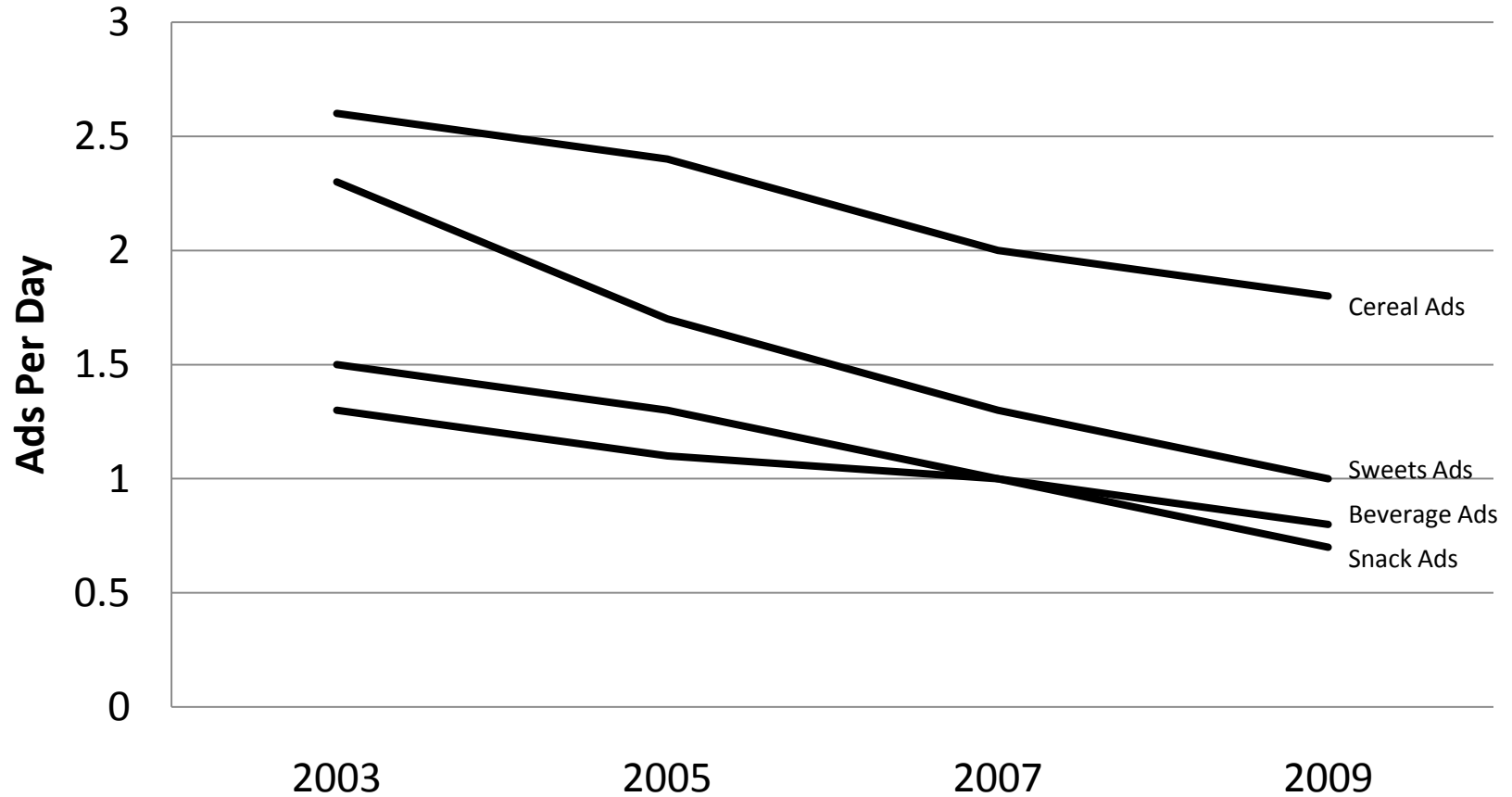
Exposure to Food Advertisements per Day for Children by Year

Children Ages 2-5 Years



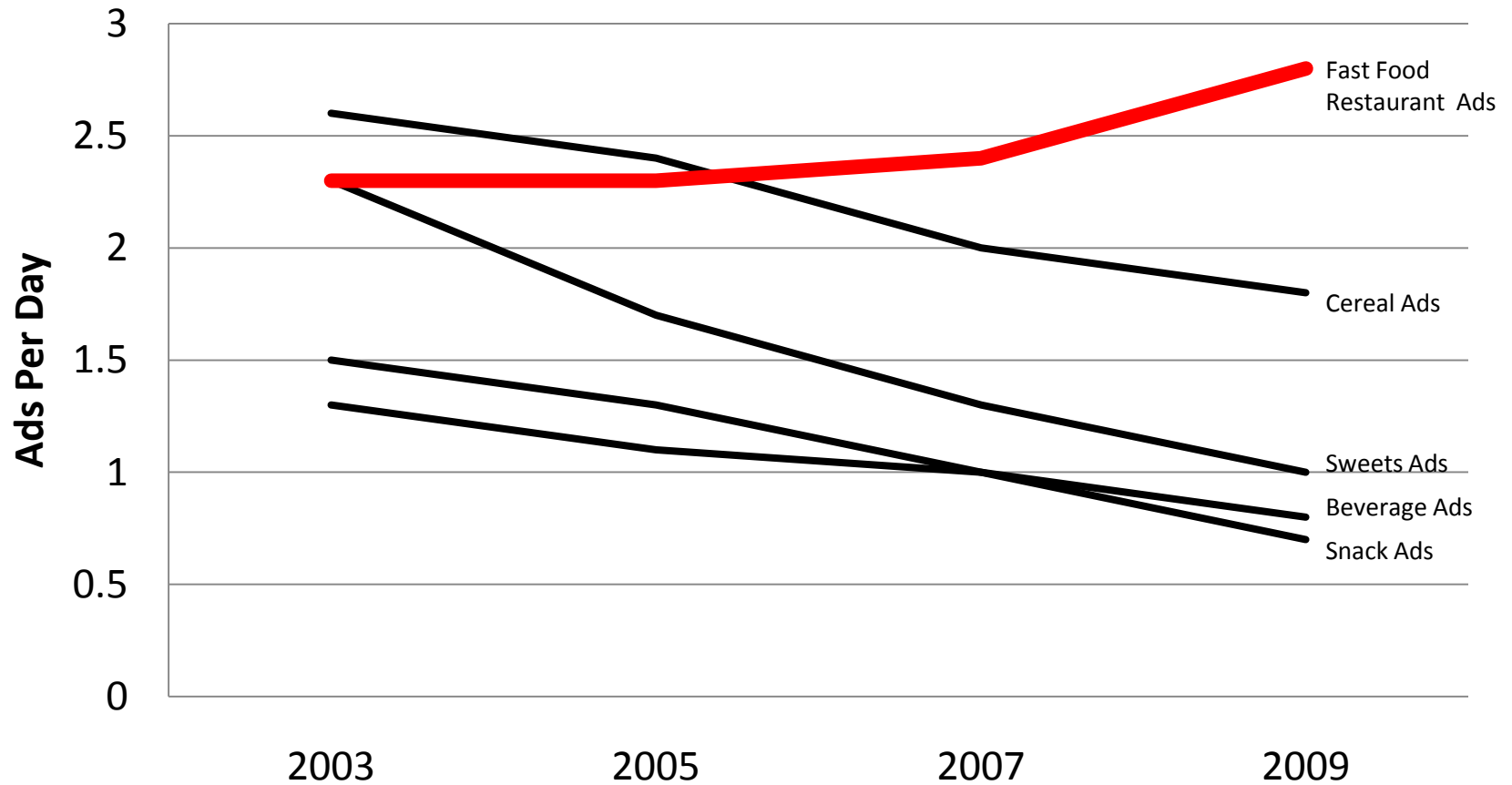
Exposure to Food Advertisements per Day for Children by Year

Children Ages 2-5 Years



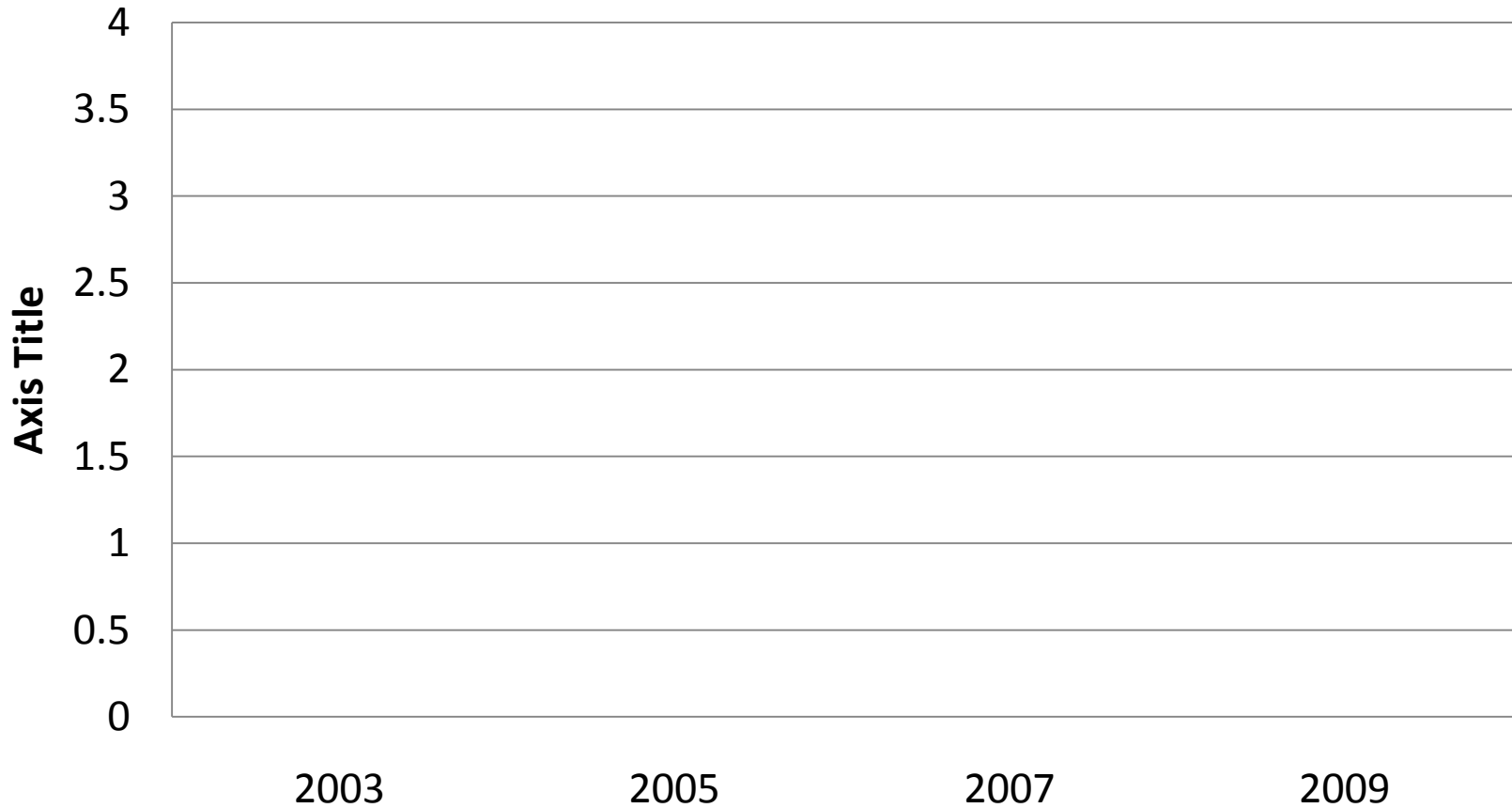
Exposure to Food Advertisements per Day for Children by Year

