

# Two self-tracking projects:

- 16 years of daily weigh-ins
- Reaction time as a measure of brain function

Alex Chernavsky

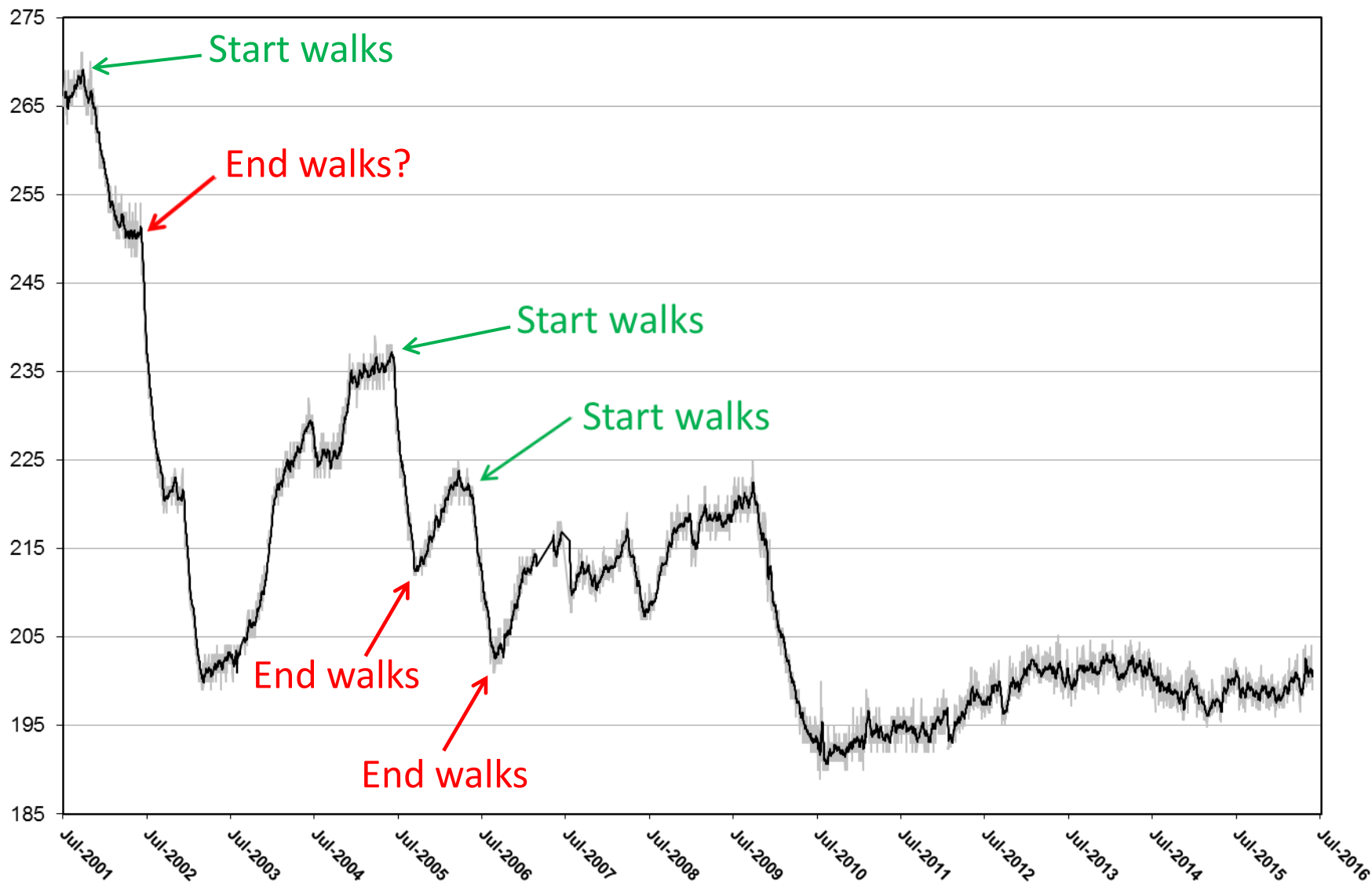
`alexc@aya.yale.edu`

`brain-tracking.org`

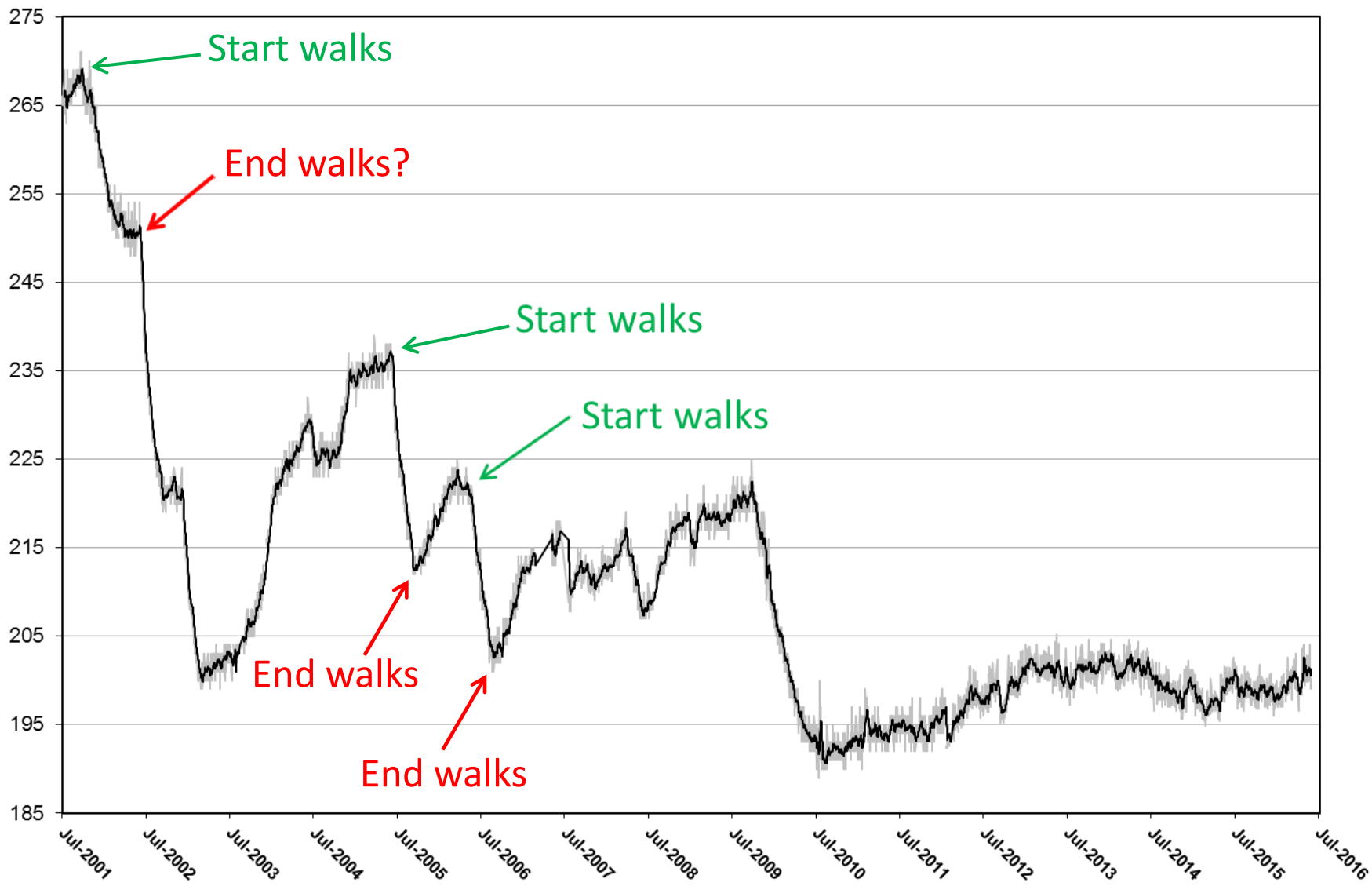
# Recording daily weights

- Started in 2001
- Wanted to lose weight
- Hypothesis: Simply measuring my weight would lead to weight loss

