



**01 OCTOBER 2018** 

## **CALIFORNIA RAISINS - FORMULA ONE BRAIN FUEL?**

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Being able to control a 3/4 of a ton racing car, at over 200 miles per hour takes nerves of steel and an incredible reaction time.

Formula 1 race car drivers like Lewis Hamilton do this all the time. It's claimed that Lewis' reaction time is <u>less than 200 milliseconds</u> (less than a fifth of a second); considering the average



Brit has a reaction time somewhere around the 500 millisecond mark, in racing terms, he's left you standing at the starting line before you even pressed the accelerator pedal.

But what does it take to get your brain and central nervous system working that efficiently – and importantly, can nutrition help?

We know that our brains works extremely well with a steady supply of glucose from the bloodstream and that predominantly comes from foods rich in carbohydrates such as: breads, pasta, rice, fruits or in some cases the biscuit tin! When you eat these foods, your digestive system breaks them down to release glucose (a simple sugar) into the bloodstream for your brain, muscles and organs to use.

Have you ever wondered why you start to crave carbohydrate-laden foods when you've been focusing on your work, exercising or using your 'brain power' a lot?

That's your brain asking for a bit more glucose to maintain the workload (<u>as described here in this NHS article</u>). Whilst people respond in different ways to a drop in blood glucose level, if your **THINKRAISINS.THINKCALIFORNIA** 

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brain doesn't get enough glucose, your brain will instead use other types of stored energy in your body such as fat and protein. Whilst this is a great survival mechanism, these fuels just aren't as efficient as carbohydrate and often the result is people remaining tired or unable to keep up the pace. A common side effect of low carbohydrate diets is fatigue for this very reason – read more here about the Low-carb diet.

So the science makes sense but you might be asking if we add a little extra glucose does the research show it actually improves brain performance?

Interestingly, this question has been frequently investigated, incredibly by NASA who completed an extensive literature review of the side effects of blood glucose on performance – <u>see the National Aeronautics and Space Administration (NASA) research article here.</u>

NASA found unanimously that maintaining blood glucose levels improved almost *every* aspect of brain function, including memory, reduction in errors and increasing reaction time. Considering astronauts need to make very fast decisions in space – I'm inclined to believe them!

## How do we put this into action?

Well guzzling sugary, glucose drinks at the first sign of fatigue is not a solution. In fact, the effects of sweets, sugary drinks, biscuits and candies which all raise blood glucose very rapidly (also termed high glycaemic index foods) will only lead to a *temporary* lift in brain function – followed by a low blood glucose crash.

What we want instead are foods that give a steady release of glucose to help prevent the highs and lows in blood glucose. That **requires foods with a medium to low glycaemic index** such as wholegrain breads, oatcakes, nuts, seeds and fruit/dried fruit, like California Raisins.

Remarkably, Lewis Hamilton has smartly taken pole position on this one again with his <u>Instagram post showing off his couscous</u>, <u>pomegranate</u>, <u>raisin</u>, <u>and orange peel salad</u>.

So, sprinkling a serving (30g handful) of California Raisins on your salad or as a snack in between your meals, might just be the edge you need to keep your brain fuelled and firing like a formula 1 engine.

## **About the Author:**

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You can find out more about Rick at www.rick-miller.co.uk

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