Children Ages 2-5 Years



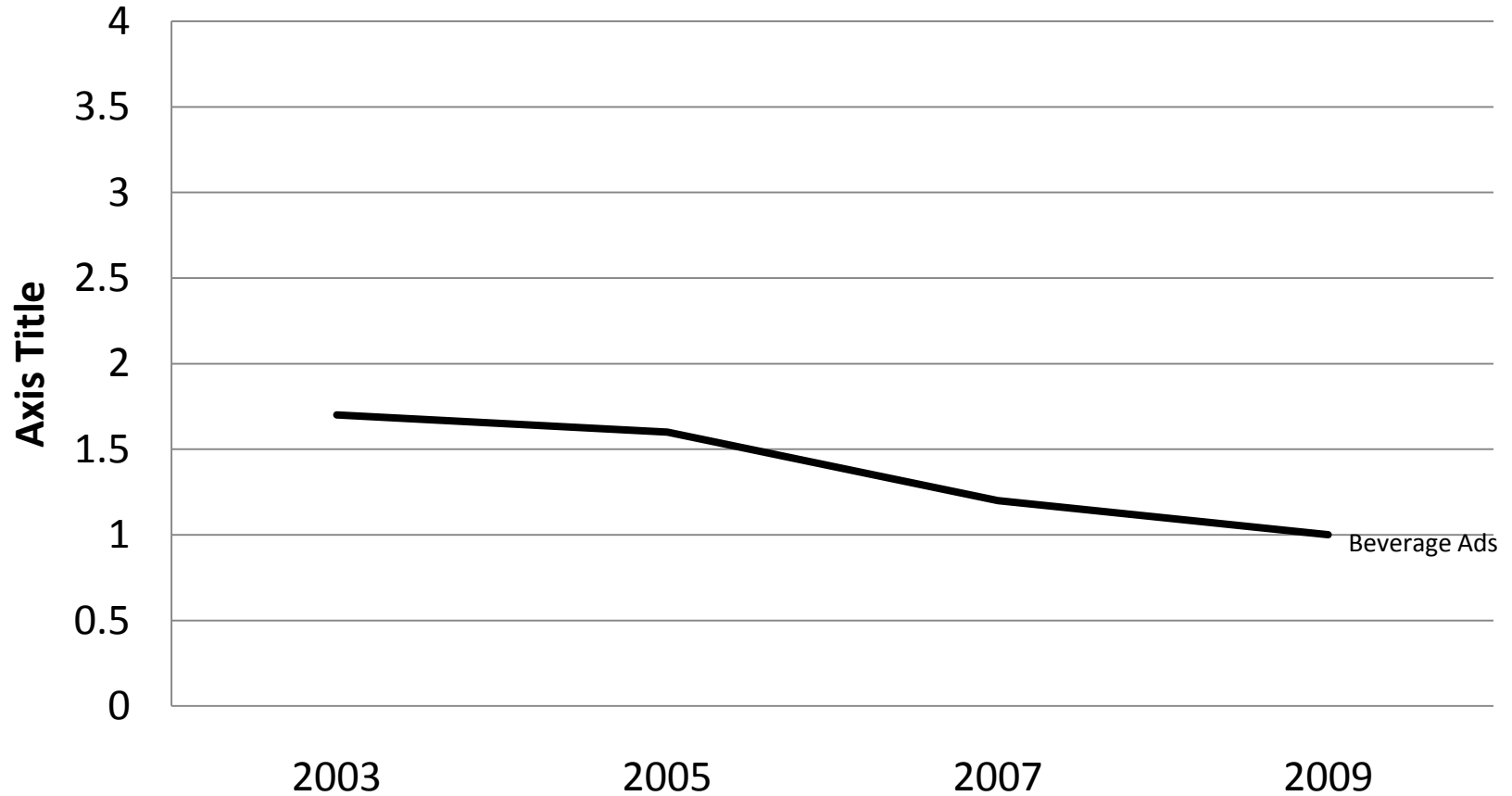
Exposure to Food Advertisements per Day for Children by Year

Children Ages 6-11 Years



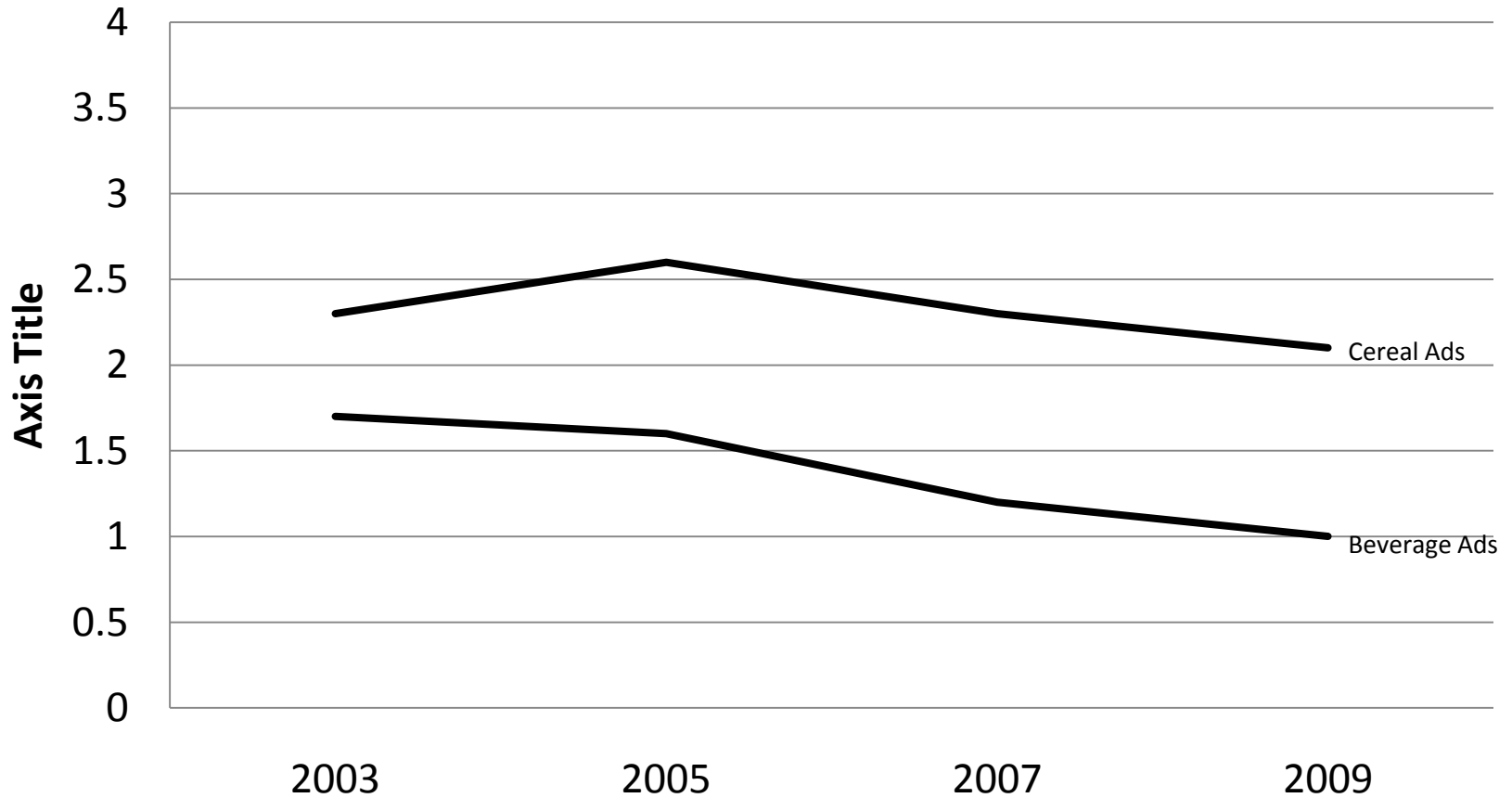
Exposure to Food Advertisements per Day for Children by Year

Children Ages 6-11 Years



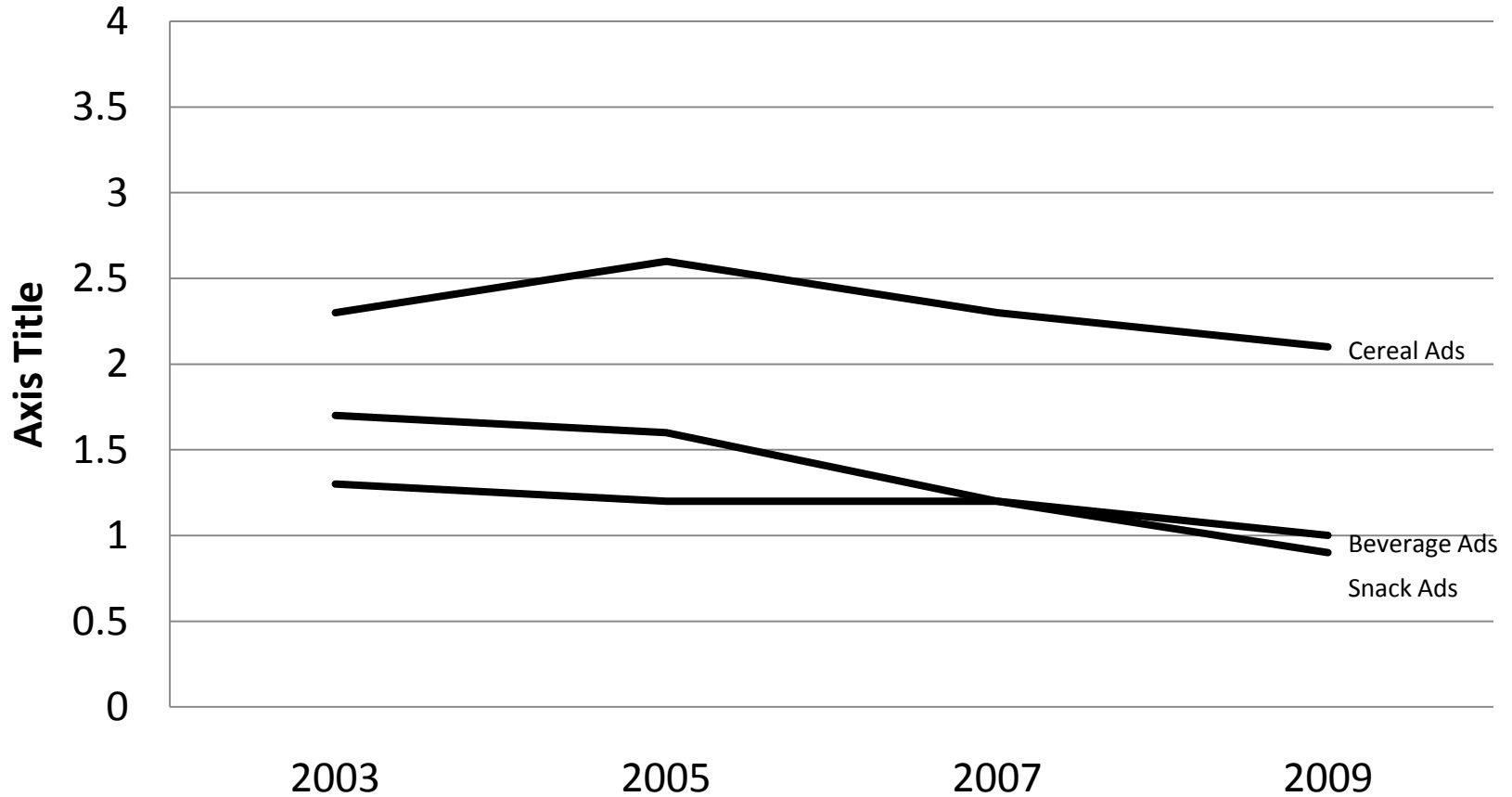
Exposure to Food Advertisements per Day for Children by Year

