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# Stress and Obesity in America

By Georgianna Donadio

**I**t is currently reported that two out of three adults are either overweight or obese, and the numbers continue to climb. As a result, statistics demonstrate that a significant portion of our population is being diagnosed with chronic conditions such as diabetes and heart disease. Even more shocking is that we are experiencing these conditions at earlier ages than previously reported. It is not unusual today to hear about a young person in their 20's diagnosed with mature onset diabetes, a condition normally developed during middle-age.



On May 7, 2004, a controversial and award-winning movie aimed at exploring the obesity epidemic hit the theatres. In "Super Size Me," a tongue-in-cheek look at the legal, financial and physical costs of America's hunger for fast food, filmmaker Morgan Spurlock explores the horrors of school lunch programs, declining health and physical education classes, food addictions and the extreme measures people take to lose weight. As a centerpiece of the film, Spurlock puts his own body on

the line, living on nothing but McDonald's for 30 days following three rules:

1. Eat only what is available over the counter
2. No supersizing unless offered
3. Consume every item on the menu at least once

In the end, Spurlock has a weight gain of 24 pounds and experiences harrowing visits to the doctor. The issues that are explored in "Super Size Me" beg the questions: what has changed in our environment to cause this obesity problem to reach epidemic proportions and what is causing people to overeat as we do?

A groundbreaking study, reported in 2003 by the University of North Carolina at Chapel Hill, found that between 1977 and 1996, portion sizes for key food groups grew markedly in the United States, not only at fast-food restaurants but also in homes and at conventional restaurants. In particular, portion sizes for salty and sugary foods, essentially, "comfort foods," experienced the most dramatic portion size increases. For example, the USDA's recommended serving size for a cookie is half an ounce, while the average cookie sold in restaurants was found to be 700% larger.

The by-products of our affluent American society, envied by many around the world, have a definite dark side — our obesity rate, for starters. In a culture where more is better and disposable income is abundant, when it comes to eating we have developed a "more food, more conveniently and more often" attitude.

### **Stress: A Pre-Cursor to Obesity**

Certainly, no one forces us to eat more than our body needs, so what is driving this "hunger" for more? Over the last two decades, almost in direct proportion to the dramatic increase of food consumed and chronic disease diagnoses, the amount of stress in our society and on each of us individually has increased significantly. Stress is the term medical researcher Hans Selye, M.D.,

Ph.D., gives to the experience our bodies go through when we have to adjust or adapt to fluctuating circumstances during the course of the day. While many of us think of stress in relationship to emotional states, many other factors can exert an equally detrimental effect on our bodies as well. When we don't get enough sleep or rest, work or exercise too much, have an infection, allergies, injuries or other emotional or physical trauma, as well as normal changes in our physical state such as pregnancy, menopause, etc., our bodies must chemically and neurologically adapt in order to survive. Part of this adaptation process relies heavily on the nutrition that is available for the kidney's adrenal glands to produce the adaptive hormones. It is often this aspect of stress that can lead to overeating, particularly the types of foods that cause unhealthy weight gain.

Thanks to the work of M.I.T. Professor Judith Wurtman, Ph.D. and others, we now understand the significant role that a neurotransmitter or "chemical messenger" called serotonin plays in producing our cravings for complex carbohydrates and sugars, two of the largest contributors to unhealthy weight gain. Serotonin, along with other neurotransmitters, are produced by our bodies as "feel good" hormones. Under stress, we do not have enough of these hormones and we become motivated to "self-soothe" by behaviors that lead to the increase of serotonin. Overeating of carbohydrate and fatty-rich foods, or "comfort foods" such as cookies, ice cream, etc., significantly increases these feel good hormones. Many addictions such as smoking, alcohol and drugs are also attempts to self-soothe and increase serotonin, but no other addictive or unhealthy behavior is as socially acceptable and as easily available as over eating. We can do it anywhere, anytime, alone or with company! It is no wonder we have such a love affair with eating.

In addition, our body's need for certain nutrients, specifically protein, Vitamins A, C, and E, unsaturated fatty acids, cholesterol and minerals, skyrocket when we are adapting under stress. Often, if we do not stop the stress cycle or do not appropriately supplement these nutrients, we can turn to overeating to satisfy the body's demands for the fuel it needs to keep dealing with the stress we are

under.

For a period of time, foods that comfort, soothe or supplement can make us feel calmer until our level of serotonin drops again or until we become more exhausted and need to feed ourselves, yet again. Then, we start the cycle all over and consume more carbohydrate and fatty rich foods until we feel better. This is the cycle of self-medication or self-soothing practiced in homes, offices, restaurants, automobiles and yes, even bathrooms across America! The long-term effect of such behaviors, apart from obesity and escalating chronic diseases, is that our nervous systems are being hyper-stimulated. Anxiety, exhaustion, depression, overeating and insomnia are just a few of the symptoms we experience when our nervous systems are working on overload.

As a result, it is no wonder that within the last year, low-carbohydrate diets have proven effective for many people. Approximately 20% of Americans, or 20 million people, are currently on a low-carb diet. For many of us, our stress level is a major factor in the over consumption of carbohydrates, therefore reducing or eating normal amounts of carbohydrates is spawning weight loss. The real issue, however, is how long can we reduce our carbohydrate loading without reducing our stress levels and the behaviors that create elevated stress in the first place?

