

( $P < 0.001$ ) than their NON-PCOS counterparts. Finally Receiver – Operator Curve analysis (ROC) suggest that BMI  $\geq 30$ , WC  $\geq 34$  inches, and WC-to-height ratio  $> 0.5$  were better than chance at identifying participants with PCOS. The area under the ROC ranges from 0.59 to 0.64. %BF  $\geq 33\%$  and BMI  $\geq 25$  had confidence intervals that included 0.5 and were therefore not better than chance at identifying participants with PCOS. Our results suggest that BMI  $\geq 30$ , WC  $\geq 34$  inches, and WC-to-height ratio  $> 0.5$  might be useful marker for screening for risk of PCOS among women of reproductive age in this population. However, the low ROC values suggest that these cut-off values may misclassify many women.

**957-P**  
**Body Mass Index, Attrition, and Reasons for Separation During the First Year of Army Service**

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**Purpose:** To examine the association between BMI and medical from the Army during the first year of service, especially among extremes of BMI. **Methods:** A cohort study of was done to determine the relative risk of medical discharge as well as a cross sectional examination of reasons for separation. The study population consisted of soldiers who enlisted as active duty in the Army for the first time between January 1, 2002 and December 31, 2006 and were medically discharged within one year. Analyses were stratified by gender to control for differences in body composition standards for each gender. **Results:** BMI was found to be significantly associated with medical discharge in both males and females. The highest risk of medical discharge was observed in the underweight (RR = 1.29, males; RR = 1.26, females) and obese (RR = 1.33, males; RR = 1.31, females) BMI categories. The risk of medical discharge among the overweight was slightly elevated relative to normal weight soldiers (RR = 1.14 males, RR = 1.06 females) but the risk among overweight soldiers Underweight men and obese men were also more likely to experience disability discharges. **Conclusion:** Interventions to minimize early attrition and prevent injury of underweight soldiers should be undertaken along with interventions targeted at overweight and obese soldiers.

**958-P**  
**The Postpartum Period: A Teachable Moment for Change in Overweight Moms?**

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Weight retention after pregnancy contributes to obesity. The transition from pregnancy to postpartum has been theorized as a “teachable moment” (TM) for weight-related behavior change. The TM heuristic suggests that life transitions, such as a baby’s birth, can (i) lead to greater perceived health risks, (ii) increase emotion, and (iii) impact self-concept/role. These factors may prompt mothers to change weight-related behaviors, and raise concern for her child’s risk for overweight. Baseline data from 262 overweight postpartum women from the KAN-DO trial were used to (i) describe the 3 TM domains as they relate to their own and their child’s weight, (ii) assess predictors of these TM factors, and (iii) create a Brief TM score to assess how TM factors affect motivation. Mean age was 33, mean BMI was 32.9, 74.4% were White, 69.8% held at least college degrees and most had two children (67.9%). All women had a preschooler (mean age 3.2) considered at-risk for overweight given their mother’s weight status. 15.5% of children met CDC’s definition for at-risk-for-overweight (85th–95th percentile) and 11.1% were overweight (>95th percentile). Mother’s BMI was positively correlated with: greater negative emotions regarding her own weight ( $r = 0.25$ ,  $P < 0.0001$ ), greater certainty that she would be overweight if she continued current eating behaviors ( $r = 0.17$ ,  $P = 0.006$ ), and greater likelihood of thinking differently about her own eating/exercise behaviors since the baby’s birth ( $r = 0.15$ ,  $P = 0.02$  (exercise),  $r = 0.13$ ,  $P = 0.04$  (eating)). In multivariate analyses controlling for parity, race, education, and age, BMI significantly predicted an increase in all three TM domains. Overall, women were not concerned about their child’s current or future weight. Women were categorized as high/low in each of the three domains, yielding a TM Brief Score. Women with higher BMIs, more children, less education, and who were younger had higher TM Brief scores (all  $P < 0.0001$ ). In regression models, higher TM Brief scores predicted stronger motivation to improve eating ( $P < 0.0001$ ), exercise more ( $P < 0.0001$ ), and lose weight

( $P < 0.0001$ ). Relationships remained after controlling for BMI, parity, race, education, and age. For certain women, the postpartum period may be more of a TM than for others. Higher BMI is predictive of high scores in all three domains. The brief TM score may be a good indicator of motivation to change behaviors during the postpartum period.

