Nutritional Harm Reduction

This document concerns itself with the relationship among depression, anxiety, learning issues, obesity, diabetes and problems with alcohol as well as how to use nutrition to turn them around.

The CDC now estimates one of three American children is destined for the tragic and preventable diagnosis of diabetes, and at younger and younger ages. There are many warnings, if only people knew what to look for. The most notable warnings include intense preferences for refined foods (chips, cookies, candy) and regular or diet soft drinks or alcohol, mood swings, struggles with weight, and a spectrum of brain issues including mental fatigue, inability to focus consistently, and ADHD. The problems start in the food supply and would hardly exist were it not for modern refining processes.

The following paper offers suggestions on how to practice nutritional harm reduction as well as case stories of people in the Suppers programs whose lives are better for doing so.

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"The diagnosis or name of the disease is inconsequential compared to identification of the biochemical and environmental causes."

Sherry Rogers, MD

Harm Reduction

Harm reduction is a concept in public health and addictions counseling that acknowledges that while a person may not stop doing a high risk behavior, there is value in promoting behaviors that reduce overall harm. The harm reducing behaviors mitigate the potential dangers and health risks associated with, for example, prostitution, drinking, and drug use. Promotion of the use of condoms, needle exchange programs, and designated driver campaigns are good examples.

As Herr (1998) noted, at least 7 out of 10 causes of death are related directly to lifestyle, behavior and personal choices. Still, as a culture we are sleepwalking into the epidemic of obesity and diabetes, not to mention all the diseases and addictions that are their companions. Even though there is a mountain of evidence connecting poor blood sugar regulation, alcohol addiction, and foul mood chemistry with the consumption of refined carbohydrates (Larson, 1997), most of us don't recognize even the most flagrant symptoms as consequences of poor diet. These are the loud but inarticulate warnings of a dangerous, pre-diabetic state. Anxiety. Mood swings. Insomnia. Cravings. Irritability. Fatigue. Fuzzy thinking. Weight gain. They fairly scream at us, "Change your diet", but we haven't been taught their language.

Of all your organs, your brain is among the most sensitive to poor nutrition (Bland, 1987). That is why the earliest symptoms of poor nutrition usually include learning issues (Simontacchi, 2007), brain symptoms like anxiety and depression (Schachter, 2006), or poor concentration (Bock, 2008). Over time, other systems cave in too, so other health problems accumulate like overweight, diabetes, or cardiovascular disease. But long before this happens, you're likely to see foul moods and fatigue. If the disease process is started in childhood (and remember, The Centers for Disease Control predict one of three American children will end up diabetic before age 50), it is likely to be interpreted as a behavioral problem or attentional issue rather than as the early signs of an adult-onset disease.

What's going on here? Misidentification of the nation's most pressing addictions challenge: At the biological core of these seemingly distinct health challenges are environmental and biochemical forces that combine with our bodies to make for an addictive food supply. To understand why the food supply is so addictive, it's necessary to recognize that there are two general kinds of brain nutrients: building blocks and fuel. It may help to think of a car engine. You need steel to build the engine and you need gas to fuel it. Our engine – brain – is more than half structural fat (not the flabby kind), the kind that keeps cold water fish flexible in frigid oceans. The working parts – neurotransmitters – are made from the amino acids in the protein food we eat. And the fuel is glucose, from sugars and starches. In our culture, we tend to eat way too much fast fuel (refined carbohydrates like cake, chips, soda) and not enough slow fuel (fiber-rich fruits and vegetables) and not enough building blocks (high quality fats and an array of protein foods). We may eat enough protein, but our processing and preparing methods reduce its food value. In that case, eating what seems to be enough still does not supply the necessary nutrients for learning brains and good mood brain chemistry.

The addictive relationship with Western processed foods rises from quirks of metabolism that make us crave fast fuel (read refined carbohydrates) even when what we really need is

building blocks (read high quality fats and protein). In a medical and recovery culture that emphasizes the pharmaceutical, spiritual and behavioral contributions to recovery at the expense of the historical, biological body, we do not typically think about what sets up our bodies for addiction and relapse to begin with.

When the brain is fed too much fast fuel and not enough building material, the logical conclusion is some combination of craving, and mood, behavior and concentration problems (Ross, 2002). Weight and energy are likely to be problems too. And long term, the addictive relationship with processed foods lead us into chronic degenerative disease.

As holistic doctor Sherry Rogers (1995) pointed out, the diagnosis is inconsequential compared to the biochemical and environmental causes of the problem. If obesity, diabetes, problems with alcohol, depression, anxiety and learning issues share common roots in diet and lifestyle, then knowing which changes to make matters more than naming the disease. These issues often cluster in individuals and cluster in families. Which ones express in this or that person or family is a matter of individual biological vulnerability, but the need for a diet of uncontaminated whole foods holds true for all of them.

Costly Addiction

There is not agreement on what the most costly addiction is. Alcohol, drugs and cigarettes commonly top the list because we are not accounting for the obesity and diabetes epidemics as consequences of addictive food. Given that these and most of the modern health scourges relate to diet, environment, and lifestyle, it's easy to argue that the food supply is the most costly addictive agent. Working with the idea that an addiction is a relationship with a material or activity which one repeatedly does in spite of the known negative consequences, refined food is the most expensive addiction in our culture. It is costly both in human and dollar terms, but the price tag is often hidden. We aren't taught to think of treatments for depression, ADHD, diabetes or cardiovascular disease as externalized costs of buying cheap food. They are. These treatments really belong in the grocery budget because they are the pricey consequences of eating cheap, processed food. Dependency on these foods creates the need for medical, educational, and counseling expenditures that would not be necessary if we avoided them in favor of whole foods.

