

How are sleep, diet, and happiness related: why are they important?

Jake Sorber, Dave Breese
Christyne Berzsenyi/English 202C

How does sleep affect what we eat?

In the United States, 68.5% of adults and 31.8% of children are overweight or obese. Why these numbers though? I propose to you that sleep plays a big role in these numbers.

- When you are awake, your brain creates ghrelin which signals to the body that it should eat. This ghrelin builds up in the body but is dissipated during sleep.

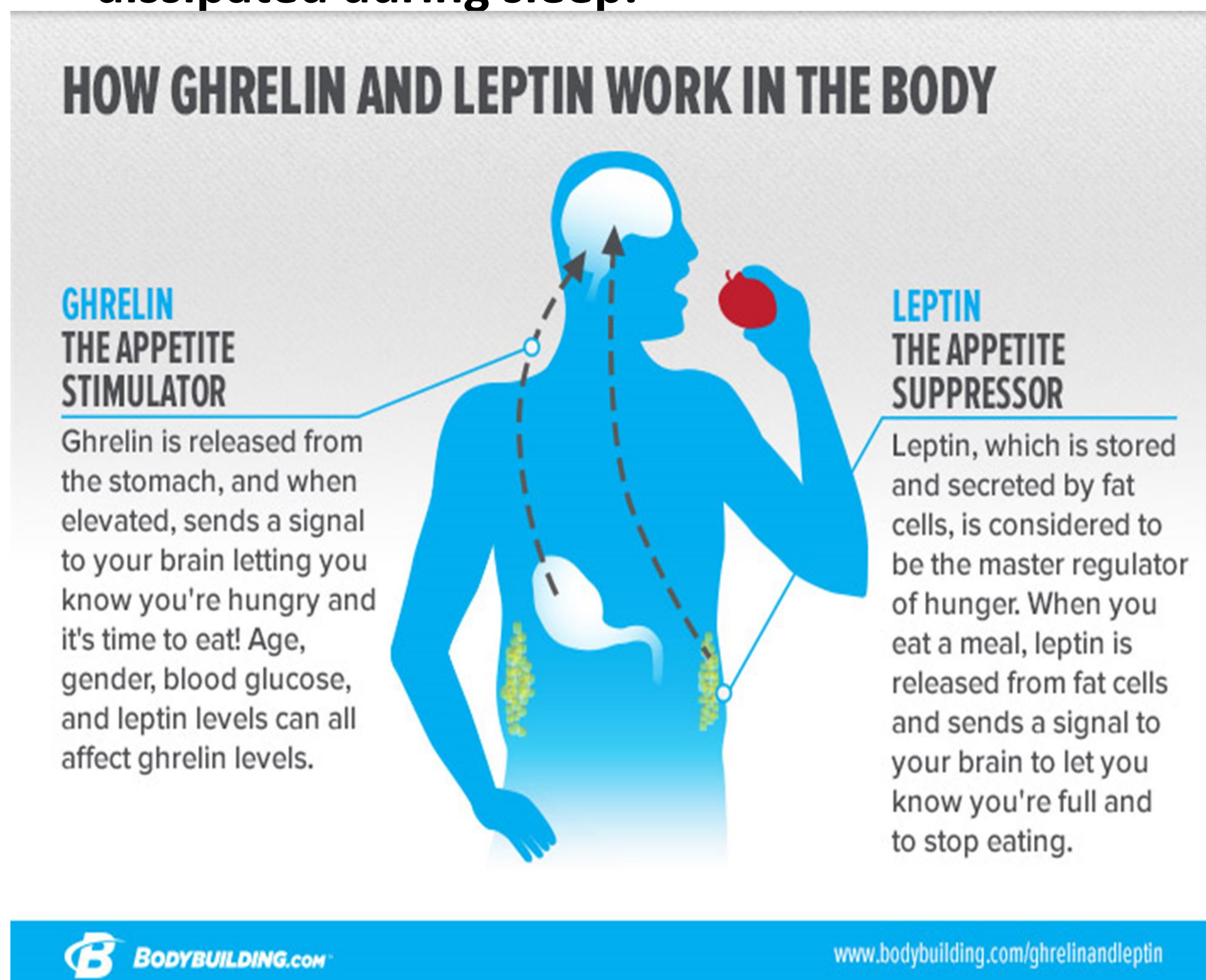


Figure2: Ghrelin and leptin and how they affect the body.

- Leptin tells your body when it is full, but when sleep deprived its levels in the body plummet.
- When sleep deprives our body gives off a cortisol spike, which causes our body to conserve energy and hang on to fat.



