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# Evening Snacking in Relation to Self-reported Declines in Sleep Quality during Pregnancy: Preliminary Results from the Decision-Making, Eating, and Weight Gain during Pregnancy (DEW) Study

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## **Authors**

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## **Keywords**

Pregnancy, Quality of sleep, Snacking

## **Comments**

Poster presented on Senior Scholars Program Poster Presentation Day at the University of Massachusetts Medical School, Worcester, MA, on April 30, 2014. Medical student Wendy McCallum participated in this study as part of the Senior Scholars research program at the University of Massachusetts Medical School.

This poster was also presented at the University of Massachusetts Center for Clinical and Translational Science Research Retreat, Worcester, MA, on May 20, 2014.



# Evening snacking in relation to self-reported declines in sleep quality during pregnancy: preliminary results from the Decision-Making, Eating, and Weight Gain during pregnancy (DEW) Study



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## Objective

To examine the association between changes in sleep quality from pre-pregnancy and evening snacking.

## Methods

The DEW study enrolled women who were 18+ years old, pregnant with singleton gestation <36 weeks, English speaking, with pre-pregnancy body mass index (BMI) 18.5-40kg/m<sup>2</sup>, with plans to deliver at UMMHC

Women reported sleep as being “about the same”, “a little better”, “a lot better”, “a little worse”, or “much worse” as compared to 3 months prior to pregnancy; changes in sleep quality were categorized as “worse” or “same/better”

Women completed three 24-hour dietary recalls (2 weekdays, 1 weekend day).

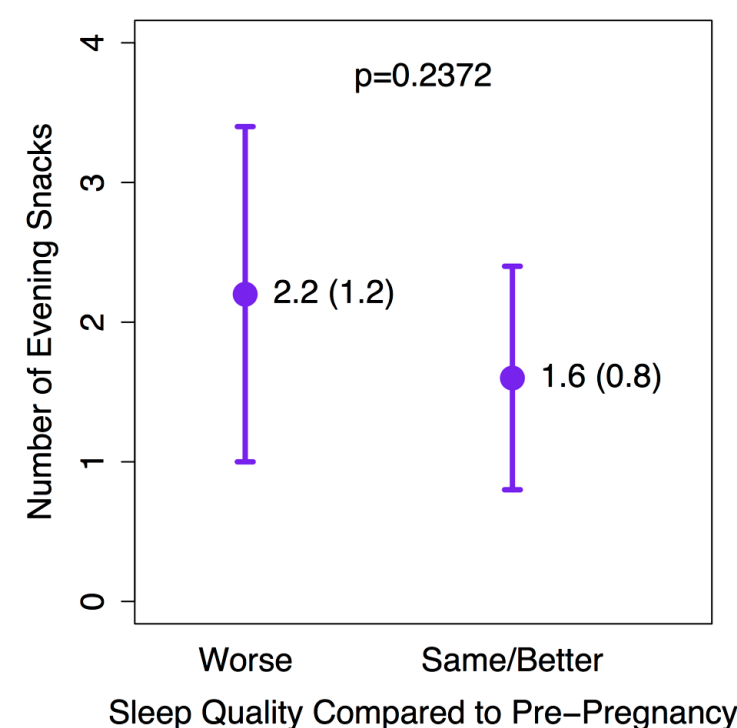
Evening snacks were defined as eating occasions after dinner but before an hour after usual bedtime during which something other than water was consumed

Fisher’s Exact tests and t-tests provided comparisons for evening snacking (yes/no), number of snacks, and energy intake from snacks

