

**Chapter 9, Excerpt from “Change Your Brain, Change Your Body”**

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# **THE FOCUS AND ENERGY SOLUTION**

## ***Boost Your Energy to Stay on Track Toward Your Goals***

*“And what is a man without energy? Nothing — nothing at all.” — Mark Twain*

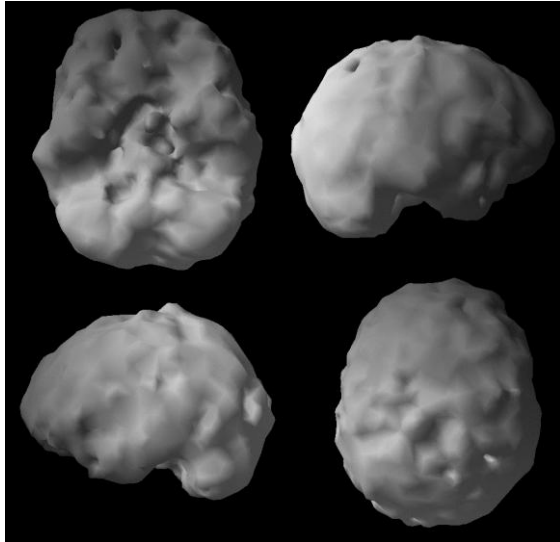
Dwayne, forty-five, one of my close friends, came to the clinic for a scan. His energy had been waning, and his mind felt older than he liked. He had trouble concentrating, was starting to mix up names, was more forgetful, and was struggling with mental fatigue throughout the day, especially mid-afternoon and evening. He was working two jobs, one of which was being a psychotherapist in the evening. His wife was becoming very frustrated with him, as he had no time or emotion to give her. When we performed a brain SPECT scan on Dwayne, it showed overall decreased activity in his brain.

Dwayne had a slew of bad brain habits. He rarely got more than five hours of sleep, drank eight to ten cups of coffee a day, did not exercise, and mostly had a fast-food diet on the run. Dwayne had sent me plenty of patients for scans, so when he saw his own brain, he knew something had to change. “But I can’t stop the caffeine,” he said. “I will not be able to work at night. I will be a mess.”

“That is only your distorted thought as a justification of the caffeine,” I said. Because of our relationship and the fact that Dwayne was a psychotherapist who understood my work, I could be candid with him. “You do not want to go through the pain of withdrawal so you

rationalize that it is easier to continue to poison yourself. Not that smart.”

Image 8.1 Dwayne’s Caffeinated SPECT Scan



Scalloping, toxic appearance

“No, seriously, I will fall apart without the caffeine,” he replied.

“Is that true?” I asked. “Can you absolutely know that it is true?” I was borrowing a phrase from the work of my friend Byron Katie who wrote *Loving What Is*, a book that teaches people to question their own thoughts.

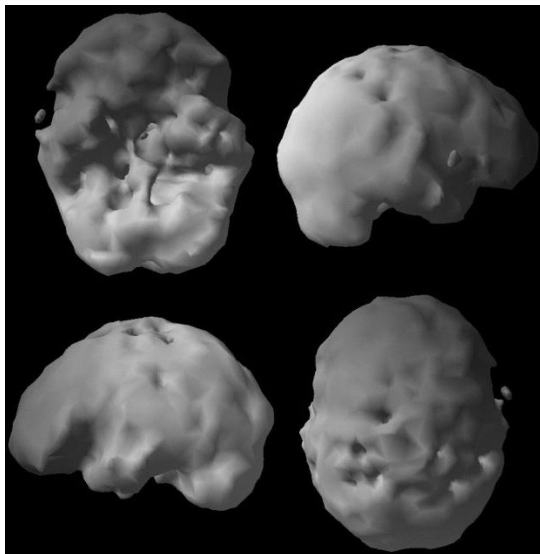
Dwayne thought for several moments then said, “I guess I really don’t know, but something has got to change.”