Until we recognize our relationship with the processed food supply as a pervasive cultural addiction, we won't see significant progress with obesity, diabetes, cardiovascular disease, depression, etc. because processing foods *is* the primary biochemical cause (Ross, 2000). Turning around the epidemics will require reducing harm culture-wide by supporting changes in the content of our diets, improving digestion, and adjusting the timing and circumstances under which we eat. For some people, changing diet and lifestyle will be enough, for others, not. Supplemental nutrients will be necessary. Either way, harm reduction thinking will be required because unlike alcohol, drugs and cigarettes, food is not something from which we can totally abstain. Harm reduction is all we have to work with.

To summarize, the major health and mental health scourges that relate to diet and lifestyle call for individual and culture-wide attention to the elements of nutritional harm reduction, including:

- Learning to make good observations about what's going on in your body
- Improving the content of the diet to include uncontaminated whole foods
- Supporting better digestion
- Using timing to mitigate the effects of favorite processed foods

- Improving the settings and circumstances under which we eat
- Using nutritional supplements when good food is not enough

To make it really simple, the Suppers program rule of thumb for distinguishing between health promoting and harm promoting food hinges on the degree of processing. Our common health and mental health scourges are not usual in cultures that rely exclusively on diets of whole foods (Bond, 2007). So at the level of the physical body, eating whole food is a primary form of prevention for health, mental health, and addictions issues. Once refined food and beverage is rooted in the culture, as they are in the United States, it becomes an expensive and tragic public health issue (Pollan, 2008). Non-whole -- more drug-like -- food is now so normalized in our national food supply that even those of us who know how we ought to eat better are not consistently doing it.

Imagine feeling about a piece of broccoli or a dish of salmon the way you feel about ice cream, or chocolate, or pizza, or whatever is your favorite non-whole food. Whole foods don't manipulate our brain chemistry and draw us into relationships with them the way the refined ones do. All they do is satisfy healthy, normal hunger. If giving up these favorite items seems unthinkable, nutritional harm reduction provides a few options.

Learn to observe your personal biochemistry

Nature is no longer in charge of what's available to eat. Big business with intense profit motives is. Throughout human history it was not necessary to understand how foods affected your body, we ran on availability and instinct. No more. Confronted with the CADs (convenient, addictive and delicious) it requires a concerted effort to hone your skills of self-observation to understand how foods affect your body. This is necessary because each one of us is so biologically distinct from each other that there just aren't any rules that apply to everybody (Williams, 1978). Genetics, blood type, family history, stress responses, historical eating habits, exposure to toxins and many other factors make us each interact differently with foods. Not only is one man's meat another man's poison, the same eating behavior can lead to obesity in one person, ADHD in another, anxiety in a third, and have no obvious ill effects on the fourth!

Do you already know how to interpret the language your own biochemistry is speaking to you? There is no book, or website, or doctor that can tell you how to deal with yours; it involves a search process, driven by you. What the Suppers program can provide that books, websites, and doctors can't is a supportive environment where you can experiment until you learn how food and lifestyle influence the way you feel. Our process involves learning to make distinctions between the moods you experience for situational reasons versus the moods that are driven by food and beverage (Ross, 2002).

Since depression and anxiety are two of the most common problems for people who come to Suppers, we'll use these examples. There are many many reasons for being depressed, and there's no guarantee that any depressed person has just one. But what you can rely on is that depression is always there for reasons; it's not random. Similarly, anxiety never strikes in a vacuum. At Suppers, we challenge the notion that it is ever "generalized". Like depression, anxiety is there for very specific reasons that vary from one person to the next. Sometimes it's a response to a situation. Sometimes it's your body's loud but inarticulate attempt to tell you to change how you live and what you eat. Often, it's a combination.

If you're reading this material at your computer or your desk, you'll get a very limited sense of why and how to uncover your personal reasons for depression and anxiety. That's

because very limited parts of your self are participating in the process: your thinking brain, your memory, and your imagination. And your imagination probably relies on your memory. The part that's missing is your body. There is no way for your thinking brain and imagination to conjure up what it would feel like if you were eating the right foods for you and feeling well if you don't have a memory of feeling well. The only way to do that is to eat whole foods for as long as it takes to experience vibrancy. Then you'll get valuable information when you re-introduce the foods you suspect are drug-like for you, the ones that may be sitting within arm's length right now, a cup of coffee, something sweet, perhaps, and surely something at least a little addictive. These are your mood band-aids.

Leaving the nutritional status of the physical body out of the healing and recovery equations is a pervasive oversight in our medical and recovery cultures. Why, even the disciplines that train people to work with addicts, school children with learning issues, and people with depression and anxiety are not educating their students in the relationship between food and mood, behavior, addiction, and learning issues.

Our member Carrie didn't know relief from her panic attacks was within arm's reach. She just needed somebody to ask her the right questions. Here's her story.

> "Learning to be a better observer of my own experience required having somebody in my life asking the right questions. I thought I had an anxiety disorder. There were certain times and certain places where I would have panic attacks, for no good reason. When I went to get a bunch of blood work done, it turned out my blood sugar was out of range and low, but nobody in the clinic picked up on that and I didn't know what that meant. As soon as I came to Suppers meetings, everybody seemed to have an education about the symptoms of low blood sugar. So I learned too. The shakes, sweats, desperation, and mood swings all related to poor food choices and skipping meals. They asked things like; do you binge on carbohydrates; do you get really hungry mid morning if you eat a bagel for breakfast; and is it worse when you forget to eat? Everything they asked, I said, Yes, Yes, Yes. I've been a slave to food, cranky, anxious, depressed, and scared of my own mood swings for years. I started writing down everything I ate, not changing the menu, just writing it all down. The conclusion leapt off the page at me as soon as I asked myself the right questions. All I needed was to practice some nutritional harm reduction by eating breakfast, eating more protein, and eating sweets only after a good meal. I'm still a little whacky, but I never feel like my heart is off to the races except when I cheat really badly on an empty stomach."

