



HOW TO STAY HEALTHY AS A MASSAGE THERAPIST

Continuing Education E-book

12 CE Units

HOW TO STAY HEALTHY

AS A MASSAGE THERAPIST



12 HOUR CONTINUING EDUCATION UNIT CLASS

Approved by the

Texas Department of Licensing & Registration (TDLR)



HOW TO STAY HEALTHY AS A MASSAGE THERAPIST

Class Objective: This online class has been developed to educate Licensed Massage Therapists on how to keep themselves healthy so as to have a long and fulfilling massage therapy career. It is my hope this material will be interesting, educational and a valuable resource to assist you to not only keeping yourself healthy but also help you to educate your massage therapy clients. Keeping yourself in top physical condition and maintaining your health is not only beneficial for you in your life, but also sets a wonderful example for your clients.

APPROVED MASSAGE THERAPY INSTRUCTOR

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 Texas Licensed Massage Therapist number: MT029757

Texas Continuing Education Provider: CE1384
Texas Massage Therapy Instructor: MI2424





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Disclaimer

I am a Naturopathic Doctor (N.D.), Massage Therapy Instructor (MTI), Licensed Massage Therapist (LMT), and an Approved CE Provider in the State of Texas. I am NOT a Medical Doctor (M.D.). I have been trained in holistic and natural therapies for the body and do not diagnose any medical condition, nor prescribe any medications. Should you need immediate medical or psychiatric assistance, please telephone 911 or seek immediate treatment at an emergency room hospital. Nothing listed within this e-book class should be considered as medical advice for dealing with a given problem. You should consult your health care professional for individual guidance for specific health problems. It is understood that the author is solely responsible for the content of this work and is **NOT** responsible for your usage of said information either personally or professionally with your clients. In addition, you should ALWAYS encourage your clients to see their health care professionals for help with any medical issues they are having.

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Chapter 1 – Good Health Introduction

As human beings, there is no other thing that is more important than for us to maintain good health. *Good health truly is our most important asset*. It must be protected and nurtured so we can enjoy life to the fullest extent possible.

As massage therapists, it is even more important for you to keep yourself in good health. Not only will it help you to have many, happy, productive and



profitable years in this industry, but achieving optimum health will put you in a unique position to positively affect the clients you treat. Whether your clients seek treatment to help them cope with ongoing pain or they have a level of stress that can be alleviated by massage therapy sessions, most of the people you treat already recognize the health benefits of massage therapy. ¹ As a healing and health practitioner, you must exhibit good healthy habits yourself so you can be a model to your clients. Seeing you healthy and happy will help your clients to feel confident that they have chosen a therapist who is committed to a healthy lifestyle. Your example assures them that they are in the right place and that they are entrusting their health in a competent and healthy practitioner.

Unfortunately, most of us didn't get much "health education" in school, certainly not in grade or high school and not even in college. Most definitely an *intensive* health course was not given in our massage curriculum, as it's not a requirement of the massage boards.² Sure, we certainly covered basic anatomy and physiology, but it wasn't "in-depth."

Even in the rare cases where individuals did participate in health education, it was at a very basic level and in my opinion, inadequate. I believe that massage schools owe it to massage therapy students to provide more indepth information about maintaining and protecting our health.

Of course, proper body mechanics and healthy work habits are definitely an essential aspect of massage therapy that will be addressed in this class (see Chapter 14). But keeping your **entire body** in a healthy state is another aspect that is vitally important so you can continue to work for many years to come. It is my hope that the chapters to follow will open your eyes to new ways that you can start taking better care of yourself and your health.

As a massage therapist, you will constantly be coming in contact with people that are coping with illness. Today, millions of people are living with chronic pain and chronic illnesses³ and the trends show the numbers will continue to increase.4 While suggesting treatments or giving your opinion about what they are doing is outside the scope of your massage practice, you can of course share your personal experiences with your clients (if you choose to) and let them know about other natural health practitioners that you network with (i.e., acupuncturists, chiropractors, naturopaths, etc.). Sharing knowledge with your clients is one of the best ways you can help them to improve their overall health. Don't be afraid to share your experiences or any knowledge or education that you've obtained. Doing so will help your clients to build trust in you and they will come to appreciate your expertise. As your clients begin to value the care you provide and the personal interest you show in them, the result will ultimately be an increase in return visits. As a massage therapist, remember you are building a relationship with your client at each appointment, so don't be afraid to share!

Chapter 2 – How to Read a Food Label

In our quest to maintain a great level of health, one of the most important things I try to stress to my clients is the value of reading nutrition labels on the foods they consume. Obviously, the more natural and whole foods your foods are (like lean meats, vegetables, fruits, nuts, and seeds) the better it is for your health.⁵ But, if a large portion of your diet consists of fast food (YIKES!) or something out of a box, bag, or can, you should take the time to read the ingredients and find out exactly what you are REALLY ingesting. It is your body after all...don't you want to know what you're putting in it?

Food manufacturers can be very sneaky, so it is important to learn how to read (and interpret!) a food label.

Here are some general guidelines to help you in deciphering food labels:



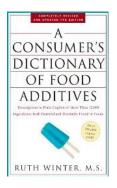
1. The ingredients that are listed on the food label (usually right below the Nutrition Facts box) are listed in order of quantity. In other words, ingredients are listed from most to least. For example, when reading a food label for whole-wheat cereal, you'll typically see "whole wheat" listed first because the majority of the product will be made from wheat. "Sugar" or "high fructose corn syrup" generally will be listed next because most commercial cereals have massive quantities of sugar in them. When purchasing any food product, I recommend you look for sugar to be listed much further down the ingredients list...

Even better, look for products that don't list sugar, high fructose corn syrup or artificial ingredients at all!

2. There will probably be words listed under Ingredients that you will be unable to pronounce, much less define. My personal rule of thumb is that if you can't pronounce a food ingredient or you don't know what the food



ingredient is, DON'T EAT IT! Make an effort to buy products with very short ingredient lists, made up of foods that you can read and identify. There are literally thousands ⁶ of food additives that can cause health related problems, so eating only foods you can identify is always best.



If you want to read up on food additives and educate yourself on their use, here is a great reference book that will help you to identify individual ingredients in the foods you eat: A Consumer's Dictionary of Food Additives

3. Food manufacturers can be very tricky with their labeling practices. Food labeling gimmicks use wholesome-sounding words to entice buyers. The terms "natural," "no artificial [whatever]," "enriched," "fortified," "light," "reduced calories," or any eye-catching term on packaged food, should be warnings that they are likely detracting from what the product really is made of.

Furthermore, the term "made with," as in "made with real fruit" or "made with whole grains," is misleading since this label can apply to even the smallest amount of said ingredient. The same goes for terms like "low sugar." The sweeteners in "low sugar" foods can come from other substances. For instance, a label that says, "high fructose corn syrup" (HFCS) really is using another term to describe SUGAR.

High fructose corn syrup is found in beverages, candy, frozen desserts, dairy products, meats, luncheon meats, ketchups, etc. Corn syrup, or HFCS, is not a naturally occurring food substance. It was created by food processors in an effort to create

ALTERNATIVE NAMES

FOR HIGH FRUCTOSE
CORN SYRUP

Isoglucose

Natural corn syrup

Maize syrup

Tapioca syrup

Fructose syrup

Fructose isolate

Fructose

High maltose corn
syrup

Glucose syrup

Fruit fructose

Crystalline fructose

and of course. HECS

products that are cheaper or that appear to be lower in calories or sugar. How is it made? In a lab, corn starch (which naturally is a chain of glucose molecules, like most other starches) is artificially isolated into separate glucose molecules using amylase and maltase enzymes. HFCS is 'high' in fructose compared to the pure glucose that is in corn syrup. Since fructose makes up the sugar content in fresh fruits, fructose sounds much healthier than HFCS, however, when we consume fructose in fruits, we consume it along with fiber, enzymes, minerals and vitamins.

Researchers have found that the way the body metabolizes fructose (and the extremely high levels at which Americans consume sugar and high-fructose corn syrup) causes fat to develop in the liver.⁸ This can lead to



insulin resistance and metabolic syndrome, two serious conditions that are discussed in Chapter 3 of this e-book class. When the pancreas becomes overworked from processing excess sugar, the blood sugar becomes dysregulated, which

in turn can lead to heart disease, diabetes, and a number of serious illnesses. ¹⁰ Studies also show that asthma and other lung disorders are linked to excess-free-fructose from sugary beverages. ¹¹

The damage caused by eating too much high fructose corn syrup—and other sugars—may not appear immediately, but slowly over time, it can trigger physiological processes that lead to diabetes, morbid obesity, heart disease, asthma, and other conditions. ¹² In my opinion, this substance should be banned as a toxin. To learn more about toxins and how they are detrimental to your health, please refer to Chapter 7 of this e-book class.

4. Don't just instantly scan to the calories or fat content on a label and expect that those numbers represent the entire item you're holding. Make sure you pay attention to the **serving size** of the product. For instance, when looking at a can of soup, you can instantly see that it has 70 calories and 0 grams of fat. But when you look closer, you'll see that those numbers

are based on a *serving size of ½ cup*. Since most soup cans are approximately 1½ cups, you would need to multiply the calories and fat content by 3 to accurately assess how much you'll be consuming. Multiplying 0 grams of fat by 3 servings should still be 0, but if you notice in the "per container" column, it says 1 gram of total fat...so clearly there is some rounding down to



make the food seem to have less fat. Don't be fooled by first glances. It would be OK if you only ate a ½ cup of soup at a time, but who does that?!



food labels to make reading the contents easier. Now the Calories and Per Serving amounts are larger, bolder, and more accurately sized.

Columns may be used to show a Per Container amount, Added Sugars must now be listed, along with the Daily Value percentages of vitamins and minerals. Calories from Fat was removed (because fat source is more important that fat calories).

 $Old\ Nutrition\ Facts\ food\ label.\ https://www.fda.gov/food/food-labeling-nutrition/changes-nutrition-facts-label$

For more information on deciphering the Nutritional Facts, visit the US Food & Drug Administration: https://www.fda.gov/food/nutrition-education-resources-materials/new-nutrition-facts-label.

Chapter 3—The Ideal Diet



Reading the labels and the ingredients are important and will help you make better choices in what you eat. However, you're probably thinking that if you purchase fresh vegetables, fruits, and lean meats you can't generally find any nutrition labels to read!

This is because the healthiest foods don't have other ingredients to put on a label! Understanding WHY fresh produce and lean meats are healthier than packaged items helps to make informed choices when choosing what to eat. Knowing the main nutrients of foods, the main sources of those nutrients, and more importantly, what they *do*, is key to healthy eating. Eating mindfully and intentionally should be an enjoyable lifelong journey of discovering new foods and learning how much of each food is healthy for *you!*

Food should be celebrated and enjoyed for the delicious taste, but especially for the energy it gives us. It's important to know that all food is comprised of three types of macronutrients: proteins, carbohydrates, and fats. These three macronutrients supply 100% of the body's energy! All three have importance in staying healthy! The differences between them are *how much* energy they supply, *how quickly* they supply it, and what happens to any leftovers. Energy from food is measured in calories, by the gram (1/28 ounce). There are 4 calories in a gram of protein, 4 calories in a gram of carbohydrate, and 9 calories in a gram of fat. ¹³ Carbohydrates are the quickest to convert into energy, and fats are the slowest.

<u>Proteins</u> are the nutrient that your body needs to grow and repair tissues, for making muscle, skin, bones, blood, hair, and more. Proteins also help with brain function and to provide energy. Proteins are made of amino acids—like building blocks--that are strung together in complex formations. Because proteins are complex molecules, the body takes longer to break them down—resulting in a slow-burning, longer-lasting energy source compared to carbohydrates and fats. When the body is not getting calories from other nutrients, or from the body's stored fat, protein is broken down into ketones to be used for energy. ¹⁴ If more protein is consumed than is needed, the body stores the protein components as body fat.

High-protein diets have been shown to be helpful with reducing body fat, losing weight, increasing satiety (a feeling of fullness), and retaining muscle. ¹⁵ Low-protein diets are not recommended except for certain very rare metabolic disorders. The ideal amount of daily



protein that *you* should consume depends on many factors, including your age, activity, health, total diet and other variables.

Protein-rich foods include meat, fish, poultry, eggs, milk, cheese, and other types of animal by-products. These protein sources contain all the essential amino acids; however, this does not mean you have to eat animal foods to be healthy. You can get amino acids from eating a variety of plant protein sources such as beans, lentils, nuts, seeds, and soy as well as lower amounts in grains, vegetables, and fruits.

Carbohydrates

Carbohydrates (carbs, for short) are a macro-nutrient that is found in a variety of foods that the body breaks down into the blood stream as sugar (also called glucose) for energy. Glucose is necessary for the brain and body systems to function, however, too much glucose is detrimental.



Carbohydrates are sugars, starches, and fiber. Besides fiber, excess carbs are stored within the liver, muscles, and body fat. Fiber is a type of carb that the body can't break down, but it aids in digestion, regulating blood sugar, lowering cholesterol, and improves satiation.

Carbs are not equal! Some are simple carbohydrates others are complex. Simple carbs are broken down quickly for the fastest, and shortest-lasting, source of energy. Simple carbs include forms of sugar, such as fructose (fruit sugar) and sucrose (table sugar). They quickly increase the level of blood glucose (blood sugar)—having a high Glycemic Index (GI)--and, if not used, are stored as fat, but will cause cravings for more. ¹⁶ Complex carbs (like beans and vegetables) are digested slower than simple carbohydrates—having a low GI—so they still increase blood sugar, just to lower levels, but for a longer time. Some foods can be complex carbs but have high GIs (like sweet potatoes). Refined carbs are not natural and have lost their nutrients and fiber through heavy processing (such as white bread, white rice, and many cereals). Refined carbs generally are high-calorie/low-nutrient and process as simple carbs, causing blood sugar levels to spike rapidly.

DID YOU KNOW... Beans, beans, the musical fruit.... You've probably heard the silly rhyme...but beans are not fruit, they are legumes, a type of vegetable that has complex carbs AND protein.



The healthiest sources of carbohydrates are unprocessed or minimally processed whole grains, vegetables, fruits and beans. These carbs promote good health by delivering vitamins, minerals, fiber, and important phytonutrients. Unhealthier

sources of carbohydrates include white bread, pastries, sodas, and other highly processed or refined foods. These items contain easily digested carbohydrates that contribute to weight gain, interfere with weight loss, and promote diabetes and heart disease. ¹⁷

When carbohydrates are consumed, the body tries to regulate the sugar surge with the hormones insulin and glucagon. When too many carbohydrates are consumed, the blood sugar gets too high (spikes) and sends the insulin/glucagon process into overdrive and disrupts the body's ability to balance the blood glucose.¹⁸

Left unchecked, blood sugar dysregulation can lead to serious illnesses, particularly, type II diabetes, metabolic syndrome, insulin resistance and hypoglycemia. An estimated 75 million Americans have metabolic syndrome



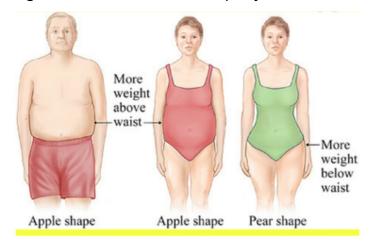
and 1 in 3 Americans over age 65 are, or will be, diabetic by 2050. 19

What you should know about metabolic syndrome:

Metabolic syndrome is a cluster of conditions related to obesity that drastically increase a person's risk of developing coronary artery disease, type II Diabetes, and stroke. It is unfortunately on the rise throughout the world, sadly, even among children and adolescents. ²⁰ 21 22

The two main risk factors for metabolic syndrome:

- ~ A large waist circumference and extra weight around the middle and upper parts of the body. (Also known as central obesity or an "Apple" body type).
- ~ Insulin resistance. When the body is no longer able to use insulin efficiently, blood sugar and fat levels rise rapidly. ²³





Making few simple lifestyle а changes can help you to break the cycle of insulin overproduction. It will protect your health; help you maintain high energy levels throughout your day (essential for massage therapists), and it can even help you to maintain an ideal body weight.

Try to implement these good practices into your lifestyle, at work and during down time:

- Eat planned, intentionally nutritious meals at set intervals that contain healthy protein and healthy fats.
- Reduce (or entirely eliminate) your carbohydrate intake (bread, pasta, rice and other grains) until you notice an improvement in energy levels and a reduction in your cravings for sweets.
- Exercise regularly with resistance and weight bearing as well as moderate cardiovascular activities.
- Increase protein and healthy fat intake (like avocados and nuts).



Image Source: https://avitahealth.org/health-library/macronutrients-a-simple-quide-to-macros/

Fats

Fats—also called lipids—are the third macronutrient and are another important source of energy for the body. Fat serves many other important functions, such as cushioning organs, body insulation, facilitating proper cell structure and function, absorption of certain vitamins, making certain hormones, and fat allows for the storage of energy. ²⁴ Fats get a bad reputation because they have the highest calories and share a synonymous name with adipose tissue (body fat) and the condition of being overweight; but while excess fat is stored as body fat and some types of fats are not good for the body, there are fats that are instrumental to a healthy diet.