Figure2: Diet and sleep are directly related
<https://s-media-cache-ak0.pinimg.com/736x/5a/fc/45/5afc450795959d509cd27392ab540a3.jpg>

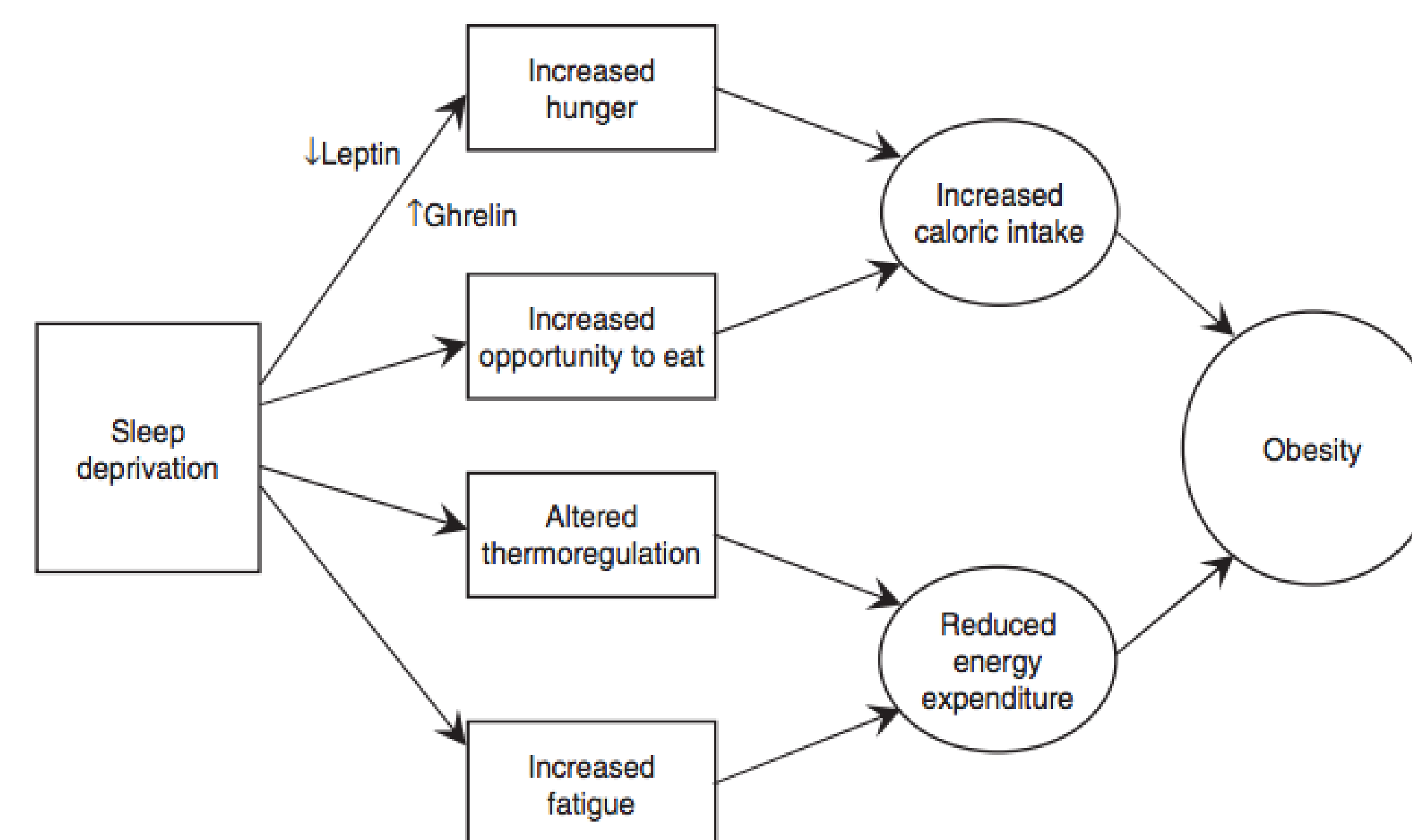


Figure 1 Potential mechanisms by which sleep deprivation may predispose to obesity.

Figure 1. Image explaining how sleep deprivation causes obesity.
<http://sites.psu.edu/siowfa15/wp-content/uploads/sites/29639/2015/09/Screenshot-2015-09-13-at-4.16.08-PM.png>

How does what we eat affect sleep?

According to the national sleep foundation - "What you eat and drink before bed can affect your sleep. For example, foods containing the amino acid tryptophan—a building block of the sleep-related chemical serotonin—could potentially make you drowsy."