Content

Nutritional harm reduction through content is a simple (if not easy) matter of eating more food that supports health and less food that detracts. The rules are ridiculously simple: Eat single, fresh, whole foods. That's all.

At Suppers meetings, we often use organic ingredients, but we aren't rigid about it. The menus are free of wheat, dairy products, sugar, and caffeine since these are the most common drug-like foods. We aren't saying you should never eat these things again; we are saying these items are the most common consequence causers. If these or other specific foods are responsible for your cravings, anxiety, or depression, then a therapeutic diet free of them will give you relief, that is, after you've withdrawn from them. We acknowledge that what we teach is a pristine, baseline diet that most people will not want to follow perfectly. Most people come in wanting to know how to responsibly manage cheating. Our rule of thumb is this: Once you know how to practice ideal eating *for you* and know how you

feel on healthy foods, you ought to be able to live well and really enjoy yourself doing 70 to 85% of what's ideal for your biologically individual body. The trick is to observe and honor your personal biochemistry and learn nutritional harm reduction, like differentiating between desserts and snacks.

The rationale for changing to a diet of whole foods appears throughout the pages of the Suppers program. Here is the fundamental reason: The evolutionary pressures that shaped humans designed us for a natural diet of locally grown, whole foods, food not altered much by refining processes (Bond, 2007). There were no alternatives. Our taste preferences for sweet, salt, and fat were shaped by the combination of two pressures: vital importance and low supply. Nature created a way to be sure we'd work hard to get enough of the things that were low or unreliable in supply by connecting the eating of them to the comfort or pleasure centers of the brain. The development of problems with alcohol, diabetes, obesity, and many common mental health problems hinge on quirks of metabolism that made ancient man seek hard-to-find foods that are now cheap and plentiful, a formula for disaster. Referring to the taste for alcohol, Rogers alerted us thirty years ago to the possibility that biologically vulnerable people could develop foolish appetites. We now know that's because ingesting refined foods and drinks is like mainlining to the comfort centers of your brain. They are more like drugs than food. And with the content of food supplies becoming more refined globally, the global epidemic of diabetes is the logical conclusion. Absent processed, refined food and beverage, and there is not a whole lot to eat that's habit-forming or that draws us into dependent relationships.

Supplements can't compensate for a diet that's totally out of synch with human evolution. But they can help with the cravings and increase your chances of succeeding at the changes you seek to make. When you try to get back to foods more like what humans were designed to eat, you are likely to feel disappointment eating just whole foods and experience intense cravings for what you had before. That's to be expected. Your body is used to foods that are more like drugs (fast carbs) when what it needs is slow fuel (low starch carbs) and building blocks (fats and protein). That's why we created a support group.

There are a few more foods that act like drugs in some people. If a particular food is a drug-like trigger *for you* (corn and potatoes have this effect on some people*)*, you may have to abstain from that food, just like a real alcoholic has to abstain from drink. But the most common ones are wheat, dairy, and sugar. It's simple to sort out whether or not a suspect is in fact the culprit; it just involves learning how to observe your experience, a skill we teach at Suppers.

Here is the story of Jim, who learned that a few of his favorite "contents" were affecting his mood, weight, and work life. He called it "Shutter Speed".

> "I'm a photographer. I quit drinking over a decade ago and never looked back. But I still have lots of issues with food, particularly weight. At a Suppers meeting I finally heard a story that sounded like me when a woman described the benefits she realized from trying a diet for people with blood type O, my type. I needed quick results and I needed a how-to manual. I got both (See D'Adamo, 1996). The biggest trouble makers for me turned out to be my favorite things: bread, cheese, and coffee. Unfortunately, they fuel my appetite and keep me eating all day. I was in a pattern of manipulating my moods and energy level with these things, particularly the coffee. I decided to try quitting because her story sounded so much like my story.

I started eating breakfast, usually high in protein. That change alone made it unbelievably easy to quit coffee because I no longer had plunges of fatigue. The big pay off was that I also lost my fine tremor and started using a slower shutter speed.

When I don't eat bread and cheese, I'm less hungry overall, and I lose weight. When I cheat, I get drawn into feeding throughout the day.

The Suppers program keeps me in the process of improving my diet incrementally and accepting myself when I fall off the bread wagon. Am I eating a perfect diet? No. Have I reduced the damage I do to this body? Yes. And each success makes the next success a little closer at hand."

Jim authored a true t-shirt line, "Never underestimate the power of a home-cooked meal."

Read the Label

Technically speaking, if the contents are listed on a label, what you're holding is not a single, whole food. Single, whole foods don't need labels; everyone can tell what they are from looking. But this is the real Western world, and most people are eating foods that come with labels to read. You can practice harm reduction by looking out for the following mood- and health-compromising ingredients: things you can't pronounce and don't recognize as food, dyes, all forms of sugar (like corn syrup solids, fruit juice concentrate, honey, molasses, high fructose corn syrup or any other words that end in "ose", maple syrup). In general, if two products seem very similar, say peanut butters, the one with fewer ingredients is likely to be the healthier choice.

Here is Cindy's journey through food labels.

"Today my friend and I crack up talking about our early parenting days, thinking we were such great mothers reading all those food labels. I read every label and then threw the food in the cart. I'd done my job.

I think we were both expecting the food manufacturers to write "poison" in the list of ingredients; that's what it would have taken to penetrate our brains.

Today I'm a bit more educated. My first choice is to buy single foods so there *are* no labels to read, one chicken, two apples, three sweet potatoes. But there are still a few things that I buy for convenience, operating as I do in the 70 – 85% of the ideal range.

