The Healthy Weight in Women Action Learning Collaborative

An Initiative of the City**Mat**C**H**/AMCHP Women's Health Partnership

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California Department of Health Services
3/3/08

Promoting Healthy Weight:
A Life Course Perspective

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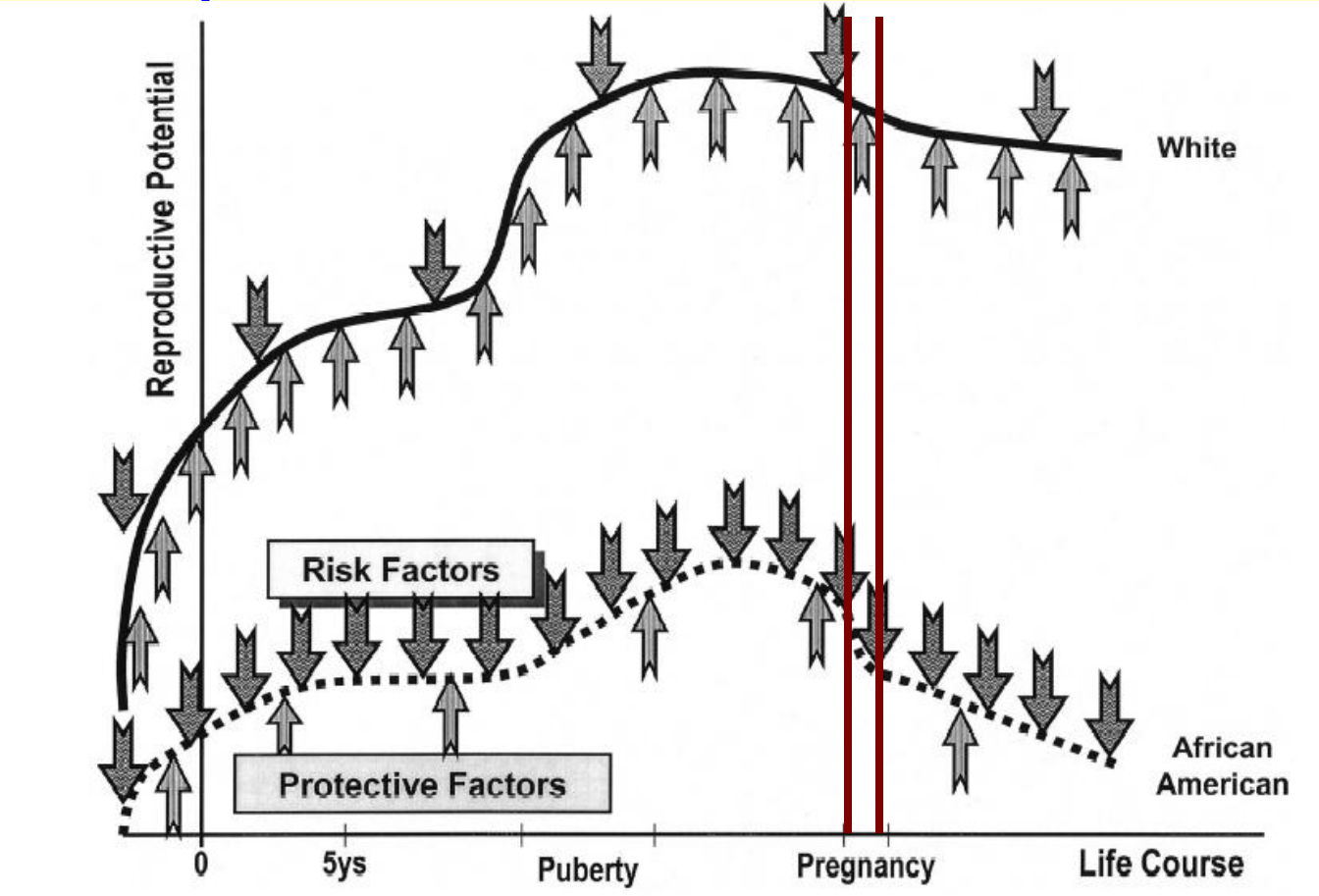
Department of Community Health Sciences
UCLA School of Public Health

Life Course Perspective

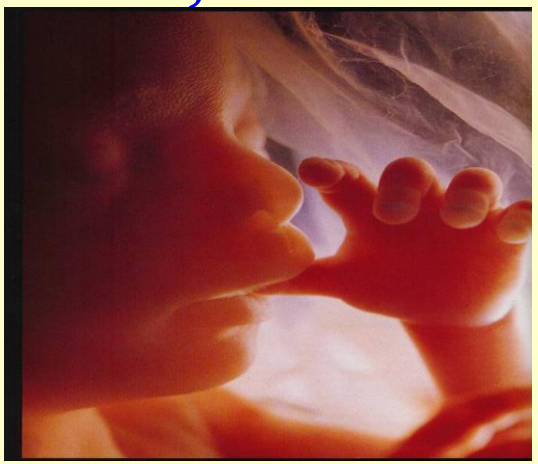
Disparities in Birth Outcomes



Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. Matern Child Health J. 2003;7:13-30.

