## The yo-yo brain effect of your favorite cola



If you rev up your brain with a "regular" fuel like your favorite cola, you most likely have experienced the yo-yo brain effect. It's the same experience of the yo-yo diet effect where you lose weight but gain back more.

In the **yo-yo brain effect** you start to feel tired, unfocused or restless and you take your favorite cola drink which perks you right up, but in less than an hour you're starting to droop even lower than before (which of course required another pick-me-up).

While you may think it's your body dragging you down, it's really your brain that's pulling the plug.

Your brain gets its energy from *glucose*. Sources from either carbohydrates or direct sugar sources provide the glucose energy for your brain's neurons to fire. Firing neurons set off a cascading messenger system which activates all of your brain and body functioning.

But when you drink your favorite cola, you get **10 teaspoons of** excess sugar (glucose), much more than what you need.

In response to this excess ...

 Sensors in the brain's hypothalamus send a message to the pancreas to release more insulin

- Extra insulin acts on excess glucose by sending to liver for storage
- Insulin levels remain high if liver unable to process glucose fast enough
- Higher insulin level acts on remaining glucose to the point of depleting its level (*hypoglycemia*).
- The adrenal glands then act on liver to get the glucose level back up

This cycling of high and low amounts of glucose has a direct effect on your brain. This is what is causing the yo-yo brain effect.

During the spike of high glucose, your brain in firing away with **spurts of energy** and the dopamine centers are responding with that feel good pleasure sensation.

But, with continued high levels of insulin, the remaining glucose can be depleted to the point where the neurons **don't** have enough energy to fire efficiently.

What you are getting is a brain that's having trouble functioning — it's slow to process, memory, learning and decision making are harder, and it can seem unfocused, confused, restless or just plain tired.

It's a shame your favorite cola drinks which taste so good and act so fast to perk you up can let you down so hard.

But, if you want greater brain performance you're going to need Super fuel.

**Disclosure Statement**: the above blog post was written under the influence of 1 glass of Pepsi, my chosen drink of preference when writing blogs. But, due to the nature of the subject matter I sipped it slowly over a period of time.

Video version: