

## Stress – A Long Story

One way of talking about what we do at Suppers is that we help people deal with stress in its myriad forms. Not that we make specific recommendations, we simply support each other as we sort ourselves out doing Suppers experiments and sharing at table. Stress became a topic of discussion at several meetings, and it didn't take long for it to become clear that the word "stress" means different things to different people. What is stress anyway? We started considering different definitions of stress and waited for people's stories to emerge. I offered that "stress is a response to a stimulus that heightens arousal and brings about the production of adrenal stress hormones."

Dr. George piped up next: "Stress is a stimulation of the central nervous system that expresses as a problem in the 'weak link' part of the body." Then the thoughts tumbled out of people, everybody had intense personal positions on stress:

"It's what you experience when you think you have no options."

"It's what you feel when somebody tries to control you."

"It's a product of how we talk to ourselves, a self-fulfilling prophecy."

"It's a response to confrontation."

"It's a response to fear, feeling trapped."

"It's how you process a situation."

People also had a lot to say about how to manage it:

"You have to exercise your choice about how you frame your situation."

"You can reduce it by feeling sympathy for others."

"You can distinguish between good stress like challenges and bad stress like feeling trapped."

"You can do brain wave training so you spend more time producing alpha waves."

"You can take charge of your situation."

"You can train yourself to stop bad thoughts. Just stop them."

"You can meditate."

I found it really interesting that we started with a definition that couches stress in terms of what it does to the physical body and quickly moved into how we experience it emotionally and psychologically. Is stress really mediated primarily by emotional and psychological forces, or are we simply better versed talking about stress in psychological and emotional terms? It was really important to me to have various groups consider the question. If stress manifests as pain, tension, or illness of the physical body, then doesn't the physical body have a role to play in alleviating it? It was time to do what Suppers does best and start making good matches between problems and solutions. If body, mind or spirit forces can cause stress, all three need to be addressed when trying to reduce it.

We started by listing all the forms of stress and stressors that we could think of. Sometimes we couldn't tell if something was the source of stress or the consequence of stress, like pain and insomnia. And we wrote it all down anyway because we felt it's all stressful.

Though each item fell broadly into the realms of body, mind, or spirit, most were some combination. But all forms of stress involve a heightened state of arousal and "negative stress", the speeding of cellular aging.

Here's what we came up with:

Primarily of the mind and emotions:

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- images and thoughts
- beliefs
- perceptions
- the meaning we assign
- illness of a loved one
- time pressures
- fear
- anger
- pessimism
- boredom

### Primarily of the body:

- illnesses
- lack of restful sleep
- pain (as abdominal, chest, or in the neck and shoulder muscles)
- gut flora that affect thoughts and feelings
- exposures, as to drugs, sugars, tobacco, and environmental toxins
- allergens
- infections
- lack of exercise
- poor nutrition
- temperature

### Primarily of the spirit

- sense of isolation or inability to bond
- lack of meaning in life

Some of the stress and stressors fell squarely in the realm of the physical, like infections and toxic exposures. Some fell squarely in the realm of the mind, like beliefs and images. And some fell clearly in the realm of the spiritual, like lack of connection and sense of meaning in life. But for the most part, the things we came up with straddled the realms, like physical injuries that came with emotional trauma or social and financial stresses that affected everything.

## Stress Hardiness

Most people also had a clear sense of things that make one more stress hardy. Some things were specific behaviors we could do; others were personal attributes.

- getting exercise or meaningful physical activity
- good nutrition
- meditation
- getting enough restful sleep
- sense of control
- personal resilience
- personal adaptability
- sense of optimism
- flexibility
- sense of purpose or meaning
- sense of connection

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It looked pretty obvious that people have or could get control over behaviors like eating or exercising more easily than over personal attributes like resilience. But maybe improvement in one area could lead to improvement in others?

Since this is Suppers and we have a mission to restore the physical body to its rightful status in the body, mind, spirit equation, we started considering how stress – no matter what its source – manifests physically. And, turning it around, we considered how reduction of physical stresses – like detoxing the brain or cleaning out the gut – might reduce the impact of emotional and psychological stress.

Mary did us all a huge favor writing with such candor about her bowel function. She had been desperately ill with problems that five days of hospital testing never diagnosed. But the staff nutritionist read her the riot act. She came to Suppers and dedicated herself to developing a taste for vegetables. Within a few short weeks her bowels were moving every day or two. Her whole life brightened as she shed the accumulated toxins of chronic constipation. In my own case, just removing sugars from my diet put a halt to years of panic attacks. It's 25 years and I've never had another.