There are three types of fat: trans-fat, saturated fat, and unsaturated fat. **Trans fats**—also called hydrogenated fats—raise your bad (LDL) cholesterol levels and lower your good (HDL) cholesterol levels. Trans fats can be found in margarine, shortening, baked goods, doughs, and fried foods. Eating trans fats increases the risk of developing heart disease, stroke, and Type 2 Diabetes. ²⁵ Thus, trans fats should be avoided entirely.

Saturated fats also increase cholesterol levels and can increase your risk for heart disease. These fats are most often solid at room temperature. Foods like butter, palm and coconut oils, cheese, and red meat have high amounts of saturated fat.²⁶ Decrease saturated fat intake and lean towards more healthy fats, known as unsaturated fats.

Unsaturated fats are known as the healthy fat as they can decrease your risk for heart disease. These healthy fats originate from plant sources such as avocados, nuts and nut butters, seeds, olives, and oils (olive, canola,



safflower etc.). They can also be found in animal sources such as fatty fish including salmon, mackerel, sardines, tuna, and herring.

DID YOU KNOW...In the 1920s, anthropologist Vilhjalmur Stefansson lived with and studied a group of Inuit. The Inuit were fishers and hunters, primarily of sea mammals such as whales, walruses, and seals. They consumed a high-protein, high-fat diet. In fact, the Inuit consumed an average of 75 percent of their daily energy intake from fat. Stefansson's research focused on the fact that the Inuit diet had no adverse effects on either their health or his own.

Gadsby, Patricia. "*The Inuit Paradox," Discover*, 1 Oct 2004. Lieb, C. W. "The Effects of an Exclusive Long-Continued Meat Diet." *JAMA* 87, no. 1 (1926): 25–26. doi:10.1001/jama.1926.02680010025006 https://med.libretexts.org/Bookshelves/Nutrition/Book%3A An Introduction to Nutrition (Zimmerman)/ 05%3A Lipids/5.01%3A Prelude to Lipids.

<u>Macros</u>

With an understanding of what carbs, proteins, and fats do, you can plan your meals to have each macronutrient. The percentages of the <u>macro</u>nutrients consumed daily are called macros. Depending on your goals, you



can adjust the amounts of protein, carbs, and fats you consume.

The U.S. Food and Nutrition Board *guidelines*, called RDAs (Recommended Dietary Allowances) or Daily Values (DV)—those percentages on food labels!—for the "average" diet have the macro for daily calories: Carbohydrates: 45-65%, Protein: 10-35%, and Fat: 20-35%. ²⁷ These proportions provide a range broad enough to cover the macro needs of most active individuals. Overall, these are considered healthy, but different combinations help achieve certain goals and help manage some conditions.

Quick Tip: Take a day or even a week to monitor your diet and track what you typically eat on a daily basis - you may be surprised!

Create an online profile for free with this handy tool that makes it a breeze to track your daily calorie, carbohydrate and protein consumption: www.myfitnesspal.com. This site and app are easy to use and give you a countdown of the remaining food allowances you have left to stay on target with your health or weight goals. You can even use the mobile app to scan barcodes from food items you eat during the day. An excellent tool for busy therapists!

Micronutrients

In addition to understanding the macronutrients in food, especially on packaged food labels, it is important to assess the micronutrients as well. Micronutrients are better known simply as vitamins and minerals. Your body needs smaller amounts of micronutrients relative to macronutrients; that's why they're "micro." Vitamins are necessary for energy production, immune function, blood clotting and other functions. Meanwhile, minerals play an important role in growth, bone health, fluid balance and several other processes. ²⁸ ²⁹ As you can see from the following list, that's a lot! Nutritional supplements can *help* supply the micronutrients your diet lacks (more on supplements in Chapter 17). There is a wider margin of safety for vitamins and minerals, but like all things in health, too much of a good thing becomes harmful.

Vitamins

- Vitamin A
- Vitamin B1 (Thiamine)
- Vitamin B2 (Riboflavin)
- Vitamin B3 (Niacin)
- Vitamin B5 (Pantothenic acid)
- Vitamin B6 (Pyridoxine)
- Vitamin B7 (Biotin)
- Vitamin B9 (Folate/Folic acid)
- Vitamin B12 (Cobalamin)
- Vitamin C (Ascorbic acid)
- Vitamin D
- Vitamin K



Minerals

- Calcium
- Iron
- Magnesium
- Phosphorous
- Potassium
- Sodium
- Sulfur
- Zinc

Trace minerals

- Boron
- Cobalt
- Copper
- Chromium
- Manganese
- Molybdenum
- Fluorine
- lodine
- Selenium

So, what is the perfect diet?

Many financially-motivated companies and government programs will advertise a "new" formula for health, but everybody's lifestyle and dietary needs are different and every *body* is different. Rather than a one-fits-all universal diet, there is a set of basic principles to live by. Your diet should:

- be high in nutrients
- low in processed foods
- balance your blood sugar
- be affordable
- be sustainable
- provide adequate hydration
- fuel your activity level
- not be socially isolating³⁰



Your perfect diet should not just keep you alive, it should help you thrive! It should give you the best possible intake of nutrients to allow your body to be as healthy as it can be!



Beware of fad diets

Too many fad diets have influenced our thinking and our eating habits. Many people still associate low fat, high carbohydrate foods with good health. The "low-fat" labels and Food Guide Pyramid were

diet craze icons of the 1990s that misleadingly promoted the consumption of all complex carbohydrates and shunned all fats and oils. It only took a few years to realize Americans were getting fatter on low-fat diets. 31 32

In fact, cutting out the good healthy fats (like avocados, nuts, seeds, fish) has clearly had damaging effects on our health. To function optimally, your brain and cardiovascular system



require appropriate levels of food energy that come from healthy fats and proteins, complemented with SMALL amounts of appropriate complex carbohydrates.

Whenever a new client comes to me complaining of certain tell-tale signs of illness (fatigue, brain fog, hormone imbalances, etc.) and we discuss what they are eating, inevitably, they tell me they are on a "low fat or no fat" diet. As soon as we introduce healthy fats like avocados and nuts back into their diet and cut out all the carbs, many of those symptoms go away.

What about the misguided fad of counting calories?! Basically, 'a calorie in and a calorie out' to maintain weight—but junk food calories are not the same as calories in nutritious food! Furthermore, the too-simple math touted that an average adult needs 2000-2500 calories per day, so "only eat that amount;" or a pound of fat is about 3500 calories, so "cut out 3500 calories to lose a pound." The truth is that even careful calorie calculations don't yield consistent results. How *your* body burns calories depends on many factors, including the type of food you eat, your lifestyle, and your body's metabolism. You can eat the exact same number of calories as someone else (say, an Olympic athlete!), and have a very different outcome!³³

Fad diets have had a negative impact on our health as a society...just look around. Do you think those diets worked? If they did, would so many people struggle with their weight and have so many health problems?

Balance is the key

Hopefully we have learned that not all fats are bad for you, and by no means are all complex carbohydrates good for you! Maintaining a healthy weight and a properly functioning immune system involves much more than simply counting calories in and calories out or eliminating fats.³⁴



It is important to have a balance of food groups when eating. Each macronutrient and micronutrient has value! Getting the right amounts of each is the mission of healthy eating! For example, a snack could be a combination of an apple with peanut butter. This snack has

healthy carbohydrates, fiber, vitamins/minerals, antioxidants, protein and unsaturated fat. When you have a carbohydrate, try to make sure you are pairing it with a protein and/or healthy fat. Embrace eating whole food and minimize processed food, but do not let fad diets cause you to fear one specific nutrient or food group. ³⁵

Chapter 4 – Eating Simple Foods for Better Health

Hopefully you recognize that the food we put into our body is considered fuel to our body and helps our body function properly. Just like an automobile, our body requires particular types of fuel in order to function at its optimum performance. Unfortunately, most of us are putting the wrong *types* of fuel into our body and then to make things worse, we're putting in too much food! If you are suffering from indigestion, reflux, heartburn, and/or constipation, this is a sign that you are eating too much of the wrong foods!



We need to learn to eat simply. Most American meals consist of massive quantities of a beverage (usually soda or milk), then a main course (meat), side dishes (rice and/or potatoes), vegetables (if

we're lucky!), probably some bread, and then a dessert. If we separate the different components of most meals, it's noticeable that the body is required to digest a wide range of foods all at one time.

First our body must contend with the soda (otherwise known as massive sugar) or the dairy (with the sugar called lactose); then meat (protein); then the refined carbohydrates (rice, pasta, or bread—also sugars); vegetables (complex carbohydrates—also sugars); and finally, the dessert (back to sugar again).

Is it any wonder that we become tired after eating a "normal" meal, reach for some caffeine to "wake us up" and/or grab an antacid to ease our pain and discomfort? This is just simply too much food and too many different types of food for our body to digest efficiently at one time. We didn't evolve to eat this way and our ancestors did not eat this way either! ³⁶

Here are some simple ways to create better health in your body by eating more simply:

Drink just water

Try to avoid drinking liquids other than water with your meals. If you are a big soda/coffee/milk/alcohol drinker during meals, try switching to water. Studies show that drinking *water* with meals aids with digestion by helping break down food so your body can better absorb the nutrients and reduces bloating and softening stool, thus, preventing constipation. Furthermore, drinking a glass or two of water increases satiety and helps curb

overeating.³⁷ ³⁸ Add a slice of lemon and/or lime if desired. Over a month or two, you will find you will feel better, and eventually, cutting out that soda can result in helping your waistline!



Don't have bread with bread

Eliminate the "bread" portion of your meal. There is no reason (other than we've developed the habit) to eat bread, rolls or tortillas with our meal. Especially at EVERY meal! If you enjoy eating breakfast tacos in the morning, try eating the egg/meat/cheese out of the taco and leaving the shell/tortilla behind. I know this may sound crazy to some of you, but not only will you feel better, your waistline will decrease! If your main course is lasagna or spaghetti, you don't need a roll or breadstick to go along with that...especially if you're slathering butter all over it (yet one more thing that the body has to digest!). I know for many cultures (Italian and Hispanic) that it is customary to include bread or tortillas with most meals; however, if you can reduce or forego these carbohydrates, you'll do wonders for not only your weight but also your health!



Many Mexican food dishes (like enchiladas for example) come with the corn tortillas that the enchiladas are made from... and then they're often served with a side of flour tortillas.

What's the problem with all of the tortillas, pasta, bread, white rice and SUGAR? These are foods that contain a high amount of refined carbohydrates. Remember that refined carbs have been stripped of their fiber content. This is what causes the blood sugar to spike, and then shortly after, the blood sugar crashes. This ultimately makes you feel hungrier sooner, even if you recently consumed an abundance of calories.

What happens when we consume too many carbohydrates? Our pancreas becomes overworked, and our blood sugar becomes dysregulated. Have you ever noticed any of these telltale signs of chronically elevated insulin?

- Cravings for sugar or coffee by mid-afternoon
- Poor sleep patterns
- Headaches, shakiness or irritability when meals are missed or delayed
- Inability to focus
- Difficulty losing weight



DID YOU KNOW ... When you eat sugar, it triggers a response in the reward center of the brain--the same area that is stimulated by drugs, alcohol and other addictive substances!^{39 40} You can overcome the addiction by decreasing your carb intake at each meal. Try these steps:

ELIMINATE: "the white stuff" – white bread, white rice, alcohol, and sugar

SWITCH: sugary, chemical-laden sodas and beer for sparkling water with lemon or herbal green teas.

<u>ADD:</u> Protein and healthy fat (like avocados and nuts) to every meal – especially breakfast! Try a chicken and veggie omelette or an avocado based smoothie recipe.

Add veggies

Increase the veggies you eat at EVERY meal. Vegetables contain vitamins, minerals and fibers that HELP your digestion.⁴¹

Keep in mind: vegetables vary in macronutrients! Potatoes, for example, break down in digestion



as starchy carbohydrates—which significantly raise blood sugar, and should therefore be eaten in moderation--and not fried or loaded with butter and sour cream. Also, corn is a grain (and a starchy carb) that can be difficult for the body to digest and is often genetically modified (more on genetic modification in Chapter 7). Vegetables make meals more satisfying without adding a lot of calories. It's best to eat them alongside some protein and fat.

Eating a small, healthy salad before you eat a meal helps to stimulate digestive juices and can ease digestion (instead of ranch dressing; try a little



olive oil and lemon juice}. Also, a healthy soup made from veggies can also be eaten pre-meal {see my "Power Vegetable Soup Recipe" in Appendix C}. Eating a salad or small soup before each meal will help you not to eat as much other food.

A practical way to incorporate more healthy vegetable dishes in your diet is to purchase a vegetarian cookbook with recipes that appeal to you. That way, even if you choose to add meat to the dish, you'll know the finished product will be healthy and tasty and it will include more vegetables than traditional recipes! Just be sure to include a variety of vegetables, (the more colorful, the more nutrients they contain) being careful not to overdo it with grains, potatoes and other starchy vegetables as a substitute for protein.

Also, be sure to have 1-2 pieces of fresh fruit throughout every day, unless you have a blood sugar issue or are flirting with metabolic syndrome. It is best to avoid fruit until your blood sugar can be balanced.

Limit types of food

Try to limit the "types" of food you are eating in one meal to a maximum of about three items. In other words, have 1 type of protein (meat, eggs, tofu, cheese OR beans), include 2-3 types of fresh, colorful vegetables, and then OCCASIONALLY include a starch (corn, potatoes, rice or bread—only pick one from the list and only if you HAVE to!).



One of my favorite cooking methods is the "One-Skillet Meal." This is easy to prepare and easy to digest! All you have to do is take a large skillet, add your choice of protein (tofu, meat or beans), sauté a few vegetables (broccoli, carrots,

kale, onions, celery, squash, asparagus, etc.), add some spices and voila!

You've just created a One-Skillet Meal and your body will love you for it! There are literally endless varieties of dishes you can create with this method, all of which will be healthy and fulfilling. You don't need the rice or pasta to complete this meal...your brain might miss it simply because you've developed the habit, but your body won't and in time you'll look forward to eating this way. If you do this, especially at your evening meal, you'll have easier digestion--and as an added bonus--you'll sleep better!

Spice it up

In a word: SPICES! Spices, herbs, and natural seasonings can jazz up all of your meals. Don't be afraid to use them...sprinkle some chili powder and a little lemon on a bowl of fruit...DELICIOUS! Add some basil, dill, oregano,

curry or cumin to a pot of beans...there are endless ways you can cook with spices. Adding exotic flavors to your meals will trick your brain into thinking that you're having a lot of variety with your food, when in fact you're actually keeping it simple and just adding some healthy and antioxidant-rich herbs and spices! Another bonus: many spices have added health benefits for your body - with no added calories! Try pre-mixed, no-salt blended spices like Mrs. Dash!



Set a schedule

We have discussed what to eat, but *when* you eat is also a key component of good health. Experts agree it's important to maintain a schedule for eating, however, there is no one-fits-all ideal timetable for meals.⁴² It is a common idea that food intake should be divided into breakfast, lunch, and dinner with snacks for appetite control; or even eating five to six times a day. However, the number of meals is certainly not a universal standard and eating so many meals a day may be contributing to ill health. Our bodies need time between eating periods to fully process the food eaten.

Intermittent fasting is a way to manage weight by dividing an eating period from a fasting period, meaning food is only consumed during a specified time. Fasting for a certain number of hours each day or eating just one meal a couple days a week can help burn fat and can improve heart health, physical



endurance, memory, and more. ⁴³ Intermittent fasting (IF) also engages autophagy, the body's way of decluttering junk from cells for many health benefits. ⁴⁴ A daily approach of eating during 6-8 hours of the day, and then fasting for the other 16-18 hours is generally the most sustainable and easiest to stick to. ⁴⁵ IF is not advised for people with diabetes, hypoglycemia, history of eating disorders, and certain health conditions. ⁴⁶

We *have* to eat, we *need* to eat nutritiously, and how often we eat matters. Plan ahead and do as much meal prep in advance as possible so you can have your meals ready at optimal times. It seems obvious that a "grazing" eating pattern is related to higher total caloric intake and eating late at night has a 55% higher risk of coronary heart disease compared to an earlier dinner. ⁴⁷ And it should go without saying, but eating junk food, even on a regimented schedule, is still ill advised!

It's worth the effort to purchase fresh, wholesome ingredients and to eat as simply as possible for the benefit of your health. Your digestion will improve, your entire body will feel better, you'll have more energy and those of you that need to lose weight will find that it comes off much easier when you simplify what you're eating. Your energy will be much easier to sustain on those days when you're extra busy with massage clients. Eating heavy meals will zap your strength and energy, so remember to keep your eating simple and nutritious so you can perform at your very best for your massage clients!

