Obesity, Physical Activity, and Nutrition in Santa Clara County

Yan Zhong, PhD
Pamela Stoddard, PhD
Santa Clara County Public Health Department
Chronic Disease and Injury Prevention All-Center Meeting
June 11, 2013
Data Sources

- **Infants**
  - California Department of Public Health, 2010 Vital Statistics

- **Children/Adolescents/Youth:**
  - Pediatric Nutrition Surveillance (PedNSS), 2010
  - 2001-2007 California Healthy Kids Survey
  - 2007-2009 California Health Interview Survey
  - California Department of Education, 2007-2012 FITNESSGRAM

- **Adults**
  - Santa Clara County Public Health Department, 2000-2009 Behavioral Risk Factor Survey
  - Communities Putting Prevention to Work, 2010 Behavioral Risk Factor Survey
  - California Dietary Practices Survey, Santa Clara County sample 2011
  - California Health Interview Survey, 2007-2009
Report Topics

- **Overweight and obesity**
  - Overweight and obesity
  - Weight management
  - Maternal BMI and infant birth weight

- **Physical activity**
  - Physical activity
  - Sedentary behaviors
  - Physical fitness standards
  - Neighborhood walkability
  - Household and workplace physical activity policies

- **Nutrition**
  - Healthy nutrition
  - Fast food consumption
  - Menu labeling
  - Food stamp participation
  - Beverage consumption
  - Consumption of foods linked with higher intake of SSBs
  - Neighborhood food access
  - Food advertising and marketing
  - Household and workplace food and beverage policies
Overweight and Obesity

- Overweight and obesity
- Weight management
- Maternal BMI and infant birth weight
Percentage of Overweight or Obese Adults by Race/Ethnicity

Source: Santa Clara County Public Health Department, 2009 Behavioral Risk Factor Survey
Percentage of Overweight/Obese Adults by Race/Ethnicity, 2000-2009

Source: Santa Clara County Public Health Department, 2009 Behavioral Risk Factor Survey
Percentage of Fifth, Seventh, and Ninth Graders Who Are Overweight or Obese, 2008-2012

Source: California Department of Education, 2008-2012 FITNESSGRAM
## Infant Birth Weight Status by Mother’s Pre-pregnancy Body Mass Index

<table>
<thead>
<tr>
<th>Mother’s Pre-Pregnancy BMI</th>
<th>Infant Birth Weight (%)</th>
<th>Underweight (BMI &lt; 18.5)</th>
<th>Normal (18.5 ≤ BMI &lt; 25)</th>
<th>Overweight (25 ≤ BMI &lt; 30)</th>
<th>Obese (BMI ≥ 30)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very low birth weight (&lt; 1500g)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Low birth weight (1500-2499g)</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Normal birth weight (2500-3999g)</td>
<td>88</td>
<td>87</td>
<td>84</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>High birth weight (≥4000g)</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>13</td>
</tr>
</tbody>
</table>

Note: Percentages may not add to 100% due to rounding.

Source: California Department of Public Health, 2010 Vital Statistics
Physical Activity

- Physical activity (adults, youth)
- Sedentary behaviors
- Physical fitness standards
- Neighborhood walkability
- Household and workplace physical activity policies
Percentage of Adults Meeting CDC Recommendations for Aerobic Physical Activity by Race/Ethnicity

Source: UCLA Center for Health Policy Research, 2007 California Health Interview Survey
Physical Activity and Sedentary Behaviors Among Youth, 2007 -2009

- Walked, bicycled or skateboarded home from school at least once a week
  - 35% of children (ages 5-11 who attended school)
  - 45% of adolescents (ages 12-19)
  - Fewer adolescent girls (38%) engaged in these activities than boys (52%).