Fear of the losses of aging was high on Sandy's list. She was regularly visiting an aunt who had dementia. The illness of a loved one jumped to the top of people's lists as soon as somebody mentioned it, a wrenching source of stress. Watching a loved one deteriorate can sap all your energy. And of course, if a loved one is dying or is lost to Alzheimer's, we can't make the stress go away by fixing the problem, we have no choice but to do self-care the best we can.

### Exhausted Glands

There isn't any kind of stress that doesn't affect the adrenal glands, the part of our bodies that gives us kicks of energy and responds to all real and imagined threats. When a threat is perceived, it doesn't matter what kind of stressor is involved, the adrenal glands pump out the hormones of immediacy, adrenaline and cortisol.

A member in Suppers for Sobriety provided a perfect example of managing emotional stress by supporting her physical body. She was experiencing the ultimate stressful situation, still sharing a house with a gambling husband as they divorced, a child to raise and unable to afford separate households. She expressed gratitude for being "Suppers sober". To her that meant that while there was nothing she could do any time soon to change the structure of her household, she was able to cope because her body was holding up for her. She was not having panic attacks or dissolving into depression, her normal state before Suppers. At the top of her self-care list were the nutrients and foods she needed to support her adrenal glands – her physical shock absorbers – and good mood chemistry. "My son isn't losing me emotionally in this crisis because I can do damage control by keeping my focus on the care of my physical body."

Another Suppers for Sobriety member expressed that a huge source of stress for him was doing life with asthma. Frank is in long term sobriety, and while he's not even tempted to pick up a drink, he had hoped that sobriety would deliver a better pay off in terms of general health. At Suppers, he got a whole new perspective. "It was a total surprise to me that nutrition had so much to do with my asthma," Frank shared. Frank attended a book review meeting on blood type dieting, not something everyone is interested in, but it really spoke to him. He decided to get off wheat and dairy products. "I find that I have cut the usage of my rescue inhaler by about half." How stressful is it not to be able to breathe? Very, it's life-threatening; that's why Frank called it his "rescue inhaler". Once again, it was a change in a habit of the physical body – eliminating troublesome foods – that reduced

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stress at the real source. Frank was able to do a good job of matching his stress problem with his de-stressing solution because he was exposed to information that resonated for him.

Most of the physical body consequences of stress come from inflammatory cell damage or rapid aging that takes place when we run insulin and adrenal stress hormones chronically. The system that governs this – the sympathetic nervous system – works really well for periodic acute stress, like the appearance of the proverbial saber-toothed tiger. It does not work so well coping with chronic stress or modern stresses that our bodies were not designed for like consumption of refined carbohydrates, exposure to chemicals in the air, water, and food supply, or unremitting social pressures like racism or chronic exposure to hatred.

When stress goes on long enough, your body becomes exhausted and gives you all kinds of signals that it's time to "do something". But you have to know how to interpret the body's language. When you experience a combination of numerous of the following indications, your body may be saying, "You're adrenal glands are fatigued from chronic stress."

- \* sugar or salt craving
- \* trouble falling or staying asleep
- \* brain fog
- \* poor concentration
- \* poor tolerance of exercise, feeling exhausted
- \* susceptibility to colds
- \* feeling dizzy when you stand up
- \* feeling wired but tired
- \* retaining water
- \* panic attacks
- \* startling easily
- \* heart palpitations
- \* poor tolerance of caffeine, alcohol, drugs
- \* feeling weak and shaky
- \* having other signs of low blood sugar
- \* weak muscles

We went around the table at a blood sugar meeting to see how many of us had a variety of these issues and, of course, many of us did. Whatever was going on with us emotionally, we all had eaten refined carbohydrates and other processed foods abusively. A show of hands indicated many of us had thyroid problems too, which makes sense since the adrenal glands and the thyroid use up the same building blocks and are aged by the same stressors.

Lisa's Story, "Marshmallow Madness", illustrates what we're up against in a culture that's still winking at junk food while the obesity and diabetes statistics rise in staggering proportions. She experienced thunderous heart palpitations. When she stopped eating refined sugars, the palpitations went away, her weight went down and her HDL (good cholesterol) went up.