For example, it took a year for my kids and me to come to terms with all the things we'd give up in order to avoid red dye. All my son's favorite candy had red dye. After clearing him out for a few weeks, I handed him a "fruit snack" with Red 40, our challenge to see if in fact the dyes were affecting his mood as I suspected. He immediately turned green about the gills on Red 40 and handed the rest back to me. The headache and malaise were immediate. I no longer had to do a sales pitch for healthy food, he got it himself, 'That's what did it to me, Mom'. He wouldn't tell you this, but I will: he used to be constipated a lot too, and making these changes has cleared up that problem as well.

It was too soon to get cocky about my brilliant parenting, however. The kids still had occasional, inexplicable meltdowns. As it turned out, my son's favorite salad dressing had Red 40 in it too. Figuring salad dressing was healthy because it makes him eat

salad, it never occurred to me to read the label. I guess the 70 – 85% rule can't apply to label reading.

Having had so much success with Suppers recommendations myself, I wanted to rehabilitate my whole family overnight.

They had other ideas.

So we went slowly, very slowly. First we had powwows about changing to healthier versions of favorite treats, health food store junk food, if you will. But it was an improvement. We replaced anything that had the word 'hydrogenated' in it. We learned all the different names for sugar. We were merciless about high fructose corn syrup and a little gentler on other forms of sugar.

As they cleaned up, they started noticing good food tastes better. My daughter is a reluctant eater and very petite. Little by little by little her tastes changed, and even she wanted the organic chicken, not because it's virtuous but because it tastes so much better. It's a bit hard on the budget, but how much is it worth to me to have kids who eat well and don't melt down anymore. A lot!

It was a tearful day when we went through the pantry, throwing out the favorite foods with dyes, corn syrup, and white flour. But by preparing slowly for this day, my kids and I had developed a taste for better food and demonstrated to ourselves the huge payoffs in terms of mood, bowel function, and freedom from headaches."

Digestion

You practice nutritional harm reduction when you support good digestion, for example, by supplementing with digestive enzymes or replacing nutrients you don't absorb well because of damage to your gut from pathogens, environmental toxins, and poor food. This is a complicated problem that may require professional help, but here's an example of how it works: A person who self-medicates for anxiety with alcohol is in a vicious cycle because the very nutrients needed to be stress hardy are the ones depleted or not absorbed when one drinks more than a small quantity of alcohol. The person whose digestion is compromised because of years of drinking may need professional help learning which nutrients must be restored to speed biological recovery. (See Ross, 2002, and Larson, 1997.) The good news is that guts heal. And they do so faster when you eat foods and take nutrients that provide the building blocks of strong digestion.

"You are what you eat" is only partly true. A more accurate adage would be "You are only what you absorb of what you eat." If your digestion is not in top form, you could be eating a perfect diet of organic, whole foods and still not get the benefits from them. Look at it this way: Biologically, the brain is downstream from the gut (Bock, 2008). Whatever the deficiencies in your digestion, there will be consequences for the brain, the organ that is the most sensitive to what you eat. Again, poor diet and weak digestion can affect mood, behavior and learning long before ending up in diabetes or heart disease. The brain is affected first with fatigue, depression, anxiety, spacey feelings, or poor concentration.

How do you know if your digestion is compromised? Here are some tip-offs:

1. Your evening weight should not be more than about 2 pounds over your morning weight. If it is, you may be holding water in your system because your body is having a toxic reaction to something you're eating.

2. Each day you should be having, without a struggle, a formed but not hard bowel movement something akin to the shape of a banana. Stools more like ribbons or marbles are a sign of compromised digestion.

3. You should not experience abdominal bloating, pressure, or discomfort. This is not normal. Something is going on in there.

4. You should feel normal satisfaction after eating, not gleeful or overly comforted. One way you can tell if a food is causing your problems is by how quickly and effectively it seems to solve your problem, adjust your mood, etc. If a food works like a drug then that is what it is *for you.* One way wheat and dairy foods (pizza, macaroni and cheese, etc.) become drug-like is by causing an opiate drug effect in the brain when their incompletely digested proteins leak out of a weak gut. If you manipulate your mood with breadstuffs, ice cream, pizza, etc. and have other signs of weak digestion, it is very likely that sugar, wheat or dairy foods are keeping you depressed and anxious or unable to feel happy and satisfied.

Here is Jenna's story. She called it "Gut Feelings".

> "If you can't stand me talking about bloating, constipation, and digestive misery, skip my story. My cranky personality formed around not being able to go to the bathroom for 30 years. Well, of course, I went a few times, but never without a struggle. I'm not very overweight; I'm not dependent on alcohol, but I definitely feel pulled into eating certain foods to change my mood. I feel angry and disappointed if there's no dessert. My favorite time of the day for a piece of chocolate is first thing in the morning. If I let myself have it, it throws me off for the whole day. Do I already know this is a problem? Yes. Do I do it anyway? Yes. That's the sleepwalk. I know what will cause consequences and go ahead and do it anyway.
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> I need to stay in the Suppers process to consciously, mindfully stay on top of eating enough vegetables. I always feel better and my digestion shall we say 'moves along' when I do. I feel like I have two brains, the logical brain that knows what's good and right for me and this tantrum-throwing other brain. My logical brain is slower. The tantrum throwing brain often makes me shove that brownie in my mouth before my logical brain slows my hand.
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> I see other people at Suppers pulling out of depression, learning to cook and enjoy whole food, even sometimes forgetting about dessert. Imagine that! That's what I want for myself, freedom from the automatic choices made by my tantrum-throwing brain."

Timing

Order matters. A trickier but very effective form of harm reduction is the timing of eating and the order in which you eat foods. Interventive snacking can make the difference between having and not having panic attacks, rages, or binges.

