Breaking the Life-Course Cycle of Obesity

The following diagram shows different risk factors for women during her life-course cycle. Implementing an intervention at different stages provides an opportunity to break the cycle of obesity.

- Poverty/Fast food/food habits in young woman
- Mother overweight/obese
- Excessive weight gain during pregnancy
- Infants born LGA/Abnormal GT

Figure 1. Life Course Perspective

Figure 2: When pregnant, California women are likely to gain above the recommended weight.

Overweight and obese women are less likely to breastfeed, which predisposes them to their offspring to childhood obesity.

Figure 3: Infant Feeding Practices by Pre-pregnancy Weight Status, 2008

- Breastfeeding (Any BF @ 1 Week)
- Exclusive breastfeeding (Exclusive BF @ 1 Wk)
- Any breastfeeding (Any BF @ 3 Mos.)
- Exclusive breastfeeding (Exclusive BF @ 3 Mos.)
- Not overweight/obese (BMI < 25)
- Overweight (25≤BMI<30)
- Obese (BMI≥30)

Figure 4: California Women of Childbearing Age (ages 18-44 years), 2008

- White
- Black
- Asian/Pacific Islander
- Hispanic
- Other

Figure 5: Weight Gain During Pregnancy by Race/Ethnicity, 2008

- Not Overweight/Obese (BMI < 25)
- Overweight (25≤BMI<30)
- Obese (BMI≥30)

Figure 6: Recommended Total Weight Gain Ranges for Pregnant Women by Pre-pregnancy Weight Status, 2008

- Underweight (BMI < 18.5 kg/m²)
- Normal Weight (BMI 18.5 to 24.9 kg/m²)
- Overweight (25 kg/m² to 29.9 kg/m²)
- Obese (over 30 kg/m²)

Table: Life-Course Weight Trends Among California Women

- Data gathered by the California Maternal and Infant Health Assessment (MIHA) Survey from 1999-2008 show increasing prevalence of pre-pregnancy overweight and obesity. In California, 22.6% of women were overweight and 13.9% were obese prior to pregnancy; these figures grew to 25.1% overweight and 16.9% obese in 2008.

Analysis: In 2008, Black (69.4%) and Hispanic (61.0%) women of child bearing age had the highest prevalence of overweight and obesity, followed by Whites (42.1%) (Figure 1).

- Black: 43.9%
- Asian/Pacific Islander: 32.9%
- Hispanic: 46.8%
- White: 42.2%

Conclusion: The life-course perspective has far-reaching policy implications for reducing childhood obesity. Public health interventions need to be integrated, and should include multiple factors interacting over the life course (biological, psychological, behavioral, and social determinants of women’s health). Title V funded projects at the local level are an opportunity to reduce childhood obesity by applying the life-course perspective, especially before, during, and after pregnancy.