### Failure to Connect

Plenty of research indicates that diet and lifestyle choices like what you eat, drink and smoke and how much you exercise have a lot to do with overall health. If you wanted to take a free pill that simultaneously improved your memory, stabilized your blood sugar, and lifted your depression, the pill would be called "exercise". But what else influences these

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stressors which we commonly point to as the source of our health problems? In my quest to help our group understand more completely how stress works, I found another interesting piece of research. Smoking, drinking, eating junk food, obesity and lack of exercise have not been found to explain higher rates of disease and death among the poor, even though they are higher among the poor. This is not something I wanted to share since we're building a program on a foundation of lifestyle change. The missing variable was identified to be "perception of one's place in the world," including lack of social relationships and social support, disposition of pessimism like lost sense of control or self-esteem, and heightened levels of anger and hostility. Also implicated were certain chronic and acute stresses in life and work: racism, classism, and other things related to the inequitable distribution of power and resources. The researchers were quantifying what good sense tells us: The health of an individual requires a community. This is why at Suppers we prize restoration of the family table and therapeutic friendship just as we prize good eating habits.

Everybody had a personal take. As the discussions continued in the meetings, one of us who does bio feedback described how stress is always associated with certain brain wave signatures. A therapist noted that most triggers for relapse are some kind of stress. One who had been a stay-at-home mom who wanted to go back to work saw boredom at home as the trap that caused the greatest source of stress.

Of course, there's no separating the body, mind and spirit experiences, they're simultaneous. Our culture offers us a variety of therapies, practices, and free-to-users groups for emotional and spiritual support; it's the nutritional status of the body that gets left out of the equation. There's not much out there that supports teaching us how to eat. Since the Suppers priority is to restore care of to the physical body to its rightful status, I asked that for now we work with a definition of stress that included the physical body experience. "Stress is a response to real or perceived threats to body, mind or spirit that heighten arousal and activate the sympathetic nervous system, producing adrenal stress hormones."

### Sugar and Tigers and Imaginary Threats

Ruby's experience was frightening until she figured out the source of her premonitions of disaster. In her case, an undetected physical threat manifested as irrational thoughts, big stress on two fronts, but she was aware of only one. Ruby was on the verge of getting psychological counseling when she attended an accidentally well-timed meeting on false emotions. She'd been having frequent episodes of emotional meltdowns, erupting into tears on the ride home from work. She felt sucked into demon fantasies of accidents and disasters, and she was scared that she might be losing her mind. She felt better as soon as she got home and ate. The source of Ruby's stress dried up as soon as she started eating a mid-afternoon snack of yoghurt or soup. Ruby had no idea that her problems with blood sugar were related to the clouds of anxious depression that descended on her in the car after a stressful day at work. She did a few food experiments to collect data on which foods carried her longest and she's been having a strategic afternoon snack ever since. No more panic attacks.

While your mind is worrying, isolating or imagining catastrophe, the sympathetic nervous system is preparing you to fight or flee. This is the part of your brain that reacts faster than the language-bound logical part of your brain. It takes care of survival issues like reacting in times of threat. It pulls energy from digestion and tissue repair and deposits it in muscles that can run or defend. And it doesn't matter if the source is a saber toothed tiger, a 32-ounce cola on an empty stomach, or imagining being stalked. The part of your

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brain that is fast and automatic can't tell the difference between reality and a well-constructed imaginary threat. Nor can it distinguish between sugar and tigers because it is hormonally driven (and the responding stress hormones are all the same regardless of the stressor. Remember, Lisa gave herself a panic attack with marshmallows).

Several people told stories of losing keys that illustrated how fast and automatic this system is. Faster than you can mentally list the meaning of losing keys, several of us flooded with stress hormones, just imagining the prospect. We did not have to sit there enumerating, "I won't be able to drive home. I can't get into the house. My boss will kill me if I lost the key to the office. I feel like an idiot. It'll take days to replace them all". No, a stress response is immediate around a lost set of keys, which symbolizes so many problems simultaneously.

The sharing and story telling progressed from the moderately amusing experiences of becoming separated from keys to the dreaded anticipation about what all this means for our memories. The consequences of spending too much time activated by our hormonal alarm system often show up first as brain symptoms, like poor concentration and reduced short term memory.

### Stress and Memory

We frequently hear complaints from our chronically stressed Suppers members that their memories don't work very well. "My recall of what happened thirty years ago is just fine, but don't ask me to remember what I just had for breakfast." For people who experience low blood sugar, a big part of the problem comes from hormones. I've made it a personal priority to read stuff written by scientists and put it into words us average mortals can understand. I call myself a "scientist at heart" as I'm not a scientist at brain. Our bodies are complicated in their details, but I just don't believe there is any general concept that's so obtuse it can't be explained to a person of average intelligence in words of one syllable. So I hit the books again and found a graspable explanation of the relationship between stress and memory. Here's what made sense to me: An important adaptation of our brains is that we remember the details of threatening situations. This was accomplished in the design of our brains by locating lots of receptors for cortisol in the memory center. As new threats came up, the logic follows, connections were forged that enabled our brains to retrieve immediate life-saving data to help us avoid or deal with similar subsequent threatening situations.