Some people cannot give up sweets. Even agonizing over their weight or the diabetes in their family, they will continue to eat sweets. They exhibit a key characteristic of addiction

by continuing a behavior even while knowing it is harming them. The harmful effect of refined carbohydrate foods like chips, candy, cakes, and cookies depends partly on how quickly they appear as sugar in the blood stream. These non-whole foods tend to get in there a lot quicker than whole foods, increasing insulin response and the risk for weight gain. The glycemic index describes this difference by ranking carbohydrates according to their effect on our blood glucose levels. In general, whole foods cause less havoc with blood sugar than milled or otherwise processed foods (Sears, 1997).

For the person who will not practice abstinence from highly refined carbohydrates like cakes, candy, or white bread, harm reduction through timing can effectively reduce the glycemic index of a favorite food. The potential for damage from these foods goes down if these foods are taken on a stomach full of whole foods, i.e., as dessert. In Suppers language, snacks are the exact same foods you'd eat at a meal. Snacks promote health. They provide the building blocks for strong bodies and stable mood. If a food is not a health-promoting meal item, it's a dessert. A piece of roasted chicken is a snack. Chips are not; they're dessert. A cup of homemade soup is a snack, a cup of cocoa is not; it's dessert. An apple is a snack. Apple pie is not; it's dessert. If something is made from single, whole ingredients, it passes for a snack. If it's milled like a flour or otherwise processed, it must come after a meal to reduce its impact on your blood sugar and mood chemistry.

Breakfast

Another important timing strategy is called breakfast. Skipping breakfast can set you up for bouts of fatigue, anxiety, craving, and binges for the whole rest of the day (Ross, 2002). Eating a breakfast of whole foods, including some protein, can set you up for more stable blood sugar and reduced desire for sweets and coffee. You could think of it as a form of pre-emptive eating.

Following is another excerpt from the story of one of our founders, Cindy, who says, "My epiphany came in a bowl of chili".

> "Counter to everything I feel like doing first thing in the morning, I ate chili. I decided to try some breakfast chili to see if there was anything to this theory about setting yourself up for a better mood all day by starting with protein. The effect was immediate. A bowl of turkey chili shielded me from the spinning and ranting that normally followed the prized first cup of coffee that got me out of bed in the morning. Just this change alone had rippling benefits throughout the family, but I didn't stop there. Chronic depression and anxiety lifted after I went cold turkey off of coffee. My negativity vaporized, along with the hot flashes. Even when I didn't sleep well, a bad night didn't destroy me anymore.
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> It's painful for me to tell you that something I love as much as I love AA has a shortcoming. Those first years in the program were profoundly life changing. But it was not there that I learned I have a body and that that matters. It took many years of seeking in other places to make this discovery. In my 13th year of sobriety, I realized what I had been doing was throwing program and therapy at a depressed brain. I've been working the Suppers program for two years, and still the most profound, single improvement came when I had my epiphany in a bowl of chili."

Snack Timing

Another form of pre-emptive eating is snack timing. Remember, a snack is the same as a meal item. All the rest has to go on the dessert list. For people on the blood sugar/mood chemistry rollercoaster, a well timed snack can make the difference between having a panic attack and maintaining relative stability or triggering a binge and resisting the impulse.

In order to find out which foods work for interventive eating, it will probably be necessary to do a food/mood observation chart and track your reactions across the day.

Here is Rosella's story, the case of a psychotherapist who learned to manage her eating disorder through a nutritional harm reduction timing strategy.

> "I have been a psychotherapist for over 30 years and have had an eating disorder my whole adult life. Wild horses could not have separated me from my mountain of popcorn or candy binges. Years of psychoanalysis did not bring me any closer to sustaining a normal weight or managing these impulses. Periods of weight loss on diet programs were interspersed with defiant bouts of eating and weight gain.
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> My husband encouraged me to look at the possibility that my food choices themselves had emotional and psychological consequences. He's very oriented to including the physical body in a holistic approach. What emerged from my food/mood chart was that my body was going into low blood sugar hormonal emergency mode most afternoons. We tested several foods for me to eat pre-emptively. The results were clear: When I ate a dish of lentils at 4:00, I turned off the trigger. Over the years I have made great strides. Whereas I initially resisted having the homework assignment of eating one piece of fruit *a week,* I now relish fruits and vegetables. It did take a while to acquire the taste for them. I needed lots of support and that's what the Suppers program patiently provides.
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> Today I am always within 5 pounds of my ideal weight. I still indulge in all my favorite foods and drinks socially and occasionally popcorn or candy. The difference between then and now is that I can get right back on track the next day as long as I eat something like a dish of lentils before I feel the trigger."

Circumstances

The calorie content of food is not the only thing making us sick and fat. Stress and the circumstances under which we eat count too. Here's an interesting one: Your metabolic rate is lower while watching TV than while sleeping. So your body is burning less energy while you mindlessly watch TV than while you sleep. That makes eating while watching TV a doubly deadly invitation to obesity.

Mindful vs. Mindless Eating

At Suppers we always sit down and take our time eating the food we've prepared from scratch. One of our members, Brooke, shared her experience getting coached in mindful eating (See Albers, 2003).

Here is Brooke's story, "I'm NOT satisfied".

