Obesity Epidemic: healthy eating and active living make a difference!

Barb Alberson, MPH, Sr. Deputy Director
San Joaquin County Public Health Services
The Obesity Epidemic

Is it really as bad as they say?

Yes!
Why do we focus on Obesity Prevention?

Major risk factor for many chronic diseases (leading causes of death and disability in the U.S.)
Obesity Trends* Among U.S. Adults, BRFSS 1985

(*BMI ≥30, or ~ 30 lbs. overweight for 5’ 4” person)

Map of Obesity Trends in the United States for 1985, showing the percentage of adults with obesity in different states. The map colors indicate the percentage of adults with obesity: No Data (white), <10% (light blue), and 10%-14% (dark blue).
Obesity Trends* Among U.S. Adults, BRFSS 1995

(*BMI ≥30, or ~ 30 lbs. overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults, BRFSS 2005

(*BMI ≥30, or ~30 lbs. overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults, BRFSS 2014
(*BMI ≥30, or ~ 30 lbs. overweight for 5’ 4” person)
Bringing it home. . .

Prevalence of Obesity among Adults (%)

Source: California Health Interview Survey (CHIS)
* San Joaquin County Underweight estimates are statistically unstable
Almost 45,000 adults have diabetes in San Joaquin County;

And, if you add in those considered pre-diabetic, that’s more than 48% of our adults!

(CHIS 2013-2014 pooled estimates)
Compared to the other 57 counties in California, San Joaquin County has the 4th highest diabetes-related age-adjusted death rate.

(Source: County Health Status Profiles 2016—California Department of Public Health)
Not just adults, our children are at risk...

- 1 in 7 youth ages 6–19 is overweight
- If the current trend continues, of those children born in 2000
  - 32.8% of boys and 38.5% of girls will develop diabetes
- 1st generation in history who may not live as long as their parents

### Body Composition

<table>
<thead>
<tr>
<th>Grade 5</th>
<th>Stockton</th>
<th>Manteca</th>
<th>Tracy</th>
<th>Lincoln</th>
<th>Lodi</th>
<th>Ripon</th>
<th>Escalon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Fitness Zone</td>
<td>50.0%</td>
<td>58.0%</td>
<td>61.0%</td>
<td>64.8%</td>
<td>57.3%</td>
<td>65.4%</td>
<td>61.5%</td>
</tr>
<tr>
<td>Needs Improvement</td>
<td>19.7%</td>
<td>19.7%</td>
<td>19.4%</td>
<td>16.3%</td>
<td>20.4%</td>
<td>19.8%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Health Risk</td>
<td>30.3%</td>
<td>22.3%</td>
<td>19.6%</td>
<td>18.9%</td>
<td>22.3%</td>
<td>14.8%</td>
<td>24.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade 7</th>
<th>Stockton</th>
<th>Manteca</th>
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<th>Lincoln</th>
<th>Lodi</th>
<th>Ripon</th>
<th>Escalon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Fitness Zone</td>
<td>53.1%</td>
<td>57.4%</td>
<td>61.4%</td>
<td>61.7%</td>
<td>58.3%</td>
<td>63.2%</td>
<td>57.8%</td>
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<td>21.5%</td>
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<td>18.2%</td>
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- California Physical Fitness Report measures 6 major fitness areas: aerobic capacity, abdominal strength and endurance, upper body strength and endurance, body composition, trunk extensor strength and flexibility, and flexibility.
- Body Composition can be measured by skinfold measurements, body mass index, or bioelectric impedance analyzer.

Source: California Department of Education, Physical Fitness Test
Do Obese Children Become Obese Adults?

- About a third (26-41%) of obese preschool children are obese as adults.
- About half (42-63%) of obese school-aged children are obese as adults.

California Center for Physical Activity, 2009
Why Is This Epidemic Happening?