Foods that contain relatively high amounts of tryptophan

- Fish
- Dairy products
- Turkey
- Pork
- Spirulina
- Soybeans

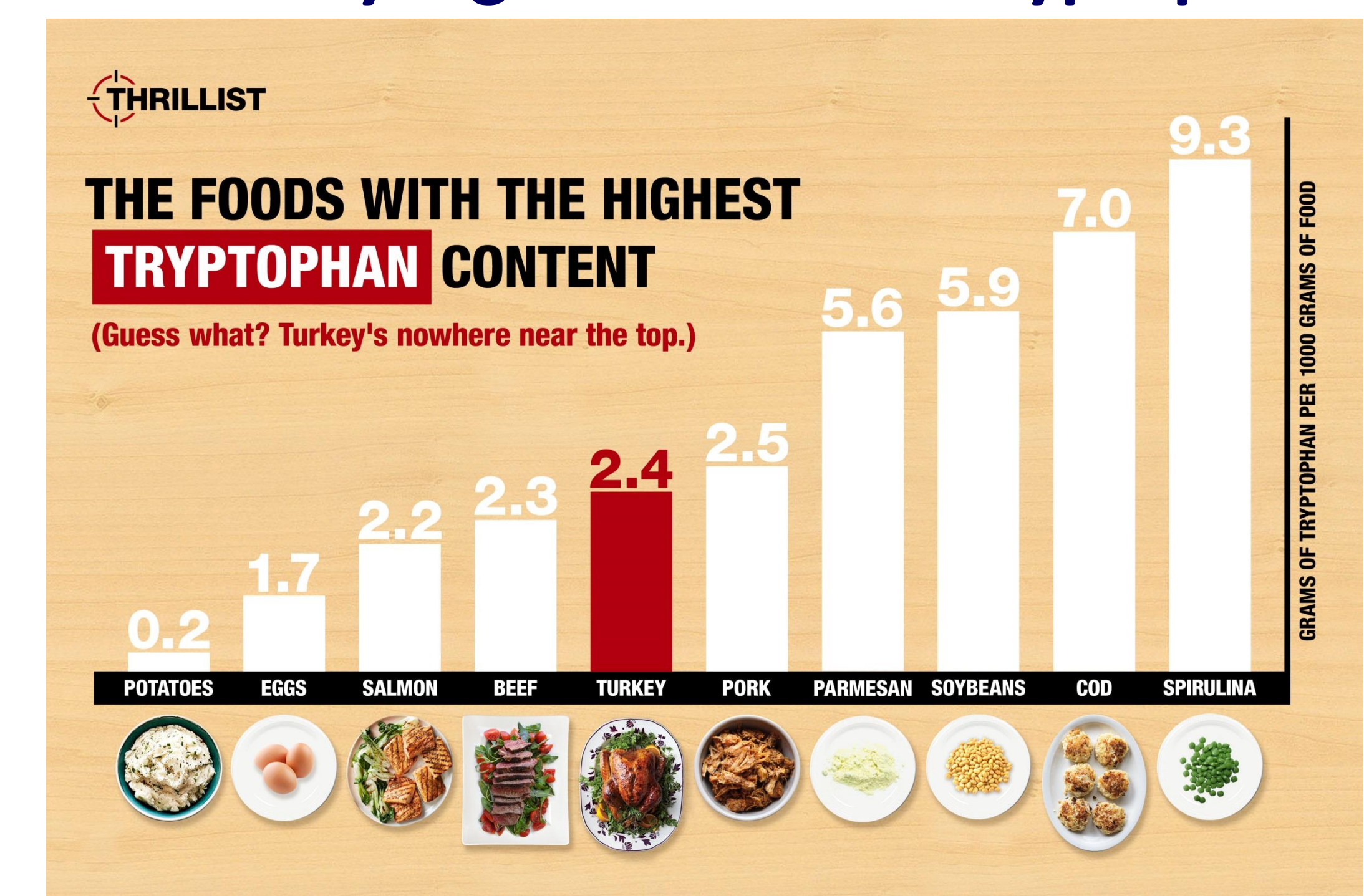


Figure 2: List of foods with highest competition
<http://assets3.thrillist.com/v1/u/tryptophan-graph.jpg>

If individuals don't watch what they eat and when they do, it will result in a vicious cycle of bad sleep habits and bad eating habits.

Works Cited

- "Obesity in the U.S. « Food Research & Action Center." Food Research Action Center Obesity in the US Comments. N.p., n.d. Web. 12 Apr. 2016. Reference in Calibri, 32 points, bold
- N.p., n.d. Web. 4 Apr. 2016.
<<https://sleepfoundation.org/bedroom/taste.php>>.