Chapter 5 – Water: The "Other" Drink



Did you know that our bodies are comprised of approximately 60% water? ⁴⁸ I'm sure you learned that in massage therapy training, but it never hurts to repeat again. On average, your body loses approximately 9-13 cups of water every day. ⁴⁹ Your body uses water to help regulate body temperature, transport nutrients and oxygen, carry away waste and to detoxify your kidneys and liver. ⁵⁰ It is extremely important to replenish your body's water supply every day.

Unfortunately, most of us are not drinking pure water. Many of the common health complaints I hear from clients, can be directly related to their lack of water consumption. For people that suffer from chronic headaches for instance, often lack of pure water is one of the most common triggers. Too many people are addicted to sodas, coffees and black teas and they just don't offer the same beneficial health properties as drinking pure water.

Here are a few healthy water tips:

~ "Eight" is not the magic number of glasses of water your body requires. Of course, you have probably heard that drinking eight, 8-oz glasses of water is the rule of thumb. I don't necessarily agree with that philosophy. My recommendation is that **you** base your water consumption on **your** weight, **your** level of exercise, the climate in which **you** live and **your** lifestyle habits.

To determine the appropriate amount of water that your body needs, take your body weight and divide that number in half. This is the number of ounces of water you might consider drinking in one day.⁵¹ Example: A person who weighs 140 pounds should consume approximately 70 ounces of water a day. If you exercise, that number should increase. Obviously here in Texas,



in the middle of summer, we should be conscious of our water consumption because of the extreme heat. Doesn't it make sense that if people are different sizes and have different exercise routines should they consume different amounts of water? standard of "everybody" needing 8 glasses of water a day, simply

doesn't apply universally, in my opinion. I think it makes more sense to treat individuals as such; therefore, everyone's daily requirement for water will be different.

~ Drink plenty of water throughout the day. Carry some water with you as you run errands, travel to and from work and keep water with you in your therapy room so you can hydrate between appointments. Our job as massage therapists often involves intense, physical activity...especially for those of you that practice deep tissue massage or other physically demanding modalities.

Making sure you *hydrate yourself between appointments* is absolutely essential and will help you with your energy for your next client. Chugging a soda (or heaven forbid, a Red Bull or some other highly toxic substance) only serves to deplete your body of hydration and essential nutrients. Developing consistent routines to drink water will help you develop a healthful habit!

~ There is no substitute for water. One of the biggest surprises for some of my clients is when I tell them that iced tea (black tea) and coffee don't count toward your total water consumption each day. "But they have water in them!" you say? Yes, they do, but along with the water, they also contain chemicals that negatively affect the body. In most cases large amounts of tea and coffee (about 5 – 7 cups of coffee a day) actually cause a diuretic affect in the body because they increase



the frequency of urination, which can eventually lead to dehydration.⁵² Put simply, *water is water*. Drink pure water whenever possible, not coffee or tea.

Alcohol is extremely dehydrating, so for every glass of alcohol you have, consume an extra glass of water to compensate for the diuretic effect. Also, don't be fooled by the latest fad of "water enhancers!" Those shiny packets or little bottles of flavored "juice" that you can squirt into your water bottles don't contain real fruit juice, but instead chemicals and food dyes...they are extremely damaging to our health, and I don't recommend them.

- ~ When exercising, you need to increase your consumption of water, before, during and after you are active. Take frequent water breaks while exercising. Drinking extra water when you have finished exercising to replace perspiration lost during the exercise is also advised. It is important to compensate for the amount of fluids you lose when exercising, so drink up!
- ~ Hungry you say? Drink a big glass of water. Dehydration pangs are often mistaken for hunger, which can lead to overeating! The most common symptoms of dehydration are: dizziness, minor headaches, lack of mental clarity, etc.⁵³ Some of these



symptoms can also indicate low blood sugar.⁵⁴ If in doubt, make sure you try the water first! And incidentally, if you're trying to lose weight, drinking a large glass of water 10 minutes prior to a meal will help you to feel full and consume less food!

~ One of my favorite tips is to drink 12-16 ounces of room temperature or slightly warm water with about ½ of a fresh lemon squeezed into it as soon as you wake up each morning. As you sleep, your body is very busy "cleaning house," so this is the best way to start the day and helps to flush out toxins that have accumulated in your body. It also helps you to include a portion of the water consumption you need for that day. Drinking a large glass of water first thing in the morning will help your body to it do its job much more efficiently!

~ Additional times to increase the amount of water you drink? You should increase your water consumption:

If you have a cold, flu, or other virus.

If you are in dehydrating conditions such as extremely hot or dry weather or severely cold weather or high altitudes.

- ~ Also, remember that most of the above tips apply to children too! Children are constantly bombarded with opportunities to drink sodas and sugary juices at school and with friends. Make sure they are getting enough **water** also!
- ~ Drink herbal teas...there are so many different brands of herbal teas on the market. My FAVORITE teas are all the different varieties from Storehouse Tea Company and Rishi Teas. Both of these teas have Organic teas and are available online; some Rishi Teas can be found in health food stores.



Matcha tea has recently become more popular in the US but has been used for centuries in Japan. ⁵⁵ With its vibrant green color, matcha is a powder made from finely ground green tea leaves and is prepared in two different grades:

ceremonial (for drinking) and culinary (cooking/baking). The creamy tea is rich in antioxidants, vitamins, and minerals that pack a host of health benefits, with research suggesting that it supports brain and heart health. ⁵⁶ The health benefits of matcha exceed those of other green teas because the whole leaf is ingested, not just the brewed water.

Contrary to popular belief, different types of teas have varying degrees of caffeine. Typically, herbal teas are made from plants like peppermint or chamomile that have no caffeine. But other types of teas like white teas, rooibos, green teas and black teas all have varying degrees of caffeine depending on how they are made. ⁵⁷ Fortunately, herbal, white and green teas are NOT dehydrating for your body and have a significant amount of beneficial health properties to them. Check them out! They have wonderful flavors that will help those of you that need something with taste to it, which water doesn't provide. And having something with a little "flavor" but no added sugar or caffeine will help you between massages when you need to hydrate yourself.

~ A word about water bottles...You may not realize that a typical water bottle is made from toxic ingredients. Plastics are very harmful and detrimental to our health, particularly when heated. 58 Much more detail can be found about the dangers of plastics in Chapter 7 of this e-book class as there is an entire chapter dedicated to toxins and how they are negatively affecting our health. But for this discussion on water, PLEASE buy a good water filtration system for your tap and then use a REAL glass



to serve yourself water. Then you can ditch the disposable water bottle habit. Not only is it better for our landfills (all those plastic water bottles have to go somewhere!), but you won't be exposed to the negative chemicals that go into the plastic bottles.

I recommend the <u>PUR 3-stage water filtration system</u> and then use that to fill a stainless steel water bottle like the one below. This system fits on your kitchen faucet, is inexpensive and removes chlorine and other harmful contaminants.



~ For those of you that are constantly on-the-go and carry a water bottle around with you, you should be aware that even the hard plastic bottles that claim to be BPA-free still have negative health consequences associated



with them. ⁵⁹ My new favorite water bottle is the Thermos brand stainless steel insulated thermos. I carry it everywhere with me as it keeps ice water *ice cold*...even if you leave it in the car in Texas heat! Best of all...no harmful plastics!

Lastly, our taste buds have gotten used to the sugary-sweet sodas that so many people are addicted to. Often when I suggest to clients that they drink more water, usually the reaction I receive is less than positive – mostly groans and moans about how they "hate water" and "it doesn't taste like anything," etc., etc. This is a major epidemic in our society right now (in my opinion). Many people go days without drinking any real water (again what is in soda or iced tea and coffee doesn't count!) and our health is suffering from it. And remember that "diet" or "zero sugar" sodas might not have any added sugar in them and have less calories than regular sodas, but they are also filled with insidious chemicals and harmful ingredients to make the soda taste sweet to your tastebuds. Do yourself a favor and stop drinking them as they are simply not healthy for our bodies.

In order to try to implement more water in your diet, start by drinking in the morning (as mentioned above). The following week, try to replace one soda per day with a glass of water. Don't like the taste? Squeeze a half of a lemon or



orange into the water to add some flavor or try sparkling water if you miss the "fizz" of soda. Also as mentioned earlier, there are SO many healthy green, white and herbal teas...the possibilities for different flavors are truly endless, so be sure to try some if you really just can't do plain water yet. In time, your taste buds will acclimate to the taste and before you know it your body will crave more water and LESS soda! Try it and see for yourself!

Chapter 6 – Enriched & Fortified Foods

Have you ever seen the words "enriched" or "fortified" on a cereal box, a loaf of bread or bag of flour? Have you ever stopped to think about what they mean? Why is it necessary to "enrich" or "fortify" our foods? Here are a few possible explanations:

<u>Enriched</u>. You'll see this term most commonly on flour, breads, tortillas and pasta. What this means is that during the refining process of the grain (like wheat or oats), valuable nutrients have been stripped away. Before being processed, the wheat grain contains the hull from the kernel and is brown in color. Food manufacturers strip that hull (bran)

away in the refining process, mixing in bleaching chemicals, resulting in white flour. 60 According

to Cogent Food and Agriculture, "When wheat is milled into wheat flour, there is an approximate 70% loss of vitamins and minerals and fiber, 25% loss of protein,

90% loss of manganese, 85% loss of zinc and linoleic acid, and 80% loss of magnesium, potassium, copper, and vitamin B_{6.}" ⁶¹

To compensate, synthetic B Vitamins are added, or "enriched," back into the flour because they were stripped away when the flour was made. Unfortunately, many of the benefits of the vitamins are only achieved when

INGREDIENTS: ENRICHED WHEAT FLOUR (FLOUR, MALTED BARLEY FLOUR, REDUCED IRON, NIACIN, THIAMIN MONONITRATE (VITAMIN B1), RIBOFLAVIN (VITAMIN B2), FOLIC ACID], WATER, SUGAR, YEAST, VEGETABLE OIL (SOYBEAN), SALT, CALCIUM PROPIONATE (PRESERVAT!VE), MONOGLYCERIDES, DATEM, SOY LECITHIN, CITRIC ACID, GRAIN VINEGAR, WHEAT GLUTEN, POTASSIUM IODATE, CALCIUM SULFATE, MONOCALCIUM PHOSPHATE. R20-178-201583 CONTAINS WHEAT, SOY.

they are consumed in the foods where they naturally occur, and the other stripped-away nutrients are still lacking. 62

Fortified. This label is often found on foods such as dairy products, orange juice, cereals and juices. These foods have additional synthetic vitamins and minerals, not originally found in the food, added—or "fortified"—in an attempt to increase their nutritional value. 63 Often food manufacturers add a label that says "fortified with essential vitamins and minerals" but in the natural health world, that type of labeling is a red flag that it might be an attempt to hide a significant amount of high fructose corn syrup, other added chemicals and synthetic vitamins in that box or bag.

This type of labeling practice particularly happens with cereals. Manufacturers use terms like "whole grain," on labels and fronts of boxes of cereals and other foods...don't be fooled! This does not mean that the product is a healthier option. The sugar content is simply unacceptable in most of these products, so be sure to read the label on the box or bag. Here's a great video to watch that discusses some popular cereals and how they inhibit our immune system: http://www.youtube.com/watch?feature=player_emb edded&v=1kuWJrV4Wmc



Obviously, if your diet consists of a lot of packaged and processed foods (meaning that you do most of your shopping down the aisles of the grocery store instead of on the outside of the store where the fruits, vegetables and lean meats are located), your diet will inevitably be lacking in valuable nutrition and your body will likely end up on toxic overload. When this happens, you'll likely experience some detrimental health effects like insomnia, headaches, allergies, and/or digestive trouble. 64 65 66 67

Processed and packaged foods are detrimental to our health.⁶⁸ They don't contain the necessary nutrients to keep our body in good working order. Most of the clients I see are on a diet made almost entirely of processed and packaged food. It's no surprise that they start looking for some natural health care! When these types of foods are routinely eaten, nutritional deficiencies and imbalances within the body will occur. A diet of

processed food can result in a of lot health symptoms: allergies, blood imbalances, sugar stress. fatigue, headaches, sleep problems, anxiety, depression, ADD/ADHD symptoms, digestion problems and joint pain. 69 70 71 72 That's quite a list!



Remember The Golden Rule:

If your food comes in a can, bag or a box and you got it from the inside aisles of the grocery store, chances are that it's a processed food and has little value to sustain a superb level of health!

The best way to ensure that your food contains the best nutrients for your body is to shop on the outside of the grocery store where the fruits, vegetables and meats are located. If you do need to get a few things within the isles of the grocery store, be sure to read the labels.

Natural foods do not need to be "enriched" and "fortified." If you're eating the diet that nature intended - predominantly vegetables, fruits, lean meats and nuts/seeds - you'll see that you'll have no need to purchase anything that has been artificially enhanced. **Nature has provided everything we need to obtain a superb level of health.**

The Bottom Line: If a food needs to be "enriched" and "fortified" to have acceptable levels of vitamins and minerals in our diet, then we shouldn't be eating that food at all!

The Better Option: Stick with natural and whole foods wherever possible. Whole foods (such as the ones listed below) have all the vitamins, minerals, enzymes, phytochemicals and antioxidants that our body needs to function optimally:

- Fruits
- Vegetables
- Lean, unprocessed meats
- Nuts/seeds

The end result: a strong and healthy



Chapter 7 – Toxins & Chemicals

In my professional opinion, food allergies and chemical sensitivities are one of the main causes of illness and chronic diseases that affect our society. The foods and chemicals we ingest every day are 100% responsible for how our body functions and how we feel in our body.

Since most of us are eating a processed-diet (remember what you learned in Chapter 3 about foods and the difference between processed and whole foods: that which comes out of a box, bag, can or drive-thru), we are not eating the natural diet that our bodies are designed to eat. We are not consuming enough fresh fruits & vegetables and therefore are being subjected to a wide range of food chemicals and additives in our foods. Many people have allergies to these substances, and although they may not realize it, it's their food that is making them sick.

Toxins in our Food

• MSG (Monosodium Glutamate or otherwise labeled as Glutamic Acid or Glutamate) — This chemical is commonly found in Chinese food; salad bars; fast food restaurants; sausages; luncheon and deli meats and cheeses; frozen meals, canned foods such as soups and vegetables; canned parmesan cheese; soy sauce; salad dressings; packaged gravies; spices; sauces, etc. Almost any processed prepackaged food has a good chance of having MSG in it, so be sure to read the label and avoid it!

The other problem with this chemical is that the government allows food manufacturers to use a multitude of other names for it.⁷³ So, when you're checking labels be sure to check for these ingredients also:

- caseinate
- autolyzed yeast enzymes
- beef or chicken bouillon
- natural flavoring

- hydrolyzed vegetable protein
- soy protein concentrates, soy isolates
- autolyzed yeast extracts

Unfortunately, these are all alternative terms for glutamates, but the FDA allows these names to be used as long as the actual glutamate is less than 99 percent pure!⁷⁴ So, watch out and read your labels so you know what you're eating! For more information on how to read labels correctly, please refer to Chapter 2 on How to Read a Food Label.

Artificial Sweeteners – These toxic chemicals are lurking in so many foods we eat: diet sodas, flavored drinks, chewing gum, juice, frozen foods, yogurt, diet or no-sugar foods. They are most commonly seen on the tables in restaurants in the pink, blue and yellow packets. The Artificial sweeteners are absolutely insidious and should be avoided at all costs. Unfortunately, as a nation, we are consuming WAY too much of them because they are in everything. Anything marked "diet" or "sugar free" is going to have these chemicals in it. The more common names are Aspartame, Saccharin and Sucralose (Splenda) and they are damaging to your health. Even if you're just simply chewing gum, that's enough to negatively impact your health... there are enough chemicals in one stick of gum to completely disrupt your body chemistry!



Artificial sweeteners are known to be headache triggers, 77 so if you suffer from a lot of headaches, see if some of these chemicals have made it into your personal food supply. Instead of opting for an artificial sweetener, check into a natural, herbal sweetener called Stevia. Contrary to the other sweeteners, Stevia actually comes from a plant and is a much healthier option for you to use to sweeten herbal tea or coffee. Although not perfectly ideal, Stevia is more natural than man-made chemicals,

but just like anything, too much can be detrimental and have negative consequences.

Food Colorings – Beware of food dye colorings in foods like juice, readymade meals, frozen foods, cereals, cakes, cookies, chips, frostings, etc. Blue Dye #1 & 2, Red Dye #40 and Yellow Dye #5 in particular are very common additives in many items such as yogurt, flavored powdered drinks, energy drinks, etc. so please make sure to check your food labels. Food dyes are known to trigger headaches and can have other adverse effects on the body and in particular, the brain. These chemicals are known to trigger health and behavioral problems in children and in my opinion, greatly contribute to symptoms of ADD and ADHD.⁷⁸



Other Known Food Triggers – Here is a list of some common foods that many people are sensitive to. Chronic headaches, allergies and stomach upsets have all been linked to some of these foods, particularly if you eat a LOT of them:

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- ~ yellow cheeses (cheddar), aged cheeses (blue cheese, gorgonzola, etc.)—These are known to cause migraines and other types of headaches.⁷⁹
 - ~ caffeine⁸⁰
 - ~ chocolate⁸¹
- ~ beer & wine Chemicals called "sulfites" are used to make wine and often the yeast used to make beer is problematic for a lot of people. 82
- ~ mushrooms Mushrooms are a fungus and for people that suffer from Candida, headaches and gastrointestinal issues, mushrooms can exacerbate those symptoms.⁸³
 - ~ pickled meats like herring
- ~ wheat products (bread and pasta) Most people cannot effectively digest grains. If you're one of the unlucky people who is sensitive to grains, you'll need to be extra diligent in reading food labels and wheat-related products containing gluten, as they are often put in many processed foods.
- ~ Nitrates/Nitrites in hot dogs, lunchmeat and dairy foods.