- Visited a park or playground at least once in the past month
  - Eighty-two percent (82%) of children ages 1 or older
  - 77% of adolescents
  - Asian (73%) & Latino (76%) children < Whites (92%) and SCC overall (82%)
  - More adolescent boys (88%) visited than girls (66%)

- Watched TV or played video games for two or more hours
  - 59% of children and 64% of adolescents

- Used a computer for fun for at least two hours
  - 24% of children and 44% of adolescents

Source: California Health Interview Survey, 2007-2009
## Physical Activity Among Adolescents

<table>
<thead>
<tr>
<th>Location</th>
<th>Attended daily PE classes %</th>
<th>Daily physical activity %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Clara County</td>
<td>40</td>
<td>56</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seventh</td>
<td>78</td>
<td>62</td>
</tr>
<tr>
<td>Ninth</td>
<td>38</td>
<td>61</td>
</tr>
<tr>
<td>Eleventh</td>
<td>15</td>
<td>47</td>
</tr>
</tbody>
</table>

Source: California Healthy Kids Survey, 2007-2008
Other topics include:

- Exercised three or more days in the past week to strengthen or tone muscles
- Watched TV or played video games for at least two hours on an average school day
- By sex, grade level, and race/ethnicity
- Trends for daily physical activity
Percentage of Youth Who Met Physical Fitness Standards by Grade, 2007-2011

Source: California Department of Education, 2007-2011 FITNESSGRAM
Percentage of Fifth Graders Meeting Physical Fitness Standards by Race/Ethnicity, 2007-2011

Source: California Department of Education, 2007-2011 FITNESSGRAM
## Perceptions of Neighborhood Walkability and Access to Physical Activity Among Adults

<table>
<thead>
<tr>
<th>Santa Clara County</th>
<th>Sidewalks, shoulders of the road, trails, or parks in home neighborhood are safe for walking, running, or biking (%)</th>
<th>Have access to safe public indoor or outdoor exercise facilities, such as tracks, basketball or tennis courts, swimming pools, or school gyms in home neighborhood (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>92</td>
<td>83</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Latino</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>96</td>
<td>85</td>
</tr>
</tbody>
</table>

**Source:** California Dietary Practices Survey, Santa Clara County Sample, 2011
# Household Physical Activity Policies by Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/ Ethnicity</th>
<th>Limited amount of time child(ren) watch TV (%)</th>
<th>Allowed child to walk or bike to or from school (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Clara County</td>
<td>69</td>
<td>62</td>
</tr>
<tr>
<td>Race/ Ethnicity</td>
<td>72</td>
<td>65</td>
</tr>
<tr>
<td>White</td>
<td>63</td>
<td>68</td>
</tr>
</tbody>
</table>

**Source:** California Dietary Practices Survey, Santa Clara County Sample, 2011
## Workplace Physical Activity Policies

Indoor or outdoor facilities available that make it easier to be physically active during work hours (%)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Latino</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Clara County</td>
<td>54</td>
<td>59</td>
</tr>
</tbody>
</table>

Employer provided physical activity benefits such as gym membership, sports teams, exercise classes (%)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Latino</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Clara County</td>
<td>34</td>
<td>41</td>
</tr>
</tbody>
</table>

**Source:** California Dietary Practices Survey, Santa Clara County Sample, 2011
Nutrition

- Healthy nutrition
- Fast food consumption
- Beverage consumption
- Neighborhood food access
- Household food and beverage policies
- Workplace food and beverage policies
Consumption of at Least Five Servings of Fruits and Vegetables the Previous Day Among Adults by Sex, 2004-2010

Source: Santa Clara County Public Health Department, 2004-2009 Behavioral Risk Factor Survey; Communities Putting Prevention to Work, 2010 Behavioral Risk Factor Survey
## Consumption of Fast Food Among Adults

<table>
<thead>
<tr>
<th></th>
<th>Consumed fast food one or more times in the past week (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Clara County</td>
<td>40</td>
</tr>
<tr>
<td>Age Group</td>
<td></td>
</tr>
<tr>
<td>18-44</td>
<td>46</td>
</tr>
<tr>
<td>45-64</td>
<td>35</td>
</tr>
<tr>
<td>65+</td>
<td>28</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>43</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>37</td>
</tr>
<tr>
<td>Latino</td>
<td>49</td>
</tr>
<tr>
<td>White</td>
<td>36</td>
</tr>
</tbody>
</table>

*Source: Santa Clara County Public Health Department, 2009 Behavioral Risk Factor Survey*
Healthy Nutrition and Fast Food Consumption Among Children and Adolescents

- **Consumed Five or More Servings of Fruits and Vegetables the Previous Day**
- **Ate Fast Food One or More Times in Past Week**

**Children (6-11 yrs)**
- 39%

**Adolescents (12-19 yrs)**
- 68%
- 74%

**Source:** California Health Interview Survey, Children & Teens, 2007 & 2009
Consumption of Beverages Among Adults

![Bar chart showing consumption of beverages among adults.](chart)