Early Programming

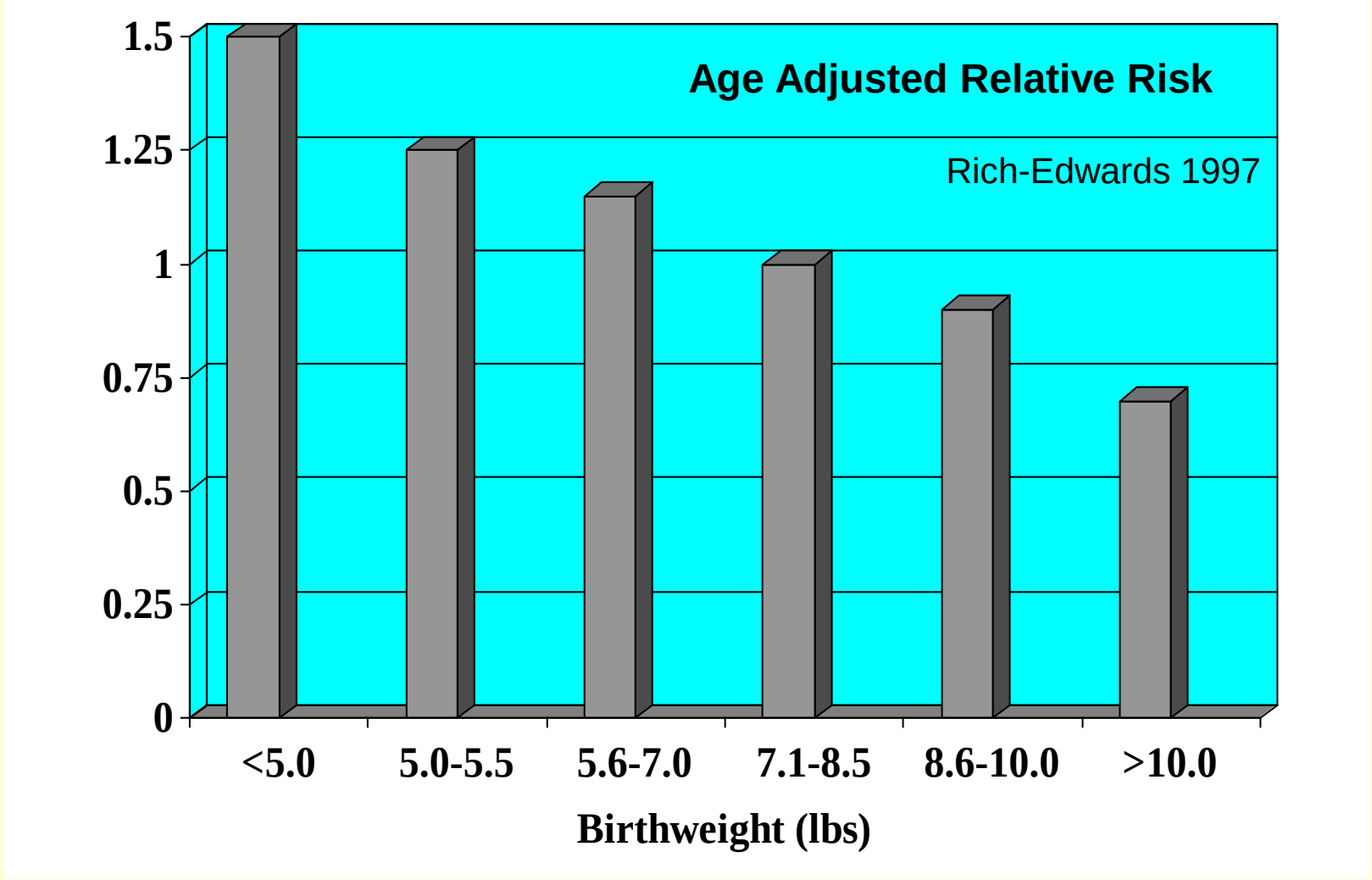
- The process whereby a stimulus or insult, at a sensitive or ‘critical’ period, has lasting or lifelong impact on health or function.
- Link between chronic stress, racism, and poor birth outcome.



Barker DJP. Mothers, babies and health in later life. Edinburgh: Churchill Livingstone. 1998.