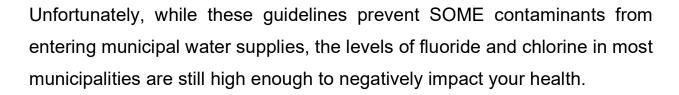
If you suffer from chronic headaches, allergies and/or digestive problems, pay close attention to the items in the above listing and identify any foods that you might be consuming regularly. Then, cut out those foods for a period of 3 weeks to see if your symptoms improve. If not, then pick another food and eliminate that one. Do one food at a time until you are able to identify the culprit. Then you'll know which one you are sensitive to, and you can take steps to eliminate it from your diet.

Plastic Water Bottles

The truth is the water that comes out of most municipal taps is not much different than what is contained in bottled water. If you check the "source" on that \$3.00 bottle of water, you might be surprised to learn that the parent company might be Coca-Cola or Pepsi and that the water is just plain old municipal water. The Environmental Protection Agency (EPA) National Primary Drinking Water Regulations are legal standards that apply to all public water systems in the United States. You can read more about drinking water at: http://water.epa.gov/drink/contaminants/index.cfm

The goal of these standards is to protect people's health by limiting the levels of common contaminants in drinking water, such as:

- Microorganisms
- Disinfectants
- Disinfection Byproducts
- Inorganic Chemicals
- Organic Chemicals
- Radionuclides





Adding a <u>simple filtration system that can be installed right onto your tap</u> is an effective, money saving way to ensure that the water you drink is pure,



safe and more appealing in taste. It's amazing to see how many people choose to spend money on bottled water, having been convinced that in some way it's cleaner or safer. The word is out: what you find in that expensive bottle of water may be much more harmful to your health than filtered tap water!

If you need even more motivation to break the bottled water habit, why not add up the cost of purchasing your water over weeks, months or a year. Bottled water is so costly, ounce for ounce; it costs almost as much as gasoline! Even more ironic, many water bottlers get their water from municipal supplies, filter it and sell it back to you, at a markup of up to **3000** *times* the cost of bottling it yourself at home.



The bottom line: Toxic chemicals in your drinking water, in the foods you eat, and in your home, accumulate in your body each day you are exposed to them.⁸⁴ These chemicals become a burden that your body has to contend with and are often responsible for disrupted endocrine systems. They affect a person's healthy hormone levels because they are known as "endocrine disruptors" and can trigger a host of serious illnesses.⁸⁵

DID YOU KNOW... BPA or Bisphenol-A is just one chemical that's received a lot of attention lately. It is often found in clear, hard plastics and is very commonly used in water cooler bottles, plastic water bottles and even some reusable bottles. BPA is a synthetic compound of chemicals that mimics the estrogen hormones that are normally found in females. Studies have linked BPA to breast and ovarian cancers as well as childhood developmental problems (check out the journal articles "Endocrine disruptors and breast cancer." By Cathrin Brisken and Park et al.'s "Gene alterations of ovarian cancer cells expressing estrogen receptors by estrogen and bisphenol a using microarray analysis" for more information). Keep in mind that this toxic compound is just one of many substances found in plastic containers that poses a serious threat to our health.

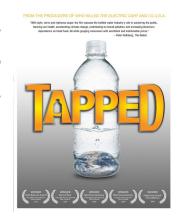
You can read more about BPA at the following websites:

http://en.wikipedia.org/wiki/Bisphenol_A

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3145995/

Try to eliminate any plastic in your kitchen, especially hard plastics marked on the bottom with a number 3, 7, PC, or PVC. Also avoid any plastic that is not BPA Bisphenol-A free, especially food storage containers and water bottles.

The following documentary will give you a very eyeopening look into the bottled water industry and will help you to understand where "spring" water really comes from:



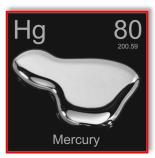
"Tapped" Documentary Movie

Experts agree that the absolute best choice for carrying drinking water is a reusable stainless steel bottle. ⁸⁶ They can handle most types of liquids, they're durable and reusable and best of all, they don't run the risk of



leaching toxic chemicals into your water. Don't be fooled by cheap aluminum bottles that may be lined with the same chemicals as plastic ones! As massage therapists, it's vitally important to keep water within reach throughout your workday to help keep you hydrated. My favorite bottle is made by thermos – it's so well insulated it will keep water cool for hours!

Mercury Poisoning



I'm sure you've heard about the danger of mercury poisoning and how it is definitely damaging our health. 87 Mercury is unique as the only metal that is a liquid at room temperature, so it binds well with other materials. Some common ways to get mercury toxicity are:

amalgam (silver) fillings used to fill cavities in our teeth; consuming too much of certain types of seafood or fish; and from vaccinations. However, research revealed a much more insidious way that we are being exposed to mercury: High Fructose Corn Syrup (HFCS).⁸⁸

Even if you feel that there is very little high fructose corn syrup in your diet, let me warn you: as we have already discussed earlier in this e-book, it is in almost all processed foods. It is a VERY cheap form of sugar and food manufacturers use it much more often than ever before to sweeten items like sodas, barbecue sauce, weight loss bars and drinks, frozen dinners, jellies and jams, ketchup, peanut butter, etc.

Since our consumption of HFCS is on the rise, we are also being exposed to more mercury toxicity. But how does corn syrup become contaminated with mercury? The answer is that the major plants that make corn syrup use mercury-cell technology in the production of caustic soda, an ingredient used in the corn conversion process. ⁸⁹ It's a very technical process, but the bottom line is, mercury is being

Poisoning	
Neurological	Non-Neurological
Ataxia	Alopecia totalis
Chorea	Autoimmunity
Blindness	Fatigue
Depression	Hypersalivation
Drowsiness	Keratosis
Excitability	Melanosis
Fearfulness/anxiety	Recurrent infections
Insomnia	Ulcers
Irritability Low Intelligence Quotient Memory loss Mental retardation Parasthesias Quarreling Restlessness Temper outbursts Tremors	

found in a number of food products. Fortunately, we have consumer watchdog groups like "Institute for Agriculture and Trade Policy," who discovered this fact and do ongoing testing and research for public safety.

But why is mercury so bad, you ask? First of all, it damages the nervous system. 90 This is one of the primary risks for pregnant women and their fetuses and why pregnant moms, babies and children are encouraged to avoid seafood. 91 Mercury also causes vision problems, impairment of speech, walking and muscle weakness. Some people who have been exposed to mercury suffer from insomnia, headaches, emotional issues, and skin problems. 92 And of course, mercury has been linked to autism, ADD and ADHD because it can cause severe brain imbalances. 93 94 95

Quite simply, the risk of mercury exposure is yet another reason to shop organically and avoid high fructose corn syrup. Not only does it contribute to obesity, diabetes and a whole host of other health problems, now mercury toxicity has been linked to it. Please do yourself a favor and start reading food labels as you do your grocery shopping (see Chapter 2 of this class on how to do this correctly!) and please avoid any product that has high fructose corn syrup.

Please also take a moment to read this article on Heavy Metal poisoning:

http://www.onlinedigitalpublishing.com/publication/?i=49743&p=41

Genetically Modified Foods

Do you know about Genetically Modified (GMO) foods? Unfortunately, the answer is probably NO, as so many people I talk to have never even heard of it and do not know what it means. Genetic modification is a seriously detrimental farming practice that is poisoning our food supply and robbing us of our health. ⁹⁶



What does "genetically engineered" or "genetically

modified food" really mean? In the simplest terms, this means that a food's DNA has been altered by a scientist in a laboratory. Why? This process is done for several reasons, but the primary reason is MONEY. One of the theories behind GMO is that if scientists can adjust the DNA of a plant to resist insects, then they can protect the crop from damage and ultimately, increase production and profits.⁹⁷

There are a number of foods involved in genetic modification. The website: <u>Seeds of Deception</u> has extensive information about this topic. According to Seeds of Deception, the percentage of our produce that is affected by GMO is as follows:

- soy (91%)
- Hawaiian Papaya (more than 50%)
- cotton (88%)
- zucchini & yellow squash (small amount)
- canola (80-85%)
- tobacco (Quest brand)
- corn (85%)

Another point to keep in mind is that a very LARGE percentage of chickens, pigs and cows are fed corn to fatten them up quickly. These animals are also ingesting large amounts of GMO crops and are then slaughtered and served to us as food. So, we are ingesting genetically modified food every time we consume most commercial beef, chicken or pork that is purchased in grocery stores and big "warehouse" stores. ⁹⁸ Yet another reason to visit Farmers' Markets and purchase meat from a local farmer who does not use those farming methods.

What are the health risks to humans? Of course, food manufacturers and the FDA would like you to believe that genetically modified foods are OK for humans. But I disagree. There is a lot of research and literature available about the dangers of "tweaking" our food supply. ⁹⁹ The bottom line for me is that nature didn't intend our crops to be modified. It's bad enough that commercially grown produce is doused with herbicides and pesticides. But now we have to worry about some scientist in a lab purposefully manipulating a gene in the crop and worse, injecting bacteria or pesticides in them to make them resistant to insects?! Doesn't this sound crazy for humans then to eat that food and expect it to give us optimal health?!

As a Naturopath, this practice is abhorrent to me as I know the human body is designed (and functions optimally) when consuming foods that are as close to natural as possible. Eating foods that are GMO is about as far away from this as you can get! Artificial chemicals are not good for us, and it is my personal opinion that our tainted food supply is directly contributing to the rise in allergies, digestive complaints, cancers, muscle and nerve diseases and the list goes on and on.

I urge you to review some of the references given in this section. Also, one of the forefront researchers into GMO issues is Jeffrey Smith. Here's a wonderful 10-minute video given by him that will also open your eyes to this serious problem: http://www.youtube.com/watch?v=WUYOhJE-8U0.

DID YOU KNOW... Buying organic can cost more, and in tough economic times, many families are hesitant to spend more at every trip to the grocery store. If you need to prioritize your grocery spending, have a look at the Environmental Working Group's list of the "dirty dozen" (a.k.a. highest in pesticide residue) foods. The EWG analyzes data from the Department of Agriculture about pesticide residue on an annual basis. Using this data, they provide a list that ranks foods based on how much or little pesticide residue they have. Experts estimate that by avoiding the "Dirty Dozen" (buying organic) and choosing the "Clean Fifteen" (non-organic with the lowest pesticide residues) that people can successfully reduce their exposure to harmful pesticides by 80%! Now that's money well spent!



I am not a fan of consuming a lot of grains (especially wheat) as I don't think it is fit for human consumption. I believe that we are not biologically designed to eat grains, but if you must eat them, be especially sure to **buy corn and soybeans that are marked "NON-GMO."** When buying meat, buy grass fed beef and free-range chickens. It's important for us to consume meats from animals that are eating their natural diets. Cattle and chickens in this country typically come from commercial factory farms where their main

staple is CORN! Cattle are meant to be grazers and eat grass; chickens should be able to "scratch" and eat bugs, etc. (More on this later in this chapter). Also, it's obviously crucial to get meats and eggs that have been traditionally



raised with no "hormones or antibiotics." In our current food supply, this is hard to do and may take shopping at a special store in order to feed your family the fuel that will help them to be as healthy as possible. It also will cost more, but with prescription drugs and surgeries on the rise, the small financial investment in adequate food, will be beneficial to you and your family in the long run.

Nitrates/Nitrites

Nitrates and nitrites are preservatives that are commonly used in cured meats, especially hot dogs, lunchmeat, bacon and sausages. Medical studies have uncovered a number of health risks, including cancer, that

come from eating nitrites. 100 101 One study found that people who regularly eat cured or processed lunchmeats have a 71% greater chance of developing lung disease than people who never eat this type of meat. 102

How to Eliminate Nitrites and Nitrates from your diet:

By changing the way you do your grocery shopping (as has been mentioned earlier), you can eliminate these chemicals from your diet completely! Eat only fresh, unprocessed foods and meat that has been raised and slaughtered by local farmers. An added benefit is that since these foods don't need to be trucked thousands of miles across the country, they don't need to be wrapped in plastics or injected with artificial preservatives (like nitrates) before you eat them. Try it and you'll be surprised to see how good it tastes – naturally! Of course, if you're not able to get access to local harvested meats, you can shop in your local grocery store. Many now are carrying organic, pasture-raised, grass-fed and nitrate-free foods...you just simply have to ask questions, take the time to read labels and educate yourself about what the food manufacturers are putting in your food.

Understandably, if you are busy keeping up your massage therapy practice as well as any other pursuits, taking the extra time to read food labels and

shop healthfully can be a challenge. However, purchasing whole foods and limiting "convenience foods" (fast foods and take out), will pay off many times over in the long run.



Making the investment in your family's health now (and in your long-term massage therapy career!) will benefit you immediately and in the long run. Food that is free of nitrites and other chemicals and toxins delivers better flavor and keeps your family safe from the risk of contaminated food from processing plants.

DID YOU KNOW...

- In August of 2006, the FDA approved the process of preventing the food-borne disease listeriosis by spraying *bacteria-eating viruses* on processed meat and cold cuts.
- To create new flavor additives chemists sometimes use fungal and tissue culture – both of which can produce flavorings classified as "natural." (From <u>Sustainabletable.org</u>)

Want to learn more about what goes in your food? The FDA maintains this database to track the thousands of indirect additives in our food supply:

https://www.fda.gov/food/food-ingredients-packaging

Hormones/Antibiotics in Animal Foods

Sadly, the landscape of America's farmland is rapidly changing and the days of family farmsteads with cows. chickens. pigs lambs and frolicking in green pastures are becoming a thing of the past. Disappearing along with them



are the traditional farming skills that have been developed and passed down over generations, ushering in a new age of industrial processes with a single aim: increasing production in order to increase profit.

What You Should Know About Our Country's Food Supply Practices

The "modern" way of farming in the United States involves consolidating small farmland areas into massive factory farms, which now raise an estimated 78% of all poultry in the world's food supply. ¹⁰³

The Environmental Protection Agency defines CAFO's (Concentrated Animal Feeding Operation, also called Industrial Agricultural Operation (IAO); Industrial Livestock Operation (ILO)) as:

"Agricultural operations where animals are kept and raised in confined situations. CAFOs congregate animals, feed, manure and urine, dead animals, and production operations on a small land area. Feed is brought to the animals rather than the animals grazing or otherwise seeking feed in pastures, fields, or on rangeland." 104

A farm is considered to be a CAFO if:

- They confine animals for at least 45 days in a 12-month period, and
- There is no grass or other vegetation within the confinement area

Although these consolidated operations are praised by some for their ability to produce cheap food in high volume, there is no such thing as a free lunch and the repercussions from this type of farming are far reaching. CAFO's completely disregard the surrounding environment, the animals' welfare and impact on the people who live in the vicinity of these massive factory

farms.¹⁰⁵ According to the documentary <u>King Corn</u>, one CAFO with 100,000 head of cattle creates the same amount of pollution as a city of 1.7 million people!

Several major environmental and animal rights organizations are rallying for support against these farming practices for the following reasons:

Misuse of Antibiotics and other Pharmaceuticals

 Low doses of antibiotics are combined with food to keep infections down. 106 Most animals can only survive the minimum number of months required to reach full size in CAFO conditions.



 When full-blown infections inevitably do occur, animals are pumped with high doses of antibiotics, often within short time periods of entering our food supply.

Excessive Size

 Thousands of animals are forced to live in unnaturally confined, filthy areas, which become breeding grounds for disease. Cattle feedlots often contain thousands of animals with no room to move or turn



around, while many egg farms contain more than one million chickens, with 4-5 chickens in a one-foot square cage stacked on top of one another 5 high.

Total Disregard for Animal Welfare

- Massive metal structures confine animals indoors, without access to fresh air, sunlight or normal animal behavior. 107
- Animals are mutilated to keep them alive and speed growth in factory farm conditions. Chickens and turkeys have their beaks cut off (debeaking) and cows and pigs have their tails amputated (docking). 108

Environmental Impact of Waste

 Massive amounts of waste produced by CAFO's are held in man-made lagoons, which runs the risk of leaching into groundwater.¹⁰⁹

Who Is Behind Factory Farm Practices?