> "My entire being interacts with the food I eat. I watch my husband – much bigger than I – push away from the table feeling satisfied after the meal I've prepared, and I wonder at his capacity to feel satisfied. I'm not satisfied!
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> Insulin dependent diabetes struck me at age 39. For a year after my diagnosis, my life revolved around re-learning how to eat and manage this disease. My goal was to eat in a way that reduced the units of insulin I'd have to take in order to keep my blood sugar stable and feel good.
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> This was no small task. Diabetes is a chronic disease. It is with you every minute of every day, and there is no such thing as taking a vacation from diabetes. To keep blood sugars in the healthy range, you must think about every morsel of food you put in your mouth and take the appropriate amount of insulin to move the glucose out of your blood and into your cells. This takes a lot of work, training, and brain energy. I've had to deal with the lonely, sad, tired, dejected feelings when I just wanted what I wanted, not caring about calories or blood sugar effects. One day, I dug into a container of locally produced organic ice cream. How much more wholesome could I be! It had the added virtue of being a fund-raiser for the local school garden. Couldn't my pancreas give me special dispensation for a worthy cause? The holy ice cream did a terrible number on my blood sugar since after taking two small bowls of it, I went back to the freezer for the container and just mindlessly ate out of it while reading a pile of newspapers I had missed during the week. UGH! I knew I shouldn't be eating it, but it tasted so good and helped ease my anxiety.
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> Sometimes I actually fight with myself – in my head – in terms of what snack I will reach for. I know I don't want carbs and should reach for – and usually do – veggies, high fiber crackers, cheese, hummus, if I have some around, and chicken soup. I try to have a container of one of the Suppers soups on hand for any meal and in between. Since the Suppers soups are mostly protein, veggies with lots of fiber, and good fats, they're very low in carbs and do not result in much of a change in my blood sugars. I am trying to tailor–make an integrated approach for myself, combining good food choices and working with a counselor who teaches mindful eating.
>
> Some of the initial exercises were very powerful and have stuck with me: Use nice dishes that make you feel happy and proud of what you are eating. Make it look nice. Chew slowly; put your fork down between bites; close your eyes and really taste the food, enjoy it. Of course, sit down to eat. But I am not always good at this. It seems so unfair that I have to be vigilant, while others like my husband are simply satisfied.
>
> I have pursued many avenues to gain a greater awareness of my eating habits, including hypnosis, meditation and yoga, and other forms of relaxation and breathing. In the Suppers program I have accepted that my best chance at making good matches between my problems and personal solutions will involve identifying *all* the active forces that make me hungry, sad, and dejected. My experience with fish oils has taught me that certain changes are necessary but not sufficient to stabilize my mood. Taking enough Omega 3 fat produced the single most dramatic change in my mood since I started the program. My hormonal and menopausal depressions seem to have disappeared! Plus I just lost my taste for coffee and now start my day with a soothing cup of hot green tea. The tea does not seem to spike my blood sugars like coffee did every morning. I learned about the benefits of Omega 3s and getting off coffee from discussions at Suppers meetings and the successes realized by others sitting at the

> table. I don't know what my ultimate recipe for success will turn out to be, but I do know that slowing down and eating more mindfully will be part of the package. So will taking supplements for the things my body just doesn't have enough of."

Brooke makes an important point. Making improvements in any of the key areas – content, digestion, timing, and circumstances – can reduce harm. But to experience vibrancy, you may have to stick with the program long enough to identify *all* your issues and match the solutions to the problem. At Suppers we draw an analogy to a man hobbled by ten nails in his foot: If you remove nine nails, what will you have? A man hobbled by one nail in his foot. Still hobbled, still wondering how close he is to addressing all the changes he has to make to get relief.

The Suppers promise is to stick by you and help with just about everything you can do without a doctor to improve your health and – for people in recovery – make sobriety more doable.

Eating While Drinking

If you are not an alcoholic and abstinence is not your goal, you can reduce the effects of alcohol by having it with whole foods, including protein, high fiber and low starch vegetables, and high quality fat. Good food slows the absorption of alcohol. An empty stomach speeds it up. Combining alcohol with refined foods like white bread or chips will not have the same benefit since refined foods feed into the same biological pathways for poor blood sugar regulation and unhappy mood chemistry as the alcohol.

Stress

The circumstances under which you eat profoundly affect your ability to absorb nutrients from food. If appealing to your vanity helps, think of it this way: Eating while stressed is fattening; eating while relaxed is slimming. Eating while stressed is aging. Eating while relaxed is restorative.

In "The Anger Eater", our member Raquel recounted an adult child story that demonstrates the tight bond of emotional life and eating life. By reducing food-induced anguish through nutritional harm reduction, she was better able to cope with the emotional turmoil.

Here is Raquel's story.

> "My relationship with food has always been tightly coupled to anger. As a child, I lived in a turbulent household. The unpredictability of my father's alcohol-induced rages turned me into a timid, fearful child. Since the angry tirades usually occurred late in the evening, I spent my youth feeling tired and nervous, ever vigilant for the possibility of a bad event, even when things were relatively calm. I ate candy for comfort and energy. My father was also a controlling, invasive parent, and I came to think of myself as an individual who was incapable of an independent thought or action. As I grew older, my anger at my home situation grew as well, and I used food as a weapon against myself. I ate less and less, hoping that if I were small, I would be less noticeable and less likely to become a victim to my father's angry, frightening behavior and be invisible to his constant need to control my actions and decisions. I also thought, at some level, that it would be preferable to disappear instead of feeling helpless to change or escape from my home situation.

As an adult, I continued to have problems managing my anger. I was afraid of the emotion. For me, anger was a dangerous beast that needed to be tamed, not an acceptable human emotion that, when expressed appropriately, was healthy and necessary to normal psychological functioning. As a result, I became an anger eater. As I swallowed my anger, it would build until it spilled out in inappropriate ways: snapping at my mother for not answering my invitation for Thanksgiving dinner within 24 hours, ranting wildly to a friend because someone had given me the finger at an intersection where I had the right of way. Since I had such low self esteem, I always picked someone 'safe' to express the anger to; someone I knew would not retaliate or react in a way I would find threatening. In spite of my graduate education and a degree in counseling psychology, the theories I read about managing anger addicts and enabling adult children of alcoholics like myself simply did not register with me emotionally.