Dwayne realized that his thoughts were only setting him up to fail, and he agreed to cut back on his caffeine use, get better sleep, and get on a brain-healthy diet. A month later, I got an excited call from Dwayne. He told me he had completely cut out the caffeine and that he was sleeping and eating better. “I feel ten years younger,” he said. “You were right, thank you.” I

love Dwayne's story because it highlights how the little lies that we tell ourselves are ruining the health of our brains and our bodies. You can have better energy and focus by paying attention to the health of your brain.

Another friend, Ted, called me late at night complaining of feeling sad, overwhelmed, unfocused, and tired. This was very unusual for Ted whom I had known for fifteen years. He had just had a physical, and the doctor found nothing to explain why he felt so bad. I asked him if his doctor ordered a testosterone level. He said no. I told him to have his doctor order a total and free testosterone level. Both results came back very low. Testosterone replacement caused a marked positive change in my friend's health and overall energy level. As you saw in Chapter 7 The Hormone Solution, when testosterone levels are low, both men and women are more prone to low energy, poor concentration, depression, low libido, and memory problems.

Image 8.2 Ted's Low Testosterone SPECT Scan



Low overall activity

Your energy and focus are dependent on the health of your brain. In order to stay on track toward your goals and to have the best body possible, it is critical to optimize your brain so that you can be focused and energetic. Our “bad brain habits” on a daily basis are hurting our ability to concentrate and to feel the energy we need to achieve our goals for a better body. We need energy to get our butts out of bed and off the couch in order to be physically active. We need energy to help us deal with daily stress. We need energy to cook nutritious meals rather than opting for fast food because we’re too tired to cook. We need laser-sharp focus to plan what we are going to do once we arrive at the gym. We need focus to help us grocery shop and plan what we are going to make for breakfast, lunch, and dinner. The goal is to wake up everyday with the focus to know what you need to do to get the body you want and the energy to do it.

In this chapter, we will look at the focus and energy solution to help you live a healthier, more vibrant life. We will look at the “focus and energy robbers” and the “focus and energy boosters,” plus develop a focus and energy solution all of us can use.

## **FOCUS AND ENERGY ROBBERS**

Focus and energy robbers fall into a number of different categories, including:

Inherited brain disorders

Infectious causes

Hormonal issues

Low or erratic blood sugar states from any cause

Anemia

Brain trauma

Environmental toxins

Many medications

Chronic stress

Untreated past emotional trauma

Bad brain habits

Let's look at some of these in greater detail.

**Inherited brain disorders:** These include illnesses, such as attention deficit disorder (ADD), some forms of depression, anxiety disorders, and obsessive compulsive disorder. These disorders tend to run in families. Of course, there are many environmental factors that can make these problems better or worse, but there is a definite inherited vulnerability to them.

ADD is the classic focus and energy problem. The energy issue can be too much, such as hyperactivity or restlessness, or too little, which is often associated with a subtype of ADD called inattentive ADD. Both types almost always start in childhood, but the inattentive type, which is more common in girls, is often missed because the students are not disruptive like their hyperactive brethren, often appear spacey, and may have low energy. In addition, symptoms common to both types of ADD include distractibility, disorganization, trouble being on time, poor handwriting, and being too sensitive to touch, smells, and light.

Dietary interventions may be helpful for ADD. There is one study from Holland that reported that children who were put on an elimination diet and ate only lean protein, fruits, vegetables, rice, and pear juice, had the same positive response rate as giving them Ritalin, a common medication for ADD. Exercise has also been found to be helpful. Certain supplements

***ACTION STEP***

*To ease ADD symptoms, try exercise, an elimination diet, and supplementation with fish oil, zinc, acetyl-l-carnitine, and SAME.*

