'Grazing' Eating Pattern Associated with Greater Obesity Risk in Australian Women

By Ruth Kava — October 18, 2017

It's a persistent question — does it make any difference how one's meals are distributed during the day? Research has suggested that, given the same caloric intake, when one eats really doesn't affect one's body weight. But in free-living adults, would the caloric intake be the same? Or would one eating pattern make it more likely that a person would consume more and thus be more likely to gain weight? Dr. Rebecca Leech and colleagues from Deakin University in Victoria, Australia investigated the associations between eating patterns and nutrient intakes, diet quality, and adiposity. Their study [2] was published in the American Journal of Clinical Nutrition.

These researchers used dietary data from two 24-hour recalls of about 4500 adults that were collected during the 2011-2012 Australian National Nutrition and Physical Activity Survey. Participants' height, weight and waist circumference were measured; BMI was calculated and overweight and obesity defined as a BMI > 25. The investigators examined the distribution of eating occasions during the days reported, and also compared the adherence to healthy eating recommendations.

Three classes of temporal eating patterns were identified and were similar for men and women. The “conventional” pattern involved eating occasions (EOs) at times typical in Australia — i.e., lunch at noon and dinner at 6 pm, with snacks at 10 am and 3 pm. The “later lunch” pattern was characterized by lunch at 1:00 pm rather than noon, and the third or “grazing” pattern involved more frequent EOs and a lower probability of a meal at conventional times. About 42, 34, and 24 percent of men reported following the first, second or third pattern respectively. Comparable percentages for women were 40, 34, and 26 percent.
Men who followed a conventional eating pattern had significantly higher BMIs, and a substantially higher proportion were classified as overweight or obese than were men who reported later lunch or grazing patterns. Women with grazing patterns had significantly greater energy intakes than did women with the other two patterns, and as one might expect, an association with overweight or obesity.

Furthermore, both men and women who reported grazing patterns had poorer diet quality scores and greater intake of discretionary foods than did participants reporting the other patterns.

Of course, the limitations of self-reported data apply to this study, and even if the 24-hour recalls were accurate, it is not clear how representative they are of participants’ usual dietary patterns. However, it does seem logical that a dietary grazing pattern might make it more difficult to maintain a lower energy intake, and if that is the case, it could account for the increased likelihood of overweight or obesity — at least for women. Whether similar results would be seen in studies of other nationalities remains to be determined.