Barker Hypothesis

Birth Weight and Coronary Heart Disease (similar for HTN & insulin resistance



Primary Prevention of Childhood Obesity

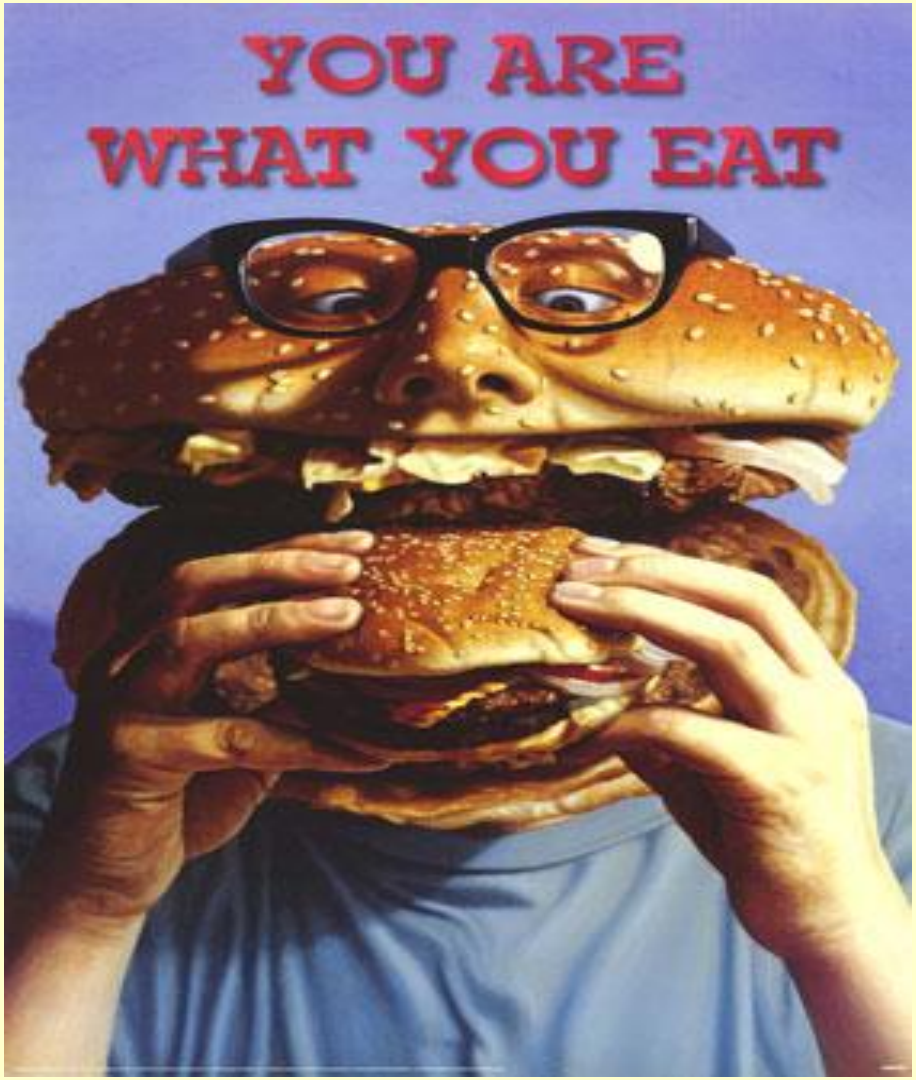
- ✓Control maternal diabetes
- ✓Reduce maternal poor nutrition
- ✓Stop maternal smoking
- ✓Other factors?

Epigenetics

Same Genome, Different Epigenome

R.A. Waterland, R.A. Jirtle, "Transposable elements: targets for early nutritional effects on epigenetic gene regulation," *Mol Cell Biol*, 23:5293-300, 2003. Reprinted in the New Scientist 2004