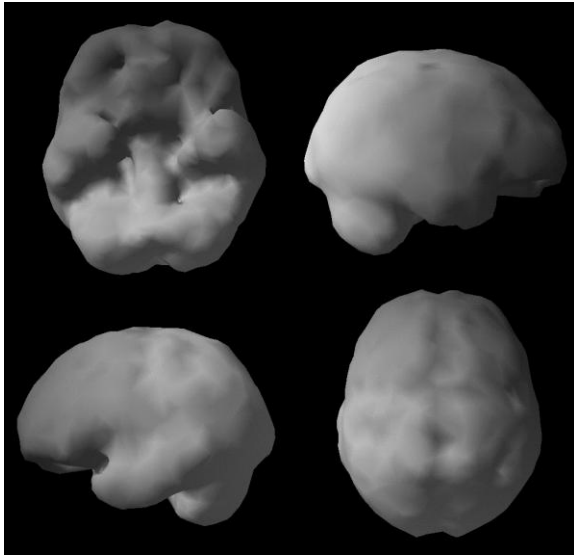
such as fish oil, zinc, acetyl-l-carnitine, B6, and magnesium have also been found to be helpful for some people with ADD (See Appendix C The Supplement Solution for more information), while others do better with medications, such as Ritalin, Adderall, or Provigil.

Our brain-imaging work has taught us that illnesses such as ADD, anxiety, and depression are not single or simple disorders, and all of them have multiple types. Knowing which type you have is essential to getting the right help. You can see my books *Healing ADD* and *Healing Anxiety and Depression* for more detailed information.

Julie, 54, came to see me for low energy and problems with focus. She was also disorganized, easily distracted, often late or in a hurry, and frequently in conflict with her husband. Her general lab work, including her hormone levels, was normal, plus she had the primary problems since grade school. Her teachers always told her parents that if only she tried harder she would do better. I have noticed on brain SPECT scans that the harder people with ADD try, the worse their brains look. Typically, we do two brain SPECT scans on our patients, one at rest and one when they are doing a concentration task. At rest, the ADD person's brain often looks fine, but when they try to concentrate, there is often decreased activity, especially in the front part of the brain in the PFC, which is often responsible for sustained attention. We published a recent study that reported this drop-off of activity helps to predict a positive response to stimulant medication over 80 percent of the time.

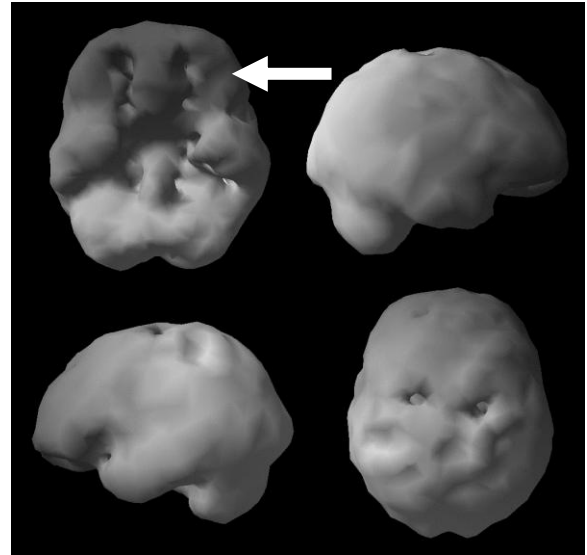
Julie's scan showed decreased PFC activity with concentration compared to rest, which meant, the harder she tried, the worse it got for her. On treatment, which included fish oil, a healthy diet, exercise, acetyl-l-carnitine, and SAME, she did much better, especially in the areas of her energy and focus.