- VERY complex issue!
- Variety of factors play a role:
  - behavior
  - environment
  - genetic
  - culture
  - socioeconomic status
35.5% of adults do not engage in recommended levels of physical activity: 30 min./day

78% of children fall short of the recommended minimum dose of activity: 60 min./day

Children spend more time watching TV in a year than they do attending school.
## 2014-2015 California Physical Fitness Report

Percent of students who meet all 6 major fitness standards

### San Joaquin County

<table>
<thead>
<tr>
<th></th>
<th>5th Grade</th>
<th>7th Grade</th>
<th>9th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>23.7%</td>
<td>30.3%</td>
<td>31.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>28.0%</td>
<td>35.6%</td>
<td>41.0%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>21.2%</td>
<td>28.2%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>19.0%</td>
<td>26.6%</td>
<td>26.9%</td>
</tr>
<tr>
<td>White</td>
<td>31.8%</td>
<td>36.7%</td>
<td>36.9%</td>
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### California

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<td>30.5%</td>
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<td>42.0%</td>
<td>47.3%</td>
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- California Physical Fitness Report measures 6 major fitness areas: aerobic capacity, abdominal strength and endurance, upper body strength and endurance, body composition, trunk extensor strength and flexibility, and flexibility
Why Is This Epidemic Happening?

Dietary Behaviors

- Increased consumption of sugar sweetened beverages
- Increased frequency of meals eaten away from home
“It is unreasonable to expect that people will change their behavior easily with so many forces in the social, cultural, and physical environment conspire against such change”

Institute of Medicine
Why Is This Epidemic Happening?

The Physical Environment

Nobody wants to walk or bike if it isn’t safe
Why Is This Epidemic Happening?

The **Food** Environment

- Increased number of fast food establishments
- Lack of access to healthy and affordable foods
- Farm subsidies for corn (fructose)
Why Is This Epidemic Happening?

The Food Environment continued

Marketing

Most frequently marketed foods and beverages are higher in added fats and sugars

• 87% of food/drink ads seen by 6-11 yr. olds on TV are for products in saturated fats, sugars, or sodium.

Centers for Disease Control and Prevention, 2012
Why is the Epidemic Happening?

Social and Economic Environment

Residents in poor or socially disadvantaged neighborhoods at higher risk for obesity . . . and poor health outcomes in general!

- Sub-standard housing stock
- Less access to affordable retail
- Food deserts
- Fewer local services
- Exposure to crime and violence
- Lack of transportation options
- Infrastructure in disrepair (e.g., broken sidewalks)
- Lack of safe places for physical activity (e.g., parks)
- Lack of market wage jobs
Life expectancy varies in San Joaquin County Valley depending on zip code.

- Lincoln Village, a neighborhood with primarily white residents, high levels of education, and a higher average annual household have an average life expectancy of 90 years.

- Central Stockton, an area with a higher percentage of Hispanic and low-income residents and a lower average annual income, have an average life expectancy of 69 years.
### Place Matters Example: What’s Sold and Promoted in a Community?

<table>
<thead>
<tr>
<th></th>
<th>Low-income Neighborhood</th>
<th>Higher income Neighborhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td>7</td>
<td>27</td>
</tr>
<tr>
<td>Fast Food</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Bars/Taverns</td>
<td>35</td>
<td>11</td>
</tr>
</tbody>
</table>
## Example (Published Data): Human Development Composite Score (Life Expectancy + Education + Income)