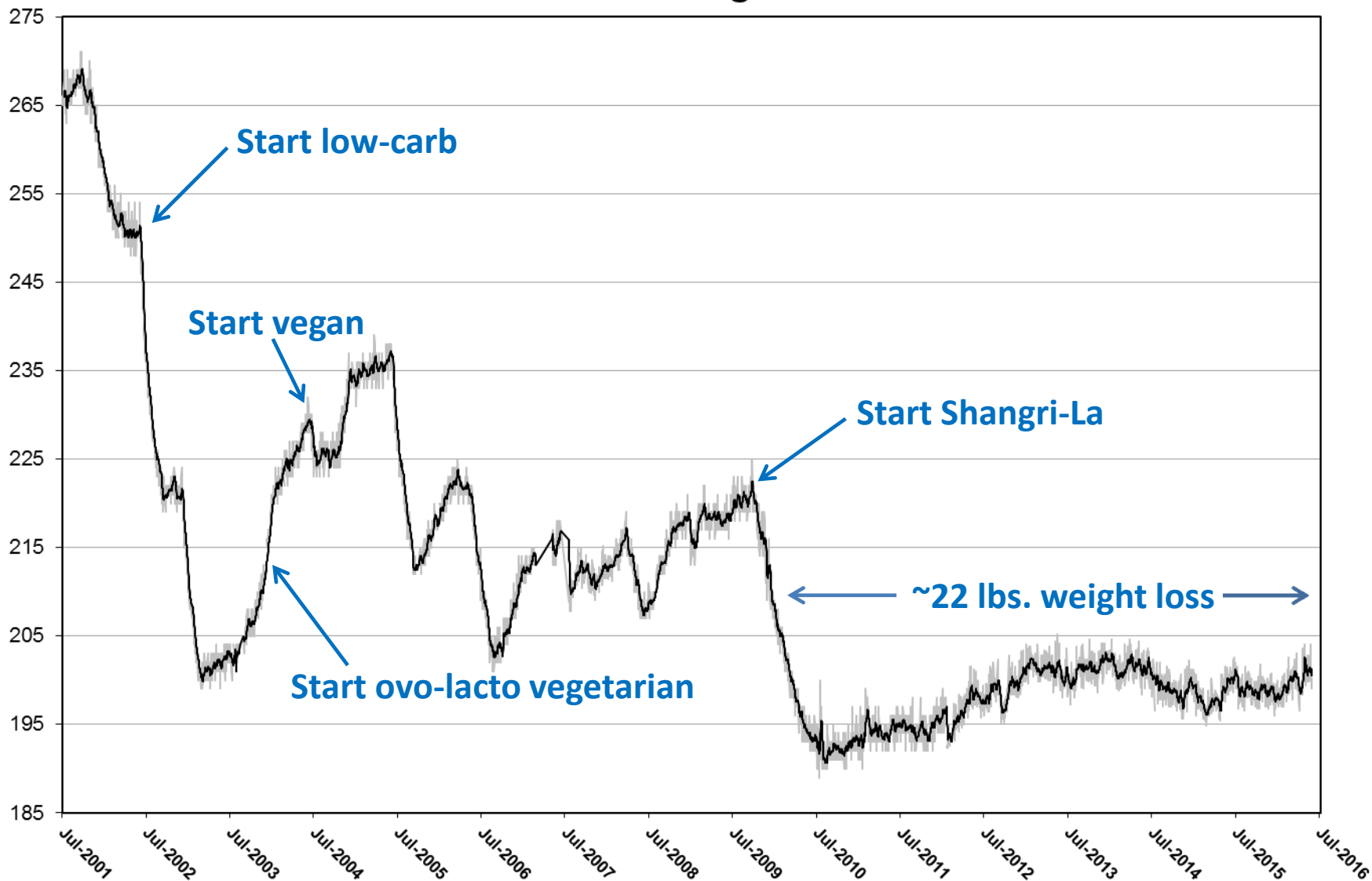
# Effects of Exercise on Weight: 2001–2016



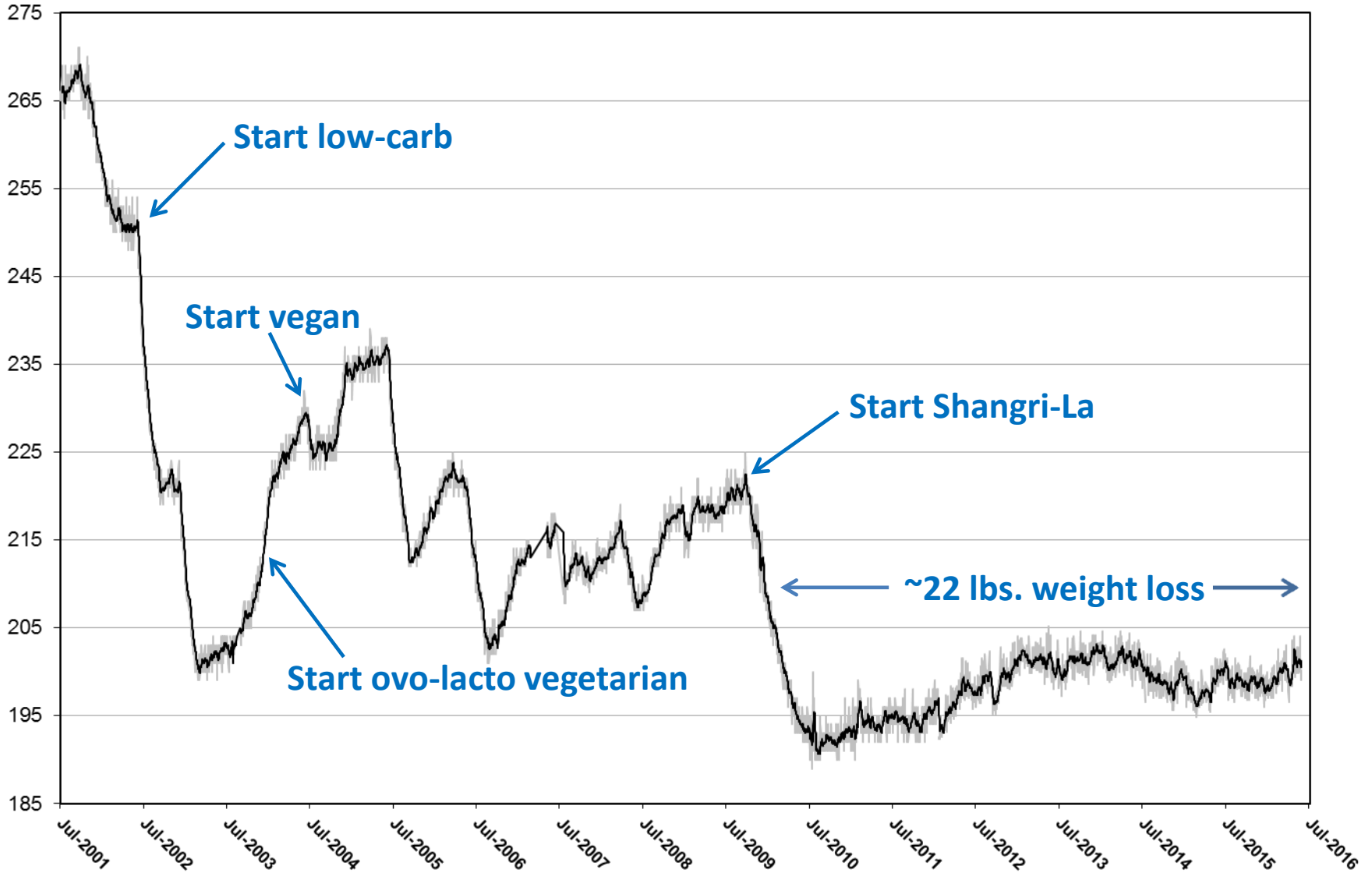
# Effects of Exercise on Weight: 2001–2016



