

# It's All In Your Head...Really!

By Dani-Jean Stuart, Hudson

I'd wager a chocolate bar that I'm not the only Dispatcher who has cravings for fatty, sugary, or salty foods. Not necessarily in that order, but definitely in combination of those elements and certainly with food intake. Eating carbs increases serotonin, protein levels of intensity. You know what I'm talking about! All the way from "Hmm, I'd really like some chocolate" to "Look, if y'all get between me and that donut? *Someone's* gonna get hurt."

I'm guessing it's not news to you that sleep disruption paired with stress drives carb cravings. Just look at folks circling the donut box at a NHEDA meeting. No one wants to be the first to dive in, but that box gets our attention every time. I've decided to solve the "not wanting to be first" issue by bringing donuts and just openly pillaging the supply in plain view of all attendees.

But seriously. Working on little sleep and with daily stress is often considered just "how we roll" in dispatch. Schedule rotation, vacation/sick fill-in, adrenal response, caffeine use...each of these contributes to the conditions feeding on each other. Trying to figure out which comes first..sleep disruption or stress..is much like ing the chicken/egg debate. The bottom line is that two things we consider normal in our work environment seriously affect our food choices.

We know this anecdotally but current brain science appears to confirm it. UC Berkeley researchers have used functional MRI technology to study what happens in the brain when someone is short on sleep. The waking fMRI images show a *decrease* in activity in the *frontal* lobes of the brain and an *increase* in activity in the *lower* lobes of the brain. Basically, when you're sleep deprived, the part of your brain that's considered the area that regulates control..the Executive Function..decreases in activity. And the primitive area of your brain..related primarily to instinct..increases in activity.

Once you've learned a behavior/habit that way, fMRI studies show a lot of activity in the brain at the *beginning* of the behavior, and at the *end* of the behavior, but *not a lot of brain activity in between* (from a June 2014 article in Scientific American). So when someone reaches for junk food *out of habit* in response to sleep deprivation and/or stress, they are *literally* giving *almost no thought* to what they're doing! It's like a different way of self-medicating and we're doing it *without the input of the higher regions of our brains*.

So where does that leave those of us who use food as a feel good habit? Does just the thought stress you out? Wait! NO! Don't reach for that cookie!

Under these brain function patterns, test subjects chose higher caloric value foods to the tune of an additional 600-900 calories over healthier choices. You can read that study here: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2919439/>.

**Up next: Habits, satiety, and the dreaded word "meditation"**

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