The human health costs alone are startling enough that more and more environmental and human-interest groups are questioning America's factory farm practices. At the center of the ongoing controversy is an international conglomerate pharmaceutical company called Bayer. Bayer bought the company once known as Monsanto and has dominated U.S. agriculture for decades. Monsanto became known as the world's most hated corporation, due mainly to their dark history of producing chemical products that have cost thousands of lives in the US and around the world. ¹¹⁰ ¹¹¹



Furthermore, in regard to CAFO's, Monsanto was the creator and distributor of the Bovine Growth Hormone somatotropin (known as rBST, and rBGH) to increase milk production in dairy cows. Not surprisingly, since the use of rBST is known to increase the number of bacterial infections in livestock, Bayer/Monsanto also supplies the massive amounts of antibiotics needed to treat these infections. 112

Did you know that 70-80% of antibiotics in the United States are prescribed to farm animals? 113 114 Instead of using antibiotics as they were intended (to treat infection), farmers give their livestock massive doses of antibiotics to prevent illness because of their unsafe and unsanitary living conditions. This overuse of antibiotics jeopardizes all of our health because it leads to antibiotic resistance. 115 When strong bugs (bacteria) survive a treatment that is too low or is cut short, they multiply and pass on drug-resistant genes.

Then when another animal or human is infected with the bacteria, the commonly prescribed antibiotics will no longer be effective. Protect your health and our food supply by purchasing meat that has been raised on organic farms or from local farmers in your area.



Typically, animals raised on these farms are not treated with synthetic hormones or antibiotics.

On a conventional farm, cattle are treated with up to six different hormones (in addition to the antibiotics) to increase production. Hormones such as , estrogen and progesterone are linked with increased risk of certain cancers and rbGH or rbST are modified hormones that increase milk production in cows and increase the concentration of the breast cancer-linked insulin-like growth factor-1 (IGF-1) in milk. The best way to avoid these unhealthy added hormones and to make sure you know exactly what you're serving on your dinner table is by buying direct from the farmer!

As one of the world's largest seed distributors, Bayer (Monsanto) has also gathered attention for its use and promotion of GMO (genetically modified or genetically engineered) seeds in the US and around the world. Up to 90% of soybeans, corn, cotton, canola, and beets consumed in the U.S are now genetically engineered. These foods are added into human and animal



foods with no legal requirements for food manufacturers to label GMO foods or conduct safety testing. Department of Agriculture statistics also reveal that the vast majority of meat, eggs and dairy products originate from CAFOs, where animals are raised on low quality GMO feed. 120

A number of studies found Monsanto's GMO crops, herbicides, and biopesticides to be a danger to our planet's ecosystems. A compilation of 19 medical studies also revealed that consumption of GMO corn and soybeans can cause serious liver and kidney disruptions in rats and mice. 121

DID YOU KNOW... During the 1960s and 1970s, Monsanto was the leading supplier of Agent Orange (which contains the chemical dioxin) for the U.S. Military in Vietnam. During an eight-year period, more than 72 million liters of Agent Orange were sprayed on over one million Vietnam civilians and over 100,000 U.S. troops. In the decade following the end of the war, over 9,000 veterans had filed claims for disabilities related to Agent Orange.

Read more here: http://en.wikipedia.org/wiki/Monsanto



What Can You Do?

The first step in ensuring that the food you consume is safe and free of synthetic hormones, pesticides and antibiotics is to increase your awareness of where your food comes from. By purchasing organic, traditionally raised meat and animal products from local farmers, you'll improve your health and drastically reduce the risk of consuming food that damages your organs and immune system. In the grocery store, avoid purchasing processed foods





and instead opt for whole, fresh ingredients that are labelled "Non-GMO."

Make the switch to organic meat and on top of the health benefits, you'll also notice a tremendous improvement in the taste and quality of the foods you are eating. A further benefit: by purchasing food from local farmers, (managed by families instead of enormous factories and huge corporations) you help to protect our clean food supply and ensure that family run farms don't become a part of the past! In addition, your money stays in your local community rather than in the corporation shareholder pockets. Why not

check out the farmer's markets in your area or get together with your co-workers and massage clients to see if you can join a farm share Co-op or Community Supported Agriculture (CSA) and have fresh produce delivered right to your home or office!



DID YOU KNOW... One T-Bone steak raised on corn feed contains an average of 9 grams of saturated fat, while the same cut of steak from an animal that was fed grass contains less than 2 grams of saturated fat! In addition, the grass-fed beef has significant amount of the healthy Omega 3's which are the healthy fats you need in your body. 122 123

http://www.americangrassfedbeef.com/grass-fed-natural-beef.asp

Herbicides/Pesticides



Eating produce is great, but not if you're getting a bunch of pesticides and herbicides. These chemicals are being used in massive proportions. One study showed that

children who ate conventional fruits and vegetables over a period of 3 days had NINE TIMES the level of pesticide metabolites in their urine than children who were given organic produce during the same period. ¹²⁴ Even more troubling: the children who ate the non-organic produce had pesticide levels in their bodies that exceeded the safe guidelines determined by the EPA (Environmental Protection Agency). ¹²⁵

What effect do pesticides have on our bodies? Lab tests show that pesticides kill brain cells. Organochlorine insecticides have been found to cause different types of cancer. ¹²⁶ Chemical pesticides have been linked to infertility, birth defects, and damage to the nervous system. ¹²⁷ ¹²⁸ ¹²⁹

As was mentioned earlier, most grain crops, particularly wheat, soy and corn, are now genetically modified. These plants are "tweaked" in a lab so that their genetic makeup contains pesticides, or they are bred to withstand direct application of herbicides and pesticides! To make things worse, these grains are also fed to livestock. The pesticides build up in the animal's fatty tissue, so when humans consume their meat, dairy and eggs, the pesticides are passed on, exposing us to further health hazards.

Another concern is that the EPA's method for testing the risk of pesticides is not very conclusive. The EPA only considers the effects of high exposure, rather than long-term exposure to low doses of pesticides, which would better reflect the real-life impact of these chemicals in our daily diet. ¹³⁰ The other issue is that the EPA only tests the health effects of a single chemical, when in reality, the average American is contaminated with low levels of HUNDREDS of pesticides at any given time! ¹³¹

So, make sure you do your best to buy organic if possible and please wash all of your fruits and vegetables before consumption. Click here to read more about choosing healthy produce and to download a free PDF file of the Environmental Working Group's Shopping Guide:

http://www.ewg.org/foodnews/summary/

Skin Care and Personal Care Products

Have you ever tried to read the label of your

favorite lotion, makeup or even shampoo?

Other than water, are there any ingredients you can even pronounce? Research shows that on any given day, the average American woman applies **515 chemicals** to her body (many of them are known carcinogens)! 132

Remember that whatever you rub into your skin, you are rubbing into your internal organs.

Since our skin is our largest organ, it absorbs whatever we put on it and goes directly into our bloodstream. This is an especially great time to remind you to be conscious of your lotion or oil that you use on your massage clients.



PLEASE be sure you are using 100% plant-based oils. If you prefer lotions, be sure you check out the label on your favorite product to ensure it doesn't contain any harmful chemicals. You certainly don't want to put chemicals on your clients' skin and since you are doing massages most of the day, you don't want to immerse your hands in this lotion for what could potentially be 6-8 hours a day! Let's consider three main toxins that are found in common skin care and personal care products and find out how to avoid them.

Sodium Lauryl Sulfate, also called SLS, started out as an industrial degreaser and garage floor cleaner. For manufacturers of skin and personal care products, it is a cheap ingredient that makes chemical mixtures foam well. This explains why more than 100 of the leading shampoo brands contain this chemical and it can also be found in most skin cleansers, bubble baths, hand soaps and toothpastes. ¹³³ Why is this worrisome?

In a concluding report on the safety of sodium lauryl sulfate, the *Journal of the American College of Toxicology* found that this chemical has a "degenerative effect on the cell membranes because of its protein denaturing properties." ¹³⁴ Interestingly, the journal added that "high levels of skin penetration may occur at even low use concentration."

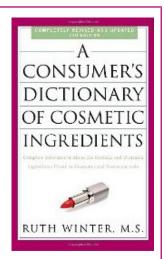
And there are even more health concerns linked with sodium lauryl sulfate:

- Cancer causing nitrosamines can form in the manufacturing of sodium lauryl sulfate or when it interacts with other nitrogen-bearing ingredients within a cosmetic formulation. 135
- Studies show that sodium lauryl sulfate enters the skin and accumulates in the heart, liver, lungs and brain. 136
- Additional research reveals that sodium lauryl sulfate can cause damage to the immune system and the skin. Over time, skin layers may separate and become inflamed due to the irritating effect of this chemical. 137

If you want to avoid using SLS, you'll need to watch out for the following ingredients on your personal care products:

Sodium monolauryl sulfate, lauryl alcohol, hydrogen sulfate sodium salt, sodium lauryl sulfate, sodium laureth sulfate, (SLS, SLES), sodium dodecyl sulfate, PEG (1, 4) lauryl ether sulfate, sulfuric acid monolauryl ester sodium salt, monododecyl ester, sodium PEG lauryl ether sulfate, and sodium dodecyl sulphate. 138

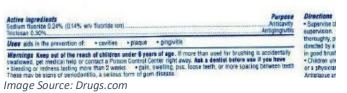
Here's a great book I recommend to research common names and chemicals that are found in personal care products: Consumer's Dictionary of Cosmetic Ingredients, by Ruth Winter



Propylene Glycol is a colorless, viscous liquid that is commonly used in anti-freeze, hydraulic fluids and in paints and coatings. But it can also be found in cosmetics, laundry soap, toothpaste, deodorants, baby wipes and even in some processed meats and foods. ¹³⁹ It is a penetration enhancer found in many cosmetics and body care products that help them to contain moisture. The reason it became popular is that it makes the skin feel soft. But the downfall is, propylene glycol is easily absorbed into the skin and can be contaminated with known cancer-causing agents - 1,4-dioxane and ethylene oxide. ¹⁴⁰ ¹⁴¹ When reading product labels, look out for polyethylene glycol (PEG) PG (propylene glycol) and PPG (polypropylene glycol).

Triclosan – is an antimicrobial chemical used in toothpaste, mouthwash, detergent and even some "germ-resistant" toys, kitchenware, towels, and bedding with "Microban." ¹⁴² Prior to 2017, triclosan was also estimated to be found in 75% of all anti-bacterial soap and body washes in the U.S. even though studies showed triclosan doesn't have any benefits over ordinary soap and water in terms of its anti-bacterial properties. ¹⁴³ ¹⁴⁴ Even worse is that triclosan is easily absorbed by the skin into the blood and can trigger gut inflammation and alter hormone regulation, specifically the thyroid levels. ¹⁴⁵ ¹⁴⁶ ¹⁴⁷ ¹⁴⁸ In 2017, The FDA declared triclosan as "not considered generally recognized as safe" which helped in removing it from many topical products,





but not from hundreds of other products, like toothpaste! 149 150 I think there is enough data to safely say it is best to steer clear of products that contain triclosan.

Chemical Body Burden

A term we're hearing more and more now is "chemical body burden." This refers to the build up of chemical ingredients in the body over time. ¹⁵¹ A person's body burden may cause untold health problems and there is no way for conventional medicine to treat or diagnose it. But as you can imagine, generations of synthetic chemical exposure in our food and in our homes certainly prevents us from attaining optimum health and wellness. We can't change the choices that were made for us in the past but remember you're in the driver's seat when it comes to selecting personal care products.

Chapter 8 – Stress & Emotional Health

Do you have stress in your life (who doesn't, right?)? Of course, we all do to some degree. But what really matters is how you handle that stress!

It is important to keep stress to a minimum — Several recent studies have linked high stress levels to making a person more susceptible to catching colds and flu. Keep your stress to a minimum by working reasonable hours and not overbooking yourself. Aim for at least one night per week to spend relaxing with friends and family. As mentioned throughout this e-book, keeping your diet healthy, getting adequate sleep and taking nutritional supplements can all help to keep your level of stress under control.

It's a medical fact that **emotional stress impacts health and well-being.** ¹⁵³ Doctors, psychologists and healthcare professionals often diagnose stress and anxiety as underlying causes of physical problems. Recent **research**

now shows a link between emotions, memory, and the immune system. 154 155 However, the emotional demands and stresses of everyday life can make it difficult to maintain a consistent, positive mental attitude.



When you feel fulfilled, happy and positive you tend to enjoy better health. You are able to get your maximum potential out of life and have more to give your friends and family.

Here are my top five recommendations for all of us as massage therapists to combat stress:

- Write down some of the major contributors to your stress levels (work, home, people in particular, situations in particular, etc.) and also note any possible solutions.
- 2. Keep a daily journal (Oprah recommends even a brief "gratitude" journal with a few points each day). Doing this will help you to keep track of your emotions while dealing with the stressful event.
- 3. Take stock of what you can eliminate from your daily routine. For example, who can take on more chores in your household (women routinely take on too much...if you and your husband both work outside the home an equal number of hours, is he helping at home as much as you are?); what are you doing to take care of yourself? Are you putting yourself first? Just as during an airplane emergency, when passengers have to put on their OWN oxygen mask first in order to be able to be of help to others, you need to make sure that your own physical and emotional needs are met *before* you can be there to help the important people in your life. Having some honest and frank discussions with your family members might be in order, but it is necessary in order to keep you from taking on too much stress.

4. Take a stress break. There are plenty of ways to carve out relaxation time and they won't break the bank either! Try deep breathing exercises during work breaks (a great app for that is called <u>Calm</u> and you can get it for free in the app store...it will help you take some



deep breaths!);
take a walk; or a
hot bath; learn
yoga; include
relaxing music
during your
workday (your
clients will love it
too!); create an

herbal tea time "ceremony;" trade a massage with another massage professional! Also, taking an extra half hour between massage appointments is one of the very BEST things you can do for, not only yourself, but your clients as well! You will approach each new client with a fresh perspective, instead of out of breath and feeling harried as you just finished your last appointment and barely had time to go to the bathroom! That's no way to run your massage practice; schedule some down time for yourself!

5. Talk to someone you trust—perhaps a counselor, pastor, spiritual advisor, friend, supportive family member, etc. Discussing your feelings and confiding in someone face-to-face is an important, but often overlooked way to deal with stress, especially in these days of text messages and social media!

DID YOU KNOW...

Stress impacts our bodies on every level. The fight or flight response produced by constant stress causes our adrenal glands to produce too much of certain hormones and not enough of others. It radically changes the chemistry of the blood; causes damage to certain molecules and tissues and weakens the immune system. The body's stress response causes higher levels of free radicals to circulate throughout our bodies and triggers inflammation. Living in a constant state of stress also takes its toll on our brain; it has been linked to depression and anxiety over the long term and in the short term, it causes mental "fog" and inhibits our memory. So it is important to limit stress and take time to recharge yourself.

You can find out more about this at:

http://en.wikipedia.org/wiki/Fight-or-flight_response.

Chapter 9 -- Are you addicted to Prescription Medication?

New research shows that more and more people are addicted to pain-relieving, anti-anxiety and anti-depressant related medications than ever before. Lethal overdoses from prescription painkillers have tripled in the past ten years and now account for more deaths than heroin and cocaine combined. 156 157



The amount of prescription painkillers on the market is now so out of control that the supply would be enough to medicate every single American with a standard dose of Vicodin every four hours for one full month, according to the Centers for Disease Control and Prevention.¹⁵⁸

"The unfortunate and in fact shocking news is that we are in the midst of an epidemic of prescription drug overdose in this country. It is an epidemic but it can be stopped," said former Director of the CDC Thomas Frieden. 159

In a previous version of this e-book, I had mentioned that in 2007 the DEA (Drug Enforcement Agency) reported over 6 million people were addicted to prescription medications ¹⁶⁰ – that number rose to over 9 million people who *reported* misusing prescription medication in 2020. ¹⁶¹ Those are staggering numbers, and they're going up. ¹⁶²

Have you ever considered if you are one of them? Chances are that either you, or someone you know, are taking a prescription on a long-term basis. Unfortunately, Americans have been brainwashed to believe that because the drugs are being prescribed by a physician, that they are safe. The real truth is that is simply untrue. Times stated: "In fact, now the burden of dangerous drugs is being created more by a few irresponsible doctors than by drug pushers on street corners." 163

Research done recently by The University of Arizona College of Pharmacy found that health professionals with the authority to prescribe medication could only identify less than HALF of drug combinations with potentially dangerous drug-to-drug interactions. ¹⁶⁴ This happened because they were relying on the pharmacy's software to assist them in their prescribing methods.

Why is this so worrisome? The study's findings raise alarm because the average American is prescribed 2-3 medications at EACH visit to their physician's office! In one year alone, over 100,000 Americans die of adverse drug reactions and the Journal of the American Medical Association estimates that drug reactions may range from the 4th to the 6th leading cause of death among Americans. ¹⁶⁵

Have you ever stopped to read the multiple pages of "Side Effects, Contraindications, Warnings and Interactions" that you receive when you pick up your Rx? You should. It "should" be a wake-up call for you. We have to do a better job about managing our pain or depression, rather than reaching for a drug to mask the symptoms rather than dealing with them head on.