- **Soda**: 9%
- **Sugar-Sweetened Fruit Drink**: 9%
- **100% Pure Fruit Juice**: 18%
- **Water**: 46%

<table>
<thead>
<tr>
<th>Beverage</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soda</td>
<td>9%</td>
</tr>
<tr>
<td>Sugar-Sweetened Fruit Drink</td>
<td>9%</td>
</tr>
<tr>
<td>100% Pure Fruit Juice</td>
<td>18%</td>
</tr>
<tr>
<td>Water</td>
<td>46%</td>
</tr>
</tbody>
</table>

- At least once per day in past month
- 4+ times/day in past week

**Source:** Communities Putting Prevention to Work, 2010 Behavioral Risk Factor Survey
Bottled and Tap Water Preferences Among Adults by Race/Ethnicity

Source: California Dietary Practices Survey, Santa Clara County sample, 2011
Soda Consumption Among Middle and High School Students by Race/Ethnicity, 2001-2008

Source: California Healthy Kids Survey, 2001-2008
Perceptions of Neighborhood Food Access by Race/Ethnicity & Income

<table>
<thead>
<tr>
<th></th>
<th>Often or always could easily find a variety of good quality, affordable, fresh fruits and vegetables that they want (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Clara County</td>
<td>81</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td>65</td>
</tr>
<tr>
<td>White</td>
<td>90</td>
</tr>
<tr>
<td>Household Income</td>
<td></td>
</tr>
<tr>
<td>&lt;$20,000</td>
<td>49</td>
</tr>
<tr>
<td>$20,000-$49,999</td>
<td>85</td>
</tr>
<tr>
<td>$50,000-$74,999</td>
<td>80</td>
</tr>
<tr>
<td>$75,000+</td>
<td>86</td>
</tr>
</tbody>
</table>

Source: California Dietary Practices Survey, Santa Clara County sample, 2011
Other topics include:

- Whether hard to get fruits and vegetables at restaurants
- Hard to get fruits and vegetables at fast food restaurants
- Hard to get fruits and vegetables at workplace
- Fruits and vegetables are too expensive
## Household Nutrition Policies Among Adults by Selected Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Limit how much soda and other sugary beverages child(ren) drink(s) at home (%)</th>
<th>Limit number of times per week or month family ate at fast food restaurants (%)</th>
<th>All family members who live in the household ate a meal together most or everyday in the past week (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Clara County</td>
<td>90</td>
<td>71</td>
<td>66</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td>96</td>
<td>80</td>
<td>46</td>
</tr>
<tr>
<td>White</td>
<td>92</td>
<td>63</td>
<td>72</td>
</tr>
</tbody>
</table>

**Source:** California Dietary Practices Survey, Santa Clara County Sample, 2011
Workplace Food Policies Among Adults

- Healthy Foods Available at Cafeteria: 85%
- Healthy Beverages Available at Cafeteria: 91%
- Healthy Foods Available at Vending Machines: 15%
- Workplace Provided Farmers’ Market, Produce Delivery or Free Fresh Fruit Snack: 17%

Source: California Dietary Practices Survey, Santa Clara County Sample, 2011
Obesity and overweight
- Overweight/obesity among Santa Clara County adults increased from 52% in 2000 to 55% in 2009.
- Seventeen percent of fifth-, seventh-, and ninth-graders in Santa Clara County were overweight and 16% were obese.

Physical Activity
- Only about 1 in 2 adults (57%) in Santa Clara County met CDC’s recommendations for physical activity.
- On a typical weekend day, over half of children (59%) and nearly two-thirds of adolescents (64%) watched television or played video games for two or more hours.
- Forty percent of middle and high school students attended daily physical education (PE) class and 56% engaged in daily physical activity.
Nutrition

- Only 18% of adults reported consuming five or more servings of fruits and vegetables the previous day.
- Approximately 4 in 10 children ages 6-11 (39%) ate five or more fruits and vegetables the previous day.
- From 2001 to 2008, the percentage of middle and high school students consuming one or more glasses of soda the previous day decreased from 71% to 55%.
- Fewer Latino (65%) than White adults (90%) reported they often or always could find a variety of high quality and affordable produce to purchase in their neighborhood.
- Nearly all adults (90%) limited the amount of sugar-sweetened beverages children are allowed to drink at home.
Questions?