You Are What You Eat

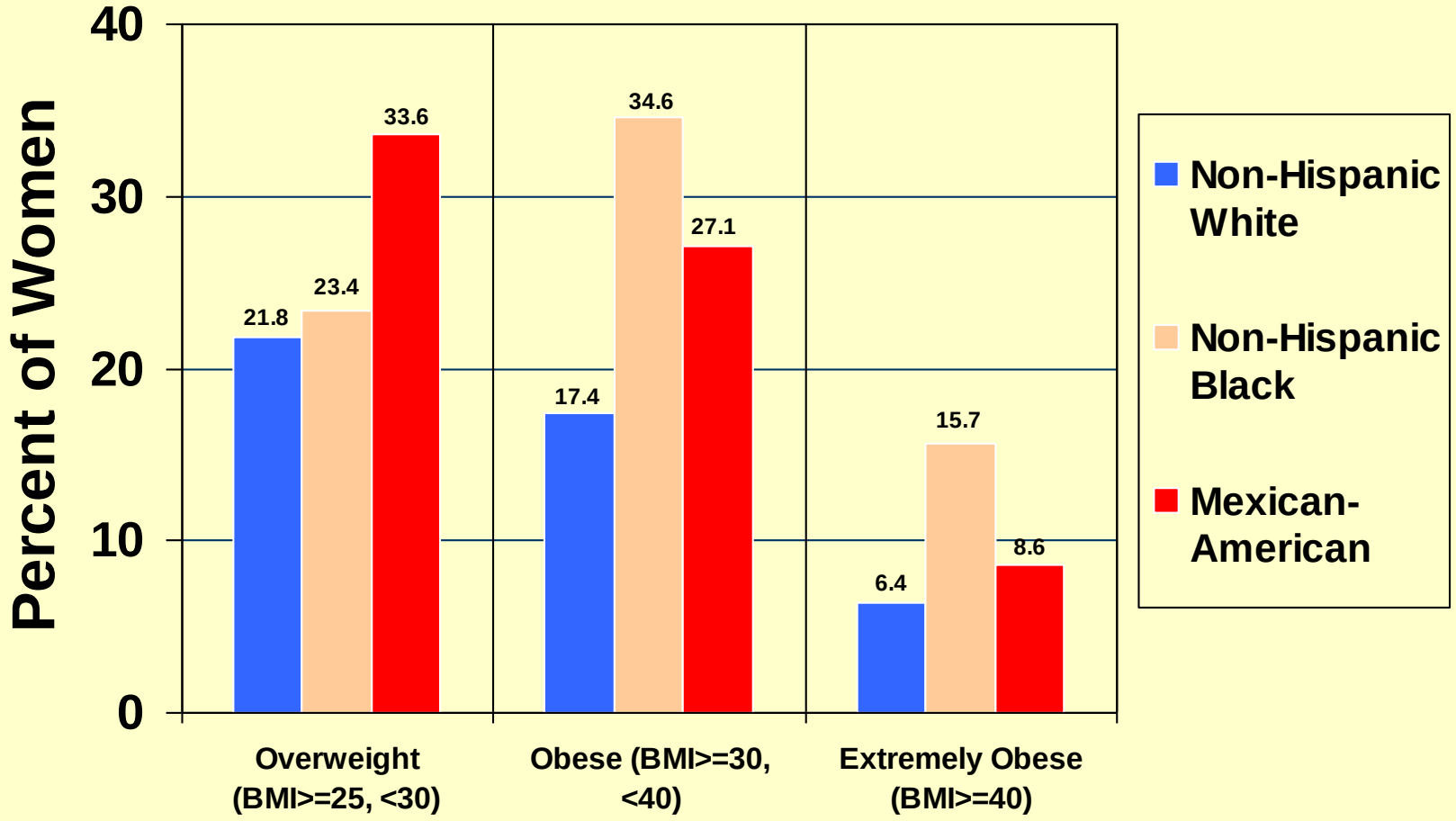


Maternal Obesity and Adverse Perinatal Outcomes

Sonja A Rasmussen, MD, MS

National Center on Birth Defects and Developmental Disabilities, CDC, Atlanta

Prevalence of Overweight, Obesity, and Extreme Obesity Among US Women Aged 20-39 Years, 2003-2004, By Race-Ethnicity