I agree with Dr. Mehmet Oz when he states that, "...many people taking prescription drugs—legally or illegally—are hiding from their real problems. Instead of addressing painful emotions or aches, addicts swallow a quick fix." Also, "We use these pills to numb ourselves to what's really happening in our life, which is often a wake-up call to make a change." 166

Of course, one of the main problems with the overuse of these drugs is that many people are not aware of natural and safe alternatives to painkillers and anti-depressant medications. I'm sure you have flipped through a magazine, watched TV or even while listening to the radio have heard an ad about a fantastic new drug that can "cure what ails you." We are constantly being bombarded by the media (via the pharmaceutical industry) about drugs. Unfortunately, those of us in the natural health world do not have the advertising budget like the big pharmaceutical giants, so you don't often get exposed to safe and natural substances that can *really* help.



Instead of addressing the *cause* of our problems, we've been conditioned to believe that the best way of coping is to mask over that symptom with a drug. We live in a world where we want instant

gratification. We want it fixed now and we don't want to be uncomfortable while we're fixing it.



I have met with countless clients over the years who have been addicted to anti-depressant and anti-anxiety drugs. In my opinion, this is the worst kind of addiction.

In the beginning most people felt that their use of these medications was harmless

enough. Just a little "help" to get them over the divorce/loss of job/boyfriend troubles, etc. Then it turned into numbing. I always know when I'm talking to someone who is addicted because when I ask them a question, they can't answer it. The question is: *How do you feel?* The drug has numbed them out so much that they are unable to get in touch with their emotions and express themselves. Whether it's mad, sad, happy, or even depressed, they can't get there at all—they are simply FLAT. The problem is, when they are ready to get off the drug, the predominant emotion is FEAR. They are afraid to face their own FEELINGS.

My personal opinion is that it's those very emotions that can actually HELP people get better. The anger they feel is there for a reason to try to tell them something about their life. If they are depressed, they need to look at **WHY** they feel that way and work on specific solutions. And speaking of depression...so many of my clients have come to me for help with their depression. When they tell me that their personal and work life are fine, then addressing the physiological cause of the depression is next. Most often this is a hormonal imbalance or nutritional imbalance and can be rectified by dietary changes and supplements. This is addressing the **cause** of the illness, not band-aiding just the symptom.

Drugging yourself out so you don't have to FEEL is not the way to solve your problems, and in fact, it can only make things worse. If you realize you've been overusing prescription medications, perhaps to cope with pain from a work-related injury in your massage practice or to deal with anxiety or depression (please refer to Chapter 14 on avoiding injuries), be assured you can safely get off those medications and it's likely that a natural remedy can help you just as much. You will need help in this process, as doing it on your own is not advised.



You certainly will need nutritional support and guidance when you decide to reduce or eliminate medications, since your diet plays a HUGE role in the way your brain chemistry works. As you start to have withdrawals from a drug, your

brain chemistry is affected. 167 During this time, eating certain foods (and avoiding other foods) will make the process significantly easier. You will also need nutritional supplementation to help your body to repair itself from the damages caused by the drugs and help to boost your immune system.

In addition, talking with someone (a qualified therapist, priest, spiritual advisor, etc.) can help you to cope with the emotional impact. A trusted counselor can help you work through whatever it was that was making you anxious or depressed in the first place and help you with solutions to making changes in your life if they are warranted.

The most important thing is to remember this: You do have options to help yourself heal from addiction to prescription medications. There are MANY different natural healing modalities that work just as well (if not better!) than prescriptions without the risk of debilitating side effects.



willing to Are you work yourself? Are you ready to address the real of what's cause wrong? Can you face the uncomfortableness of your life and make those changes? Can you put yourself and your body and health first in your life and do what's in

YOUR best interest? There is much helpful information in the first few chapters of this class discussing the importance of food and how it impacts your health. It definitely will have a role in stopping any prescription medication. If you're truly ready to make this change, then it's time to have a talk with your primary care physician and discuss their approach for *very slowly weaning yourself off* of the meds. The next conversation should happen with a qualified natural health practitioner (there are many types of natural therapies and modalities; a listing can be found in Appendix B) that can help support you nutritionally to make this as easy as possible. And lastly, get in touch with a good therapist or priest...someone you trust and with whom you can discuss your innermost thoughts. You don't have to be addicted for the rest of your life or take the medications forever; there is help out there for you.

Chapter 10 - Exercise

It is important to exercise regularly, even if it's only for 10 minutes a day! Get out and take a short walk and enjoy the change of scenery and fresh air.

We all know we need to do it. And research is now showing that even 10 minutes a day is significantly better than nothing ¹⁶⁸ and for busy massage therapists, this is essential! So, take the stairs instead of the elevator or park WAY out in the parking lot (as long as it is safe for you to do so!) instead of trying to find the spot closest to the store.



For women, the best types of exercises are weight bearing. They help to increase our bones' strength, tone our muscles and with an increase in muscle mass, the metabolism speeds up – something almost all women would appreciate!

Additionally, regular exercise slows the aging process by preventing the deterioration of muscle and bone mass. 169 It reduces the likelihood of obesity,

which in turn eliminates high blood pressure, cardiovascular disease and blood sugar problems.

Stretches like those found in yoga or Pilates are great for working on core muscle groups. A strong core is essential to provide you with necessary support for your work as a massage therapist and it will help you to avoid injuries and muscle strains.

The key is to find an exercise you enjoy and better yet, a friend or family member who will exercise with you to help keep you motivated. Exercise does not have to come with a hefty price tag – why not try: walking; hiking; jogging/running; climbing stairs; cycling; skating or swimming. Most of these activities can be done for free (or almost free) and they offer the added benefit of fresh air and a refreshing change of scenery after a long day of massage appointments!

Even in your own living room, there are more appealing ways to exercise than ever before, such as dance and aerobic video games, virtual reality skiing, YouTube Pilates videos, and so on. If you are the type who prefers the structure of a class environment, ideal exercise classes for massage therapists are cardio classes, spinning or join a rowing team! You can certainly join a gym if your budget allows, but also inexpensive exercises classes can often be found at your local YMCA or adult education classes are sometimes available through your local school district.

Just one caveat – as a massage therapist it is essential to choose activities that do not present a risk of injuring your arms, hands and fingers. Your hands are your livelihood! So be careful about participating in activities such as volleyball, football or tennis, where upper body injuries are common.

Chapter 11 – Sleeping Adequately

Are you sleep deprived? Adults need more than seven hours of sleep per night. ¹⁷⁰ If you're not getting the proper amount of sleep, your immune system suffers, and your body will become much more vulnerable to getting sick. As massage therapists, we are exposed to extremely high levels of germs (and sometimes very stressful environments!), so it's essential to get the rest our bodies need to keep our immune system in top shape!

What exactly does sleep do for us? Besides the drowsiness, slowed



thinking, lack of energy, and higher susceptibility to illness, here are a few reasons why getting enough sleep is important for your health, and a few tips for better sleep to help your career to be a long and happy one! When adults are getting less than seven hours of sleep a night on a regular basis there is an evident link with poor health, including mental health disorders. hormone imbalances, increased pain, weight gain, diabetes, high blood pressure, heart disease. stroke. and depression. 171 172



Sleep is an invaluable time for our body to restore itself - just like recharging your batteries! You've got to do it in order to keep the machine running at its best. While it can be a challenge to make time for more sleep, a

practical way to start is to aim for one night in the middle of the week to get to bed an hour earlier. Try it and you'll see that your early night will become the day you look forward to all week!

If you're having trouble sleeping, keep in mind that what you do during your day will impact how you sleep at night. Do what you can to establish good sleep habits. Try to be as consistent as possible with the time you go to bed each night. And while we all enjoy a nice morning to sleep in, it's best for your body's circadian rhythms to get up within an hour of your usual wake time.

If you still struggle to get a good night's rest, it may help to establish a relaxing bedtime routine to help you put the cares of the day behind you. Try a nice soak in the bath (with warm, but NOT hot water), reading a favorite book or doing deep breathing and relaxation exercises. An incorrect diet is often at the root of sleeping issues and I suggest eliminating caffeine from your diet altogether. In addition, if you are consuming too many carbohydrates (bread, rice, pasta, tortillas), it will cause swings in your blood sugar that can create sleep problems. Remember to limit heavy foods before

bed (no HUGE meals after 6pm) and to create an environment that induces sleep. That means no computers, TV, or electronic devices that give off light and radiation that make it more difficult to sleep. In fact, more and more research shows that sleeping in a PITCH DARK room is essential for our body to make the correct balance of hormones. Those lights from digital displays from TV's and alarm clocks might not seem all that bright, but they are detrimental nonetheless. Cover them with tinted tape and do your best to make your bedroom as dark as possible.

If stressful situations are keeping you up at night, do what you can to address them during the day. Many people find it beneficial to write down any issues that are causing them worry. As you create your list, also note any possible solutions. Putting your finger on what's bothering you, as well as seeing a plan on paper of how you can deal with it successfully will help to put your mind to rest. And then at night, your body will be soon to follow!

Lastly, remember that physical ailments and conditions (and the medications you may be taking for those conditions), can also cause insomnia and other related sleep problems. Sleep problems are one of the most common complaints of new clients that come to me for natural health care. Hormonal imbalances can also be an underlying culprit for why you're not sleeping well, ¹⁷⁴ so you might need to get some blood tests to monitor your levels. Remember to look at your health from a Naturopath's perspective...look at the "whole picture" of what's going on with your body when trying to identify the cause of why you're not sleeping. And if you need help, don't hesitate to book an appointment with a qualified natural health practitioner who can help you to address your sleep issue and how it relates

to dietary habits, physical ailments and medications and of course, stress (different types of natural healing modalities can be found in Appendix B). When indicated, we can provide valuable nutritional support to encourage your body's natural circadian rhythms to work in harmony with your sleep cycle and refer you for additional therapies like acupuncture to help you establish the sleep routines you need to maintain good health! Of course, you can always go to a physician and get a sleep medication (like Ambien for instance), but that is not really addressing the cause of why you're not sleeping. It is a "quick-fix" and not a very good one at that; many side effects come along with taking Ambien, 175 and again, it's not going to fix the problem and you'll end up being addicted to the medication in order to help you sleep. Along with those side effects, inevitably come prescriptions for other medications to alleviate the side effects from the first drug! This cycle continues over and over in patients all over the country. Do your body a favor: get at the root cause of why you're not sleeping and work on correcting that. Dealing with those pharmaceutical medications over years of your life is not a good solution!

Chapter 12 – Stop Smoking!!

Mark Twain famously said: "Giving up smoking is the easiest thing in the world. I know because I've done it thousands of times." ¹⁷⁶

A woman named Elaine, who smoked for 50 years said: "The cigarette could help me more than having another person around. It was more than just an old friend—sometimes it was my *only* friend."

Sadly though, as Elaine (and perhaps Mark Twain) came to realize, the cigarette is actually a false and vicious friend that can rob you of your health and take years off your life.

What makes it so hard to quit? Researchers have discovered 3 main reasons why smoking is such a powerful addiction: First, tobacco products are known to be as addictive as illegal drugs like heroin and cocaine. Secondly, once inhaled, nicotine can travel to the brain within eight seconds. Third, smoking becomes a deeply ingrained habit that becomes part of the person's daily life – when eating, drinking, chatting with coworkers, to escape stressful situations, and so on. ¹⁷⁷

What can you do if you've struggled to quit? "Stop Smoking Now" advises:

A deep commitment to the process of quitting is the single most important characteristic of smokers who successfully quit. 178

To increase your motivation, why not write out a list like the one below to outline the benefits that will come from quitting:

Save money. Even a one pack-a-day habit adds up to thousands of dollars per year.

Your senses and quality of life will improve. Most people report that when they stopped smoking, their senses of taste and smell noticeably improved. You will also have more energy, more time, and an improved physical appearance within a short time of quitting.

Your health will improve. Quitting smoking has major and immediate health benefits.

 20 minutes after quitting: your pulse, blood pressure, and body temperature will regulate to normal.



- 8 hours after quitting: your blood will detoxify of carbon monoxide and improve oxygen levels
- 24 hours after quitting: your chance of having a heart attack decreases
- 48 hours after quitting: nerve endings will start re-growing, and you'll gain an enhanced ability to smell and taste
- 2-12 weeks after quitting: circulation improves, walking becomes easier, and lung function vastly increases.¹⁷⁹ ¹⁸⁰

Your family and clients (and even your career) will benefit. "Second hand smoke is classified as a "known human carcinogen" (causes cancer) by the US Environmental Protection Agency, the US National Toxicology Program, and the International Agency for Research on Cancer, a branch of the World Health Organization." ¹⁸¹ – American Cancer Society.

As a massage therapist, you want to give the best impression to your clients and set an example of making good health choices. Quitting smoking will prevent your clothes and hair from smelling like smoke and will give you a more youthful, healthy appearance. One thing that will turn off clients more than anything is for you to come into the massage room smelling like smoke and then for them to have to breathe in that odor for an hour!

When you're ready to quit the habit once and for all, there are several aids that can help. Many people turn to patches, hypnosis or even medication. Before choosing medication, however, consider the potential side effects that can include nausea, depression and suicidal thoughts. 182 Remember too that nicotine-replacement therapies are simply a lower dose of the same drug, which comes with most of the same health risks as cigarette smoking. The best alternative? One survey revealed that 88 percent of successful quitters went cold turkey without the aid of patches or drugs. 183 There are many natural health practitioners that can help you in your quest to quit smoking and can provide valuable support like acupuncture, essential oils, nutritional therapies and other healing modalities. There is an extensive list of different types of natural healing techniques and modalities in Appendix B of this e-book class. Natural health practitioners can also help you with a number of other strategies to help you overcome your addiction and help you handle the emotional stress. For instance, if it's really stress or emotional turmoil that has you addicted to cigarettes, we can help you with making healthier choices and choosing natural alternatives to help you manage your stress.

Of course, changing our habits is never easy. If you struggle to change habits that have been deeply ingrained over the years, you are in good

company, like Mark Twain! But if you smoke – quit! I realize you know this, but it bears repeating. If you can't quit on your own, partner with a healthcare provider and/or counselor that can provide encouragement and support. Smoking



significantly weakens your immune system and will definitely affect your massage practice in a negative way. The healthier our lifestyle is, the better our chances are of feeling better throughout our careers and right into retirement.

Chapter 13 – Hormones and Our Health

Our amazing endocrine system controls a lot of what goes on in our body. It includes the glands pituitary, pancreas, thyroid, ovaries/testes and the adrenals – which are all responsible for secreting hormones as we need them. ¹⁸⁴ The "master gland," the pituitary, consists of two halves; the anterior and posterior. The pituitary controls much of what happens hormonally in the body. The pancreas puts out insulin hormone, the thyroid produces many hormones that have a great deal to do with metabolism, energy use, body system regulation, etc. The ovaries and testes provide the sex hormones and the adrenal glands secrete epinephrine, aldosterone, and cortisol (hormones which are also known as adrenaline).

Amazing isn't it? A healthy person's body maintains an appropriate balance of hormones throughout the person's life. How do our bodies maintain this balance? The body is designed with a very intricate set of feedback loops that allow the body to closely monitor how much or little of a specific hormone is being made at a given time. This information is transmitted between the brain and the endocrine glands described above, all at the same time working in harmony with the rest of the body systems.

Keep in mind however, that this balance is not something that remains static. Even from moment to moment, if we tested a person's hormone levels, we'd see that they constantly fluctuate. While our genes dictate how our body produces and uses hormones, the biggest external contributors to hormone fluctuation are our diet and lifestyle. The way we live, eat and feel has a direct impact on our neuroendocrine (brain and hormone) system and it influences how well our body can achieve hormone balance.

When a person's hormones become unbalanced, or fluctuate outside of normal ranges, what happens? Depending on which hormones are out of whack, a person will start to experience symptoms, notice changes in their body composition or develop illness. As massage therapists, we lead busy and demanding lives that can take a toll on our hormone balance if we don't take a few steps to keep our endocrine system running smoothly.

Here is an overview of more hormones that have an impact on health:

Estrogen: Fluctuations in estrogen can have dramatic effects on how we feel, think and function. Compared to other hormones, the body very tightly regulates estrogen, and it's more powerful in smaller amounts than other steroid hormones. Even tiny changes in estrogen levels can cause symptoms. ¹⁸⁵

Ghrelin is our number one hunger hormone. It's made and released in the stomach and travels to trigger the brains' appetite center, telling it when it's



time to eat. ¹⁸⁶ If you give a person Ghrelin, they will immediately want to eat more. Ghrelin isn't responsible for obesity, but studies show that taming this hormone can help with weight control. ¹⁸⁷ How can you do this? Eat slowly and ease up on the

carbohydrate consumption; make sure to eat adequate protein to keep blood sugar stable. Ghrelin levels are at their highest before we eat a meal. After you eat, the levels drop again until it's time for your next meal. 188

<u>Thyroid</u> hormones are produced by your thyroid, which is the butterfly shaped organ located in the lower neck. These hormones are essential for normal body metabolism. ¹⁸⁹ Although diagnosing thyroid disorders are notoriously difficult, a blood test can be ordered by your doctor and is the first step in



determining whether the thyroid gland's hormone production is normal, underactive, or overactive.