The capacity for good recall of threatening events was adaptive, it helped us survive. But the consequence of running too much stress hormone is burn out of the memory center. In a culture where extremes of dietary garbage combine with lack of restorative sleep and sufficient exercise, our memories don't stand a chance. We need to consciously, purposefully intervene in our brains' behalf. If our brains are so burned out from dealing with physical world stress, we end up less able to deal with the other stress life throws our way. The solution lies in a combination of 1) increasing the stress hardiness of the person, 2) reducing stress exposures, and 3) retooling how we perceive and process stress.

There is nothing protective about recalling the details of the time you stressed your body by drinking a 32 oz cola on an empty stomach. But every time you take that shocking amount of sugar and caffeine you take a step toward shrinking your brain's memory center. Lower cognition, depression and ultimately dementia can result, depending on how the conditions combine with one's genetic vulnerability.

My blood ran cold when I read that some doctors are calling Alzheimer's Disease type 3 diabetes because the incidence of Alzheimer's in diabetics is so much higher than that of the

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rest of the population, depending on what you read it's twice to four times the rate. I considered not sharing this pearl with the groups; it was too scary. I've lived in a pre-diabetic body for over 25 years and my memory troubles me. I shook myself back to reality, recalling that the fear itself was not the worst of it. As the members reminded me, the great threat is fear *with* a sense of powerlessness to change, feeling trapped.

The analogy that "genetics loads the gun, but lifestyle pulls the trigger" applies here. There's no such thing as a genetic epidemic. Genes don't change that fast. So the modern day epidemics of mental illness, obesity, and type 2 diabetes relate to some combination of vulnerability -- which is genetic -- and diet or environment, which are not. Obviously not everybody gets depressed when they eat things with trans fats. But trans fats do affect some people that way, including me. If I eat packaged snacks with trans fats, I get two reactions. One is I have to finish the bag because they make me crazy to eat more, and the other is that I feel weepy and disgusting afterwards. I find being mystified by major mood swings very stressful. I find knowing how to use food to remain in high spirits empowering.

### Stress and Infection

While we're writing this story about stress, the news is devoting a lot of time to flu. Infections pose real threats to our well being. They are hard to predict, and we can't always control them. Infection places a lot of stress -- once again -- on adrenal glands, and we have an aversion to exposure. Threat of infection is another sure fire way to get an immediate "flee" response. One member described feeling trapped in the movie theater next to a woman who audibly admitted to coming out to the movies with the flu. Why was this so stressful? Our friend had an aversion to infection and a clear memory of having flu; she felt trapped by the fact that there were no other seats in the theater to move to: a physical threat coupled with no options (except of course to leave altogether in the middle of the movie.)

### Individual Differences

Discussion of stress around confrontation brought out another movie theater story. One of us said she experienced mounting tension as the woman next to her chatted with her friend during the movie. She spoke up in hopes of silencing the chatter box. Speaking her piece was stress releasing. Others of us felt it would have been less stressful to tolerate the chatter than have a confrontation. So the same event, perceived by two different people, is more or less stressful.

Poor health and vulnerability to addiction relate not only to the objects and events that are the obvious triggers but importantly to a loop of thoughts, feelings, self-talk, and dispositions as well as the quality of the physical body that's processing the stress. It took many rounds of discussions at three different Suppers meetings to articulate what we all wanted to share on the subject of stress. In the end, I got what I always need: a reminder that in the body, mind, and spirit equation, no variable is primary. True, it's a bias of this program to stand up for the under-valued role of the nutritional status of the body. But cooking classes or handing out our recipes and recommendations wouldn't help many people. Suppers is a program. It works through restoration of the family table and the therapeutic friendships that evolve on our journeys to a healthier life.

### What is the Role of Stress in Your Life?

Here are some questions we think may help people rethink the stress in their lives and get a better handle on it.

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What are the sources of stress in your life?

And the sources of support?

Is there a possibility that your stress is increased by things you have not thought of yet?

What might that be?

Which are the stresses you have or can get control over?

And which are the ones you must accept?

Are you willing to make one change today that would help you feel more stress hardy?

If not today, tomorrow?

Is there someone you know who already makes a habit of doing these things that reduce stress?

If you can face these questions, then you are probably ready to take the Suppers BRIM Inventory, which will help you confront the role of stress in your life by identifying your Barrel of Risks and Influences for the Manifestation of illness and addiction. If you cannot face these questions, take heart. Just going to meetings places you in the way of reducing stress.