Children Ages 6-11 Years



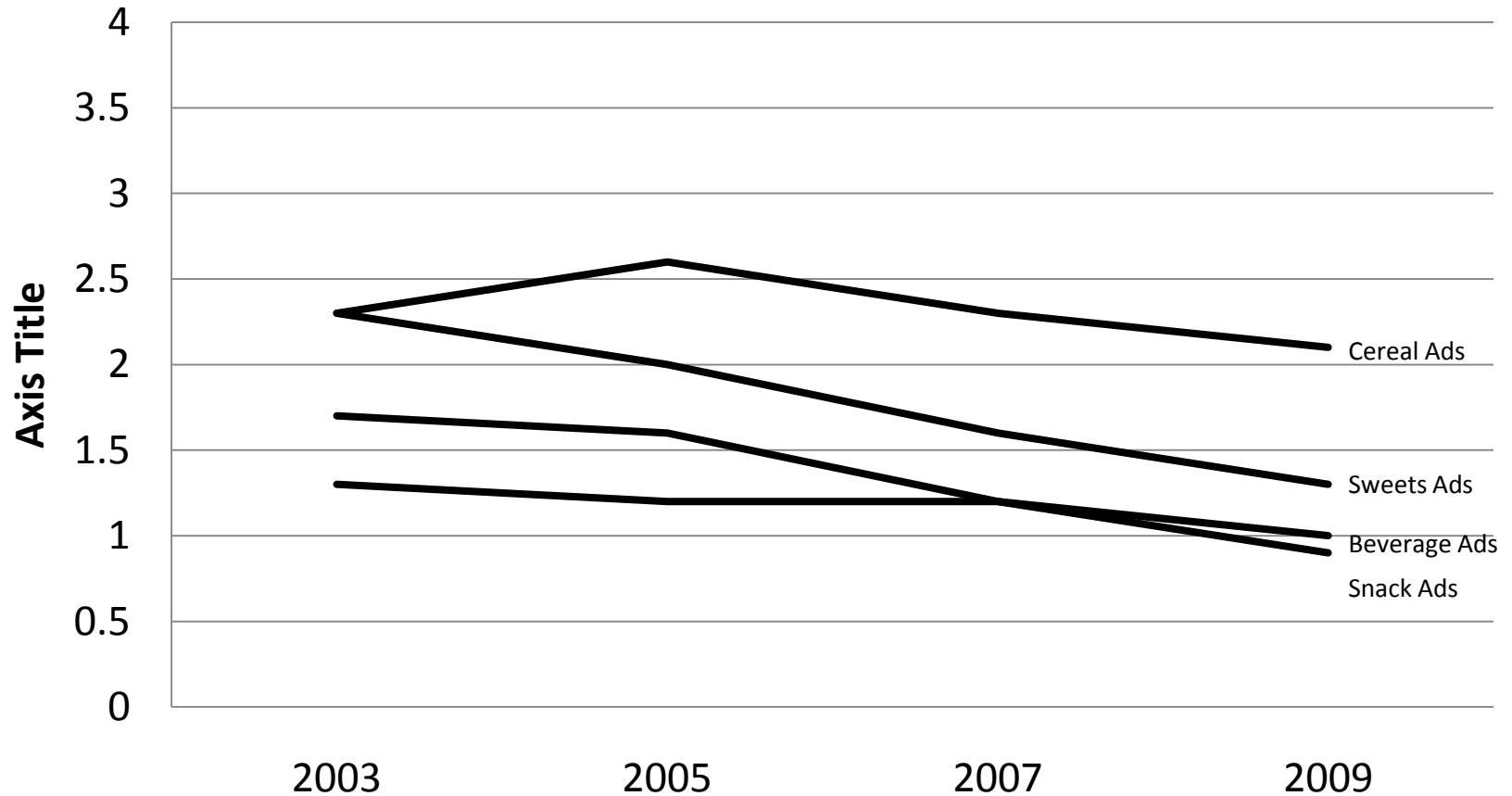
Exposure to Food Advertisements per Day for Children by Year

Children Ages 6-11 Years



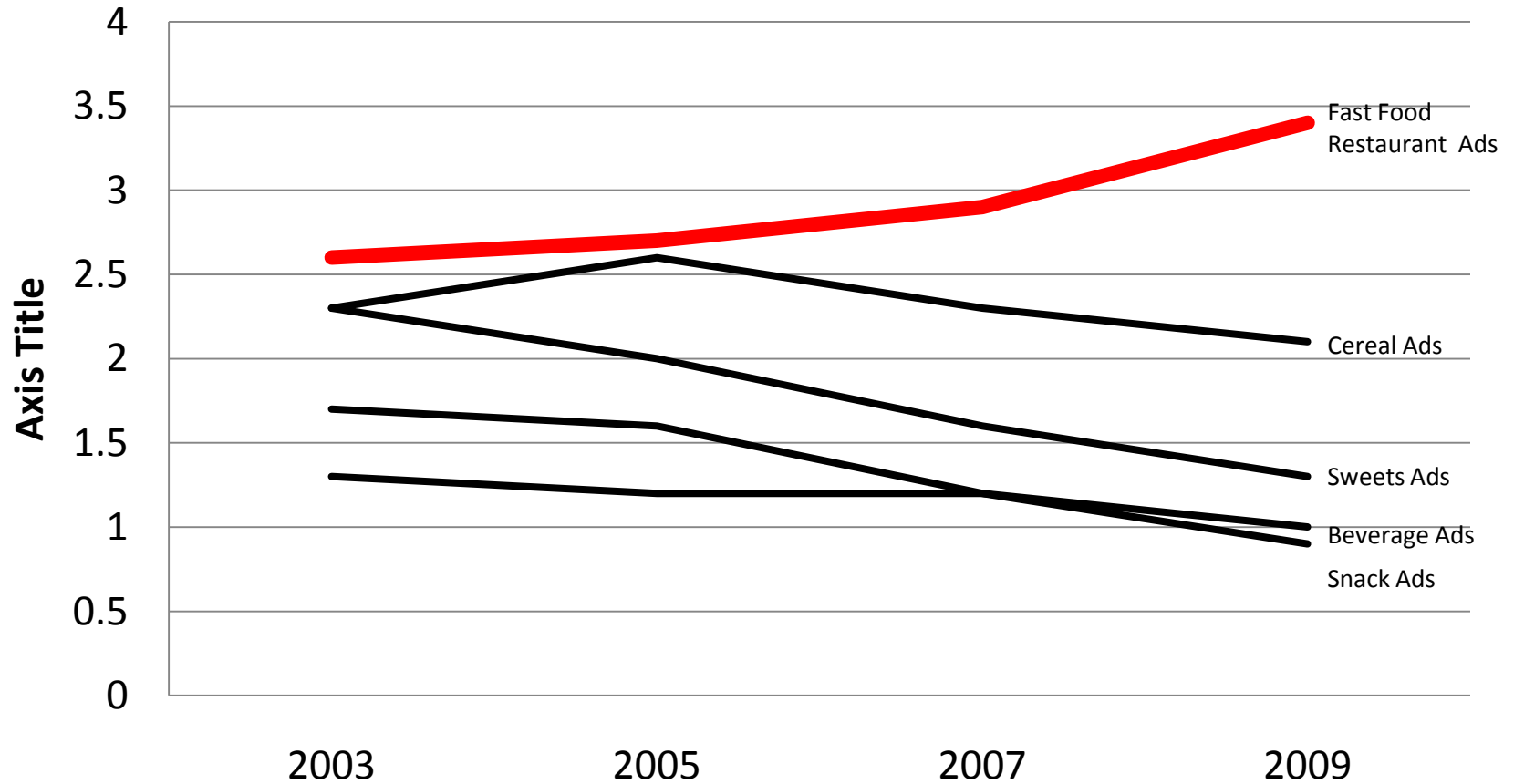
Exposure to Food Advertisements per Day for Children by Year

Children Ages 6-11 Years



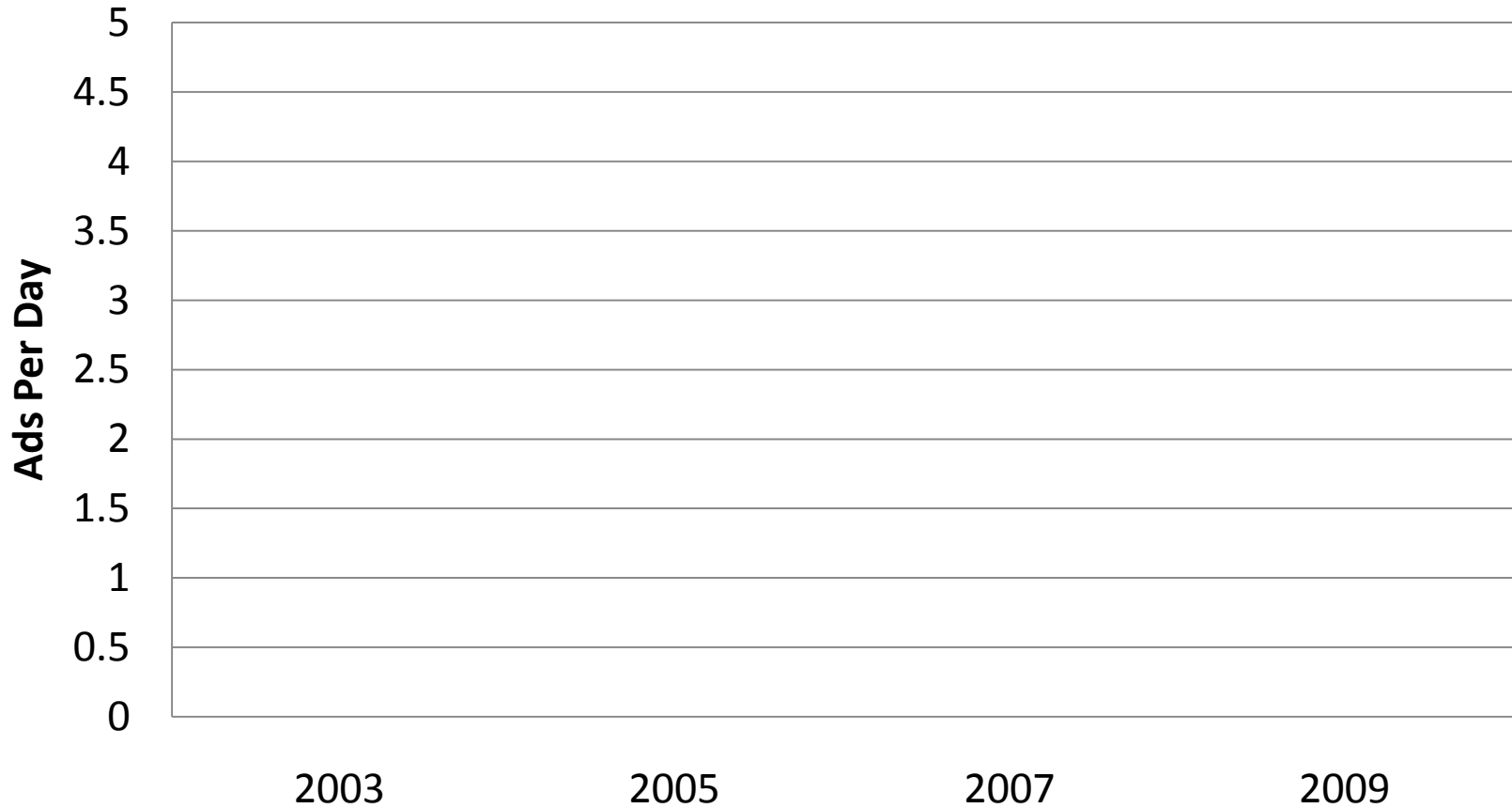
Exposure to Food Advertisements per Day for Children by Year