Not kept in check, thyroid problems can occur, including intolerance to heat or cold, hair loss, weight gain, swollen neck, depression, osteoporosis and even heart rhythm disturbances. ¹⁹⁰ Unbalanced thyroid hormone levels have been linked to a host of gynecological health concerns for women and sexual disorders in men including:

In women: 191

- PMS
- irregular menstrual cycles
- low sex drive
- infertility and miscarriage
- endometriosis
- polycystic ovary syndrome
- uterine fibroids
- severe symptoms of menopause

In men: 192

- Low sex drive
- Premature ejaculation
- Erectile dysfunction

Thyroid disease is a complex condition that requires a combination of approaches to diagnose, monitor and resolve. With so many concerns linked to this hormone, you are wise to take care of your thyroid function as much as possible and as always, be sure to check with your medical doctor and your natural health care provider.

Insulin is a hormone that is secreted by groups of cells within the pancreas (called islet cells). ¹⁹³ The pancreas is located behind the stomach and in addition to producing insulin, it is responsible for a number of functions in the body, such as producing digestive enzymes.

When you eat a meal, sugars (carbohydrates) are absorbed by your intestines into your bloodstream. The pancreas detects an increase in blood sugar and secretes insulin in response. Your cells bind the insulin, which activates other receptors that help to absorb sugar from the bloodstream and draw into the inside of the cells.

Without sufficient insulin hormones, a person can actually end up in a state of starvation, no matter how well they eat. This is because many of our body cells depend on insulin to

make use of the calories contained in the glucose (sugar).

Taking care of your pancreas by eating healthy foods and maintaining an ideal weight can help you to avoid developing diabetes. Insulin is a vital hormone, so people who develop an insulin deficiency (type 1 Diabetes) have to replace it with shots of insulin several times a day. More information on this topic can be found in Chapter 4.

<u>Cortisol</u> may cause the most common hormone problems that underlie so many health complaints. Cortisol is a steroid hormone produced in the adrenal glands and is released in response to stress. As massage therapists, we are even more susceptible to elevated cortisol, because the hormone is secreted when a person experiences spiritual, physical, or emotional stress.

Even daily stresses on our body such as dehydration, poor eating habits, not enough sleep or exercise can cause our cortisol levels to become out of control. Emotional stress that stems from a tense work environment or personal relationships can contribute to the problem as well. As massage therapists, we can often become overworked (especially in the traditional spa environment where we are often over-booked), and this can contribute to adrenal fatigue issues.



How is cortisol affected by stress? Regardless of the cause, when the body senses stress, cortisol is released into the blood stream, which increases a person's sympathetic tone (sometimes called the "fight or flight response"),

to help them cope with the situation. ¹⁹⁴ Increased sympathetic activity also sends sugar into the bloodstream to fuel our brain and muscles so they are ready to react. ¹⁹⁵

Do you recognize this pattern of events happening in your own body? Most of us do! In a healthy body, cortisol levels should be highest in the morning and then slowly taper off by the evening so our parasympathetic (calming) response can take over, allowing our bodies to rest and repair itself. ¹⁹⁶

While we all face inevitable stresses that will temporarily increase our cortisol levels (clients who cancel at the last minute, conflicts with coworkers, financial concerns, having an over-booked schedule or trying a new technique or massage modality are common stressors for therapists), the problem with chronically high cortisol is that it negatively impacts the rest of our hormones. Put simply, when large amounts of cortisol are needed to help us cope with stress, cortisol is produced at the expense of the other hormones.

Leptin helps to regulate the amount of food energy we eat and how it is used. It is involved in appetite, hunger signals and metabolism, which make it the most important hormone in connection



with our feelings of being either hungry or full. ¹⁹⁷ Leptin is produced by the fat cells and is transmitted to the hypothalamus in the brain to turn off hunger signals. So, when our leptin levels are high, this tells the brain that we are full. When the levels are low, we start to crave food and feel hunger pains. When leptin reaches the hypothalamus and binds to the receptors there, it stimulates the release of satiety (appetite-suppressing) chemicals. So, it makes sense that people with unbalanced leptin eat uncontrollably.

What can you do to keep your leptin in check? Since leptin is mainly produced by adipose tissue (fat), the amount of leptin that circulates in your body and brain is directly in proportion to the amount of fat on your body. So, keep your weight under control and make the effort to increase your muscle mass and decrease fat stores with a regular exercise regimen.

DHEA (dehydroepiandrosterone) is a hormone produced by the adrenal glands, which are located just above the kidneys. DHEA plays a number of important roles: it helps your body to cope with stress, it supports the immune system, helps optimize sex drive, controls metabolism and keeps inflammation down. In a nutshell, maintaining appropriate DHEA levels leads to good health overall, while lowered DHEA can lead to depression, cardiovascular disease, chronic inflammation, metabolic syndrome and osteoporosis.

<u>Testosterone</u> may sound like something that is only important in men's health, but in fact, both men and woman require testosterone to maintain good health.

Testosterone is the major sex hormone in males that increases during puberty and affects the body throughout life, influencing: 198

- Muscle size and tone
- Bone growth and strength
- Sperm production
- Sex drive

In women, testosterone is produced by the ovaries and the adrenal glands. It's one of several androgens (or male sex hormones) that are also found in a healthy female body. These hormones influence: 199

- Ovarian function
- Bone strength
- Sex drive

A balance of testosterone and estrogen (along with other key hormones described in this chapter) is important in women's health to keep the ovaries functioning normally.

Researchers also believe that androgens like testosterone may play an important part in normal brain function in both genders, by affecting moods, impulses and cognitive function.²⁰⁰

HGH or Human Growth Hormone, is produced by the pituitary gland. In childhood, it stimulates growth and as we get older, it helps to maintain healthy tissues and organs.²⁰¹ Around middle age, the pituitary gland slowly reduces its HGH production, which is why it is the subject of numerous studies regarding aging. While growth hormone deficiency in adults is quite rare, it can cause decreased bone density and muscle mass, a higher level of body fat, anxiety/depression and reduced capacity for exercise.²⁰² These symptoms in themselves can lead to serious illness, so if you suspect you have low levels of HGH, make sure to consult with a health care practitioner.

How to keep your hormones healthy:

As you can see from this overview of a few key hormones, maintaining a



good balance is essential for a long and healthy career in massage therapy. To attain this balance, there are a few practical things you can do to protect your endocrine system and keep you feeling your best.

First, stay away from any foods with added hormones as much as possible. Meat, dairy, eggs and products made from them are the biggest culprits. If you'll remember the discussion in Chapter 7 on "Toxins", we discussed the fact that there are added hormones in our food supply. This practice is severely undermining our health and in order to take control of your health, please seek out meat and dairy where the animal was not subjected to hormone treatments.

As you do your grocery shopping, make conscious decisions instead of simply picking up the same products week after week. Look for foods that are organic, fresh and WHOLE. In addition, be aware of what your choices are doing to the earth through farming practices, shipping and packaging. The best bet for your health AND for the environment? Buy foods from small local farmers instead of supporting giant conglomerates like Bayer and enormous meat processing plants that put you at risk of eating contaminated food. Making these choices cost just cents more per item but the benefits are far-reaching. Eating fresh and local helps support your local community and economy, the food you eat is fresher (no travel time), and there are usually no harmful chemicals used in growing produce or raising livestock.

Buying organic will ensure that you are purchasing products that were consciously raised and have not been pumped with antibiotics, synthetic hormones or sprayed with harmful toxic pesticides or herbicides that can wreak havoc on our bodies.



A second easy thing you can do is to eliminate all plastics from your kitchen. Avoid plastic wrap and store food in glass containers. Although I am not a



fan of microwaves and believe they are contributing to some of our health problems, if you MUST microwave, please never reheat food in the microwave in a plastic container or cover with Saran Wrap; use glass instead.

The plastic container or Saran Wrap leaches toxic chemicals into your food. Also, make the switch to a stainless steel water bottle as was previously discussed.

Your hormones and endocrine glands are silently at work, 24 hours a day, regulating your body functions and keeping you in prime condition. All it takes is a little forethought and a few lifestyle changes and you can accomplish a lot in keeping your system working at its best.

Chapter 14 – Proper Body Mechanics & Healthy Work Habits

Increasing our self-awareness as we work is essential for a long and successful career in massage therapy. Among other things we will discuss in the sections to follow, it means taking time out of a busy day to attend to our own needs and allowing appropriate rest periods between appointments. Often the trap that massage therapists fall into is becoming a caretaker 24 hours a day; this might mean scheduling appointments too close together, then rushing home from work to attend to a busy family life and perhaps caring for relatives. Living this way is a recipe for burnout and injury. This chapter will provide you with some helpful tips that will help you to stay healthy, happy and productive in your work.

Make Time for Yourself

As was mentioned before, the first step is taking time for yourself each day. Choose an activity during these periods that refreshes you – whether that involves deep breathing, stretching, Tai Chi or a quiet walk outside. Calming activities will help you



to remain centered and to cope with the demands of your work, both physically and emotionally.

Another important step is to set reasonable limits with your families and friends. If you have a lot of requests for extra massages, don't be shy to ask people to schedule an appointment with you. Even the people close to

you may underestimate the demands of massage therapy, so make sure you educate them on the physical demands. Once they understand, you will easily be able to build these extra massages into your schedule and this will help you to avoid burning out after a long day of work.

Eat Well at Work

Eat at consistent times each day, with good amounts of protein to keep your energy levels high enough to give an effective massage to all of your clients. Slamming sodas and Snickers bars when you start to crash mid-afternoon will not sustain energy and will most certainly result in health problems down the road. Instead, start your day with a healthy, protein rich breakfast. Then choose energy-fueling snacks like green tea and a hard-boiled egg, nuts, hormone-free deli lunchmeat or stick of cheese to keep yourself at peak performance throughout your day. Remember that it will be VERY helpful for you to plan your meals and snacks ahead of time; if you don't, you'll be

way too tempted by quick snacks, vending machines or fast food; none of which will do your health any favors and will NOT help to sustain your energy on those days when you have lots of scheduled massages. Plan your meals a week ahead of time if it helps.



A few more notes about your food – especially the meals and snacks you consume while you work, when your body is under its highest energy demands: take the necessary steps to keep your weight down. As you eat, use portion control. Eat consciously and savor the food you are eating.

Remember, it takes 20 minutes for the brain to get the message that you're eating...so SLOW DOWN...put the fork down between bites and chew thoroughly (doing this will be easier on digestion and it also slows down your eating).

Eliminate the White Stuff – White Flour, White Sugar, Salt and Cow's Milk. We all have discussed how damaging sugar, salt and flour can be to our bodies. Unfortunately, not too much has been said about cow's milk, but I believe it is very damaging to the human body as well. It is extremely



allergenic for most people and therefore they are unable to digest it, hence all the "lactose-free" products on the market today. Secondly, it is extremely mucus forming in the body and for those of you that suffer from extreme allergies, cutting out cow's milk might make a significant difference in how you feel. There's nothing

worse than a busy day of massage treatments with a chronically stuffy, runny nose and eyes. Try going without dairy and see for yourself! Eliminate all dairy from your diet for a period of 2 weeks and see if you notice a difference in your allergies and digestion.

PROPER BODY MECHANICS MAKE ALL THE DIFFERENCE:

As you massage, make sure you remain aware of your body mechanics. Use techniques that allow you to address your client's complaints without jeopardizing your own body and avoid the thinking that your hands are your main massage delivery method.

Vary the type of technique you use, changing from effleurage to soft fist, to fingertips, to flat elbow, etc. to avoid repetitive injury. You'll feel better and your clients will appreciate the positive outcomes from using a variety of massage techniques.

Maintain Good Posture

Take steps to maintain good posture as you work. Keep your core tight and use this energy rather than expending pure muscular effort, which leads to strain and fatigue.

It is so important to stand in an upright position as much as possible during massage sessions. Keeping your body in a neutral posture allows your body

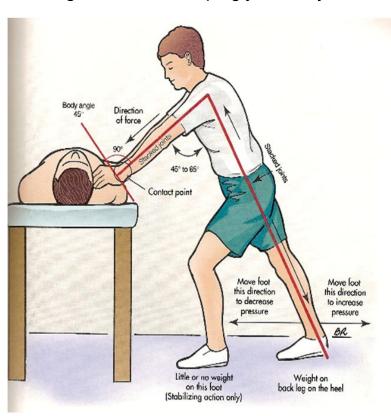


Image Source: Mohr, Edward G. Proper body mechanics from and engineering perspective. https://www.semanticscholar.org/paper/Proper-body-mechanics-from-an-engineering-Mohr/87bfe3083547d3ff316d6dd73374ec609fc8bd9b.

to move smoothly and efficiently. Avoid the tendency to bend at the waist! Leaning over a client as you work will strain your lower back and overwork gluteal your muscles as your body works overtime to try to stabilize you. You'll know you've overworked these muscles at the end of the day if you suffer from an aching lower back.

To improve your posture, try the following modifications:

- Change the position of your client on the massage table
- Change your position in relation to the client
- Adjust the height of the table (see tips below on how to do this)
- Stand as straight as possible and move by bending at the knees instead of at the waist

If possible, an adjustable massage table can be a lifesaver for massage therapists in the long run. At the proper height, your arms, neck and back should all be in a comfortable position without needing to strain at any time during the session.

Whenever you pause during your session to switch techniques or to move to another area of the body, take a minute to monitor your breathing and check your posture. Allowing time to check your technique will help keep you focused, refreshed and will bring benefits to you and your clients.



Creating a Healthy Work Environment:

There are a number of elements that can contribute to a healthy work environment that is pleasant for you and your clients to spend time in. Take

time to assess whether your massage table, carpeting or floor mats, and chairs are meeting your needs.

Many therapists find it helpful to use a balance ball or an adjustable chair that can be moved easily around the treatment room.

How do you know if your table is at the ideal height? A good rule of thumb (no pun intended!) is to let your hands hang naturally at your sides. If your fingertips just reach the top of the table, then you will likely find this to be the most comfortable working height for your body. This varies depending on if you have a long or short torso, legs or arms. A table that is too low will cause you to lean at the waist and a table that is too high will not allow you enough leverage and will use too much upper muscle strength to perform deeper tissue techniques. The best option is an electric table, which will allow you to set the table at the ideal height and change the level as needed during each session.

Placing an attractive mirror in your treatment room will not only reflect light, but it will also assist you in checking your body positions and posture as you move through various techniques. Taking the time to make small adjustments will go a long way in preventing fatigue and injury.

Avoiding Injuries

Even the most mindful therapist with an ideal treatment room may find themselves dealing with a work-related injury. Injury prevention is a complicated endeavor and unfortunately, there are no simple ways to completely remove the risk of injury. However, there are a few worthwhile injury prevention techniques that you can implement. They will help to protect both your hands and your career in long term!

First of all, can you recognize the early warning signs of work injuries? Overuse syndrome is one of the most common complaints among massage therapists. The most noticeable symptom starts with dull achiness, muscle tightness or soreness in a specific area, generally in the upper body. Other signs include reduced function and even paresthesia.

The most susceptible areas for injury are the wrist, thumb, and forearm. Chronic injuries usually begin gradually with symptoms that worsen with an increased workload. Other triggers for overuse syndrome can include insufficient rest periods between appointments, trying a demanding technique, or even emotional trauma in a therapist's personal life. Left untreated, these injuries can eventually lead to osteoarthritis, disability and the loss of function of the joints, hands or arms and then there goes your massage therapy practice **and** income!

Here are a few practical things you can do to create a comprehensive injury prevention plan that will keep you in your best shape physically and emotionally:



If you notice the early warning signs of an injury, take action to treat it
immediately. Consult your physician or a natural health practitioner to
establish a treatment plan. Remember, if you are already
experiencing pain, you have likely already developed an injury. Early
intervention gives you the best odds of avoiding a chronic, long-term
injury.

• Make sure your body is in top physical shape. Build time into your day for exercise and aim for 30-60 minutes per day. A wellbalanced exercise routine that includes cardio, weights or resistance and stretching will keep all of your muscle groups toned and flexible. Even if you are recovering from an injury, a modified exercise routine will help to speed your recovery and reduce the risk of recurrent injuries.



- Rest! Allow sufficient time between massage appointments so you not only prepare for your next client, but you allow quiet time to stretch, have a snack and rehydrate and clear your mind. Insufficient rest periods put you at much greater risk of injury. Some spas are famous for working their therapists too much, so make sure you find out their scheduling practices before you take that job!
- Expand your skills by offering as many new massage modalities as are available to you. Not only does this keep you fresh and motivated as a therapist, but it can also attract new clientele and most importantly, it reduces repetitive strains and stresses and allows your hands to rest. Why not consider offering aromatherapy with therapeutic grade essential oils, hydrotherapy, hot stone, reflexology or heat therapy in addition to your other treatments? Be extra careful when using essential oils; most over-the-counter essential oils are filled with chemicals and solvents.