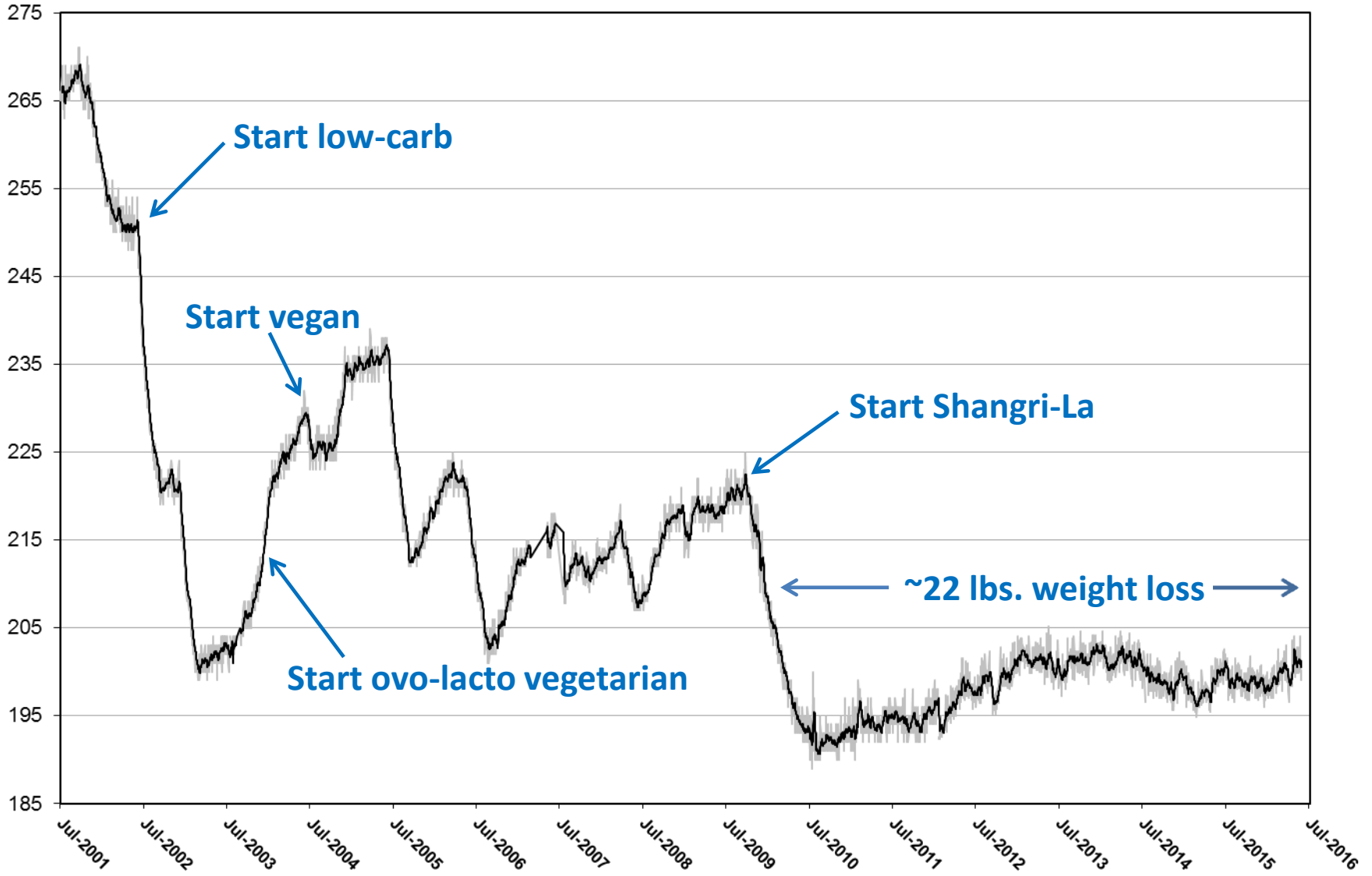
# Effects of Diet on Weight: 2001–2016



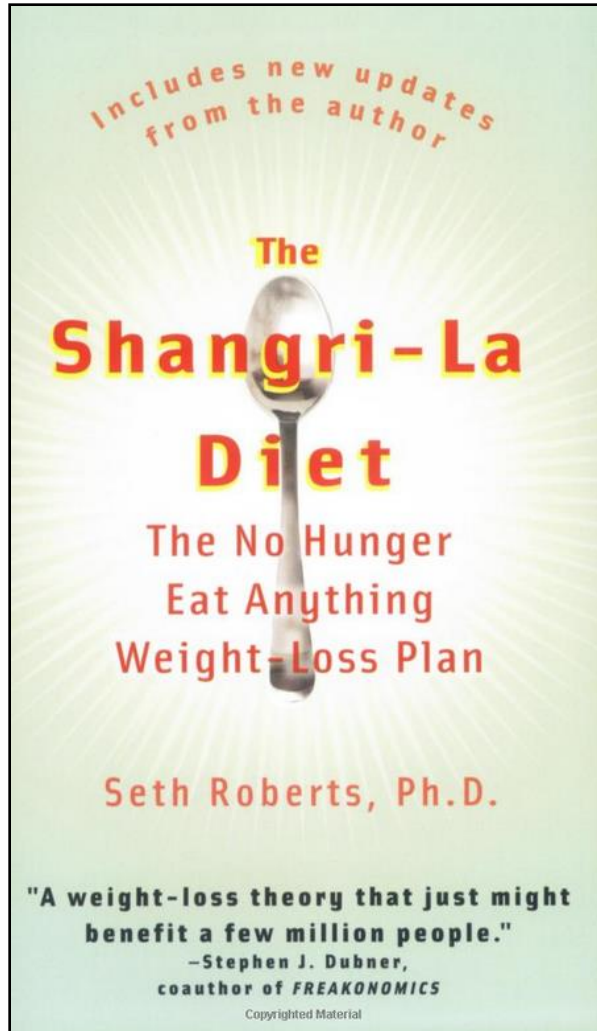
# Effects of Diet on Weight: 2001–2016



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# Shangri-La Diet: Appetite suppression



Seth Roberts  
Late of UC Berkeley



# Shangri-La diet theory:

- Strong, consistent flavors *raise* your set point
- Flavorless calories *lower* your set point  
(suppress your appetite)

# Flavorless calories between meals



# My Shangri-La routine

- Coffee for breakfast, no lunch
- 3T of flaxseed oil early afternoon
- Large dinner
- Snack before bed
- Breakfast once per week

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# Shangri-La advantages

- No restrictions on food types
- Minimal willpower
- Cheap
- Probably safe
  
- (*However...* I wanted to lose more than 22 lbs.)