Image 8.3 Julie's ADD Scan at Rest



Overall healthy activity

Image 8.4 With Concentration



Decreased prefrontal cortex activity

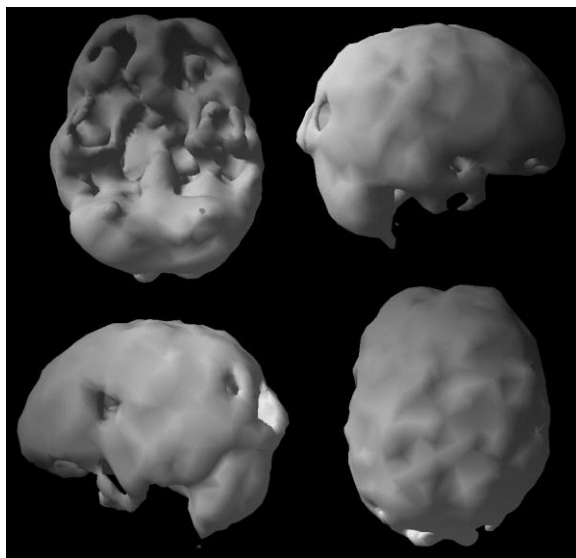
Untreated depression and anxiety disorders are also commonly associated with low energy and trouble focusing. A persistent sad mood, in combination with sleep problems, appetite issues (either too much or too little), and persistent negative thoughts, including feelings of hopelessness, helplessness, or worthlessness, tension, fear, and dread are common symptoms of anxiety and depression and need to be explored. Untreated depression actually doubles people's risk for Alzheimer's disease. Chapter 15 The Brain Health Solution explores this issue in more depth.

**Infectious causes:** Infections, such as chronic fatigue syndrome or Lyme disease, rob people of their energy and focus. When I first started in private practice, chronic fatigue syndrome (CFS) was often thought of as a “crock” illness. There is not a single reliable test to diagnose CFS so many physicians thought these patients were “psychiatric” and sent them to me.

I hated when that happened. It seemed that whenever a doctor did not know what to do for a patient, he or she would label the mysterious illness as “psychosomatic,” and send the patient to a psychiatrist or psychologist. When I scanned my first group of ten or so CFS patients, I was horrified at the level of damage I saw on the scans.

Joan was referred to me by her family physician who thought her “fatigue and trouble focusing” was all in her mind. The limited tests her doctor did came back normal. Joan’s brain SPECT scan showed severe overall decreased activity (Image 4.5).

Image 8.5 Chronic Fatigue Syndrome



Overall decreased activity

This level of damage is not caused by negative thinking or past emotional trauma (although neither of those things helps your brain). Likely, there are many causes of CFS, which need to be worked up a competent professional. But if you feel terrible and someone says it is all in your head, they may be right. It may be an illness or an infection, which was the case with



Joan, that affects your brain. In recent years, we have also seen that the brain is often, although not always, affected by Lyme disease. Other infections, such as meningitis or HIV, can also seriously negatively impact the brain.

**Hormonal issues:** As you can see from Ted's story above, low hormone levels can seriously affect energy levels, focus, and brain function. Some of the worst scans I have seen have been low thyroid scans. There is a group of scientific studies showing severe low activity with hypothyroidism. Low estrogen levels have been associated with decreased brain activity, as well, especially in the area of the brain that makes people more vulnerable to Alzheimer's disease. Chapter 7 The Hormone Solution discusses hormones in detail.

**Low or erratic blood sugar states from any cause:** Things like hypoglycemia, poor diet, or diabetes may have a significant negative effect on energy and focus. This is one reason I tell my employees not to have candy out on their desks for others to grab when they walk by. These people are looking for love in the wrong place. Most people know that when you eat a sugar load, you may have a blood sugar spike and then a blood sugar lull. A recent television piece on the Obama administration showed that many of his staffers had M&Ms on their desks. I was horrified that the White House would not have better eating guidelines for their staff. Don't you want the country's business performed by people who can focus and have great energy? Smoking by the President and plentiful candy are not great brain-healthy examples.