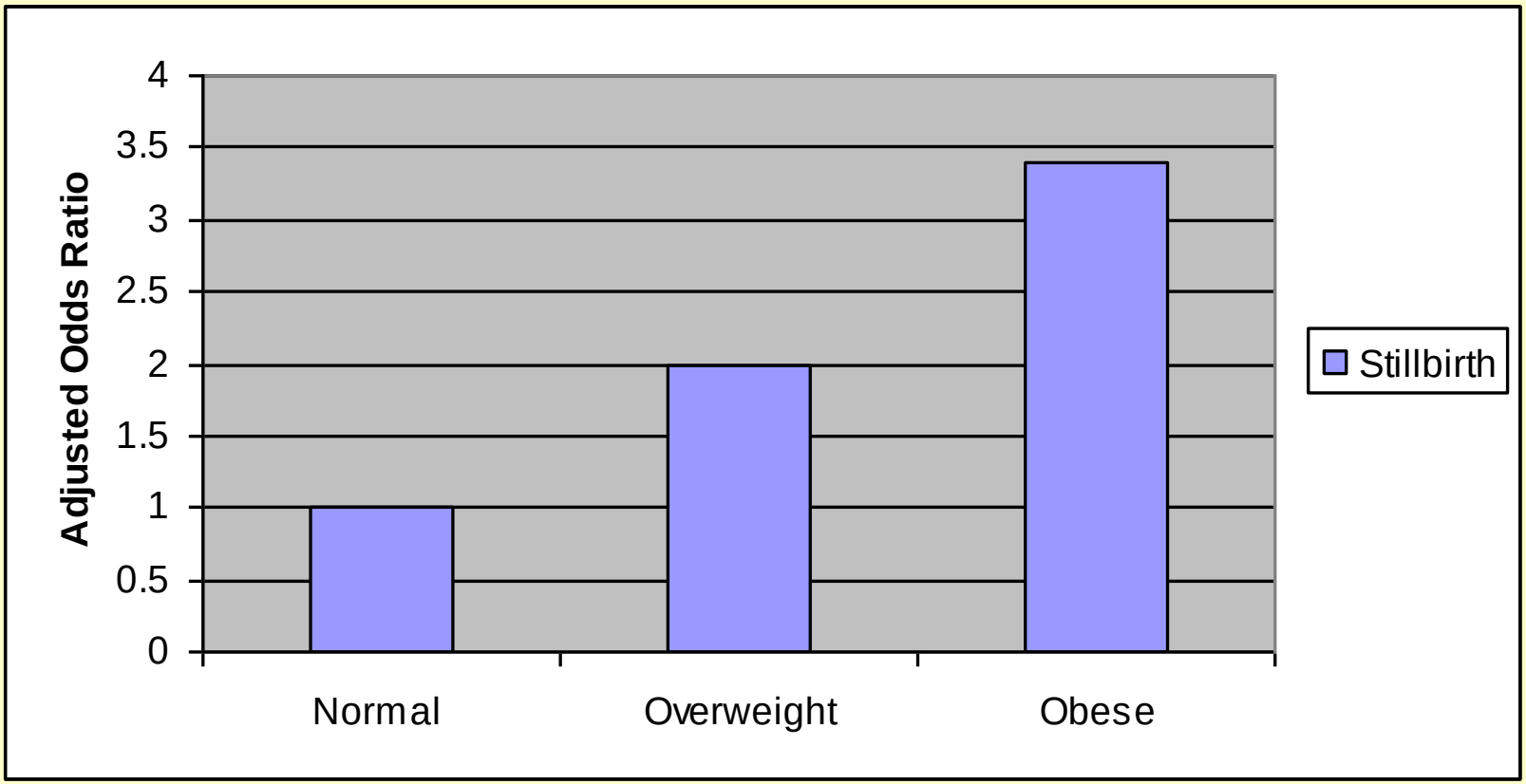


Ogden et al., JAMA 295:1549, 2006

Adverse Outcomes Associated with Maternal Obesity

- Infertility
- Pregnancy complications (pre-eclampsia)
- Labor & delivery complications
- Fetal & neonatal death (birth defects leading cause in US)
- Birthweight/prematurity
- Poor Lactational outcomes – lower initiation rates and duration
- Postpartum Weight Retention

Fetal Death by Maternal BMI in Pregnancies Without Obesity-Related Diseases



Adjusted for age, height, parity, SES, exercise, smoking, alcohol and coffee intake

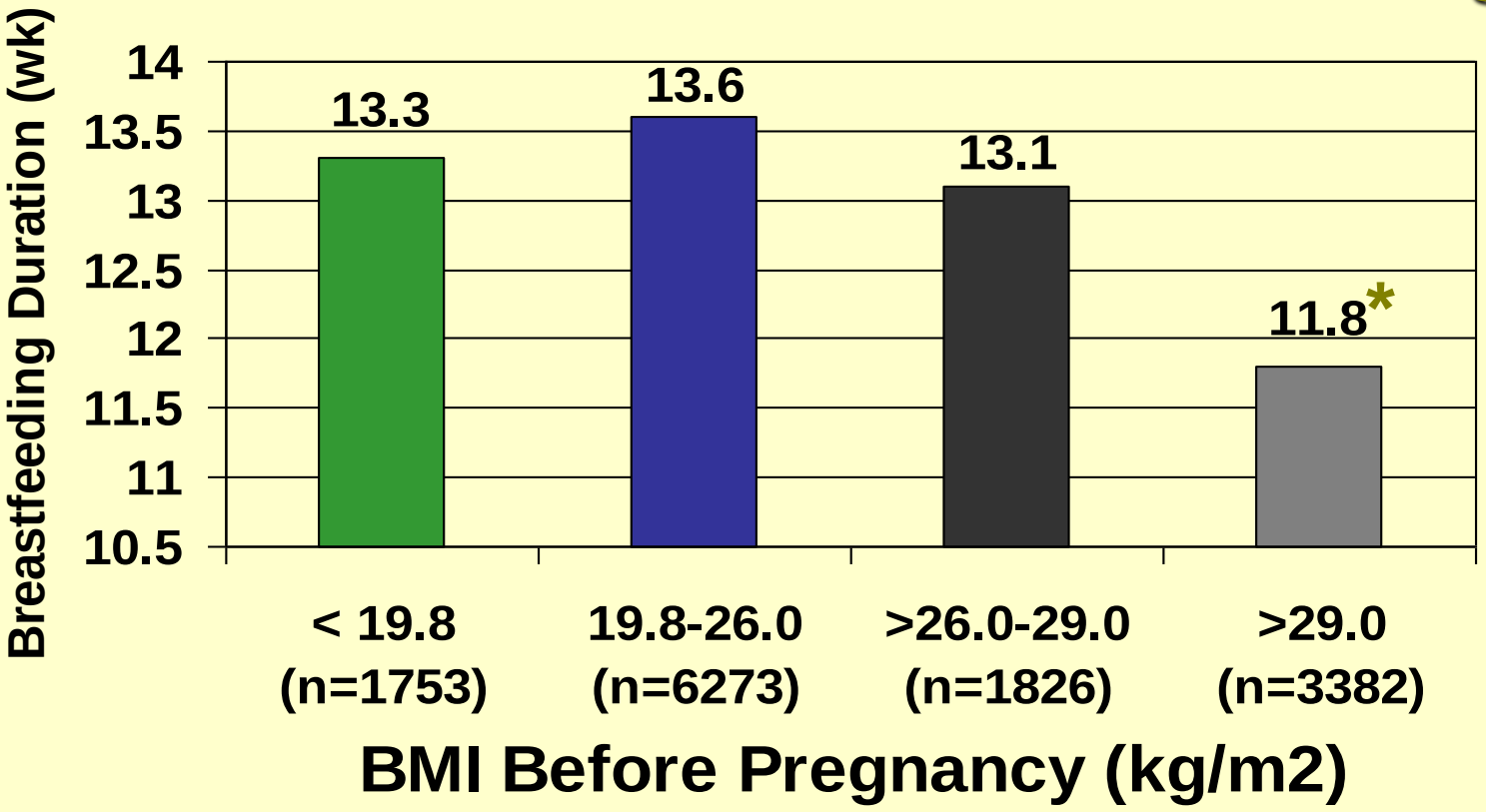
Aagaard Nohr et al, Obstet Gynecol, 2005