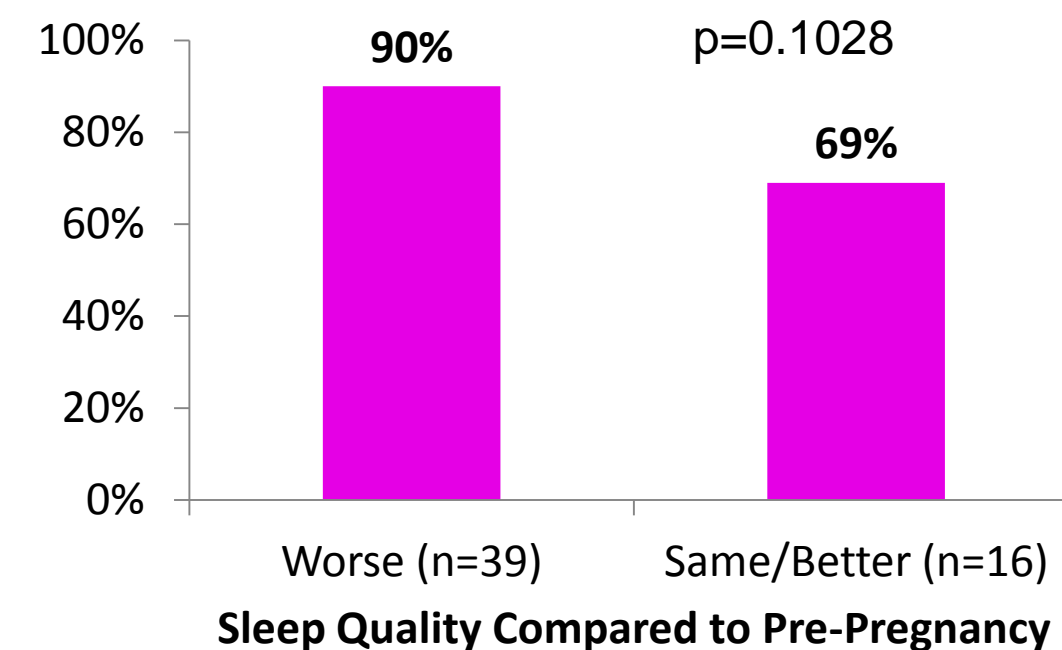
## Results

- Cohort included 55 women; 58% non-Hispanic White, aged 30.0 (SD:4.3) years; gestational age 23.0 (SD:5.9) weeks
- Of 866 meals reported, 94 were evening snacks
- 71% (n=39) reported her current sleep quality was worse than during the 3 months before pregnancy

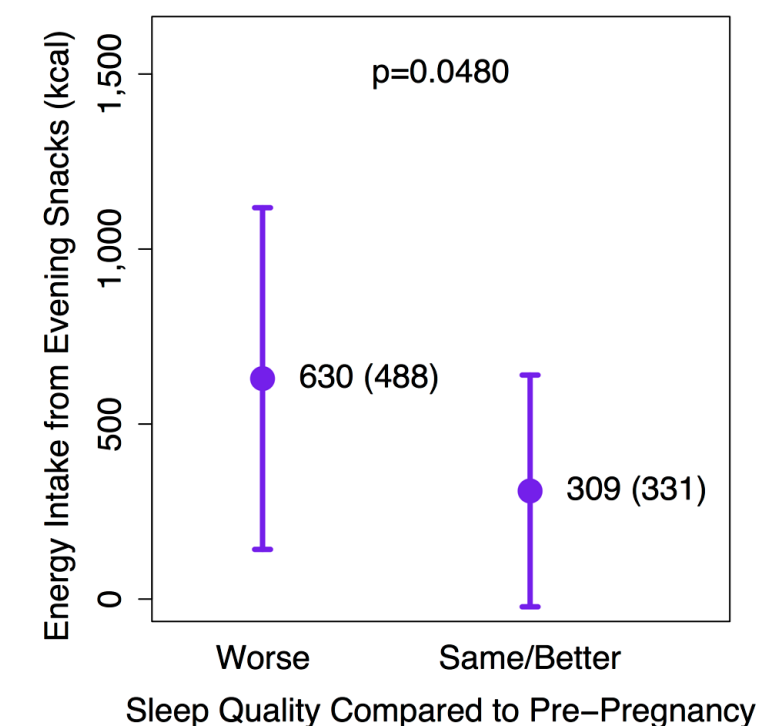
**Among women reporting evening snacks (n=46), the number of snacks did not differ by change in sleep quality from pre-pregnancy**



**Evening snacks were reported by the majority of women, regardless of change in sleep quality**



**Among women reporting evening snacks, energy intake from these snacks was higher among women whose sleep quality had declined from pre-pregnancy**



## Conclusions

Declines in sleep quality during pregnancy may be linked to evening calorie intake. More research is needed to understand the role of sleep quality, eating behavior, and weight gain during pregnancy.