Children Ages 6-11 Years



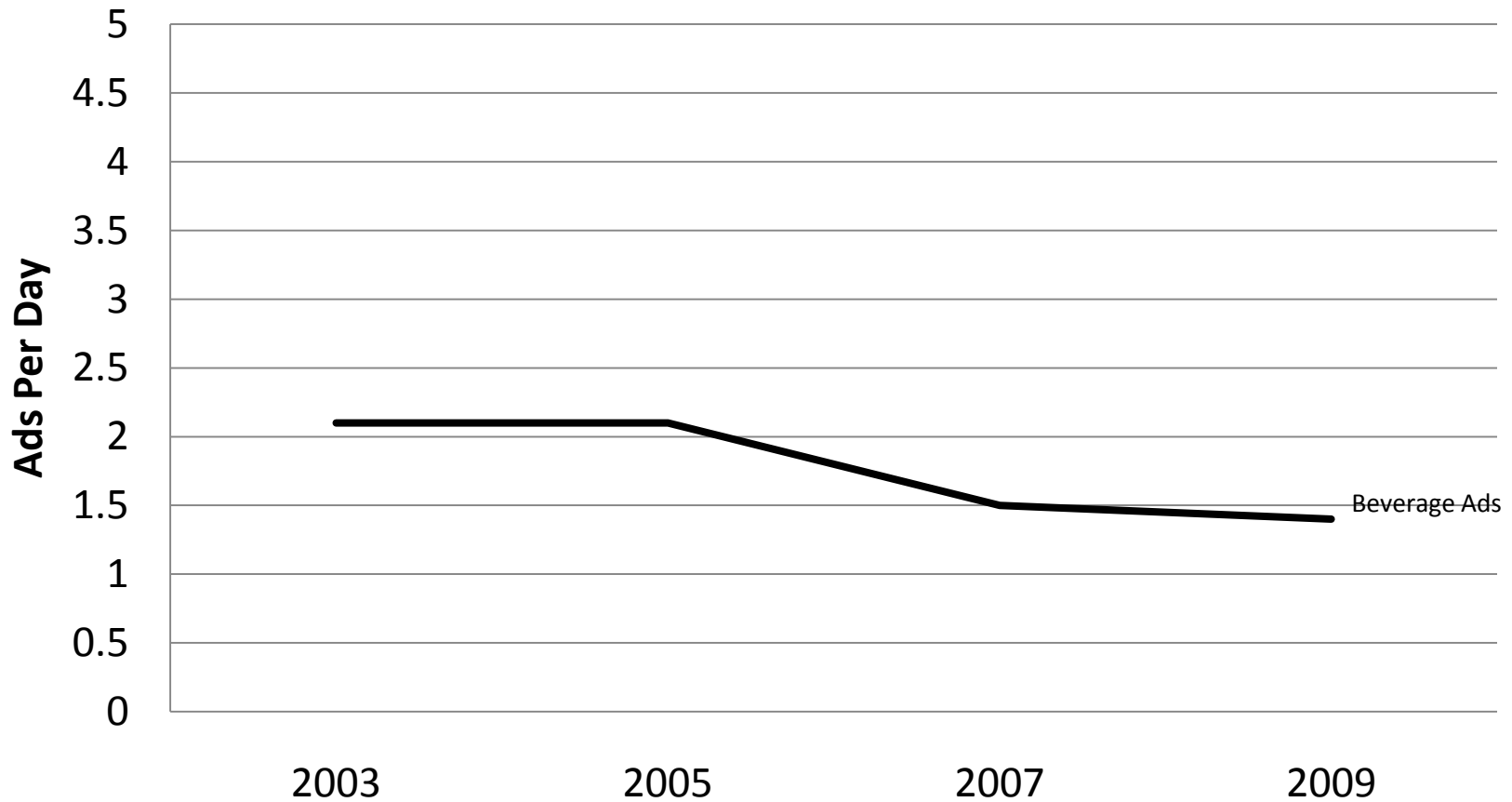
Exposure to Food Advertisements per Day for Adolescents by Year

Adolescents Ages 12-17 Years



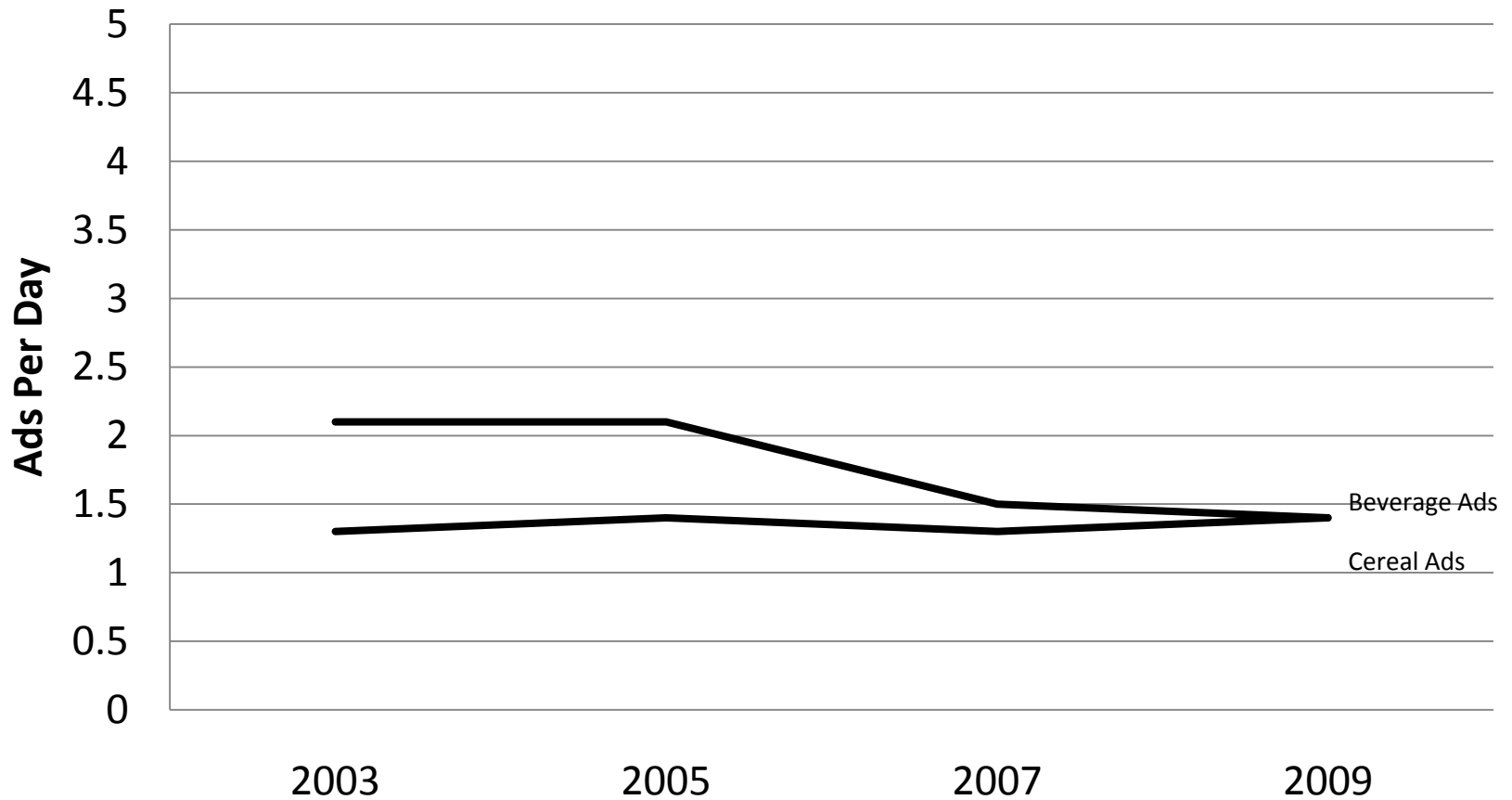
Exposure to Food Advertisements per Day for Adolescents by Year

Adolescents Ages 12-17 Years



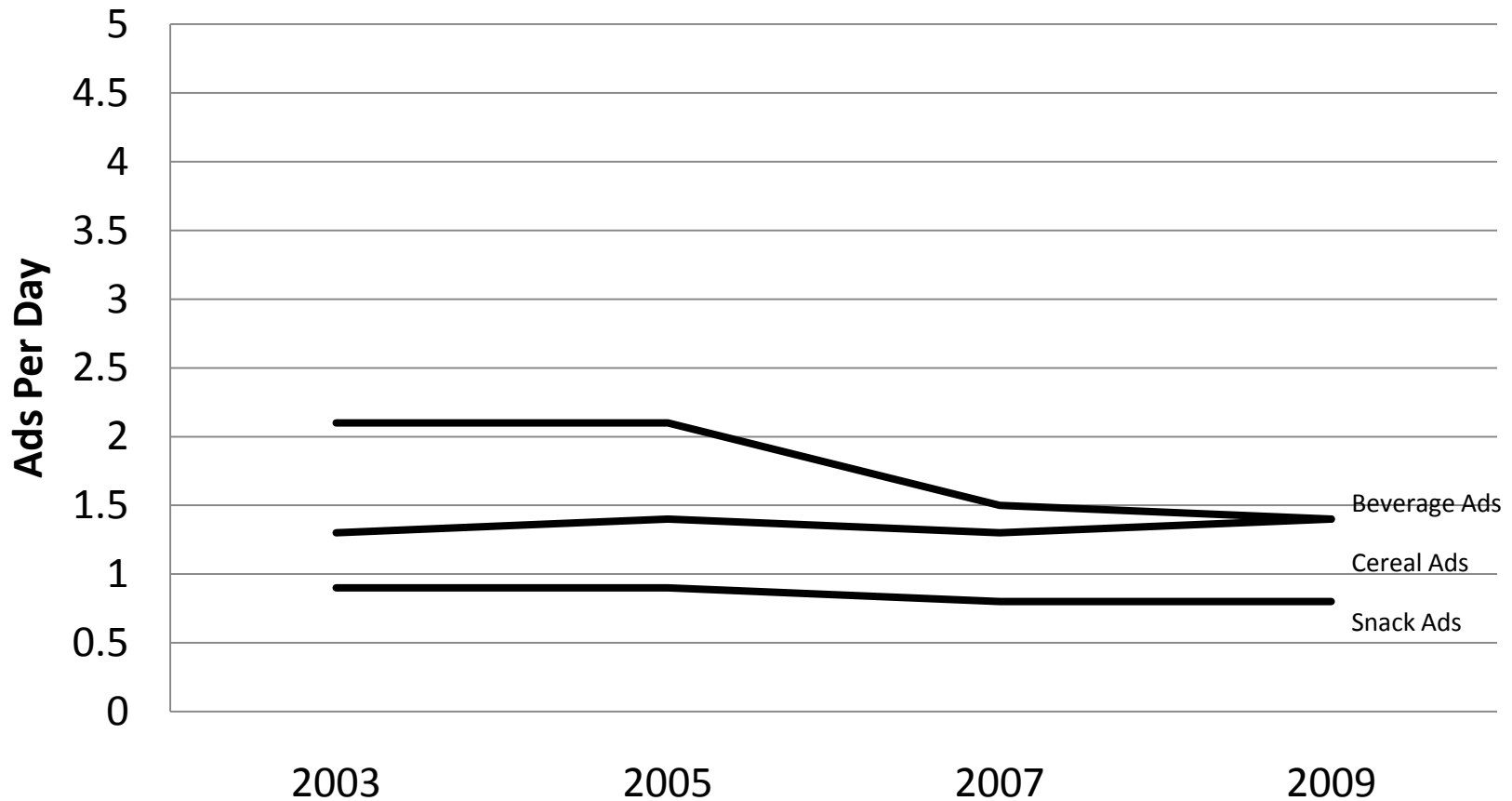
Exposure to Food Advertisements per Day for Adolescents by Year