Obesity increases Risk of Birth Defects

- Leading cause of infant mortality in US
- **Neural Tube Defects**
- **Congenital Heart Defects**
- Abdominal Wall Defects
- **Orofacial Clefts**
- **Multiple Congenital Anomalies**

Maternal Obesity and Breastfeeding

Adjusted Mean Breastfeeding Duration by BMI values before Pregnancy among Women who Initiated Breastfeeding

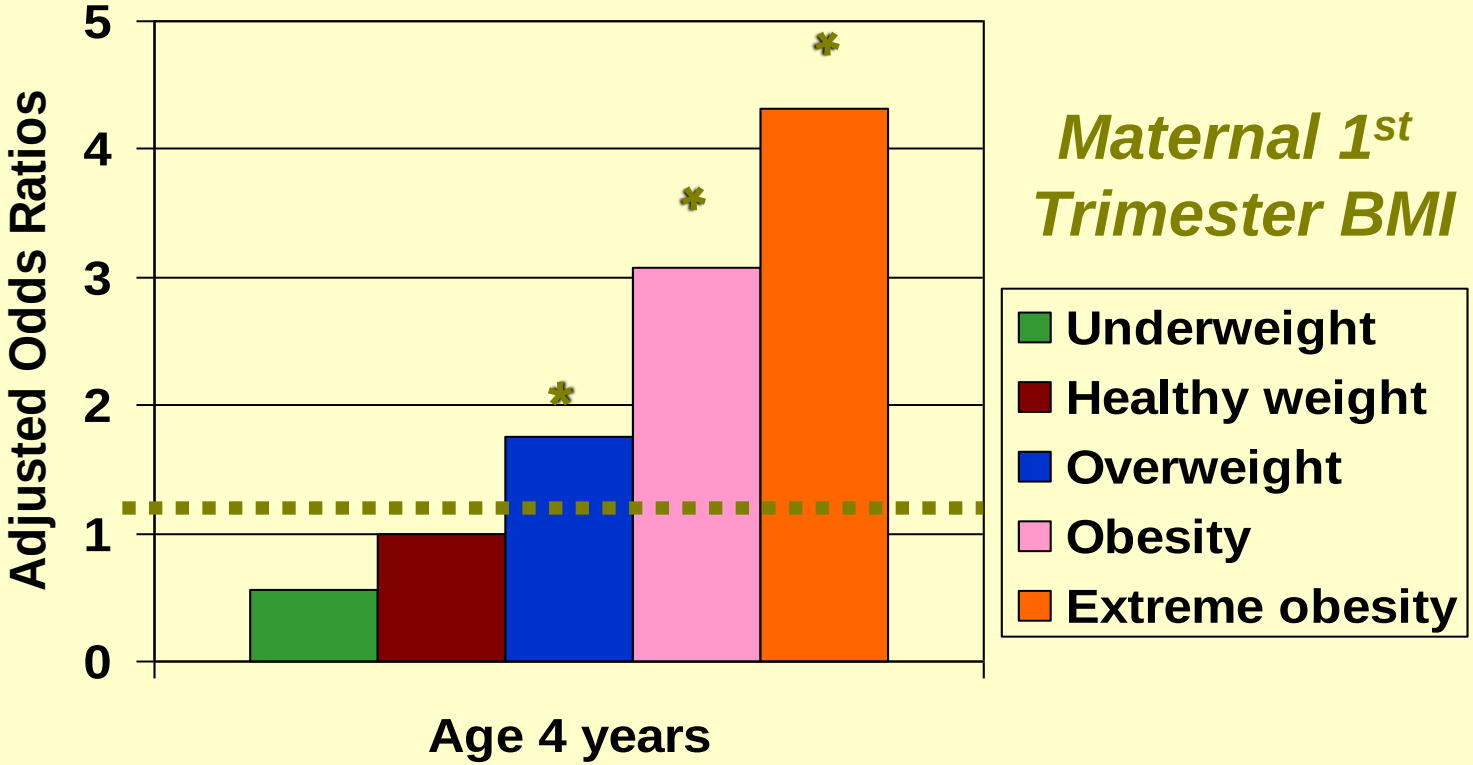


*Significantly different from the reference group (p<0.01)

Li et al., Am J Clin Nutr 77:931-6, 2003

Maternal Obesity and its Effect on Childhood Obesity

Adjusted Odds Ratios for Obesity (BMI>95th Percentile) at Age 4 Years by Maternal 1st Trimester BMI