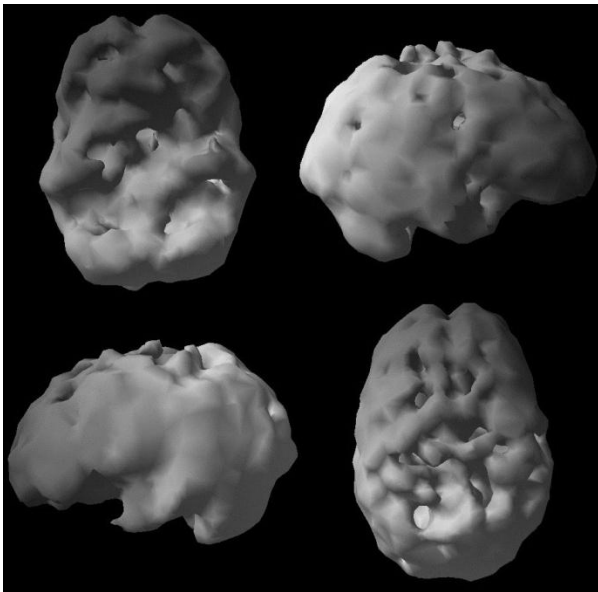
**Anemia:** Anything that lowers your red blood cell count, such as anemia, causes you to feel tired and unfocused. Excessive alcohol use causes red blood cells to become enlarged and inefficient. Hold the alcohol.

***ACTION STEP***

*Eat small meals that include at least some protein throughout the day to avoid blood sugar spikes and crashes.*

I once had a close friend who came to see me complaining of feeling scattered, tired, and depressed. Her scan looked like she was an alcoholic or a drug addict, but I had known her for many years and knew that this was not the case. In working up medical causes of fatigue, we discovered she had “Pernicious Anemia” from a Vitamin B12 deficiency (Image 4.6). After treatment her brain looked much, much better and she felt like her old energetic and focused self.

Image 8.6 Vitamin B12 Anemia



Overall decreased activity

**Brain trauma:** Physical injuries, strokes, lack of oxygen, or other trauma can cause serious brain damage and affect energy and focus.

My sister Mary is a very successful insurance agent and has been a member of the high

producing insurance agent organization Million Dollar Roundtable for the past twenty-eight years. In 1994, she lost her husband Oscar to stomach cancer, which was very stressful for Mary and her four children. Now as a single mother, Mary was chronically stressed. Fifteen months later, Mary was in a car accident. Afterwards, she noticed problems with her focus, follow through, energy, drive, and motivation. Her scan showed damage to the left side of her brain. The death of Oscar and the accident had drained all of her brain reserve.

Getting on a brain-healthy program, including supplements, such as fish oil, acetyl-l-carnitine, and ginkgo biloba to enhance overall brain function, and intense exercise along with cognitive retraining made a huge difference for her. Both of her follow-up scans have shown significant improvement.

**Environmental toxins:** Toxins, such as mold exposure, can cause trouble. In 1998, a colleague of mine named Carolyn moved into a home that had been flooded at one time. Very soon after she and her family moved in, they started experiencing health issues. For example, Carolyn suffered from numerous bouts of bronchitis, and she kept getting skin rashes. Over the next couple of years, her symptoms worsened. Carolyn, who had worked as a therapist for years, found that she could no longer focus on what her patients were saying and couldn't think clearly enough to offer them appropriate treatment plans. She often felt anxious and sometimes couldn't tell right from left, which made it very difficult for her to drive.

Her youngest son was in high school at the time, and he

***ACTION STEP***

*If you experience any form of brain trauma, it is critical that you adopt a brain-healthy program to enhance brain function.*

***ACTION STEP***

*If your home has ever been flooded or had water damage, check for mold.*

kept telling her that he couldn't focus or concentrate well enough to study at home. So he would head over to a friend's house, where he had no problem hitting the books. At home, he had no energy to get going in the morning, and he started racking up tardies at school. Whenever he spent the night at a friend's house though, he felt energetic, popped up out of bed with no problem, and easily made it to school on time.

By 2001, Carolyn knew there was something very wrong, but she didn't know what. One day, she saw a feature about toxic mold on TV, and suspected that this might be the problem. She set up an appointment with a doctor to get tested for allergies to mold, and she hired a mold inspector to check the house. The tests came back positive — mold was the culprit. She and her family moved out of the house that year and never went back. Her children have recovered well for the most part, but Carolyn still hasn't returned to work and lives with residual sensitivities. She says she has good days when her brain functions well and bad days when she has trouble focusing and thinking.