# What I learned about weight loss:

- Daily weigh-ins by themselves: no effect
- Long walks worked, but hard to maintain
- Low-carb: Rapid, but temporary
- Vegetarian/vegan: No weight loss

# What I learned (continued)

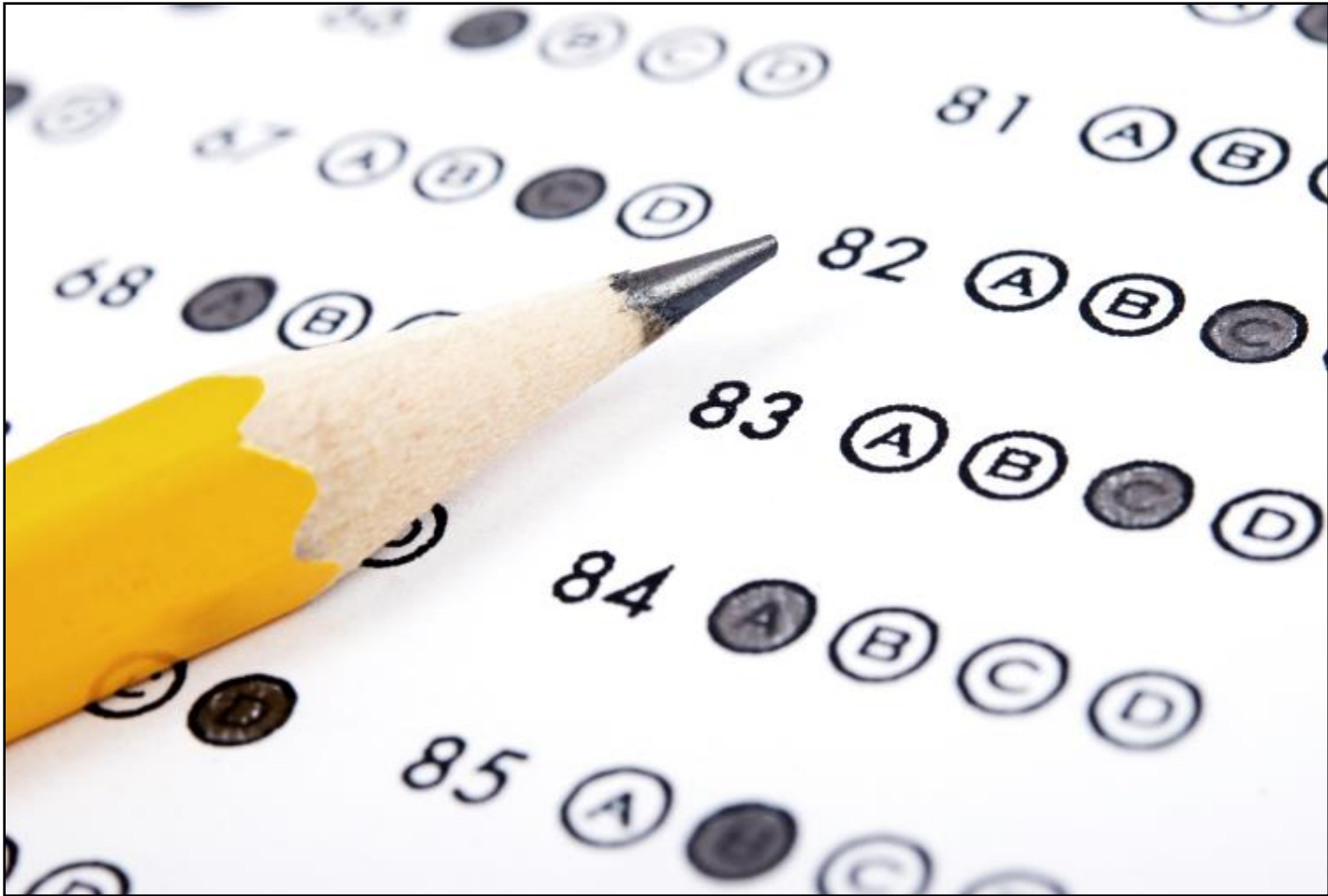
- Some fluctuations are unexplained
- Shangri La: ~22 pounds kept off for 8 years
- (Others have reported losing more weight)

