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# Sleep: A Better Bet Than Playing the Lottery

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**G**loria MacKenzie's neighbors undoubtedly looked on in envy in May 2013, when the 84-year-old widow's name was announced as the winner of the largest multistate jackpot in Florida's history. At a news conference afterward, this public statement was read on her behalf:

While in line at Publix, another lottery player was kind enough to let me go ahead of them in line to purchase the winning Quick Pick ticket. We are grateful for this blessing of winning the Florida Lottery Powerball jackpot and appreciate the interest of the public, the state of Florida and the lottery.<sup>1</sup>

While it appeared that fate—or perhaps God—had intervened on MacKenzie's behalf, actuaries know this for certain: Playing the lottery is a bad business decision.

“Why?” the uninformed might ask.

Actuaries know that the odds of winning are infinitesimal. Consider, for example, the chance that MacKenzie would win \$590 million in the May 2013 Powerball lottery: 1 in 175 million.<sup>2</sup>

Of course, most people can't fathom how unlikely this outcome is. To illustrate the quandary, Professor Robert Williams of the University of Lethbridge, in Alberta, Canada, offered this scenario:

*Picture yourself heading down to your local convenience store, slapping \$2 on the counter, and filling out a six-numbered Powerball ticket. This will take about 10 seconds. To get your chance of winning down to a coin toss, or 50 percent, you will need to spend 12 hours a day, every day, filling out tickets for the next 55 years. It's going to be expensive. You will have to plunk down \$2 at least 86 million times.<sup>3</sup>*

Despite this impossibly unlikely result, people in 43 states spent over a half billion dollars in the 2013 Powerball lottery that MacKenzie won. Indeed, 232 million tickets were sold. And in a recent Gallup

poll, 57 percent of respondents said that they had purchased a lottery ticket during the past year. In the 2012 fiscal year, U.S. lottery sales totaled approximately \$78 billion.<sup>4</sup>

## WHAT PROMPTS PEOPLE TO PURCHASE LOTTERY TICKETS?

Writing about lottery sales, award-winning journalist Andy Piore observes: “*It's a game where reason and logic are rendered obsolete, and hope and dreams are on sale.*”<sup>5</sup>

In short, people want a better life and become convinced that playing the lottery is the answer.

But there's a much more reliable method.

## SLEEP: A MUCH MORE EFFECTIVE WAY TO IMPROVE OUR LIVES

There's a better way to improve our lives. It doesn't depend on impossibly remote odds. It doesn't cost any money. It's within our control. Yet most of us avoid taking the cure.



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**Research participants who slept less than seven hours a night were nearly three times more likely to develop a cold when exposed to a virus than those who slept more.**

Do you know what it is?

Sleep.

“Getting the right amount of sleep is important in being alert the next day, and several recent studies have found a strong association between getting seven hours of sleep and optimal cognitive performance,” reports Sumathi Reddy in the *Wall Street Journal*.<sup>6</sup>

Using data from 287,000 respondents who self-reported their sleeping habits on the cognitive-training website Lumosity, scientists discovered that cognitive performance increased as people got more sleep. Seven hours is the sweet spot; less than that, scores began to decline.<sup>7</sup>

It turns out that sleep enhances memory. It acts like a “spring-cleaning” for the brain, explains neuroscientist Penelope Lewis. Waste materials that have built up in the brain over the course of the day, like the potentially memory-robbing protein fragments associated with Alzheimer’s disease, are washed away. Likewise, details that accumulated in your brain during the day are pruned away. The music you heard while waiting on hold disappears while the implications of the data you analyzed appear in the forefront of your brain.<sup>8</sup>

Creativity expands, too. Problems that are difficult to figure out at night are often solved during sleep. Visualize a committee of billions of busy neurons examining patterns between existing knowledge and new memories to develop innovative solutions. “When you dream in REM sleep,” says Dr. Jessica Payne, director of the Sleep, Stress, and Memory Lab at the University of Notre Dame, “the rational control center of the brain is deactivated. This produces an amazingly creative state, and you are able to come up with ideas that you would not when you were awake.” Envision Paul McCartney dreaming up the melody of “Yesterday” and Stephanie Meyer picturing the *Twilight* series while she slept.<sup>9</sup>