*Adjusted for birth weight for gestational age, gender, race/ethnicity, parity, smoking in pregnancy, pregnancy weight gain, birth year, maternal education, marital status, maternal age

Whitaker, Pediatrics 114:e29-36, 2004

Take Home Messages

- **Increased risks for multiple adverse outcomes seen in overweight and obese mothers**
- **Higher degree of obesity appears to be associated with higher risk**
- **Reasons for these associations remain unclear**

A Healthy Baby Is Worth The Weight

Colorado Department of Public Health and Environment

Caroline Anne Peck, MD, MPH, FACOG

Maternal, Child and Adolescent Health/Office of Family Planning Branch,

California Department of Health Services

Systematic Review of IOM Guidelines

- "Weight gain within IOM's recommended ranges are associated with better pregnancy outcomes than are weight gains outside these ranges"

- "No evidence that pregnancy weight gain within the IOM's ranges is a cause of substantive postpartum weight retention"

Abrams et al, Am J Clin Nutr, 2000

How are California Women Doing with Pregnancy Weight Gain?

- Only 41 % reported gaining weight within their target range
- 32 % of respondents gained weight below their target range
- 27 % of respondents gained weight above their target range
- Respondents classified as Overweight and Obese reported the highest percentage of weight gain above their target ranges (50 % and 78 %)

1997 California Women's Health Survey

How Well do California Women Think They are Doing With Pregnancy Weight Gain?

- Self-assessments by women of appropriate gestational weight gain are poor across all BMI groups

- 88 % of women whose gestational weight gain was higher than appropriate believed it was either just right or too little

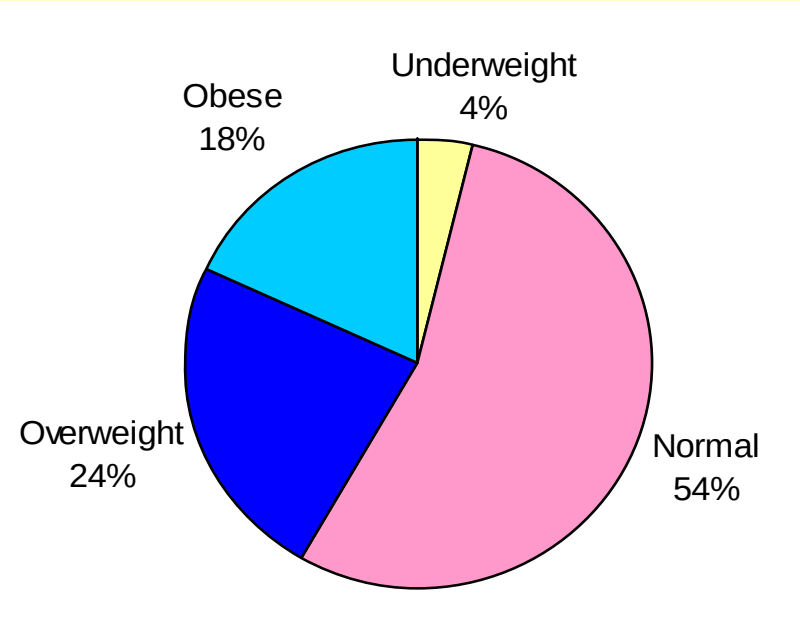
2000 California Women's Health Survey

Healthy Weight for Women of Reproductive Age

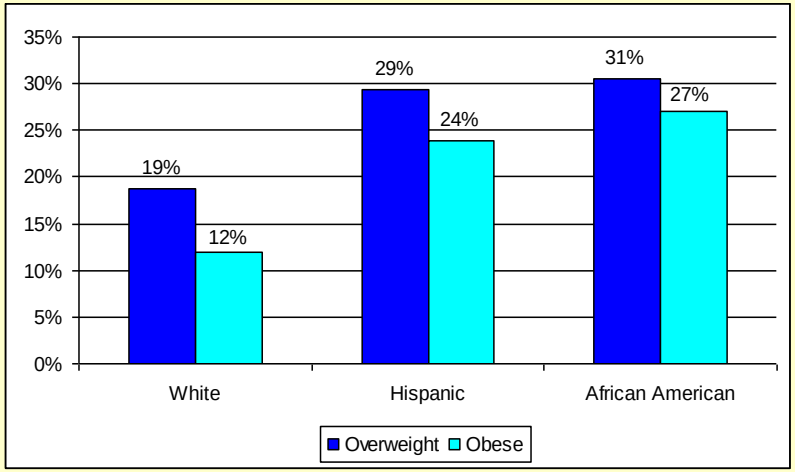
Action Learning Collaborative

Los Angeles County

Why is this our issue?



Weight Status Before Pregnancy



Race/Ethnicity

Who are our partners?