**959-P**  
**The Role of Gender in Self-Reported Intuitive Eating and Laboratory Eating Behavior**

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**Background:** Research has suggested that men and women may base their hunger on different factors, with men relying on physical indicators and women relying on other factors (Muth *et al.*, 1996). The Intuitive Eating Scale (IES) measures adaptive cues for regulation of eating (e.g., hunger) and maladaptive cues (e.g., emotions). In women intuitive eating (IE) is negatively correlated with BMI (Tylka, 2006). Further, individuals with BMIs  $\geq 25.0$  eat faster than individuals with BMIs from 18.5 to 24.9 and consequently consume more food during the meal (Barkeling *et al.*, 1992; Barkeling *et al.*, 1995; Laessle *et al.*, 2007). Men with BMIs  $\geq 30.0$  were found to have faster eating rates than women with BMIs  $\geq 30.0$  and men and women with BMIs from 18.5 to 24.9 (Barkeling *et al.*, 1995). The purpose of the present study was to examine how BMI and gender are related to IE, and to examine if BMI and gender predict eating rate and the amount of food consumed. **Methods:** 164 participants (94 females) completed the IES. 21 of these participants (14 females) ate waffles until they felt full after an overnight fast of at least 8 h. The waffles were served in uniform, bite-size pieces. **Results:** Women had higher total IES scores than men,  $t(20) = 3.07$ ,  $P < 0.01$ ,  $sr^2 = 0.05$ , and Eating for Physical Rather than Emotional Reasons subscale scores,  $t(20) = 4.88$ ,  $P < 0.01$ ,  $sr^2 = 0.13$ . BMI was positively correlated with the Unconditional Permission to Eat subscale only,  $t(20) = 2.24$ ,  $P < 0.05$ ,  $sr^2 = 0.03$ . Analysis of the amount of food eaten showed that males consumed an average of 69 more grams than females,  $t(20) = 2.45$ ,  $P < 0.05$ ,  $sr^2 = 0.23$ . In women there was a slightly negative relationship ( $B = -2.758$ ) between BMI and total grams whereas in men there was a positive relationship ( $B = 21.68$ ),  $t(20) = 2.62$ ,  $P < 0.05$ ,  $sr^2 = 0.20$ . Analysis of eating rate showed that a faster eating rate (g/min) was significantly correlated with grams of food,  $r = 0.60$ ,  $P < 0.01$ . There was a small negative relationship ( $B = -0.36$ ) between BMI and eating rate in females, whereas BMI was positively related ( $B = 1.43$ ) to eating rate in males,  $t(20) = 3.33$ ,  $P < 0.01$ ,  $sr^2 = 0.32$ . **Conclusions:** Although women reported higher levels of IE, behavioral data revealed a positive relationship between BMI and both eating rate and amount of food consumed in men, whereas no clear relationship was found in women. These findings indicate that factors other than BMI may play a role in women’s eating behaviors.

**960-P**  
**Change in Adult’s Diets as They Have Children: Coronary Artery Risk Development in Young Adults Study (CARDIA)**

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**Background:** Studies suggest that adults with children eat more saturated fat than those without children. Women’s BMI increases with having children but men’s BMI changes with children have not been studied. Few studies exist on other dietary factors or using longitudinal data. **Objective:** Compare change in BMI and daily dietary intake of selected foods and nutrients over 7 years between those who have children enter the home and those who do not between baseline and year 7. **Methods:** CARDIA enrolled black and white adults age 18–30 at baseline; Analyses were restricted to 2,711 adults without children at baseline. Linear regression was used to analyze change from baseline to year 7 for BMI and the following diet variables based on a validated diet history questionnaire: percent saturated fat (PSF), calories, fruits and vegetables (FV) (servings/day), sweetened beverages (sv/day), and frequency of fast food intake. The primary independent variable was whether or not participants had children by year 7. Models were adjusted for baseline age, sex, race, education, employment, marital status, diet variables, caloric intake, smoking, physical activity and BMI; gender-by-race-by-child interactions were included if significant. **Results:** Compared to childless adults, those raising children were more likely to be female, full-time workers, married, and older. Diet and BMI did not differ at baseline except for FV intake (Adjusted means: w/children 4.0 sv/day, no children