Meanwhile, I was alternating between eating huge amounts of food and eating almost nothing at all. When my anger was sharp and I was frustrated and fuming, I would eat nearly non stop during my waking hours (mostly carbohydrates, salt and sugar) to 'soothe' myself. After I had pushed the anger deep inside myself, I would become depressed and turn the anger inward. I would punish myself for being such a loser by depriving myself of food, eating very little for weeks. This rollercoaster eating and nearly fasting took a toll on my health. I was always very thin and athletic. I would often run miles or swim miles to decrease the stress I felt. I felt stressed and threatened by the smallest criticism or failure. I was a cortisol producing factory. I felt exhausted and demoralized most of the time. I worked very hard and, unfortunately, was very successful at hiding and denying the storm that was raging in my head.

After I turned 50, I seemed to pass a developmental milestone. I cared much less about the opinion of others. I began to feel a shift in my thinking about the definitions of urgency and failure. The exception to this change involved the opinions of my husband and my children. Their criticisms and disappointment with my behavior, my cooking, and in particular, my husband's anger that I was an unemployed, stay-at-home mother not contributing to the family's bottom line, cut me to the quick. I was very angry about these negative opinions from my family and would often spend the day frowning and snapping at everyone or giving everyone the 'silent treatment'. I was eating lots of carbs to soothe myself. I gave up the food deprivation punishment but often had days when I felt constantly hungry. Despite a rigorous exercise schedule, I gained 10 pounds in a matter of months. I would then panic and start exercising and watching what I ate but one emotional upheaval sent me back to the fridge and the pounds came roaring back. I also tried a number of diets that left me thin but exhausted and prone to colds and flu.

Since I have started a Suppers program, I have noticed an evening out of my mood and fewer 'all anger, all day' situations. I still have a way to go but I am able to take in the criticisms of my family and talk them out. I am still having anger spikes and I have my moments when I give in to some chocolate or over eat (although not carbs!!) to ease myself through the rough moments, but, overall, I see a marked improvement and my demeanor is more 'calm than storm'. My weight is slowly stabilizing. My greatest pleasure is my changed relationship with my 9-year old son. He has many of my psychological traits and tends to hold in his anger and then explode. Just a month ago, I was putting him in time out like a 2-year old while I shouted about his immaturity. I am now able to talk him through the episodes and finish the talk with a nice, long cuddle. It is one of the most joyous transformations of my life."

When Good Food is Not Enough

An important aspect of nutritional harm reduction that may require the help of a professional is supplementation. Many deficiencies can be corrected over time just with food. Some cannot. In any event, turnarounds can happen much faster when brain cells are rescued by the specific nutrients that replenish the missing brain building blocks. (See Gibney, et al, 2003; Larson, 1987; LeValle, 2003; Miller & Miller, 2005; Murray, 1999; Ross, 2002; Schachter, 2006).

In general, the specific mood, behavior, and learning issues that trouble you are determined by a) which nutrients you are missing and b) the toxins your body harbors.

The person who is subject to panic attacks but has no problem with alcohol has different brain nutrition deficiencies from the alcoholic who is subject to rages. Both will benefit from a mood stabilizing diet of whole foods. Each will require different supplements to stabilize the brain chemistry.

Most of us haven't been educated about the relationship between mood now and chronic health problems later. Yet common pathways to degenerative disease start with eating to self-medicate for unhappy neurotransmitter deficiencies, or drinking to self-medicate for depressingly low blood sugar. We aren't taught to think "early disease process" when we see learning issues or mood swings. Here is the short list of problems that are often caused when just one common neurotransmitter – serotonin -- is short in supply (Murray, 1998):

- Aggression
    - Problems with alcohol

- Anxiety
    - Attention deficit disorder
    - Bulimia
    - Craving for carbohydrates, especially the "fast" ones
    - Fibromyalgia and other pain syndromes
    - Headaches of many descriptions
    - Hyperactivity
    - Insomnia (especially staying asleep)
    - Muscle twitching
    - Obesity
    - Obsessive compulsive disorder
    - Premenstrual problems
    - Seasonal affective disorder

Of the dozens of neurotransmitters, Murray notes, serotonin is the one most involved in the onset and the treatment of medical and psychiatric problems. It is also tightly related to blood sugar mechanisms. When the body produces insulin, the biochemical stage is set for a brief spike of lovely, comforting serotonin. In practical terms, that means eating sugar and starch will be nearly irresistible for people whose brains don't produce a happy amount of serotonin.

Ideally you would get all the amino acids you need from minimally prepared protein-rich foods like eggs, milk, fish, meat, fowl, or nuts and legumes and whole grains. How do you know if you aren't getting enough? You can feel it, but you probably call it depression, anxiety, mental fatigue, etc. instead of malnutrition.

In terms of fats – which comprise 60% of the dry weight of the brain (Schmidt, 2001) – we have a profound problem in our food supply: modern farming practices and food processing have stripped our diets of the types of fat that are the preferred building materials for the brain (Bond, 2007). The brain can only work with the fats available in one's diet. A child's brain prefers to build itself out of DHA, one of the omega 3 fats. When that is not available, a child's brain develops differently on the available fats and the expectable outcome is problems with intelligence and behavior (Greene, 2008). Since the brain is the most sensitive organ to poor nutrition, depression is one logical result. Of course there are many reasons for developing depression. But at the level of the physical brain, the greatest havoc wrought on the mood of our population is arguably caused by our increasing failure to get omega 3 fats from the American food supply, unless we specifically work on getting enough. We all need these fats. But some of us suffer more for genetic reasons. Those who have a genetic vulnerability will never feel well unless they supplement with high quality omega 3 such as fish oil to compensate for omega 3-mediated depression. Some will be able to sort it out themselves, others will require professional help.

Nutrients for the Brain

This list is not detailed enough to instruct you in the use of supplements but will give you an idea of the array of mental health nutrients that have been stripped from our diets.

B Vitamins: B1, B2, B3, B6, folic acid, B12: B Vitamins are especially depleted in alcoholics and others on the blood sugar/mood chemistry rollercoaster (Gibney, MacDonald & Roche, 2005).