# Part 2: Reaction time as a “barometer” of brain function



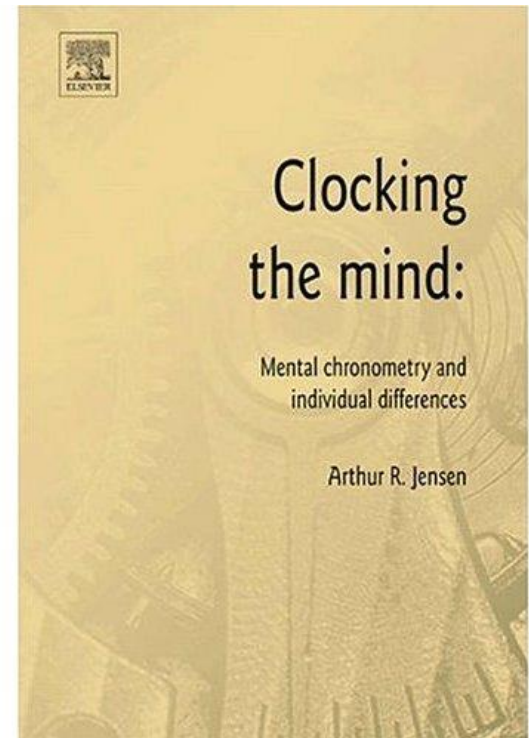


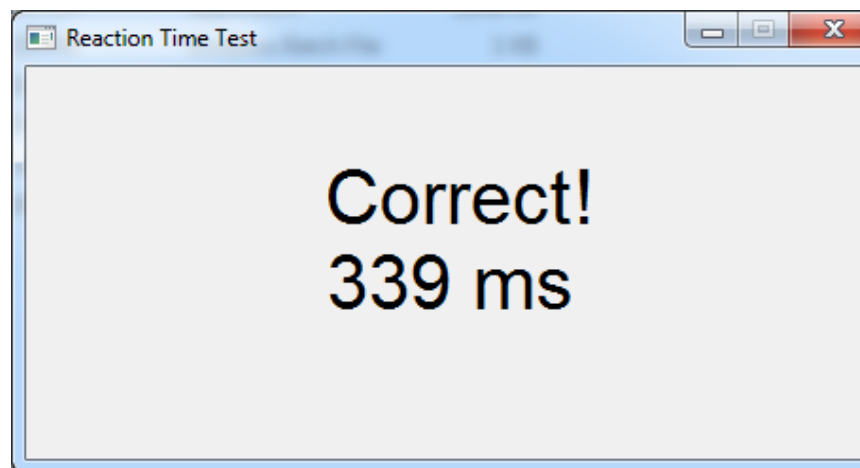
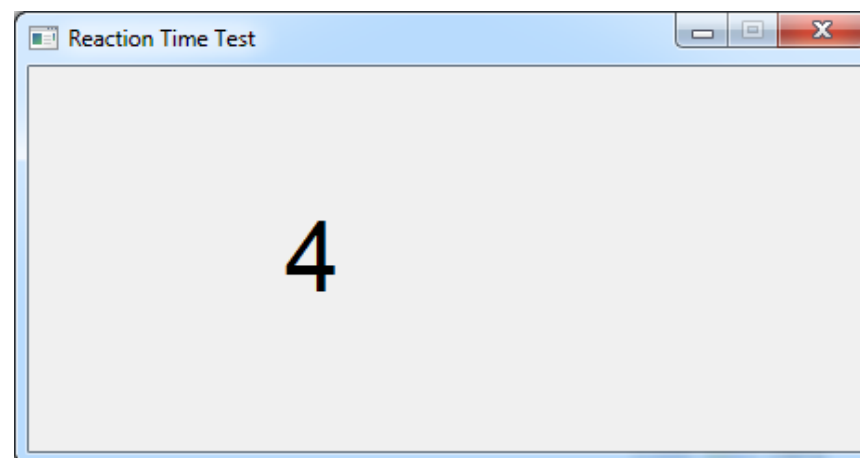
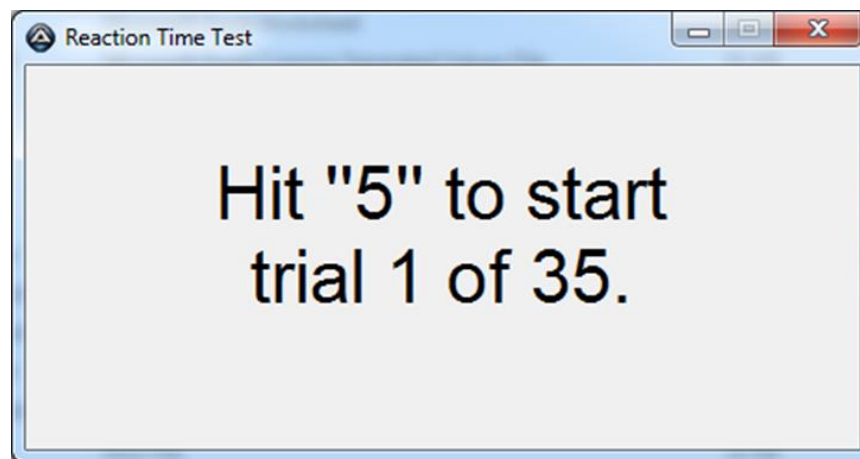
# Traditional IQ tests are limited



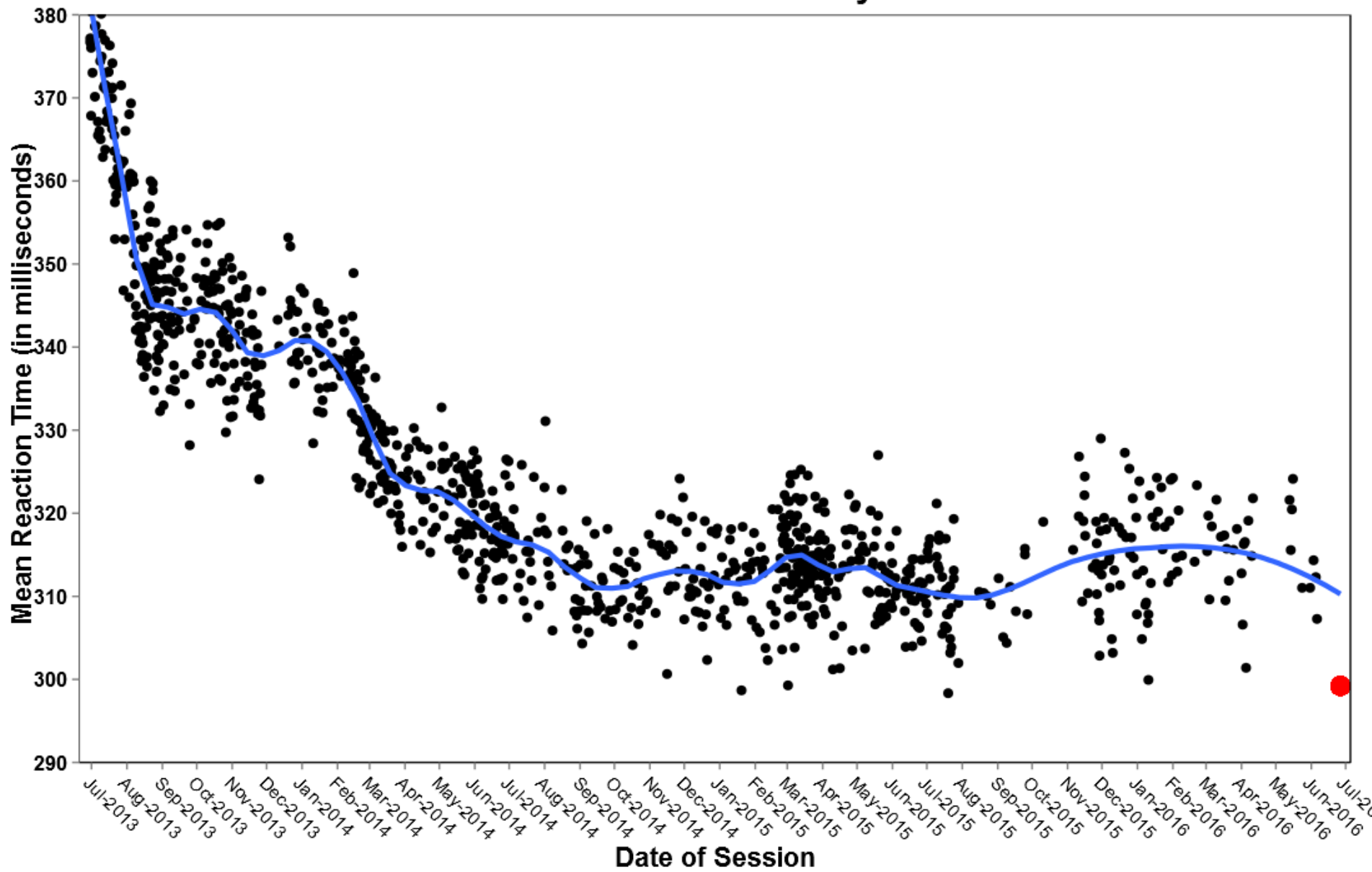
# Reaction time: Indicator of brain function?

- IQ and reaction time correlation:  $r = -0.49$
- Predictor of longevity
- Predictor of dementia onset