**Medications:** Many medications, including chemotherapy, beta blockers, anti-anxiety pills, antidepressants, and pain killers can sap energy or make it more difficult to focus. Most cancer treatments, such as chemotherapy and radiation therapy, not only kill cancer cells, but also kill normal cells. After someone goes through chemotherapy, radiation, or both, their brain scans often show a toxic appearance, meaning their brains have been affected as well. Many post chemotherapy or radiation patients complain of low energy, poor concentration, memory problems, and a general lowering of cognitive ability. Understanding this and caring for these brains is absolutely essential to having the best brain and body possible. Many cancer chemotherapy medications go straight to the brain, and they target not only dividing cancer cells, but also any normal brain cells that are dividing. While the problem area is targeted and

destroyed, there are always “innocent bystanders” caught in the crossfire.

Angelo came to the Amen Clinics for a repeat scan after he was aggressively treated for leukemia. We had seen him five years earlier for problems in his marriage. Now, he complained of memory problems, trouble concentrating, and low energy. His SPECT scan showed significant toxicity and lower overall activity not seen on his prior scan. On our brain recovery program, he felt much better and his energy and ability to focus improved.

**Chronic stress:** As you saw with the example of my sister Mary, chronic stress can lead to focus and energy problems.

**Untreated past emotional trauma:** Any trauma from the past that still haunts you is yet another energy and focus robber and is important to get treated.

**Bad brain habits:** Too much caffeine, alcohol, or sugar; drug use; lack of exercise; poor sleep; poor diet; and negative thinking patterns make concentration and focus much worse. Drinking large amounts of alcohol — four or more glasses of wine or the equivalent in hard liquor on a daily basis — raises the risk of dementia. New research shows that even moderate amounts of alcohol have negative effects on the brain. One study found that people who drink three times a week have smaller brains than nondrinkers.

New research using brain scans confirms that marijuana use harms the brain. In a study appearing in the *Journal of Psychiatric Research*, researchers showed that heavy marijuana use among young adults and adolescents may affect normal brain development, interrupting an important process called myelinization. With myelinization, brain cells are coated with a protective sheath that increases the brain’s processing speeds. The process, which isn’t completed until about age twenty-five, starts at the back of the brain and works forward, making the PFC the last area to gain the protective covering. This explains why the subjects in this study

showed abnormalities in their PFC and temporal lobes, the areas of the brain involved with decision-making, attention, executive functioning, memory, and language. With a brain that hasn't developed properly, it is harder to stay focused and make the best decisions for your

#### ***ACTION STEP***

*If you want better,  
sustainable energy and*

#### ***ACTION STEP***

***Here is a typical lab panel I order for my patients who struggle with issues of energy and focus to rule out medical causes that may be contributing to the problem. It is a good idea to discuss this panel with your health care provider.***

- *Complete blood count — to rule out anemia, inefficient red blood cells, or too little or too many white blood cells*
- *Fasting Chemistry Metabolic Panel — to check the health of the kidneys, liver, and blood glucose levels*
- *B12 — deficiency is a common cause of anemia and lethargy*
- *Folate — an essential brain nutrient*
- *25-hydroxy vitamin D — low levels are commonly seen with depression, memory problems, and immune system problems*
- *C-reactive protein — a measure of inflammation*
- *Homocysteine — a measure of inflammation*
- *Lipid panel*
- *Fasting insulin*
- *Hemoglobin A1C to check risk for diabetes*
- *Two-hour post-meal glucose — for those suspected of low blood sugar or hypoglycemia*
- *Thyroid panel with TSH, free T3, free T4, thyroid antibodies gland, and thyroid antibodies hormone*
- *DHEA-S*
- *Free and total serum testosterone for men and women*
- *Estradiol and progesterone for women over forty-five years of age*
- *Food allergy testing*
- *Fatty acid profile to check levels of omega three fatty acids*

***ACTION STEP***

*If you want better energy,  
have a daily quiet time. Just  
a few minutes will improve  
your energy.*

The first step to getting the energy and focus you need is to eliminate and treat the focus and energy robbers described above. At the same time, develop and maintain a brain-healthy lifestyle described in this book, make sure to get adequate sleep, eat a brain-healthy diet to maintain a level blood sugar throughout the day, exercise four to five times a week, use a stress-reduction program (because anxiety and stress rob us of energy and concentration), and test and optimize your hormone levels.