Adolescents Ages 12-17 Years



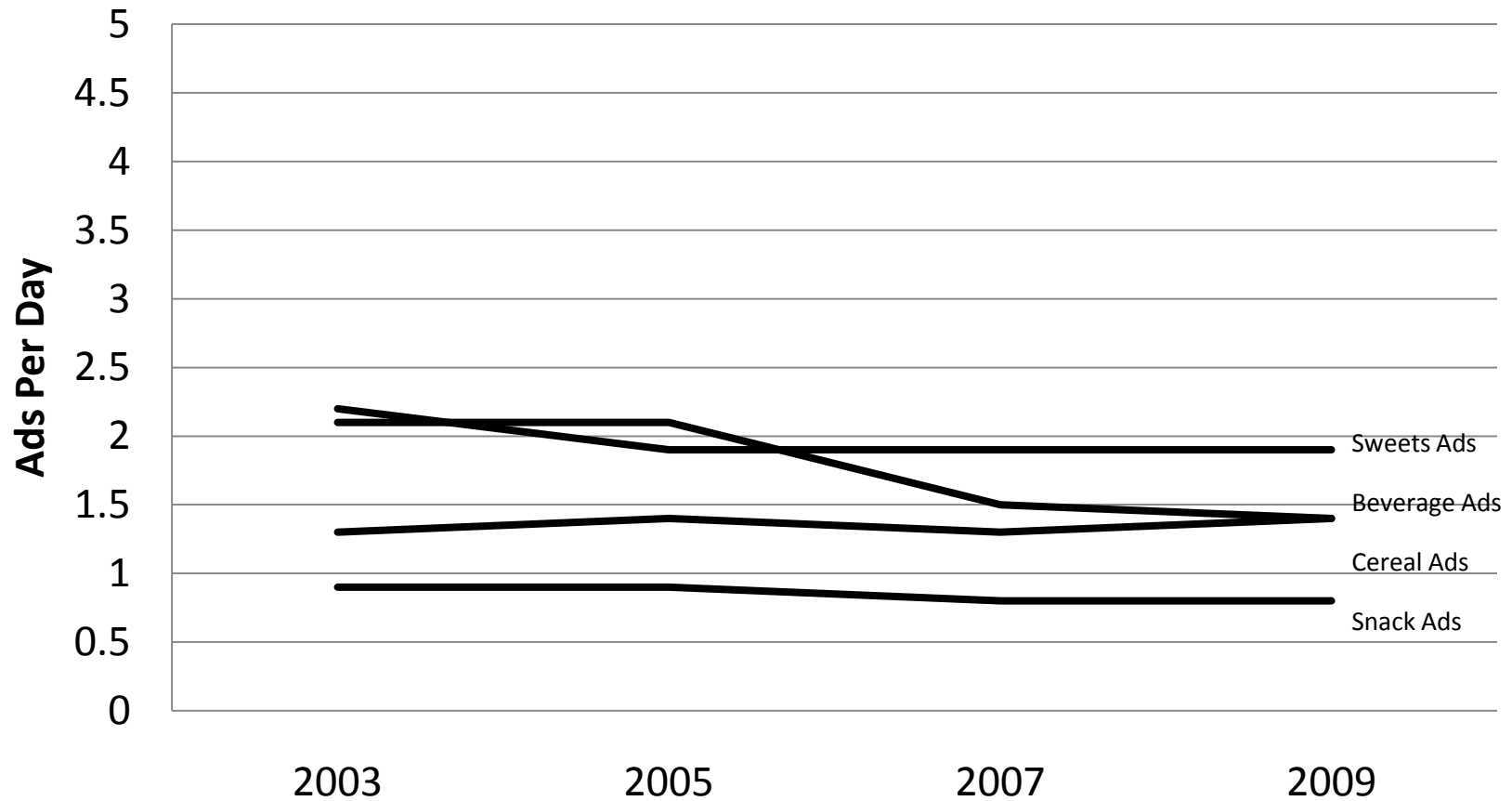
Exposure to Food Advertisements per Day for Adolescents by Year

Adolescents Ages 12-17 Years



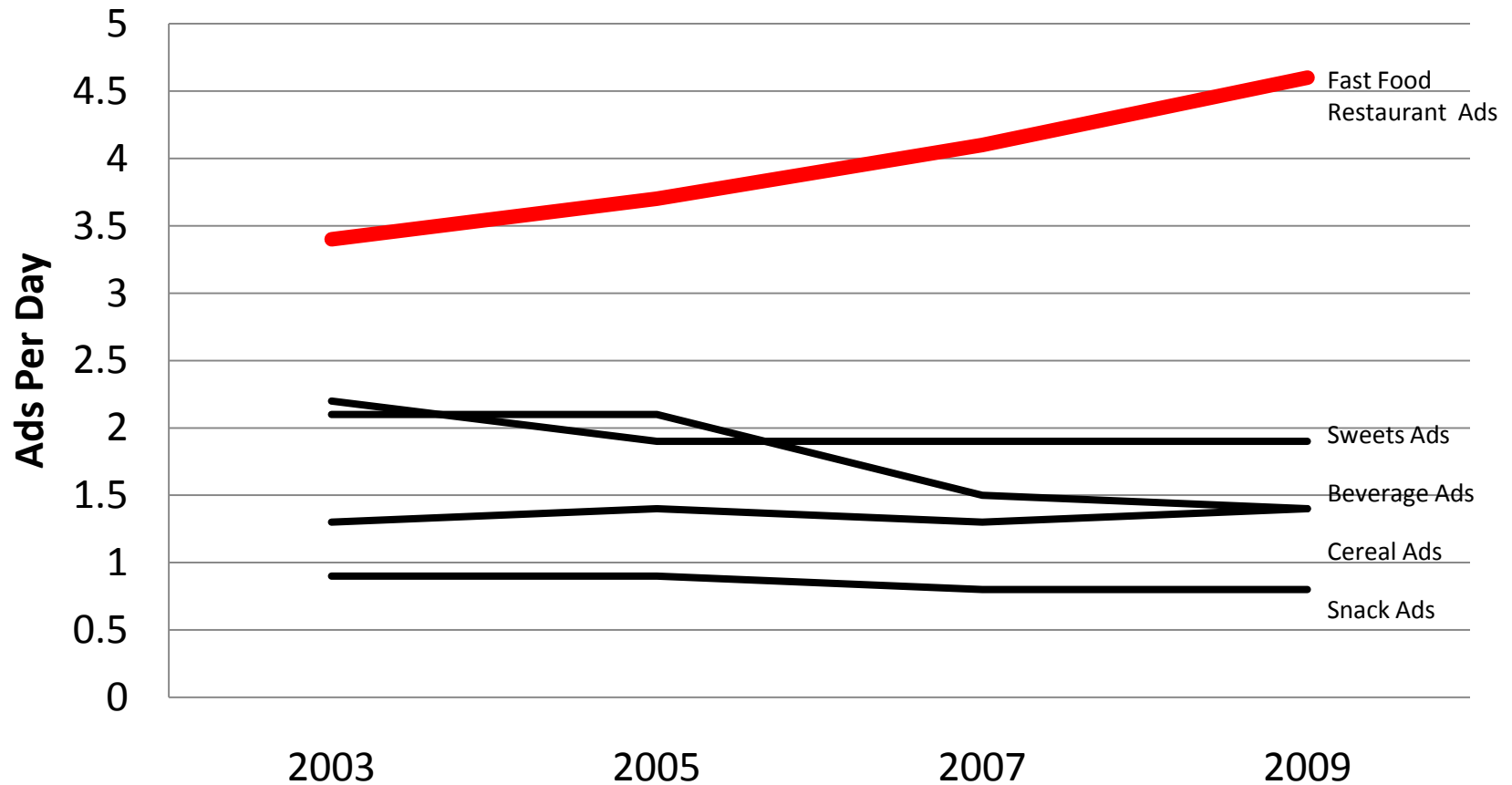
Exposure to Food Advertisements per Day for Adolescents by Year

Adolescents Ages 12-17 Years



Exposure to Food Advertisements per Day for Adolescents by Year

Adolescents Ages 12-17 Years



Nutritional Content

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Nutritional Content Analysis

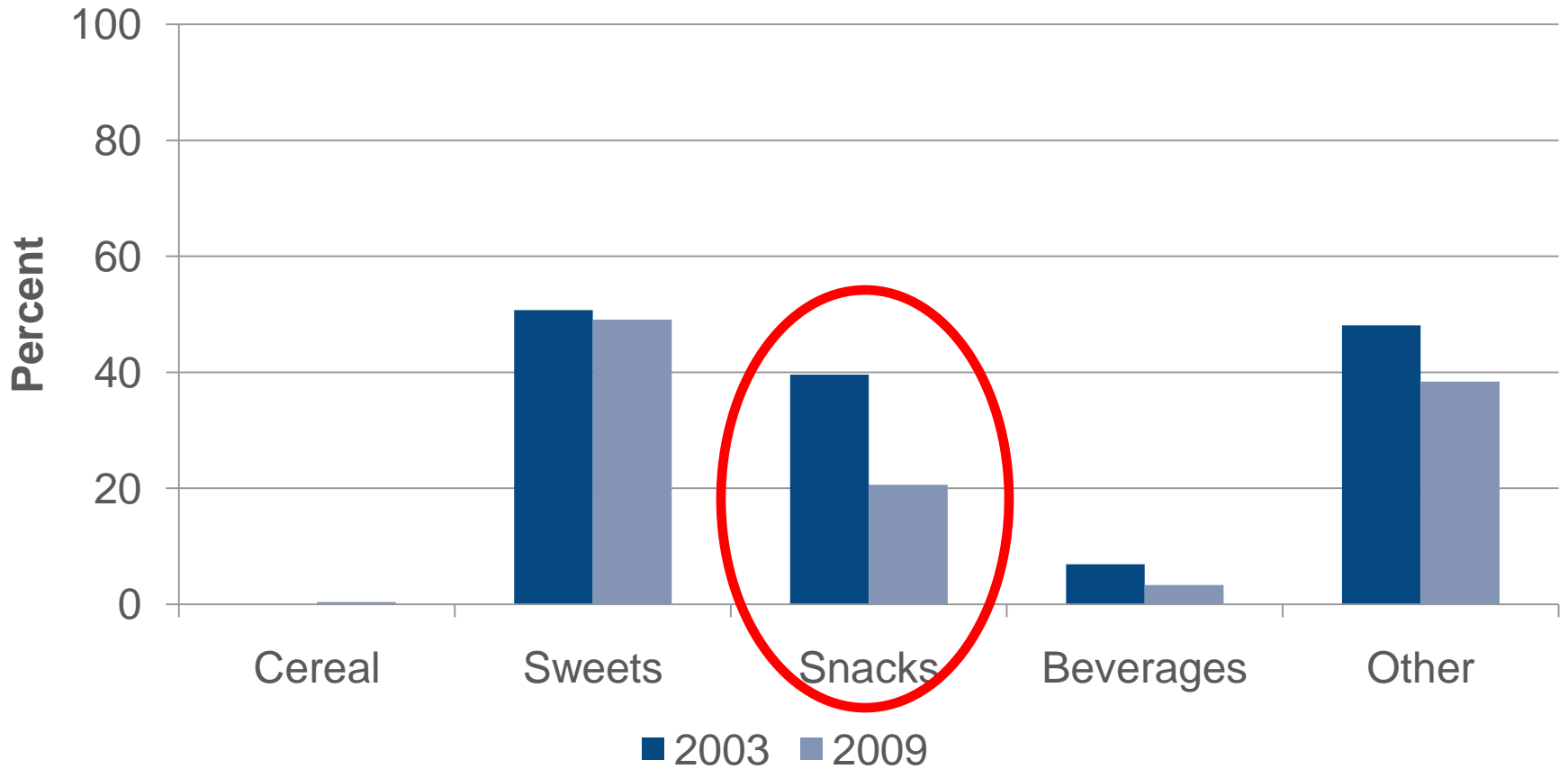
- Food and beverage advertisements were assessed on the basis of:
 - **Saturated Fat** (% Kcal): High >10% Kcal from saturated fat
 - **Sugar** (%Kcal): High >25% Kcal from sugar
 - **Sodium** (mg per 50g portion): High >200mg of sodium per 50g portion
 - **Fiber** (g per 50g portion): Low <1.15g of fiber per 50g portion
- Nutritional Content was weighted by the ratings data to provide estimates of exposure to nutritional content

Nutritional Content : Mean of Selected Measures All Food Ads Seen by Children and Adolescents

| | % Kcal Saturated Fat | | % Kcal Sugar | | Sodium (mg) per 50 g | | Fiber (g) per 50 g | |
|------------|----------------------|------|--------------|------|----------------------|-------|--------------------|------|
| | 2003 | 2009 | 2003 | 2009 | 2003 | 2009 | 2003 | 2009 |
| Ages 2-5 | 7.3 | 6.8 | 43.4 | 36.7 | 193.8 | 222.1 | 0.8 | 1.4 |
| Ages 6-11 | 7.3 | 6.9 | 44.1 | 36.7 | 190.6 | 222.3 | 0.8 | 1.3 |
| Ages 12-17 | 7.7 | 7.9 | 44.2 | 34.3 | 181.1 | 215.1 | 0.8 | 1.2 |