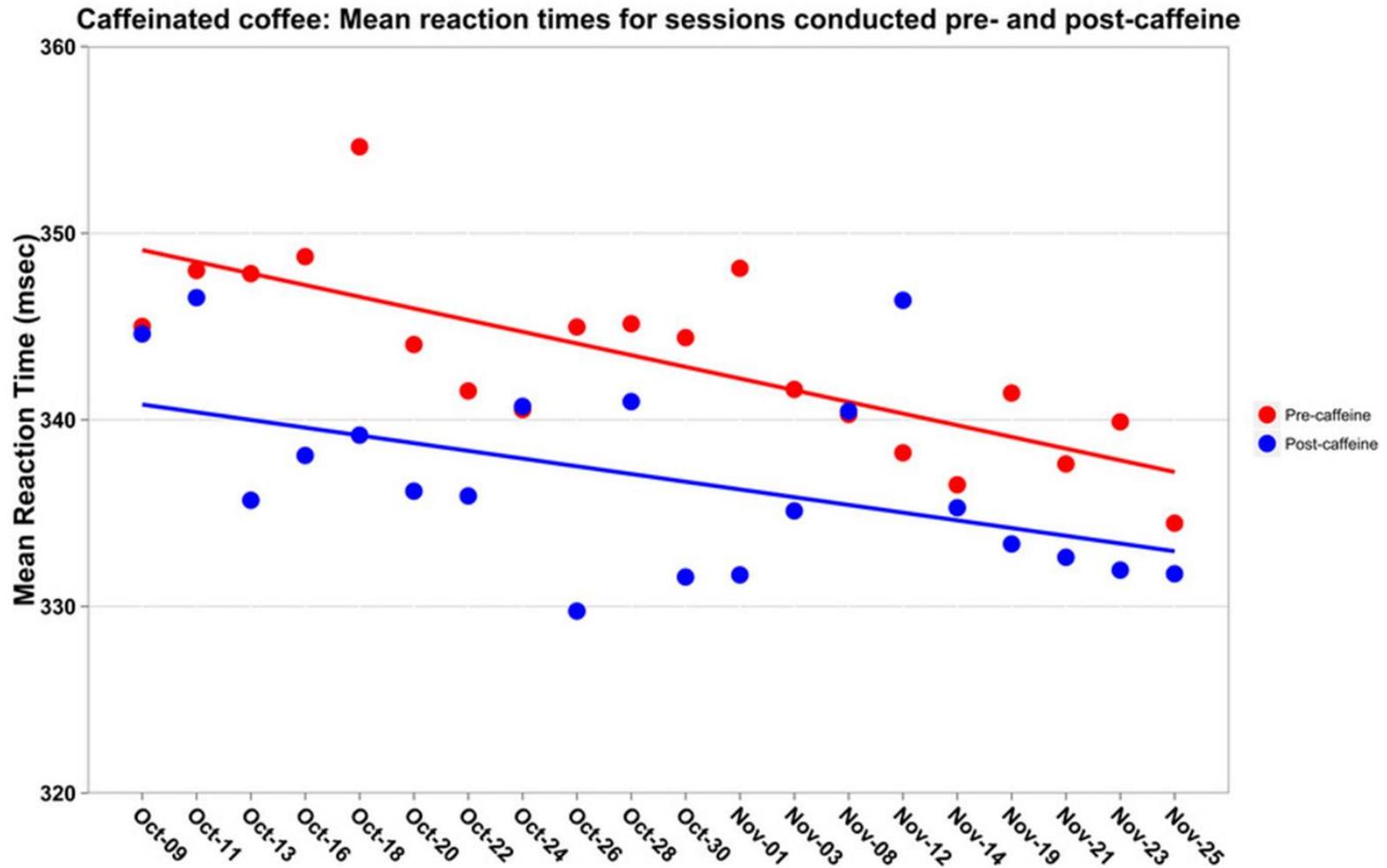




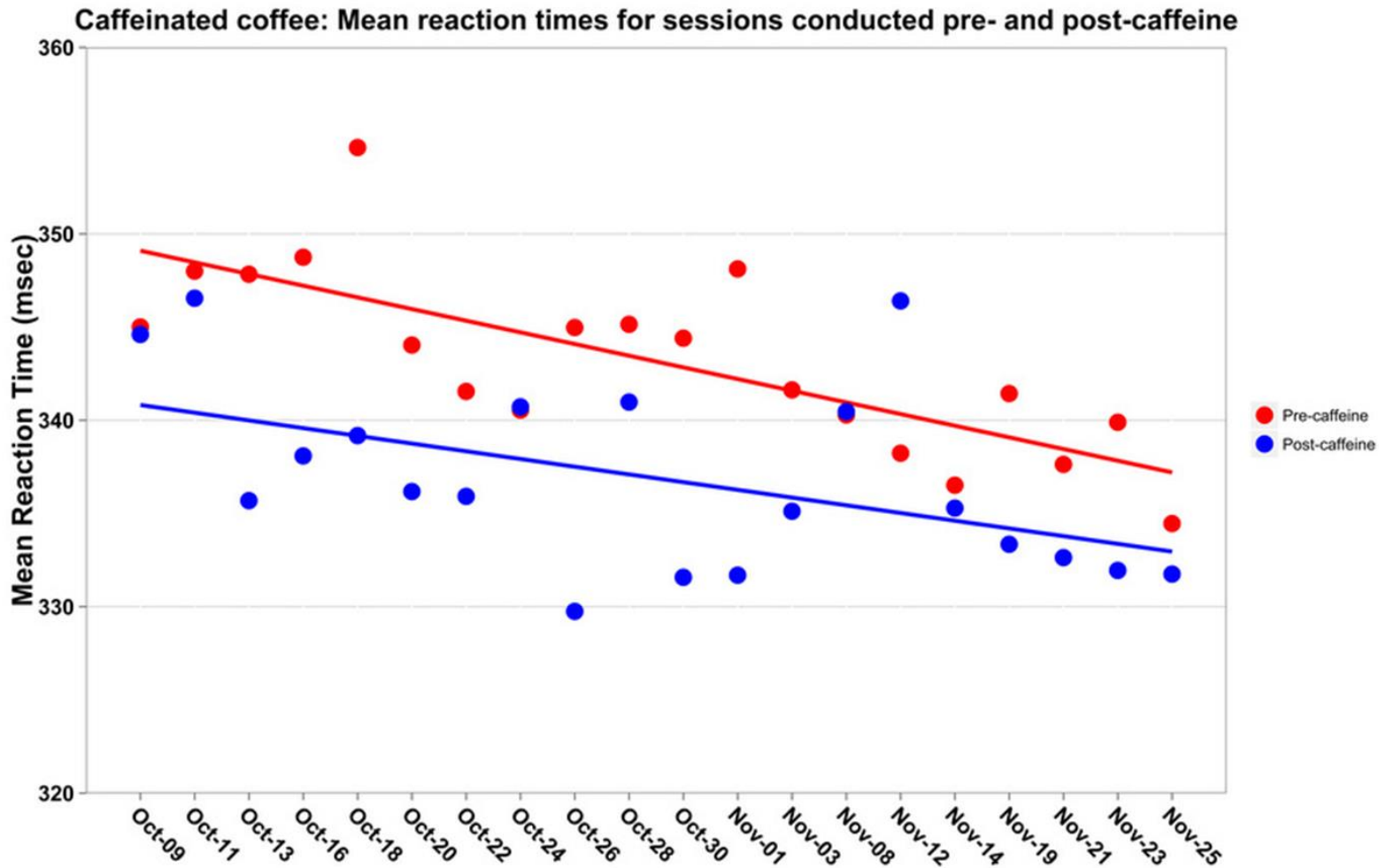
# Mean Reaction Time by Date



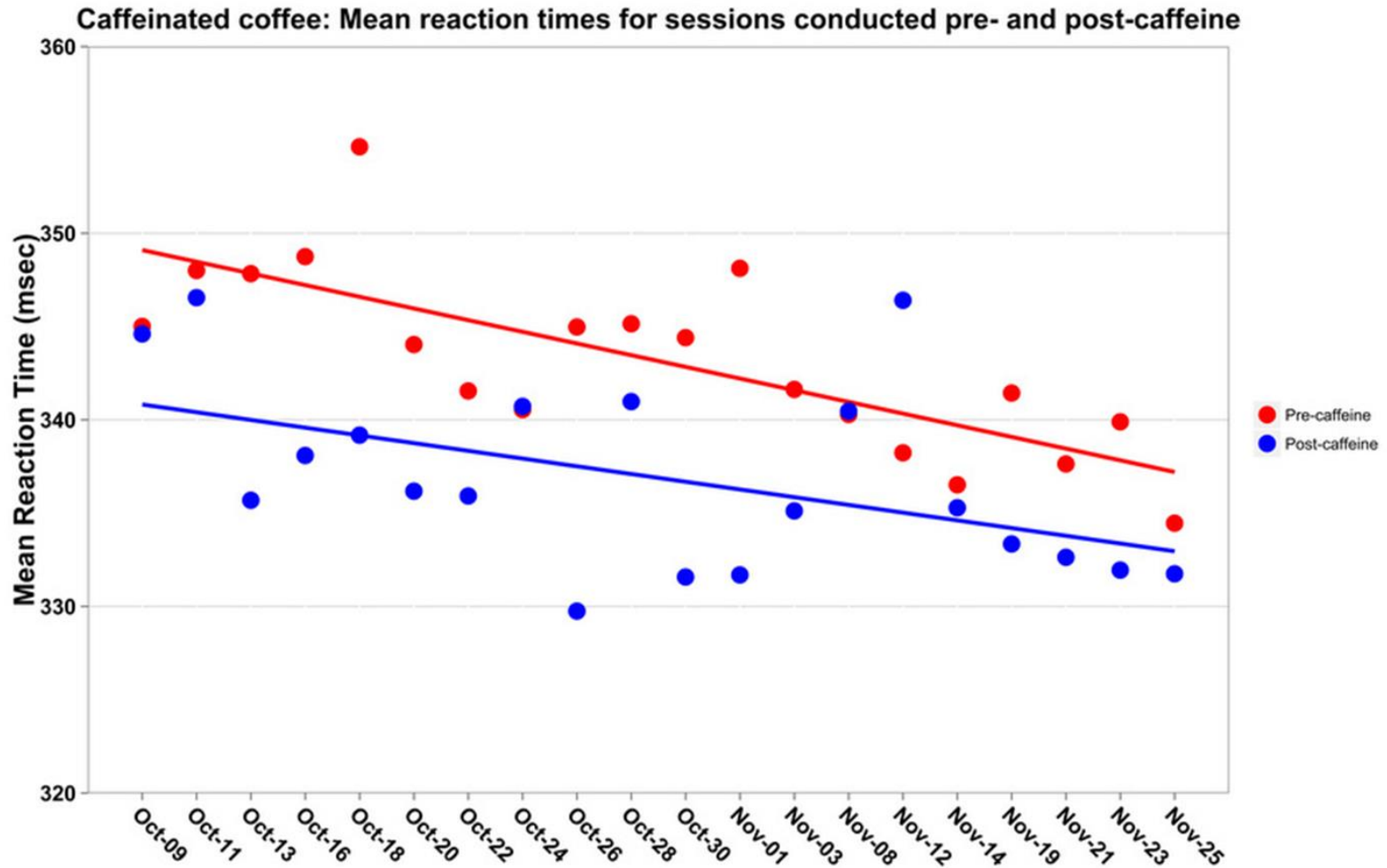
