



measured period (i.e. area under the curve is greater). Insulin concentration falls more slowly after dinner as well, but also it peaks at a higher value and stays at its peak for longer: in the morning, insulin started going down 75min after the meal, whereas at dinner it stayed high up until 90min.

You would have noticed the difference in postprandial (after a meal) blood glucose and insulin decline between breakfast and dinner. Other studies have shown similar patterns²: for example, during constant glucose infusion over 30 hours, lower glucose tolerance (how fast glucose goes down) is observed at night, i.e. levels of blood glucose at night are elevated compared to daytime when the sugar is supplied at a constant rate throughout the day-night cycle. This all points to glucose levels being affected by the time of day, and the mechanism behind this is our body's circadian rhythms. Why do you think such time-of-day differences in how blood glucose levels are maintained exist?



Circadian clocks and metabolism, recommended extra resources

1. perspectives: <https://www.thenakedscientists.com/podcasts/naked-scientists/clock-science-circadian->