Food Ads High in Saturated Fat

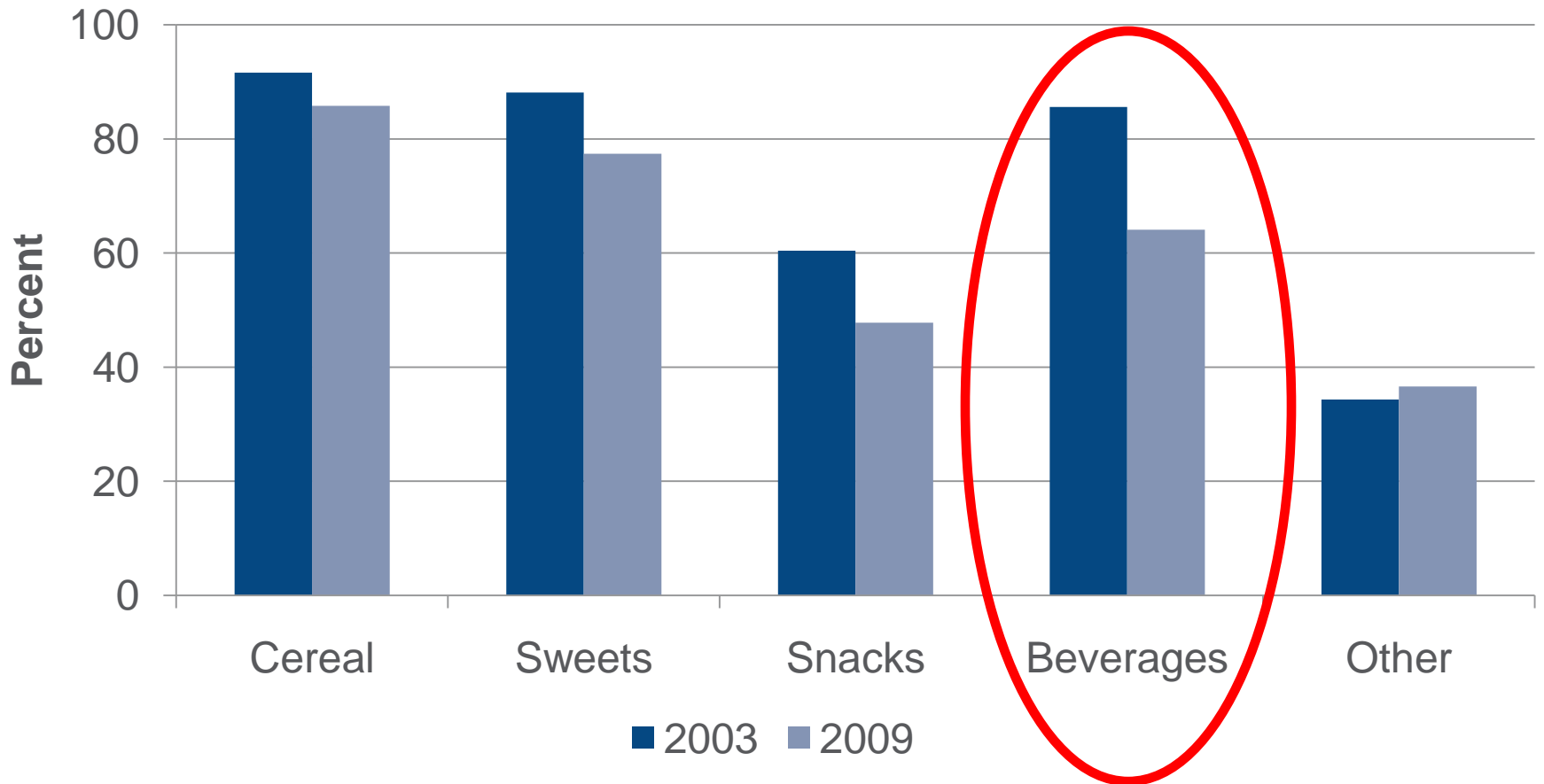
Children Ages 6-11 Years Old



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Food Ads High in Sugar

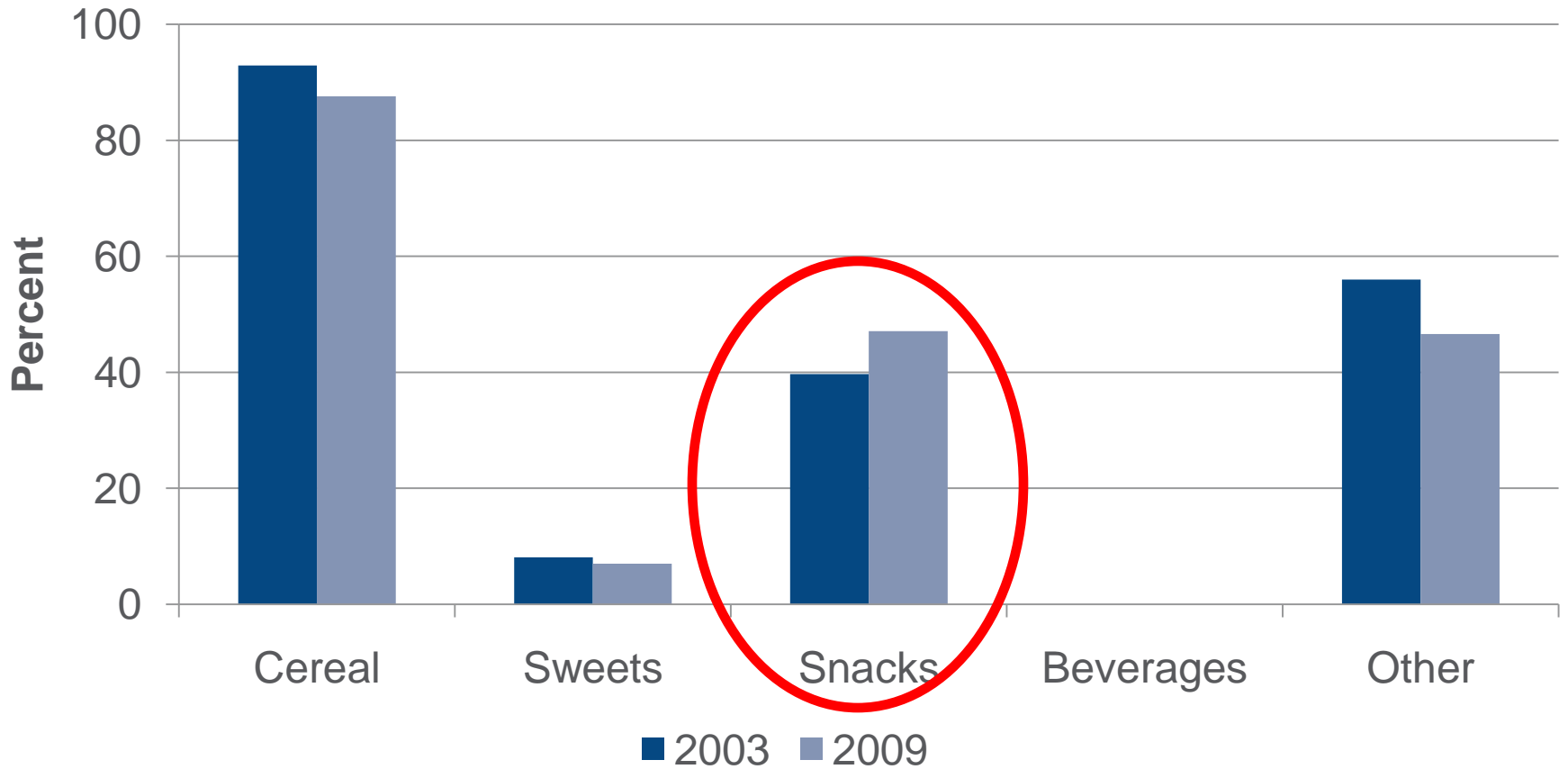
Children Ages 6-11 Years Old



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Food Ads High in Sodium

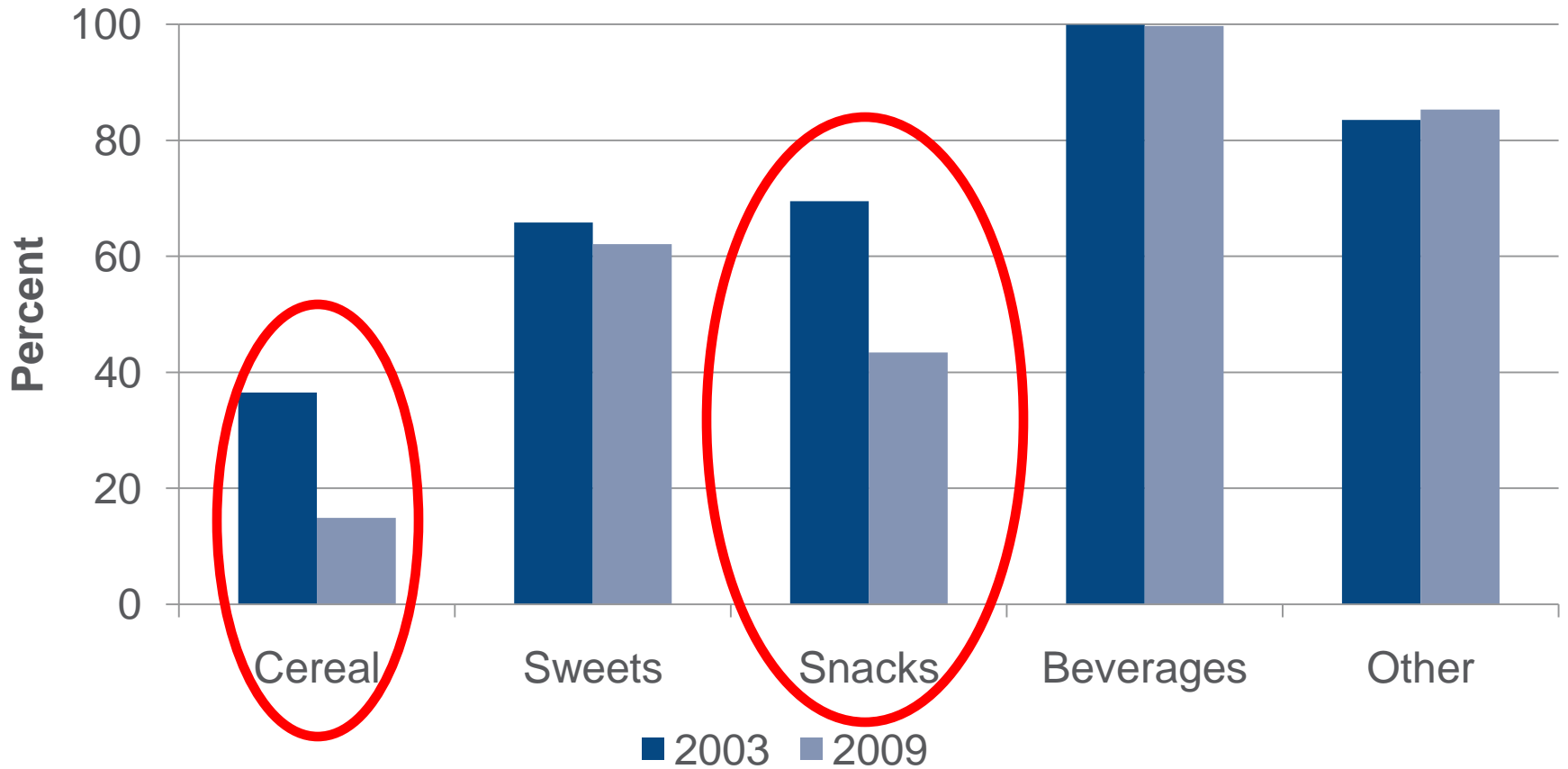
Children Ages 6-11 Years Old



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Food Ads Low in Fiber