<table>
<thead>
<tr>
<th></th>
<th>HD Index</th>
<th>Life Expectancy at Birth (Years)</th>
<th>Less than High School (%)</th>
<th>At Least Bachelor’s Degree (%)</th>
<th>Graduate or Professional Degree (%)</th>
<th>School Enrollment (%)</th>
<th>Median Earnings (2012 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>5.39</td>
<td>81.2</td>
<td>18.5</td>
<td>30.9</td>
<td>11.3</td>
<td>78.5</td>
<td>30,502</td>
</tr>
<tr>
<td>Stockton Metro Area</td>
<td>4.34</td>
<td>78.6</td>
<td>22.9</td>
<td>18.3</td>
<td>5.7</td>
<td>77.1</td>
<td>26,689</td>
</tr>
<tr>
<td>Tracy, Manteca and Lathrop Cities</td>
<td>5.05</td>
<td>79.7</td>
<td>18.5</td>
<td>19.3</td>
<td>5.1</td>
<td>78.8</td>
<td>32,198</td>
</tr>
<tr>
<td>Stockton City North</td>
<td>4.62</td>
<td>78.4</td>
<td>17.3</td>
<td>22.8</td>
<td>7.2</td>
<td>79.1</td>
<td>27,600</td>
</tr>
<tr>
<td>Lodi, Ripon and Escalon Cities</td>
<td>4.42</td>
<td>79.5</td>
<td>23.4</td>
<td>19.4</td>
<td>6.7</td>
<td>75.0</td>
<td>26,723</td>
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<tr>
<td>Stockton City South</td>
<td>2.86</td>
<td>75.9</td>
<td>35.4</td>
<td>9.9</td>
<td>3.7</td>
<td>75.0</td>
<td>19,698</td>
</tr>
</tbody>
</table>
Health Equity and Health Disparities
San Joaquin County
Public Health Services

Network for a Healthy California Campaign
Breastfeeding Initiative
Traffic Safety (Bikes, Walk to School Days)
Chronic Disease Prevention

Obesity & Chronic Disease Prevention Taskforce
GetFresh Senior Nutrition Education
STOPP Smoking
Diabetes Prevention Education
Healthy Retail Project: Refresh San Joaquin
Technical Assistance and Support for “Corner Store Conversion”

• Pricing Incentives
• Zoning legislation/ requirements
• Fruit and vegetables for sale
• Lee Law Compliance

• Produce Handling and Procurement systems
• Radio Advertisements
• Store Tours and Taste Demos

• Point of Purchase Signage
• Marketing Materials, Fruit and Veggie Promotions
• Façade Improvement
Collaborative Approach
Support Access to Fresh Fruits & Vegetables/Nutrition Education

Healthy Retail

Community Gardens

Cooking demonstrations/Education

Farmers’ Markets
Policy Example: Reduce Access to Sugary Beverages

City of Stockton Passes Second in Nation ‘Healthy-by-Default’ Kids’ Beverage Ordinance
STOCKTON, CALIF., JUNE 8, 2016 … Last night, the city of Stockton passed an ordinance requiring either water or milk to be served as the default beverage in children’s meals, the second law of its kind adopted by an American city, following the city of Davis, California. The so-called “healthy-by-default” rule – passed unanimously by the Stockton City . . .
Work with Schools

Well Placed New Schools

Availability of Good Food

SRTS: Walking School Buses and Bike Trains

After School Programs
Work with Community: E.g., Encourage Safe Parks & Playgrounds
San Joaquin County Community Health Improvement Plan for 2016-2020

Report Date: December 2016
Priority “Buckets” Selected

- Healthy Eating / Active Living
- High-quality Education
- Community Safety and Social Supports
Work with Community: Participate in Land Use and Transportation Planning

Complete Street!
We Build Our Cities and Our Cities Determine How We Live”

Winston Churchill, 1946
Healthy Neighborhoods Collaborative
Input on Stockton General Plan Update
Promote walkability!
Walkable Communities = Improving community design and the built environment

People will want to use their feet (or bike) when:

• Many transport options - not just cars!
• Connectivity and mixed use - shops, jobs, homes, parks, schools are close together
• Convenient - not too far away
• Feel safe - from speeding cars & from crime
• Pleasing places to walk - aesthetic and interesting
Does safe and walkable Increase PA?

Access to facilities helps people get enough activity!

Residents meeting recommended activity levels:

- Safe places to walk: 43%
- No safe place to walk: 27%

Powell et al., AJPH, 9/03
Goal: Active Living
Questions?

balberson@sjcphs.org