Also, have you ever noticed that when you’re sleep-deprived, you crave a quick hit of energy, something on the “bad for you” list? (Those chocolate brownies look awfully good!) That’s because sleep helps regulate appetite. It keeps weight in check by speeding up metabolism. In contrast, when you’re

exhausted, a hormone called ghrelin fuels feelings of hunger. Less leptin is produced, too, so you don’t know you’re full; not to mention that you don’t have the energy to exercise.<sup>10</sup>

A well-rested brain can also talk you off the precipice. When the “fight-or-flight” part of your brain called the amygdala screams “DANGER,” you can better resist saying something inappropriate to your co-worker or, worse yet, to your boss or upper management. On the other hand, a sleep-deprived amygdala often gallops into overdrive, sometimes prompting an explosion. “I can only do one thing at a time!” you might spew to your boss, when faced with competing demands. Regret follows.<sup>11</sup>

Finally, sleep heals: It helps maintain tissues and organs throughout life. The body’s infection fighters, white blood cells, ramp up their circulation. Research participants who slept less than seven hours a night were nearly three times more likely to develop a cold when exposed to a virus than those who slept more. In addition, insufficient sleep has been linked to all kinds of health maladies, such as heart attack, stroke, diabetes and inflammation. Thus, sleep can extend your life while making you more creative and productive.<sup>12</sup>

## HOW TO BEGIN?

Habits are notoriously hard to change. Neurons become hardwired. But it’s not impossible.

Think of one small thing you’ve changed in your life. For example, 15 years ago I stopped biting the inside of my mouth when I felt anxious. I’d been doing it since childhood. And a few years ago, I started punching in three extra numbers every time I dialed a local telephone number because area codes were now required. I’m embarrassed to admit that remembering those three new numbers took many tries as I rushed to make a call. But I did it. It just took practice and being patient with myself.

I invite you to be more patient with yourself tonight. And kinder. Take better care of yourself by going to bed a little earlier so you can get a full seven hours of sleep.

As you head off to bed, remember these words by Joseph Fort Newton:

*We can do anything for one day. So, just for today, let us be unafraid of life, unafraid of death*

*which is the shadow of life; unafraid to be happy, to enjoy the beautiful, to believe the best.*

*Just for today let us live one day only, forgetting yesterday and tomorrow, and not trying to solve the whole problem of life at once.*<sup>13</sup>

I wish you sweet dreams. ●

#### ENDNOTES

- <sup>1</sup> Huffington Post. 2013, June 5. Gloria C. Mackenzie, Powerball Lottery Winner, Claims \$590 Million May 18 Jackpot. Available: [http://www.huffingtonpost.com/2013/06/05/gloria-mackenzie-powerball-lottery-winner-claims-may-jackpot\\_n\\_3390875.html](http://www.huffingtonpost.com/2013/06/05/gloria-mackenzie-powerball-lottery-winner-claims-may-jackpot_n_3390875.html).
- <sup>2</sup> Piore, A. 2013, Aug. 1. Why We Keep Playing the Lottery. *Nautilus*. Available: <http://nautil.us/issue/4/the-unlikely/why-we-keep-playing-the-lottery>.
- <sup>3</sup> Ibid.
- <sup>4</sup> Ibid.
- <sup>5</sup> Ibid.
- <sup>6</sup> Sumathi, R. 2014, July 21. Why Seven Hours of Sleep Might Be Better Than Eight. *Wall Street Journal*. Available: <http://online.wsj.com/articles/sleep-experts-close-in-on-the-optimal-nights-sleep-1405984970>.
- <sup>7</sup> Lindley, J.K. 2014, August. While You Were Sleeping. *Real Simple*. 105,106,108, 110,113.
- <sup>8</sup> Ibid.
- <sup>9</sup> Ibid.
- <sup>10</sup> Ibid.
- <sup>11</sup> Ibid.
- <sup>12</sup> Ibid.
- <sup>13</sup> Newton, J.F. 1947. How to Enjoy the Happiest Day of Your Life. *Philadelphia Evening Bulletin*. Available: [http://www.themasonictrowel.com/masonic\\_talk/masonic\\_matter/files/masonic\\_matter\\_2004\\_10\\_22.htm](http://www.themasonictrowel.com/masonic_talk/masonic_matter/files/masonic_matter_2004_10_22.htm).

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