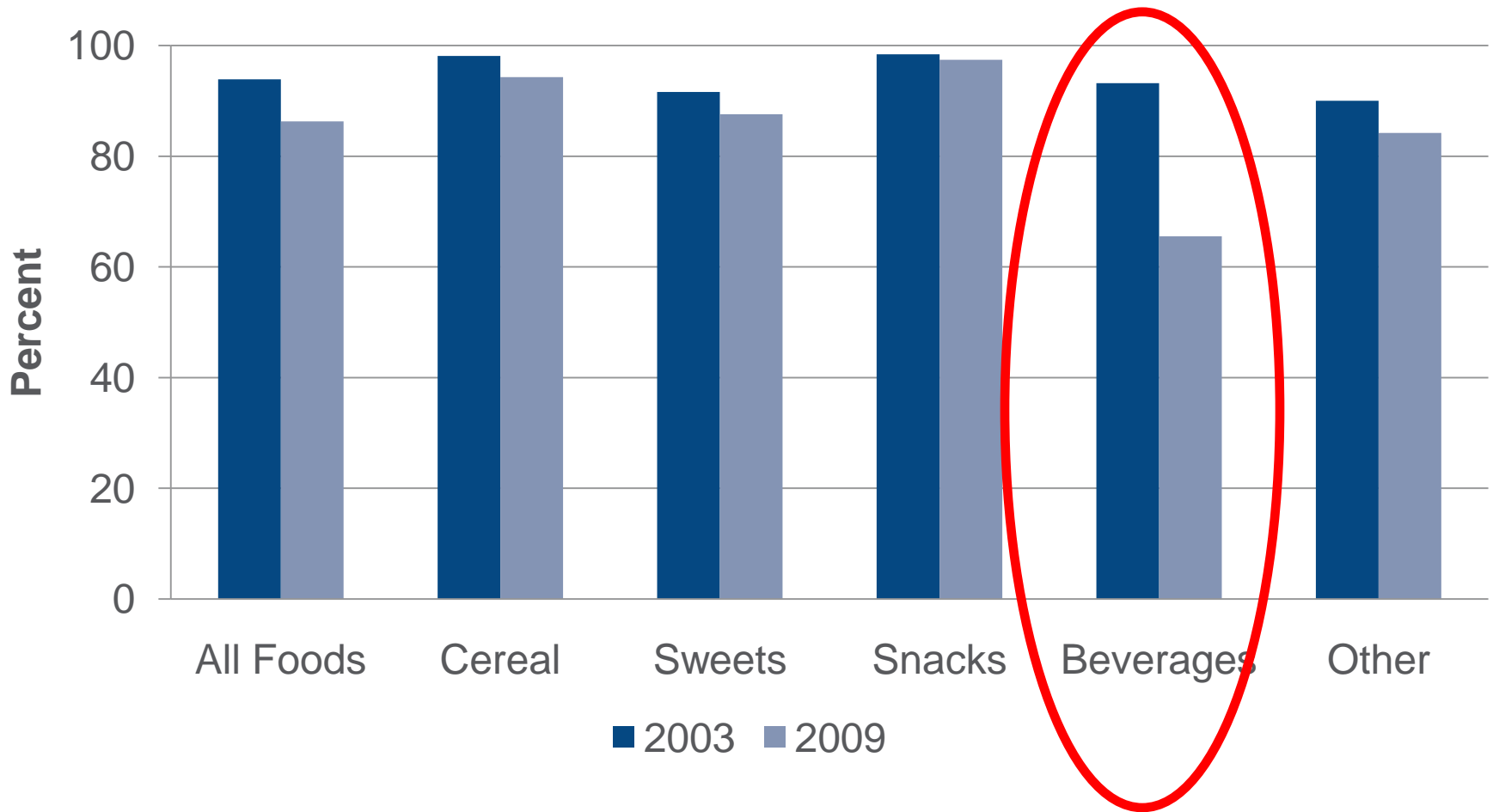
Children Ages 6-11 Years Old



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Food Ads High in Saturated Fat, Sugar or Sodium

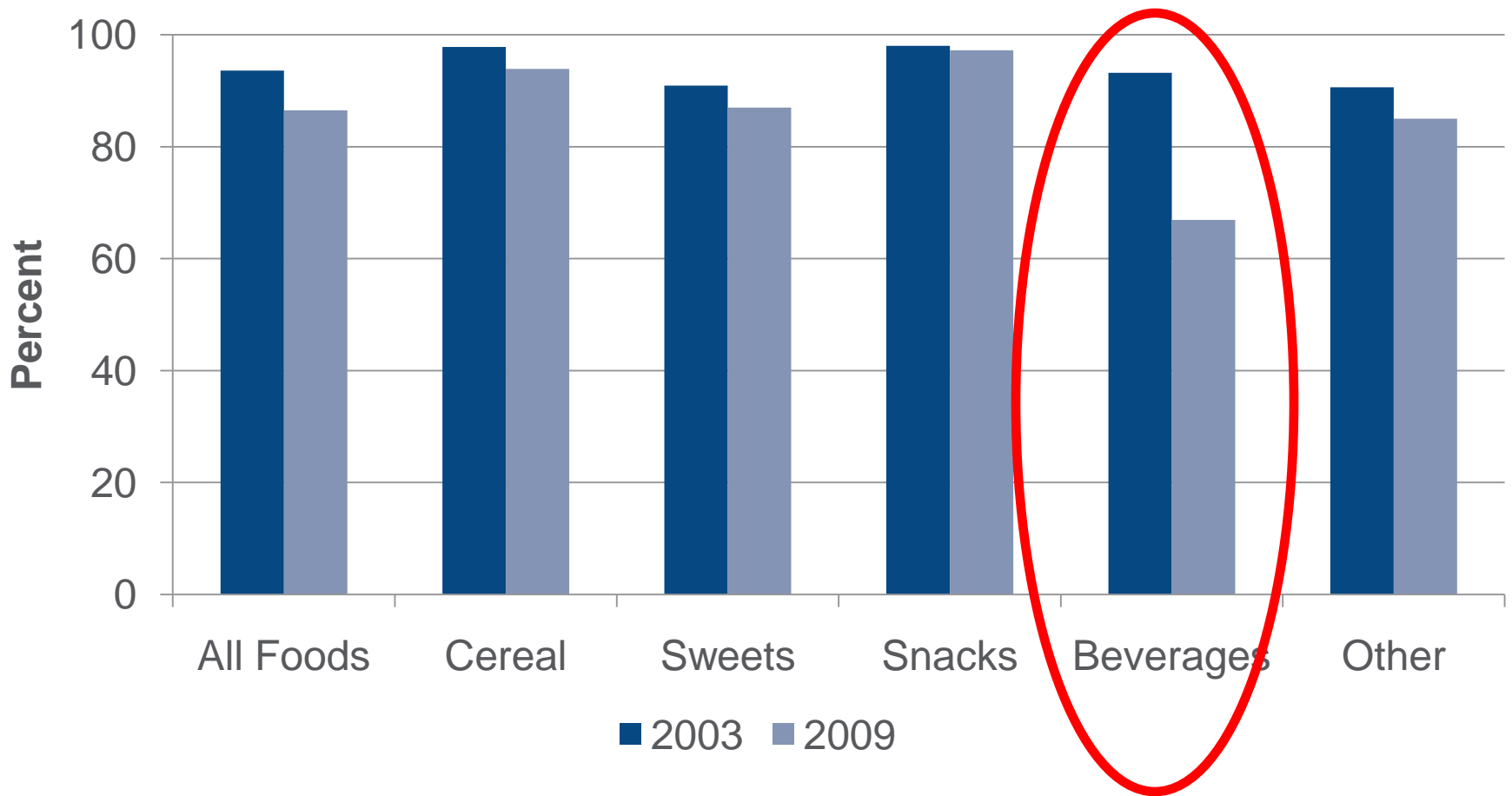
Children Ages 2-5 Years



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Food Ads High in Saturated Fat, Sugar or Sodium

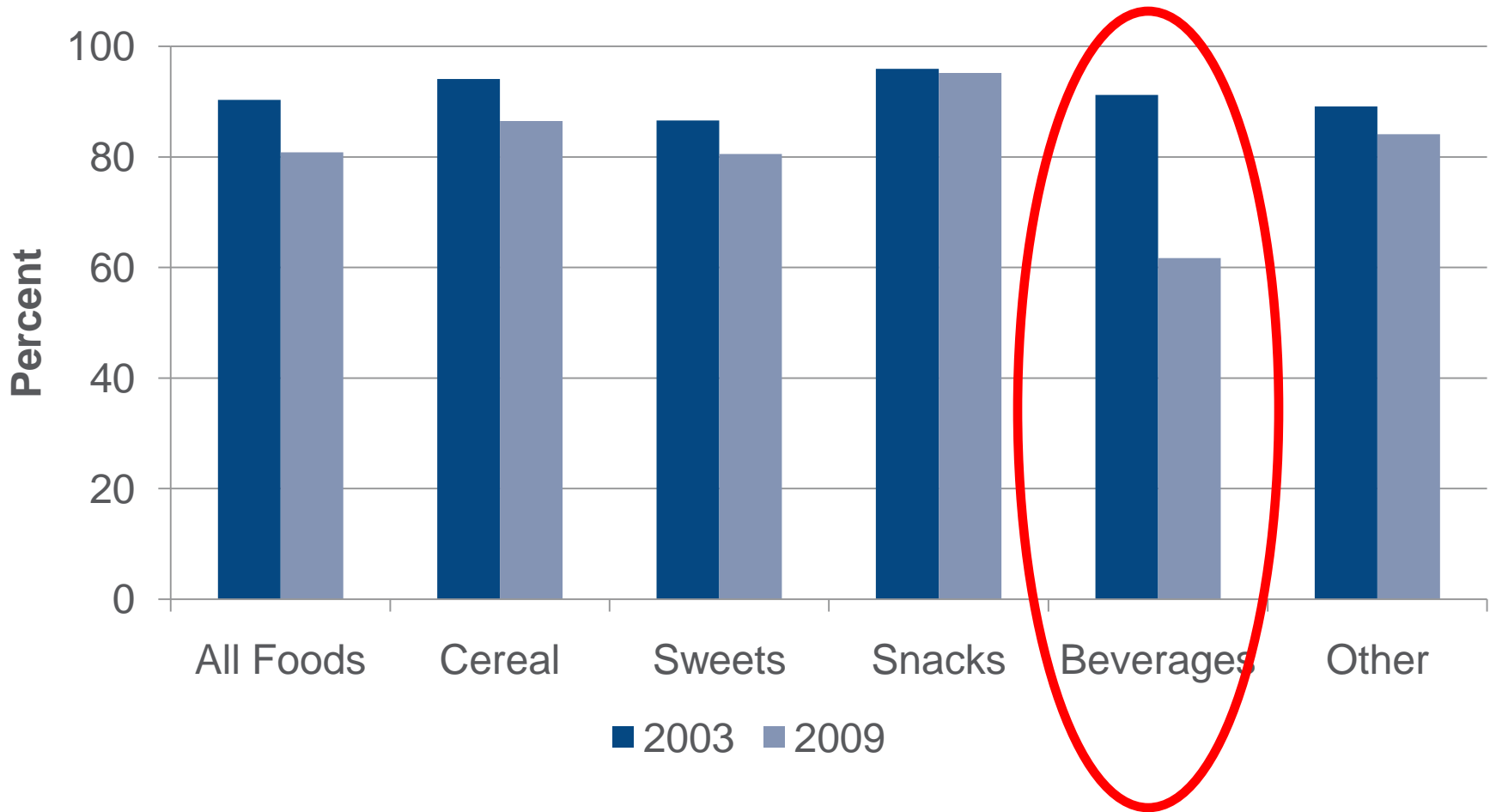
Children Ages 6-11 Years



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Food Ads High in Saturated Fat, Sugar or Sodium