Even though it sounds odd, a daily quiet time in particular is one of the best energy boosters. Researchers from our laboratory and others around the world have demonstrated that relaxation technique enhances activity in the brain's PFC, even to the point of boosting the numbers of brain cells. The better your PFC functions, the more focused and energetic you feel.

Spend ten minutes everyday reviewing your goals, spending time in prayer and reflection to boost your energy. See Chapter 11 for simple additional techniques.

Certain foods are energy boosters, especially those that are low in calories and high in fiber (from fruits, vegetables, beans, and whole grains) and protein. Since I was young, my mother was a follower of the innovative physician Dr. Henry Biehler who emphasized diet and lifestyle for disease prevention. In 1965, he wrote *Food Is Your Best Medicine*, where he discussed the pH balance in the body, with an alkaline pH being positive for the body and an acidic pH being harmful. If the body is too acidic, it withdraws alkaline minerals, such as calcium and magnesium, from bones and soft tissues to maintain balance. An acidic body is a breeding ground for disease and results from consuming too much sugar, caffeine, alcohol, and red meat. From a psychiatric standpoint, this makes sense as anything that lowers magnesium can make people feel anxious, agitated, uptight, and stressed. Dr. Bieler's Broth was a staple for my family. It consists of squash, string beans, celery, parsley, fresh herbs, and water.

Green tea is another potential energy booster. It has about half the caffeine as coffee, plus theanine, which helps people feel focused. There is scientific evidence that green tea helps keep weight off, boosts exercise ability, helps muscles recover faster from workouts, and improves attention span.

In addition, there are a group of supplements that have good scientific evidence to help boost mood, concentration, and energy. Stay away from caffeinated energy drinks, as they boost the stress hormone cortisol and can make you fat. Caffeine supplements are also associated with addiction, tolerance (where you need to take more and more to get the same result), and withdrawal. Green tea, in moderation, is ok because the theanine content helps to balance the effects of the caffeine.



My favorite supplements to boost focus and energy are B3 (niacin), B6 (pyridoxine), green tea leaf extract, rhodiola, ginseng, Ashwagandha, l-tyrosine, dl-phenylalanine, ginkgo biloba, SAMe and small amounts of caffeine. See Appendix C The Supplement Solution for more information.

## **The Focus and Energy Solution**

### **Energy Robbers**

Any brain problems

Brain trauma

Poor sleep

Low blood sugar

Poor diet

Alcohol/drug abuse

Depression

Anxiety

Chronic stress

Lack of exercise

Hormone problems (i.e., thyroid, testosterone, estrogen, cortisol)

Medical problems, such as B12 deficiency

### **Energy Boosters**

Overall brain healthy program

Focus on brain protection

Adequate sleep (at least seven hours)

Frequent small meals with at least some protein to maintain healthy blood sugar

Brain-healthy diet

Freedom from alcohol or drugs

Treatment for depression

Meditation for relaxation and to boost the PFC

Stress-reduction plan

Exercise

Optimized hormone levels

Treat any underlying medical problems

Medications such as Xanax or OxyContin

Fish oil to decrease inflammation and enhance blood flow

Diabetes

Diet and exercise

Environment toxins

Great ventilation and eliminate any toxins

Any systemic inflammation

Anti-inflammation program, including fish oil, healthy diet, and folic acid, and for some, low-dose ibuprofen or baby aspirin

Chemotherapy

Supplements, such as Vitamins B3 and B6, l-tyrosine, dl-phenylalanine, green tea leaf extract with l-theanine, panax ginseng, rhodiola, Ashwagandha, SAMA and a small amount of caffeine

Excessive caffeine

When you want a caffeine boost, get it from tea, which has been shown to help keep weight off, boost exercise ability, muscle recovery from workouts, and improved attention span and relaxation