# Caffeinated coffee made me faster



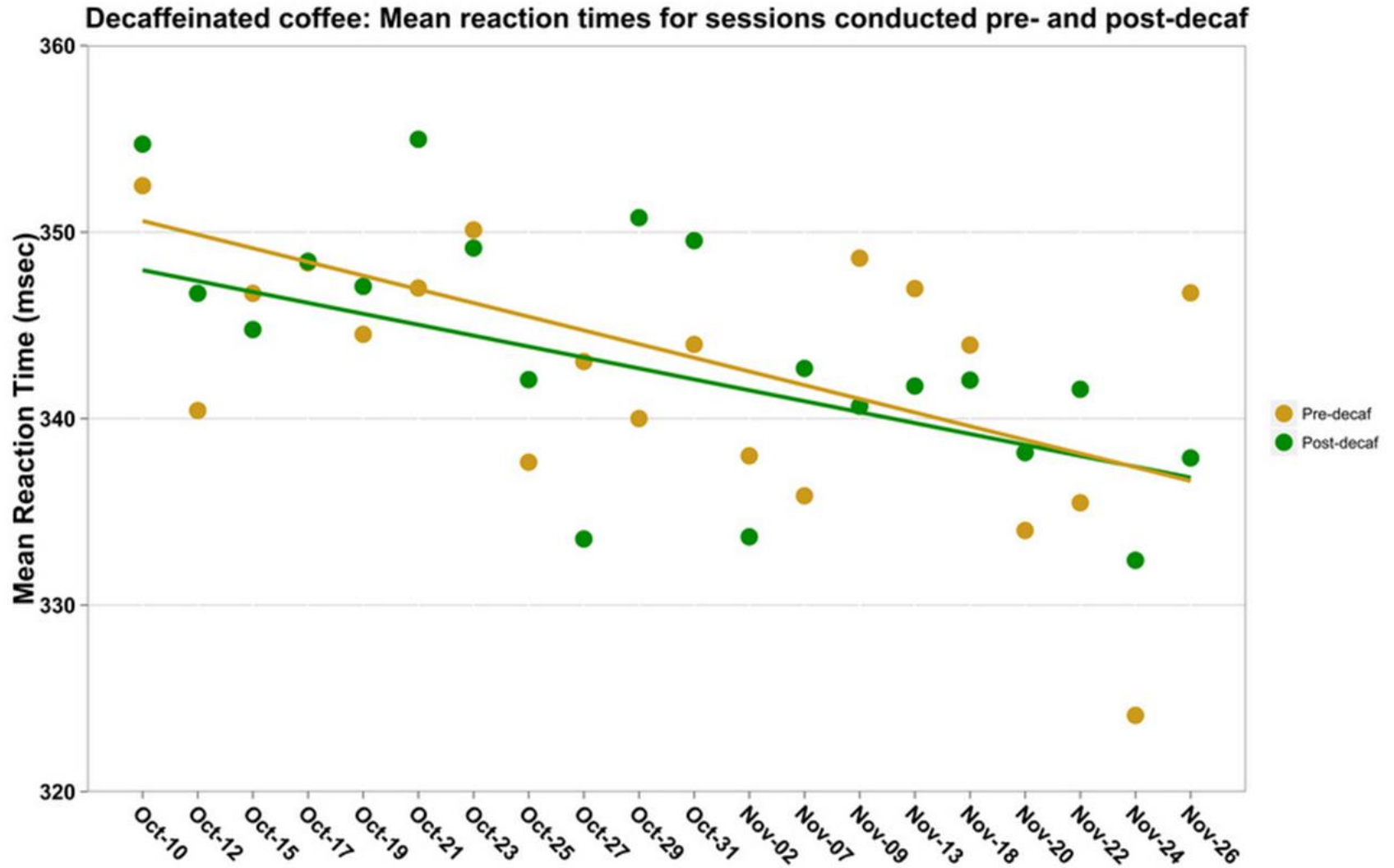
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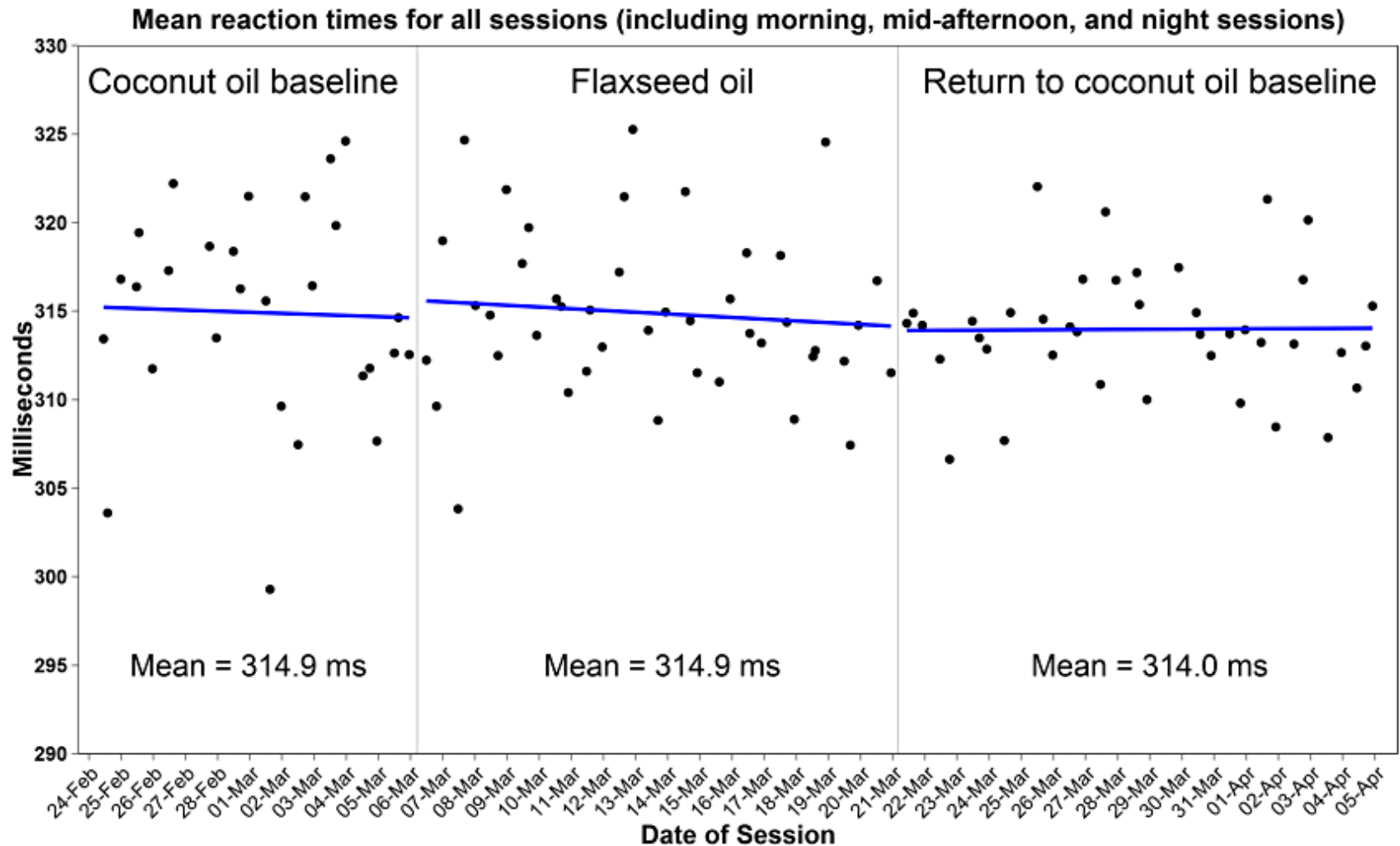