Adolescents Ages 12-17 Years



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Exposure to Beverage Advertisements, by Type and Year Children Ages 2-5 Years

| | 2003 | 2009 | % Change 07-09 | % Change 03-09 |
|--------------------------------|------|------|----------------|----------------|
| High Sugar Beverage Ads | 1.16 | 0.52 | -31.0% | -55.6% |
| Regular Soft Drinks | 0.28 | 0.09 | 4.5% | -67.2% |
| Fruit Drinks | 0.39 | 0.19 | 100.7% | -51.9% |
| Bottled Water (Sugar Added) | 0.01 | 0.06 | -49.7% | 425.8% |
| Drinks - Isotonic | 0.13 | 0.05 | -51.7% | -62.7% |
| Other High Sugar Beverage | 0.36 | 0.13 | -62.1% | -62.7% |
| Low Sugar Beverage Ads | 0.19 | 0.31 | 19.3% | 58.0% |
| Diet Soft Drinks | 0.03 | 0.03 | -37.1% | 8.1% |
| Fruit Juices (100%) | 0.10 | 0.11 | 8.3% | 12.7% |
| Bottled Water | 0.02 | 0.02 | 19.4% | 15.2% |
| Milk (Unflavored) | 0.00 | 0.03 | 127.2% | 1425.5% |
| Other Low Sugar Beverage | 0.05 | 0.11 | 51.8% | 135.9% |

Exposure to Beverage Advertisements, by Type and Year Children Ages 6-11 Years

| | 2003 | 2009 | % Change 07-09 | % Change 03-09 |
|--------------------------------|------|------|----------------|----------------|
| High Sugar Beverage Ads | 1.34 | 0.63 | -28.4% | -52.8% |
| Regular Soft Drinks | 0.37 | 0.12 | 3.5% | -68.5% |
| Fruit Drinks | 0.42 | 0.24 | 108.9% | -43.5% |
| Bottled Water (Sugar Added) | 0.01 | 0.07 | -54.4% | 369.7% |
| Drinks - Isotonic | 0.15 | 0.06 | -54.0% | -59.8% |
| Other High Sugar Beverage | 0.38 | 0.15 | -60.3% | -61.0% |
| Low Sugar Beverage Ads | 0.23 | 0.35 | 27.3% | 57.0% |
| Diet Soft Drinks | 0.03 | 0.04 | -33.9% | 20.8% |
| Fruit Juices (100%) | 0.12 | 0.12 | 18.0% | 4.0% |
| Bottled Water | 0.02 | 0.02 | 36.2% | 15.7% |
| Milk (Unflavored) | 0.00 | 0.04 | 161.5% | 1318.9% |
| Other Low Sugar Beverage | 0.05 | 0.13 | 59.8% | 151.0% |

Exposure to Beverage Advertisements, by Type and Year Adolescents Ages 12-17 Years

| | 2003 | 2009 | % Change 07-09 | % Change 03-09 |
|--------------------------------|------|------|----------------|----------------|
| High Sugar Beverage Ads | 1.61 | 0.84 | -23.0% | -48.0% |
| Regular Soft Drinks | 0.67 | 0.24 | 8.2% | -63.8% |
| Fruit Drinks | 0.32 | 0.18 | 38.7% | -45.3% |
| Bottled Water (Sugar Added) | 0.03 | 0.09 | -47.0% | 242.0% |
| Drinks - Isotonic | 0.22 | 0.15 | -35.9% | -33.1% |
| Other High Sugar Beverage | 0.36 | 0.18 | -46.5% | -50.9% |
| Low Sugar Beverage Ads | 0.33 | 0.56 | 35.5% | 66.8% |
| Diet Soft Drinks | 0.06 | 0.07 | -39.8% | 24.2% |
| Fruit Juices (100%) | 0.16 | 0.17 | 31.0% | 6.3% |
| Bottled Water | 0.04 | 0.03 | 11.7% | -16.1% |
| Milk (Unflavored) | 0.00 | 0.04 | 65.9% | 817.4% |
| Other Low Sugar Beverage | 0.07 | 0.24 | 123.0% | 234.0% |

Number of Ads Seen and Nutritional Content (%) of Ads for Companies in the CFBAI Children Ages 2-5 Years

| | # of Ads per Day | | | % of Ads High in SFSUSO | | |
|----------------------|------------------|------|----------------|-------------------------|--------|----------------|
| | 2003 | 2009 | % Change 03-09 | 2003 | 2009 | % Change 03-09 |
| <i>Burger King</i> | 0.4 | 0.4 | 6.6% | NA | NA | NA |
| <i>Cadbury</i> | 0.1 | 0.1 | 9.9% | 0.0% | 17.2% | -- |
| <i>Campbell</i> | 0.3 | 0.3 | 4.1% | 88.2% | 70.7% | -19.8% |
| <i>Coca-Cola</i> | 0.2 | 0.1 | -57.1% | 93.9% | 41.4% | -56.0% |
| <i>ConAgra</i> | 0.3 | 0.3 | 7.0% | 63.9% | 63.1% | -1.2% |
| <i>Dannon</i> | 0.2 | 0.2 | 21.0% | 100.0% | 99.9% | -0.1% |
| <i>General Mills</i> | 2.4 | 2.0 | -16.2% | 97.2% | 97.4% | 0.2% |
| <i>Hershey</i> | 0.3 | 0.2 | -32.7% | 81.5% | 100.0% | 22.7% |
| <i>Kellogg</i> | 1.5 | 0.7 | -51.1% | 98.8% | 89.2% | -9.8% |
| <i>Kraft</i> | 1.3 | 0.6 | -51.5% | 97.7% | 94.3% | -3.5% |
| <i>Mars</i> | 0.7 | 0.2 | -64.7% | 95.5% | 75.1% | -21.4% |
| <i>McDonalds</i> | 0.8 | 0.8 | 4.0% | NA | NA | NA |
| <i>Nestle</i> | 0.4 | 0.3 | -37.0% | 91.0% | 72.3% | -20.5% |
| <i>Pepsi</i> | 0.6 | 0.2 | -70.9% | 91.7% | 81.6% | -11.0% |
| <i>Post</i> | 0.4 | 0.2 | -46.5% | 95.2% | 96.7% | 1.5% |
| <i>Unilever</i> | 0.2 | 0.1 | -66.4% | 95.1% | 92.2% | -3.0% |

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Number of Ads Seen and Nutritional Content (%) of Ads for Companies in the CFBAI Children Ages 6-11 Years

| | # of Ads per Day | | | % of Ads High in SFSUSO | | |
|----------------------|------------------|------|----------------|-------------------------|--------|----------------|
| | 2003 | 2009 | % Change 03-09 | 2003 | 2009 | % Change 03-09 |
| <i>Burger King</i> | 0.4 | 0.5 | 24.5% | NA | NA | NA |
| <i>Cadbury</i> | 0.1 | 0.1 | 40.8% | 0.0% | 24.3% | -- |
| <i>Campbell</i> | 0.3 | 0.3 | 17.1% | 88.5% | 69.6% | -21.4% |
| <i>Coca-Cola</i> | 0.2 | 0.1 | -57.3% | 94.5% | 44.8% | -52.6% |
| <i>ConAgra</i> | 0.2 | 0.3 | 22.8% | 66.2% | 62.8% | -5.2% |
| <i>Dannon</i> | 0.2 | 0.2 | 29.2% | 100.0% | 99.9% | -0.1% |
| <i>General Mills</i> | 2.2 | 2.3 | 6.4% | 96.6% | 97.3% | 0.7% |
| <i>Hershey</i> | 0.3 | 0.2 | -18.3% | 79.6% | 100.0% | 25.7% |
| <i>Kellogg</i> | 1.4 | 0.9 | -37.1% | 98.7% | 88.7% | -10.1% |
| <i>Kraft</i> | 1.3 | 0.8 | -41.0% | 97.5% | 94.9% | -2.7% |
| <i>Mars</i> | 0.7 | 0.3 | -56.5% | 95.3% | 74.0% | -22.3% |
| <i>McDonalds</i> | 0.8 | 1.0 | 29.7% | NA | NA | NA |
| <i>Nestle</i> | 0.4 | 0.3 | -33.8% | 92.6% | 73.7% | -20.5% |
| <i>Pepsi</i> | 0.6 | 0.2 | -67.6% | 90.8% | 82.4% | -9.3% |
| <i>Post</i> | 0.4 | 0.3 | -33.0% | 94.7% | 96.9% | 2.3% |
| <i>Unilever</i> | 0.2 | 0.1 | -57.7% | 96.8% | 91.7% | -5.2% |

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Number of Ads Seen and Nutritional Content (%) of Ads for CFBAI vs. Non CFBAI Companies

| | # of Ads per Day | | | % of Ads High in SFSUSO | | |
|---|------------------|------|----------------|-------------------------|-------|----------------|
| | 2003 | 2009 | % Change 03-09 | 2003 | 2009 | % Change 03-09 |
| Age 2-5 | | | | | | |
| CFBAI Companies Food and Beverage Products Subtotal | 8.7 | 5.4 | -37.5% | 94.0% | 88.2% | -6.2% |
| Non CFBAI Companies Food and Beverage Products Subtotal | 1.4 | 1.4 | -1.3% | 93.3% | 79.0% | -15.3% |
| CFBAI Fast Food Companies Subtotal | 1.2 | 1.3 | 4.9% | NA | NA | NA |
| Non CFBAI Fast Food Companies Subtotals | 1.1 | 1.5 | 38.8% | NA | NA | NA |
| Age 6-11 | | | | | | |
| CFBAI Companies Food and Beverage Products Subtotal | 8.6 | 6.4 | -25.2% | 93.6% | 88.2% | -5.8% |
| Non CFBAI Companies Food and Beverage Products Subtotal | 1.6 | 1.5 | -2.2% | 93.6% | 79.4% | -15.2% |
| CFBAI Fast Food Companies Subtotal | 1.2 | 1.5 | 27.9% | NA | NA | NA |
| Non CFBAI Fast Food Companies Subtotals | 1.5 | 1.9 | 33.1% | NA | NA | NA |

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Summary: Results of CFBAI Companies

- General Mills remains the largest advertiser; moderate reduction in ads seen by 2-5y (-16%) and an increase for 6-11y (6%). 97% of ads seen are for unhealthy products.
- Kellogg and Kraft ads are both down by about 40-50% for children, but about 9/10 ads still seen are for unhealthy products.
- Coke ads are down substantially (-57%), only company other than Cadbury with less than 50% of ads for unhealthy products.
- Pepsi ads down substantially (-70%), although 82% remain for unhealthy products.
- Overall, there were significantly fewer food and beverage product ads seen by children from CFBAI companies (-38%) compared to the 1% reduction in non-CFBAI food companies. But that the vast majority of the CFBAI company ads (**88%**) seen, in 2009, continued to be for products that were high in either saturated fat, sugar or sodium.

Summary and Policy Implications

General Summary of Trends in Ad Content

- Positive reductions in exposure to food and beverage ads from 2003-09:
 - -33%, -22% and -4% for 2-5y, 6-11y and 12-17y olds, respectively
 - Cereal: -30% for 2-5y; -11% for 6-11y
 - Sweets: -55% for 2-5y; -44% for 6-11y
 - Snacks: -43% for 2-5y; -32% % for 6-11y
 - Beverages: -43% for 2-5y; -41% for 6-11y
- But fast food ad exposure up substantially between 2003 and 2009:
 - +21%, +31% and +37% for 2-5y, 6-11y and 12-17y olds, respectively
- The vast majority of ads seen in 2009 continue to be for products that are either high in saturated fat, sugar, or sodium:
 - 86%, 87% and 81% of ads seen by 2-5y, 6-11y and 12-17y olds, respectively

Policy Implications of Trends in Ad Content

- Children, on average, continue to see more than 10 food-related ads on TV every day (teens see almost 15 ads per day)
- Children and teens continue to be exposed mainly to food and beverage ads for products that are high in saturated fat, sugar or sodium
- Study results suggest that industry self-regulation is limited in its effectiveness to substantially improve food-related advertising seen by children on TV
- Key issues of concern for policymakers regarding CFBAI self-regulation:
 - No uniform nutritional standards
 - No uniform definition of child audiences
 - Does not address reach of ads in non-child programming
 - Does not apply to children age 12 and over

Institute for Health Research and Policy, UIC

<http://www.ihrp.uic.edu>

ImpacTeen

<http://www.impacteen.org>

Bridging the Gap

<http://www.bridgingthegapresearch.org>

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Bridging the Gap ImpacTeen Project**