Research has demonstrated that co-sleeping, or sleeping with a partner, may actually reduce the total sugar intake of an individual the following day. It has been observed that people in committed relationships consume less glucose (Henriksen et al., 2014), and research posits that this effect can be seen due to less energy being spent during the previous night in order to keep warm (Ijzermann et al., 2015).

Pilot work by Ijzermann et al. (2015) found that co-sleeping reduced the sugar intake of that individual the next day as compared to those who slept alone. The shared warmth between individuals sleeping together is expected to reduce the need for additional glucose to be consumed the following day.

We were one of 12 research teams around the world who sought to replicate this effect before the work is submitted for publication. In addition to replicating the effects of co-sleeping on sugar intake observed by the pilot study, our study included additional measures in order to determine whether or not they may have an effect on sugar intake levels as well.

### Participants

- **Gender:** Female: 46 (33.8%)  
  Male: 90 (66.2%)
- **Age mean:** 21.07 years old  
  Alone-sleepers – 126 (93%)  
  Co-sleepers – 10 (7%)

### Procedure:

1. Recruitment of participants
   - In-person
   - Online
2. Participants completed an online survey with the following measures:
   - Sugar intake
   - How many glasses of fruit juice did you have today?
   - Self-control (α = 0.478)
     - I wish I had more self-discipline.
   - Exercise (α = 0.269)
     - How many kilometers did you walk today (approximately)?
   - Communal strength (α = 0.18)
     - How far would you be willing to travel to visit your partner?
   - Depressive symptoms (α = 0.926)
     - My appetite was poor.
   - Insecure attachment (α = 0.822)
     - When I am tense I notice where the tension is located in my body.
   - Sleeping habits

### Results

Results did not replicate the pilot study by Ijzermann et al. (2015). Sugar intake did not end up being significantly different in co-sleepers than alone-sleepers. However, insecure attachments levels were shown to be significantly larger in alone-sleepers as compared to co-sleepers.

Possible explanations for our results may stem from the small sample size. Only 10 out of the 136 participants were co-sleepers, which is far too small to provide much insight into whether or not co-sleeping truly affects glucose intake.

The largest limitation of this study is the lack of generalizability. The sample used was of college students at a particular university, so the demographics are fairly limited, especially in age. Along with the small sample size, there is not much to be said in regards to the general population. Future research may want to take a larger sample from a more diverse setting, rather than just from a university.

Practical implications of this study range from being able to better understand how the presence of a romantic partner can affect one's glucose consumption, to possibly developing new techniques for dealing with excess sugar intake. The newfound knowledge derived from this and the pilot study may aid people in managing their sugar intake overall, and help them see how multiple facets of their life can be affected through simply sleeping alongside a partner.

### Table 1. Correlation matrix between study variables

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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td>5. Exercise</td>
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<td>7. Alone v. co-sleeping</td>
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<td>.012</td>
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