# Decaf coffee has no effect





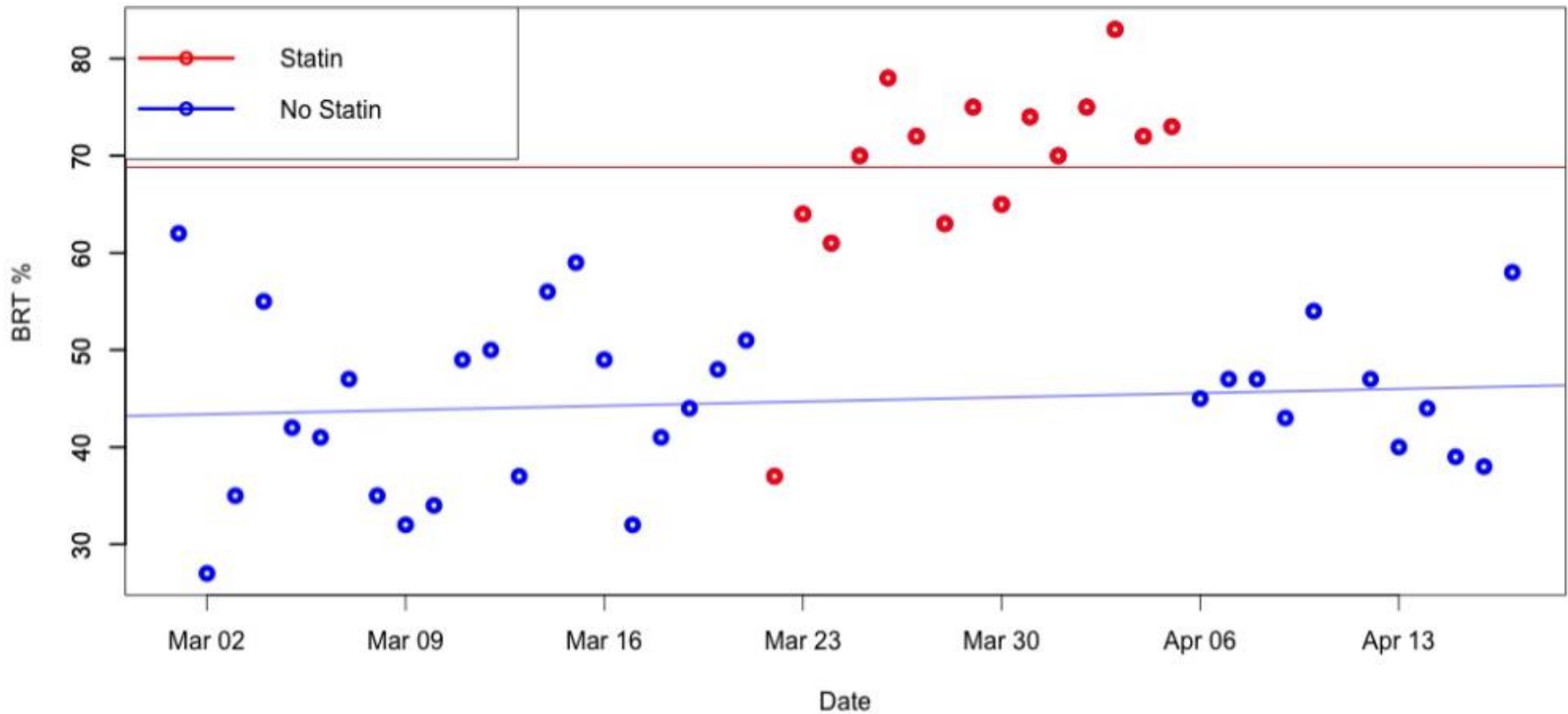
# Flaxseed oil did not make me smarter



# Richard Sprague: Statins made him faster



[richardsprague.com](http://richardsprague.com)



What about expectation effects?



# What did I learn?

- Caffeine result suggests that the test is valid
- Soy, flaxseed oil: no effect
- Test itself is tolerable (fun?)
- Challenges: Scheduling and data-analysis

# Next steps

- Other interventions: Exercise, “brain games”, nootropics, etc.
- Get more people involved
- User-friendliness: “Experiment in a box”

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