### **A Spiritually Rooted Problem**

Prior to the early 1970's, the majority of family units were structured as a one wage earner household where the male worked and the female stayed at home, taking care of the house and family. Driven largely by social and socio-economic factors, all of that has changed. Now, the overwhelming majority of families include both parents working and we find ourselves on a treadmill of more work, more responsibilities, more demands and non-stop scheduling that has many of us in a state of physical and, at times, emotional exhaustion.

Added to the mix is our competitive culture, which often leads to isolation or

“them against us” thinking. Isolation of this nature causes additional “hidden” stress. A Hindu Vedanta principle is that “the whole world is one family.” It is said that there is only one disease — the disease of separateness — separating oneself from the awareness that as members of the human family, we are one living organism. The drama created by a “one-up” or “one-down” dynamic that we find in competitive societies, can lead to the exhaustion and the psycho-social behavioral issues which can contribute to overeating.

The tipping point at which our bodies can no longer compensate for the stress they are under, is based in large part on the threshold of nutritional competency and the state of integrity of our nervous system. When our central nervous system, which governs every cell in our body and makes life possible, is not working efficiently, we have a decrease in bodily function and the ability to adapt to the world we live in. Chronic Fatigue Syndromes (CFS) are rampant in our culture today and growing at an alarming rate because of the over stimulation and increased demands placed on our nervous systems. Add to this inadequate nutrition and a decreased ability of our bodies to digest and absorb properly because of the stress, and we see the foundation of the epidemic of chronic diseases being currently reported.

What is so shocking for us, as Americans, is that while we live in one of the most affluent societies ever to exist on Earth and have one of the most technologically advanced medical systems, we are ranked at around 26th in the world health Olympics! This is not the failure of our medical system, but in fact, the failure to live in our bodies mindfully and respectfully, taking time for rest, proper nutrition, reflection, intimacy with self and others and serving the common good of society. It is this imbalance that leads us to chronic stress, which leads to physical and, if you will, spiritual exhaustion, that is producing the levels of chronic diseases and the rampant obesity we see today.

to be healthy. Yet, adages about health, i.e., “early to bed, early to rise, makes a man healthy wealthy and wise,” are often ignored in



place of our instant gratification or immediate comfort. Physical labor has taken a back seat to “mind work,” and today we work harder than ever before to have the money to buy a membership to a gym or spa so we can do the physical exercise we need to be healthy and attractive, but rarely do we actually have the time to go to the gym we paid membership fees to! Statistically, the average gym membership is used for the first 4-6 weeks after signing up and then falls off dramatically. Workout facilities count on this phenomenon when planning their recruitment and enrollment numbers. Likewise, diet plans and weight loss centers know that 90% or more of their customers will continue to have body weight issues, in spite of their best efforts to re-direct to a different way of eating. Why?



### **The Oprah Syndrome**

One of the most powerful, successful people in the world, Oprah Winfrey is a brilliant example of the “super-size” syndrome in our culture. With every possible service, care and expert available to her, Oprah Winfrey has continued to struggle with significant weight gain and loss for many years. In 2001, a chart published in a popular magazine, documents her weight gain and loss over the previous 20 years. Even during the height of her popularity and professional success, her body weight rose to dangerously elevated levels. The reasons most of us give for not taking care of ourselves include not having enough time to shop for or cook the right foods; not being sure what’s best for our body type; not enough money for domestic help so we can exercise, meditate or relax; and stress over money and achieving success. Oprah is an individual who has more than enough money and success to eliminate all those concerns, yet in spite of that, she still does not consistently maintain a proper body weight.

Driven by personal history and ambition, Oprah offers a perfect example of the potential outcome of serotonin-driven self-soothing, which invites us to ask and answer questions about self-esteem and self care. When we understand the relationship between our unconscious mind, our self-esteem and the serotonin

connection, it becomes quite clear that what is at the core of our “super-sizing” is not solved by the “diet of the month” or the next “how-to” best seller. Rather, an examination is needed of our personal worldview, our regard for nature and for others, what we value and believe in, how much we consume and how much we accumulate. When these aspects of self are aligned with choices that lead to moderation rather than extremes, and debunk the thinking that “more is better,” we then select the foods we innately know are healthy, even when we must choose from the fast food menu!

In a culture comprised of 5% of the world population, using 75% of the world’s resources, we have come to accept excess as a way of life and a standard to subscribe to. In the 1980’s, Robin Leach’s popular TV series “Life Styles of the Rich and Famous” skewed our consumer appetites towards a standard of living that has brought us to where we are today — obese and chronically diseased.

### **Take a Tip from the Gurus**

Eastern philosophies offer us an opportunity to re-think our approach to the way we live. Quite opposite from the ambitious and often aggressive American attitude of self-manifestation, Eastern wisdom invites us to ponder, “How much do I really need own, to do, to eat, to control to be content with my life? What is the role of gratitude in my life?” Shouldn’t having a calm, well functioning nervous system, the source of all life in the body, be our main objective instead of trying to trick the body into doing what we want with the latest diet craze or vitamin pills available?

It may be time to change the questions we ask not only ourselves, but the questions we are asked as consumers. Maybe, if when making his fast food purchases, Morgan Spurlock was asked the question, “Super-size or down-size, sir?” the choices he made might have resulted in significant weight loss rather than weight gain. But then Spurlock wouldn’t have a movie to make, or the millions that will be realized from it.

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