

# Healthy Living

Patient Information from the American Chiropractic Association

## Fight Fatigue with Nutrition, Activity

Napoleon Bonaparte once said that courage is only the second virtue in a soldier; the most important one is endurance of fatigue. Nowadays, fighting fatigue has become equally important for a growing army of people too busy or stressed to get adequate rest. In fact, according to a 2007 survey by the National Sleep Foundation (NSF), more than half of American women report getting inadequate sleep. And when too sleepy to function, 66 percent choose to “accept it and keep going.”<sup>1</sup>

Other cultures approach the problem a little differently. Many countries actively practice siesta—a 15- to 30- minute afternoon nap. Several recent studies support the beneficial effect of 10- to 30-minute naps on alertness, performance and learning ability.<sup>2-4</sup>

### Caffeine Quick Fix

In the United States, however, it is caffeine—not naps—that helps 78 percent of people cope with their responsibilities.<sup>5</sup> The benefits of caffeine are real: It improves mood and cognitive performance,<sup>6-9</sup> and coffee consumption can potentially decrease insulin secretion<sup>10</sup> and liver cancer risk.<sup>11</sup> On the negative side, regularly consumed caffeine can increase anxiety,<sup>12</sup> risk of headaches<sup>13</sup> and the inflammation process.<sup>14</sup> Cola beverages, but not coffee, also have been associated with an increased risk of hypertension.<sup>15</sup>

Caffeine is considered toxic—causing arrhythmia, tachycardia, vomiting, convulsions, coma or even death—only in amounts exceeding 5g. While the risk of toxicity is rare, the pervasiveness of caffeine warrants some caution. Many soft drinks, for example, contain only between 20 mg and 40 mg of caffeine per an 8-oz can;<sup>16</sup> however, today’s specialty coffees can be very potent—ranging from 58 mg to 259 mg, and even up to 564 mg, per dose.<sup>17</sup>

### Food for Energy

Instead of using caffeine to push ourselves to perform despite fatigue, preventing energy drops is a wiser approach, health experts advise. Aside from sleep,



our performance—and even our mood—depends on balanced blood sugar levels.<sup>18-20</sup>

While cautioning against seeking quick blood-sugar boosts, experts recommend juices, such as pomegranate, instead of caffeine or sugar, for those in urgent need of re-energizing.

---

***More than half of American women report getting inadequate sleep. And when too sleepy to function, 66 percent choose to “accept it and keep going.”***

---

The key to properly preventing blood-glucose slumps—which can lead to fatigue, headaches, craving sweets, depression, irritability and a host of other symptoms—is the old-fashioned basics of proper nutrition. In one study, a breakfast rich in fiber and carbohydrates caused higher alertness, while high-fat meals led to lower alertness and higher caloric intake throughout the day.<sup>21</sup> Another study showed that protein-rich or balanced meals, which cause less variation in blood glucose levels, improved cognitive performance.<sup>22</sup>

Inadequate glucose is not the only thing contributing to fatigue. It can result from anemia—iron, B<sub>12</sub>, B<sub>6</sub>, or folic acid deficiency as well. Omega-3 fatty acids, leafy green vegetables, and vitamins C, E and B<sub>12</sub> have been shown to improve memory and cognitive functioning.

### Moving the Body

Even with adequate sleep and nutrition, our lack of motion can regularly put us to sleep. To prevent mental fatigue, try starting the day with exercise, taking frequent 5- to 15-second micro-breaks (shoulder rolls or stretching) throughout the day, getting up and walking every two hours, and, of course, taking advantage of the lunch break to “do the opposite” of what your job entails. For people with mentally challenging occupations, experts suggest a walk or other physical exercise; for those doing physically taxing work, some brain-stimulating activities, like puzzles.

Imbalanced body postures, such as slouching, also require the body to consume more energy. In addition to adopting an “energy-efficient” standing position, with feet shoulder-width apart, and sitting straight, which helps improve circulation, take frequent 60-second “Stand up, Perk up” breaks that combine relaxation, breathing and stretching.

To those in urgent need of quick re-energizing, consider aerobic exercise instead of coffee. It’s quick and easy—and it stimulates brain chemicals that give us a lift.

Whether re-energizing through sleep, nutrition, exercise or—better yet—a combination of all three, it’s clear that fatigue should not be taken lightly. It’s connected with depression, and anti-depressants are now the fastest-growing prescribed class of medications. Instead of taking stimulants, opt for proper exercise, adequate sleep and a balanced diet. ■

### Sources:

1. Summary of Findings of the 2007 Sleep in America Poll. [www.sleepfoundation.org](http://www.sleepfoundation.org)
2. *Sleep* 2006 Jun 1;29(6):831-40.
3. *Sleep* 2001 May 1;24(3):293-300.
4. *Curr Opin Pulm Med* 2006 Nov;12(6):379-82.
5. Summary of Findings of the 2005 Sleep in America Poll. [www.sleepfoundation.org](http://www.sleepfoundation.org)
6. *J Psychopharmacol* 2005 Nov;19(6):620-6.
7. *Hum Psychopharmacol* 2005 Jan;20(1):47-53.
8. *Hum Psychopharmacol* 2006 Apr;21(3):167-80.
9. *Psychopharmacology (Berl)* 2005 Jun;179(4):813-25.
10. *Diabetes Care* 2005 Jun;28(6):1390-6.
11. *J Natl Cancer Inst* 2005;97:293-300.
12. *Psychopharmacology (Berl)* 2002 Nov;164(2):188-92.
13. *Cephalalgia* 2006 Sep;26(9):1080-8.
14. *Am J Clin Nutr* 2004 Oct;80(4):862-7.
15. *JAMA* 2005 Nov 9;294(18):2330-5.
16. [www.cspinet.org/new/200702201.html](http://www.cspinet.org/new/200702201.html).
17. *J Anal Toxicol* 2003 Oct;27(7):520-2.
18. *Br J Nutr* 2001 Mar;85(3):393-405.
19. *Nutr Neurosci* 2006 Jun-Aug;9(3-4):161-8.
20. *Neurosci Biobehav Rev* 2002 May;26(3):293-308.
21. *Int J Food Sci Nutr* 1999 Jan;50(1):13-28.
22. *Physiol Behav* 2002 Mar;75(3):411-23.



American  
Chiropractic  
Association

For more information on prevention and wellness, or to find a doctor of chiropractic near you, visit ACA's website [at www.acatoday.org/patients](http://www.acatoday.org/patients).

Scott Bautch, DC, DABCOH, **Contributor**

Juanee Surprise, DC, NMD, DCBCN, BCIM, **Contributor**

Scott Donkin, DC, DABCOH, **Contributor**