

# Sleep and Start Times

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# Deficient Sleep in Teenagers

- Mood and affect changes
- Behavior problems
  - Non-compliance
  - Aggression
  - Hyperactivity
  - Poor impulse control
- Risk taking behaviors and increased accidents



Beebe (2011); Gruber et al. (2012); Owens et al. (2014)

# Deficient Sleep in Teenagers

- Neurocognitive deficits
  - Attention
  - Memory
  - Executive functioning
- Weight gain
  - Increased caloric intake
  - Increased consumption fats and carbs

# Later School Start Time Outcomes

- Multiple studies have demonstrated the benefit of changing to a later school start time...
- Students getting > 8 hours sleep/night
- Better academic outcomes
  - Less depression
  - Less caffeine use
  - Fewer car crashes
- Better attendance rates
- Higher graduation rates
- Reduced tardiness