EPA, DHA: The Omega 3 fatty acids protect brain cells. If there is a deficiency, mood will elevate when these fats are replenished (Murray, 2000).

Amino Acids: Deficiency in specific amino acids is associated with specific mood states, food and drug preferences (Schmidt, 1995).

Vitamin D: This helps with depression related to seasonal affective disorder (Shachter, 2006).

Vitamin E: This protects brain cells from free radical damage Gibney, MacDonald & Roche, 2005).

Calcium and Magnesium: These are minerals that function as nature's tranquilizers, promote sleep (Werbach, 1999).

Melatonin: Promotes restful sleep when a deficient person supplements with it (Murray, 2000).

Chromium: This mineral increases glucose tolerance (Murray, 2000).

Vitamin C: For stress reduction and detoxification, this antioxidant vitamin supports adrenal glands (LaValle, 2004).

Zinc: This is needed for synthesis of neurotransmitters and repair of brain cells and helps detoxify heavy metals that destroy brain cells (LaValle, 2004).

The list goes on to include nutrients and herbs that work for some of the people some of the time and none of the people all of the time. Depending on individual needs they may include: passionflower, ashwagahnda, holy basil, cinnamon, green tea, St. John's wort, grape seed extract, ginseng, ginkgo biloba, and ginger.

The CADs: Convenient, Addictive, Delicious

Of the CADs, "convenient" is the easiest to strike down. Although making diet and lifestyle changes may seem like a lot of work, we might ask ourselves, how convenient is it to have a child with ADHD? How convenient is it to struggle with depression or diabetes or drinking? Practicing nutritional harm reduction is like putting money in the bank now that will pay out over time. Eating fast, convenient food is the opposite; it's like skimping now and paying a heavy price later on. "Delicious" and "addictive" are harder to deal with because no one has found a way to de-program the evolutionary forces that designed us to seek sweet, salt, and fat. That's why we need support groups, to sustain ourselves until body intelligence returns and we desire to eat only things that are healthy.

Activities that Function Like Nutrients

Certain activities are like nutrients because they nourish your cells.

Detoxifying: Heavy metals, the organophosphates in pesticides, etc. use up nutrients and compromise cells. Unloading them is health restoring, mood elevating, and sometimes slimming.

Exercise: Physical activity increases the production and connection of brain cells and normalizes blood sugar.

Sunlight: Vitamin D production is known to elevate mood.

Support: Now that scientists have proven that emotional and spiritual experiences profoundly affect our cells (Pert, 1997), emotional support qualifies as effectively a nutrient.

Limitations

This article does not do adequate service to the roles of anti-nutrients: dietary and environmental toxins, pathogenic organisms, stress, the effects of sedentary lifestyle, and the general loss of physicality in Western culture. If a body harbors toxic levels of heavy metals or bacteria, fungi, or viruses, dietary interventions will be of limited value. In this case, treatment must include nutritional harm reduction plus biomedical detoxification.

This article is also focused on individual choices, but clearly action is needed at all levels of society. Unlike with other addictions, there is no clear villain. This is not about a single, identifiable substance. There are no drug lords, pimps, or bad guys to point the finger at. Poverty makes things worse, but the problem exists at all levels of society. We can't declare war; the enemy is us, grandma, Great Aunt Sally, and our friends who work at McDonald's, Pepsico, and the corner store.

Conclusion

Our number one national addiction is not alcohol, drugs or cigarettes. It's food. Poor quality food is responsible for more preventable health and mental health problems than any other source. And the national menu of processed foods is so addictive that many of us have lost the taste for foods that support life. This makes the standard American diet a gateway to obesity and diabetes, addictions, and many mental health problems including anxiety and depression. We cannot abstain. That leaves us with nutritional harm reduction.

The way in to the problem suggests the way out: If eating and drinking processed foods and beverages got you into this mess to begin with, then returning to whole foods is the way out. At very least, you can mitigate the damage by thoughtfully adjusting the content, timing, digestion, and circumstances under which you eat food.

Quick Tips For Nutritional Harm Reduction

- Go slowly. Avoid rebellion.
- Drink water: half your weight in ounces each day.
- Involve eaters in the food preparation, the more ownership, the more participation.
- Exercise more control at the grocery store so there's less needed at home.
- Schedule snacks and make sure they happen.
- Have good food ready to go, you'll be hungry.
- Don't clean your plate.
- Go for color; Grandma was right.
- 70 – 85% of what's ideal for you is a good goal *except* for foods that are like drugs *for you,* the items from which you must abstain.
- Eat at tables.
- Buy mostly food that doesn't have a list of ingredients.
- Avoid eating while stressed, at least go for less stressed.

NHR Continuum

Holistic models don't lend themselves very well to continua, but with feet pressed to the fire to make this visual, a continuum of nutritional harm reduction would look something like this. Of course, people will do best making improvements in the order in which they are most likely to be successful. Starting with a drinking and driving alcoholic and ending with a thoroughly detoxed person:

- Drinking and driving
  - Drinking with a designated driver
    - Quitting, managing alcohol cravings with coffee, coke, and chocolate
      - Reducing dependence on coffee and sweets by introducing health food store junk food
        - Trying supplements to manage craving and improve nutritional status
        - Reducing craving, managing mood with NHR strategies like
        - Drinking more water
        - Eating breakfast
        - Timing snacks
        - Mitigating the effects of high glycemic index foods with low ones
        - Learning to observe how your body interacts with food
        - Healing digestion with food and supplements

- Eating with people who are good for your digestion
- Eating mindfully
  - Developing alternate sources of pleasure, besides food and drink
  - Eating regularly in the warmth of the family table
  - Increasingly using organic foods
  - Establishing a meditation or other stress reduction practice
  - Undergoing a biomedical detox, colon cleansing
  - Establishing the habit of regular, meaningful physical activity

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