Broad Stakeholder Participation

State of California Department of Public Health MCH/OFP

Los Angeles County Department of Public Health (many divisions and programs)

Promotora Organizations

Special Interest Coalitions

Demonstration Projects

Insurance Oversight

University

Hospitals

WIC

Strategies for Impact

1. **Leadership Development**
   1) Engage stakeholders
   2) Train Trainers
   3) Policy work in key sectors
2. **Support worksite-wellness programs**
   1) WORKING (UCLA)
   2) 5-a-Day Be Active!
3. **Community Collaboration**
   1) Healthy Eating Active Communities projects
   2) Promotora organizations
   3) Policy Work
4. **Message Development**

How we engage stakeholders

- Monthly meetings – educational segment and action items
- “Walk the talk”: healthy snacks and exercise break
- Reminder phone calls to members
- Dedicated staff
- Feedback from members for improving meetings

Current Results

Leadership Development

- Training, presenting information
- Broad stakeholder involvement
- Policy work

Worksite Wellness

- Network for Healthy California – employer toolkits
- UCLA and LAC/DPH – *W.O.R.K.I.N.G* project

Community Collaboration

- Demonstration projects in high-risk areas
- Promotora organizations – train the trainer

Message Development

- Focus Groups completed
- Health provider – education and support

Challenges: Designing effective community messaging campaigns

Reach women of reproductive age

- Culturally sensitive - Different cultures view "extra pounds" differently
- Appropriate reading level
- Multi-lingual

Motivate and empower women to take charge of their health

- Give them options that work
- Understand and address their barriers

Preliminary Findings – Focus Groups

- Women know about nutrition & exercise
- Barriers to healthy behavior include no:
  - Time
  - Money
  - Cooking Skill
  - Environment to support behaviors
- Specific findings for African-Americans
- Fast foods:
  - Taste developed early
  - Considered treat
  - Convenient & cheap

Challenges: Reaching Providers

- Health Care bureaucracies
- Importance of this topic compared to other clinical goals
- Implementing standards for BMI as part of patient vital signs with reminder message for clinical intervention

Sonoma County Team
Healthy Weight in Women

Key Strategies:

1. Train and coach community health workers & perinatal practitioners to address healthy eating, active living.
2. Promote increased consumption of vegetables in the community.
3. Engage youth to participate in regular physical activity.

Goals & Objectives:

- Outreach workers and perinatal practitioners support behavior change to increase healthy eating & active living.
- Families eat a "balanced plate" including more vegetables.
- Youth enjoy daily physical activity.

Promotores Training Project:
Cultivando Niños Sanos y Activos

Goal: Community Outreach Workers promote healthy eating & active living with Latino families.

- "Train the Trainer" model

Weave key messages into curriculum:

- Impact of weight on birth outcomes
- Breastfeeding as the norm
- Choose fresh foods; more vegetables
- Portion size
- Increase daily physical activity

Reproductive Health Practitioner training:

Growing Healthy Moms and Babies

- Healthy weight gain in pregnancy & loss postpartum – BMI/gestational wheels
- Portion size- belly balls
- Balanced plate – increase intake of vegetables
- Motivational interviewing techniques to support behavior change

Not Ready **Ready**

0 1 2 3 4 5 6 7 8 9 10

Increase Consumption of Vegetables

- Vegetable tasting at community events
  Great Greens and Salsa & Salsa Cooking
- Interactive activities with Girl Scouts
- Shopping/cooking classes for teens

Engage Youth to Increase Opportunities for Regular Physical Activity

Work with a school-based health center and student leadership group to develop health fitness fair.

- Feature groups and organizations that offer programs for youth.

Lessons Learned

- Local data and key informants are essential
- Take time to engage target population.
- Don't be afraid to try something new.
- $ is usually not the limiting factor.
- Collaborate & build upon existing community efforts.
- Most individuals are willing to make some behavior change; youth are especially receptive.
- Individual interventions are time-intensive & reaching target population can be tricky.

Pearls I: ***Framing*** Healthy Weight in Women of Reproductive Age

- Within Women's Sphere of Control:
  - Healthy eating, family resources, safety, role modeling for children
- Not just women…involve men, partners
- Best Approaches, Messages
  - Weight as "health," not "beauty"
  - Individuals don't identify personally with "obesity" – find new words to use
  - Healthy behavior, not just weight loss
  - One change at a time for success
  - Consistent, pervasive, multilevel messages (tobacco model)

Pearls II: ***Strategies*** for Healthy Weight in Women of Reproductive Age

- Align HWW with Related Issues
  - Healthy Weight as component of Preconception Care
  - Family Planning, planned pregnancies
  - Breastfeeding promotion

Pearl III: ***Strategies*** for Healthy Weight in Women of Reproductive Age

- Engage the Community
  - Intergenerational models
  - Culturally appropriate approaches
- Inform and Engage Healthcare Providers
  - Define the roles of providers
  - Package the concepts of both preconception care & healthy weight
  - Package as realistic, brief interventions

Pearls IV: ***Interventions*** for Healthy Weight in Women of Reproductive Age

- Partnerships that Work
  - Worksites
  - Schools
  - Policymakers
  - Built environment
  - Transportation

thank you


The Megan Furth
Harvest
Pantry
Delivering nutritious food
to hungry and anemic children
HANSEL
FORD