If you're using just any old brand, and using them all day, every day, you likely are being exposed to a high level of toxins, so be sure you do your homework and only choose pure, therapeutic-grade essential oils. Not all oils are created equal, and it is critical to use a reputable

brand. Pure oils can actually be medicinal in nature; this is going to go way beyond "just smelling nice" and being "relaxing;" certain oils can help to repair muscle strains and ligaments, so again do your research.



• Mix up your routine! It's so easy to fall into a comfortable pattern and use the same techniques over and over. But by changing the types of massage treatments you offer during a session, you can avoid overworking your hands, thumbs or shoulders. If at any time during a session, you feel pain, stop what you're doing immediately and switch to another technique. There are so many techniques you can choose from and don't worry - your client will appreciate the variety in your approach! In addition to adding different techniques, it might also be fun to experiment with different massage tools; trigger point tools, bongers, stones, small balls, massage cups, rolling pins, etc. are all wonderful additions to the massage therapists' repertoire!

Create a Healthy Work Environment

Taking good care of yourself can at times seem to be too expensive or too time consuming. Even with the best of intentions, we all lead busy lives with added stress and responsibilities outside our work. The truth is, however, that neglecting our wellbeing and our bodies inevitably leads massage therapists to become less effective, less healthy and even less happy in the long run. So, make the investment, starting at your very next appointment. A few minutes each day is all it takes to protect your health, your investment and your career.

Chapter 15 – Taking Responsibility for Your Health

One of the most important things I can stress is the need to accept responsibility for taking care of your own health—as a massage therapist and as an individual.

One way to do this is to question everything. That includes everything that comes from any health professional – whether they are a medical doctor or natural health practitioner. Why? There are literally thousands of medical mistakes that happen each and every day. Over 250,000 people die each

year as a result of medical error.²⁰³ The best way to ensure you don't end up a statistic is to know what is going on with your body. Don't be afraid to ask questions and don't leave major decisions up to someone else to make. This is your body and your life...it is important you accept responsibility for it.



In the event you find yourself visiting a hospital or an MD's office, here's a little list of things that will help you to improve your awareness and to help keep you healthy:

1. Know what medications you are taking. This sounds very basic, but you would be surprised to know how many people don't actually know the names of the prescriptions they take each day. Often when I ask my clients, the men will leave it up to their wives to "keep track of that stuff." This is a problem. You absolutely must take your own health seriously and know what you're taking. It is not your spouse's job (or parents', siblings or some

other person) to keep up with that...it is YOUR job. This also includes herbal or nutritional supplements. You don't have to memorize the list but be sure to carry a list with you of ANYTHING you're taking and take the list to any medical appointments, especially any hospital visits. Also, be sure to update it with new information as often as necessary. If typing or writing a list seems overwhelming, don't be afraid to take all of your bottles of pills with you to an appointment. Your healthcare practitioner will most definitely want to know what kinds of prescriptions and/or natural supplements you are taking...so bring them all with you!

2. **Get a second opinion**. If you are facing a health crisis, be sure you go to another experienced physician for another opinion. There are stories about people who have been presented with a life-threatening diagnosis and scary treatment suggestions, but then went on to get several more opinions before finding a physician who was willing to treat them less aggressively.

Make sure you are 100% confident and comfortable with your medical care providers. You are placing your life in their hands...it's important you have a good feeling about them and trust their judgment and opinion regarding your health.

3. **Again, question EVERYTHING**. Yes, some doctors may not like to be questioned and might even get offended. Too bad. A good physician will welcome your input and your questions. If you're not sure of something, ASK. And ask again.

When you are admitted to the hospital, make sure you know what the nurses are putting in your IV. They won't mind if you ask questions because they want to make sure there are no mistakes either. This keeps everyone on their toes and *tells your medical team that you are actively involved in your own health care*. They like that. They want someone that will ask questions. Don't take anything for granted! Nurses and doctors are human and make mistakes just like the rest of us....so ask!

In cases when you're not able to be involved in your care because you are recovering, make sure to have a family member or close and trusted friend nearby who will advocate for your health!

- 4. **Watch out for infections**. When dealing with healthcare practitioners, make sure you see them wash their hands before touching you. This seems like common sense, but they get busy rushing from patient to patient. I heard a story from a client once about a doctor coming in from another room and starting to examine him without washing his hands. Make sure they wash the stethoscope too! Speak up and protect yourself!
- 5. **Prescription Error**. If a doctor is going to give you a prescription, don't



just take the paper and walk out. It is important to find out what it is, what the milligram of the drug is, what it does and how to take it. Write all this information down, especially if you are getting multiple prescriptions!

The infamous illegible doctor handwriting can present a serious problem resulting in many errors at pharmacies. Also, find out about side effects and remind the doctor of other prescription medications you are taking to make sure there will be no interactions. Again, making it a practice to speak up and ask questions will make sure you get the medication you need that is right for you.

- 6. **Listen to your body**. You have that "gut" feeling that something isn't quite right. You go to the doctor, and they run a test that results in a "negative" diagnosis. "You're fine!" they tell you. But then you still have that nagging feeling that something is going on with your health. Go to someone else and get another test. Do this ESPECIALLY if you have symptoms that go along with this issue. Misdiagnoses happen all the time, but they can be prevented if you are persistent. Follow your inner guidance.
- 7. **Surgery**. If you are scheduled to have surgery, I would recommend phoning the Anesthesiologist the day before to discuss your case. Of course you will meet this person the day of your surgery, but calling in advance lets them know you are taking responsibility for your health. Ask any questions that you have been wondering about. The Anesthesiologist is responsible for making sure that you are "OUT" during the surgical procedure, so it is important that they have a good understanding of your health concerns ahead of time.
- **8. Mark Your Body**. Be sure to mark the "surgical spot." There are MANY documented cases of the wrong arm being operated on and the wrong organs being taken out...it happens all the time, so don't be afraid to write in black marker: "cut here" and "don't cut here" on your body!

9. "Whatever You Say, Doctor." Unfortunately, I see a lot of clients that have the "Doctor is God" complex. This is simply not true. Saying that "I'll do whatever you say, Doctor" or "I'll take whatever you give me, Doctor" is not in your best interest. Doctors are only human after all. Not only do they make mistakes, but they also sometimes have very different opinions from one another. If someone is suggesting you take a prescription medication OR have surgery or some other aggressive treatment, be sure to get the facts and all of the options available to you. Is there no other possible way to deal with this issue than drugs or surgery? What other options would be available?

If a proposed method of treatment doesn't "feel right" to you, chances are there may be another way of handling it. Even if that means going to another doctor or several other doctors; don't be afraid to do it. Don't put them up on a Totem Pole...the bottom line is that it is YOUR body and your health...speak up for yourself!

10. Remember that there are always natural options. Keep in mind that there is often a natural way to deal with almost any diagnosis. As a massage therapist, you have likely seen among your clients the amazing effect that natural therapies can have, even on serious illness. Don't forget this fact when your own health is involved. There are many different natural healing modalities out there, so be sure to visit several different types of practitioners if you have a health crisis. I have provided an extensive list of different types of natural healing modalities in Appendix B. Again, ask a lot of questions. Make sure you feel comfortable with ANY healthcare team member that you will be entrusting your health with!

Chapter 16 – Why Choose Natural Therapies?

There are many positive aspects about the benefits of choosing natural and alternative therapies to cope with common ailments and even serious illnesses. As a massage therapist, you may have colleagues who practice these therapies and may help share information with you to increase your knowledge base. The following list of items will help you to understand a few of the benefits of natural therapies and why you might consider using these services to protect your health:

1. Safe, Natural and Gentle. As a massage therapist, you are no doubt aware that almost all forms of natural therapies are safe and non-invasive. Most herbs, homeopathic remedies, nutritional supplementation,



essential oils and therapies like massage, acupressure and Reiki are all wonderful forms of natural therapies that are safe and gentle. But try not to be your own doctor; enlist the help of a qualified practitioner when dealing with herbal formulas or nutritional therapies.

2. More Choices for You. Since most health insurance companies do not cover natural therapies, you will often have many more choices available to you when searching for help for a specific ailment. Insurance companies often regulate who you can and can't see, but with them out of the picture, you are free to choose the type of natural therapy you would like and which practitioner to see. While this means you will have to pay out of pocket, keep in mind you are making an investment in your own health and in the longevity of your career as a massage therapist.

Please see Appendix B for a list of some of the more common natural health providers and their functions.

- 3. Really having yourself heard. Most natural health practitioners will take the time to really *listen* to you and your symptoms. In conventional medicine, sometimes all you get is a quick appointment. I've had clients tell me in some cases, their visits with their doctor were timed and lasted only 3 minutes! Yikes! Most naturopaths or chiropractors will take significant time with you (especially the 1st visit) to really assess you and your situation. We take into account not only your physical symptoms, but emotional symptoms too and really address your whole body. Make sure to mention the type of work that you do as a massage therapist. This will help the practitioner to tailor their approach to help you to better cope with the physical and emotional demands of your day-to-day workload.
- 4. You're in Charge. Whether you decide to take some herbs or homeopathy for yourself or make that Reiki appointment, you're in charge of what goes into your body and what happens to it. Of course, for serious illnesses, I always recommend you work with your medical doctor and partner with a natural health care practitioner that can assist you. But in less



serious cases, if you just have the sniffles or some allergies, there are LOTS of remedies you can try yourself and educate yourself on. Homeopathy and essential oils are two things that you can learn yourself; using a good reference guide and trying some simple therapies at home can often yield better results (and save time and money) than taking a harmful prescription.

5. Complementary Medicine is a Wise Investment of your Time & Money. Just as we understand the need to spend time and money maintaining our cars, our health and wellness require constant upkeep. Put off maintaining our car (like forgetting to check the oil) and we'll be spending lots of time (and money!!) visiting our local mechanic! Or even worse, be writing off a vehicle that we've invested thousands of dollars in. When it comes to our bodies, though, there are no trade-in options! So, investing a relatively small amount of time and money today will help you to avoid disastrous consequences down the road. As a massage therapist, your body is your livelihood, so you need to keep it in the best shape possible.

Educating your clients about their healthcare (and setting an example through your own choices) will help them to understand that they are <u>making</u> an investment in their healthcare. It will also help them to recognize that when they choose to pay out of pocket to see **you**, that they are using their money in the wisest way possible.

Even after considering all of the benefits, if you still think that you "can't afford" supplementation and natural health care, I would urge you to take a very honest look at your lifestyle and habits. If you're like most people, you probably spend much of your money on things like eating out, buying new clothes, entertainment like sporting events, movies, concerts, etc. That \$4.00-\$6.00 latte you're consuming not only isn't healthy but can negatively affect your pocketbook and those dollars could be used to seriously impact your health in a much more positive way. Ask yourself (especially if you've got family history of disease and illness), if what you're spending your money on today, can positively affect your health now **AND** later.

Chapter 17 – All About Nutritional Supplements



One of the most common questions that my clients ask is "Do I need to take a vitamin or supplement?" So, it's important to understand why we need to take supplements at all. Most people that aren't in some sort of health crisis wonder why they need to

take a supplement. Even if we all eat perfectly well all the time with loads of fresh fruits and vegetables, we will still need to supplement our diet with some form of nutritional supplementation. Why? What you will need depends significantly on what kind of family history you have and how you have lived your life in the past and currently; in other words, how healthy is your lifestyle now and in the past?

Here's is a short list of the reasons why everyone needs to take a natural, whole-food supplement:

1. **Depleted Soils**. Even if you eat a healthy, predominantly plant-based diet with lots of fruit and vegetables, chances are (unless you're consuming **everything** Organic) that the food is coming from soils that have insufficient mineral content.²⁰⁴ When foods are grown over and over again in the same soils, the mineral content of that soil becomes depleted over time. (This is yet ANOTHER reason why it is vitally important to consume Organic foods as much as possible. Organic farming practices include "crop rotating" so that soil depletion does not occur.)²⁰⁵

2. Poor Diet. Most of us are not eating correctly. Our lives are busy. Between home life with children, work schedules and school responsibilities, we tend to reach for the quickest and fastest thing. Unfortunately, these fast foods are very detrimental to our health. So many of our common health complaints (headaches, gastric problems, sleep issues, hormonal imbalances, allergies, anxiety/depression, etc.) can all be tracked back to what a person is, or in most cases, *isn't* eating. Proper nutrition is vital to have a healthy life.

Our bodies were not designed to drink soft drinks and consume fast food at the rate we do. If you're eating the "SAD" (Standard American Diet) way, please know that you are not choosing foods that are in your best interest. Even if you are young and are not



yet experiencing any health symptoms, now is the time to establish good habits that will last you a lifetime. You simply cannot expect to continue to put garbage foods in your body and expect your body to run at its optimal best. Remember that your massage therapy career is literally on the line. Our career can be extremely rewarding and last us many, many years, but if you are not providing your body the "ultimate fuel," you will deplete the resources available and find that you don't have the physical energy or strength to last in this field. Taking nutritional supplements while also making lifestyle and dietary changes can help your body get adequate nutrition and subsequently, help you perform at your optimal best!

3. Long Transit Time for Delivery. Have you noticed in the grocery store that more and more produce is coming in from other countries? If you think your favorite mango or pineapple (from Hawaii or the Philippines) was just cut at its peak ripeness and then immediately put into a box, rushed to the airport and then overnighted to your favorite grocery store, you're mistaken. Sometimes, foods are picked weeks or even *MONTHS* before we see it on our shelves and obviously lots of the nutritional value of the food will be lost during this time. ²⁰⁶ So much for obtaining the maximum amount of nutrition!



Natural, whole foods will always provide the maximum amount of nutrition when consumed as close to when they were picked as possible. That is one reason why shopping at farmers' markets is such a boon to our health.

Typically, these are local farmers who bring in produce that has been recently picked. This freshness is filled with lots of nutrients and will serve your body well. But foods in our grocery stores that are picked weeks or even months before the time we see it on the shelf, unfortunately have lost many of their beneficial nutritional properties. In many cases, our food supply has been <u>irradiated</u> (a way of ensuring longer shelf life, but toxic to us) and this further destroys any beneficial ingredients.²⁰⁷ Try growing your own food in small container boxes and shop at local farmers' markets when possible.

- 4. Overcooking Our Foods. We have a habit of cooking our food "to death" in this country. This results in massive loss of vitamins, minerals, antioxidants and enzymes. When we cook our food at high heat and for long periods, we do not obtain the maximum nutritional value from it. $^{208}\,$ Of over time. this will result in lots of different health course. Cooking does "kill" the food in effect, resulting in lost problems. nutrition. As far as fruits and vegetables are concerned, consuming them in as close to raw (uncooked) state as possible is always the best way. Fruits and vegetables are best eaten raw like those found in a salad. Lightly steamed vegetables are a healthier option than stir frying in oil or boiling in water.
- 5. **Not Eating Regular Meals**. So many people eat at erratic times. This is especially true for busy massage therapists who sometimes get little time between appointments to eat properly. Grabbing a bagel, Snickers bar or donut while slamming down some coffee or a soda between massage appointments, does NOT constitute a meal. Making up for it later in the day at an "all-you-can-eat" buffet is not in the best interest of your body either! Eating this way puts much undue stress on your digestion system and will eventually cause a lot of uncomfortable symptoms. Eating



consistent, healthy meals (with healthy protein snacks!) helps our digestion, our energy and our body overall. Nutritional supplementation can often help to bridge the gap between what we **are** doing and what we **should** be doing.

6. **Normal Aging = Digestion Issues**. As we age, our body produces fewer digestive enzymes that are needed to properly digest and assimilate the foods we eat.²⁰⁹ Eventually, this will result in "stomach" complaints, i.e., reflux, heartburn, upset stomach, chronic constipation, etc.

As you can see, there are plenty of reasons for taking good-quality whole-food based natural supplements. They can go a long way toward helping you maintain a better level of health. Particularly if you've got some bad habits like eating "SAD" --the "Standard American Diet" --filled with quick meals, fast food and hardly any veggies or fruits, you definitely need to add some nutritional supplementation to your diet.

But which supplements do we take and how do we know which supplements are the best ones? With billions being spent every year on nutritional supplements, it is very important you understand that not all supplements are created equal...there are sometimes very vast differences between one product and another.

As a natural health practitioner, I advocate the use of **whole-food supplements**. But not many people understand what that is, so let's talk about the difference between "Whole Food Based" and "Synthetic," "Isolated," or "Fractionated" Supplements.



A great example would be to simply look at almost any multi-vitamin found in a grocery store or drug store. When you scan the Supplement Facts and ingredient label, you'll see quite an assortment of vitamins....Vitamin A, Vitamin C, Vitamin E, etc. Here's an example of a label from an OTC

vitamin product:

Specifically, I want you to pay attention to the items listed under "Ingredients." Those are what we call "Isolated" vitamins and other chemicals. There are no foods, plants or herbal ingredients listed; only *partial* vitamins and other chemicals and these are known as isolated, fractionated or synthetic vitamins. Nature intended for us to consume food in its WHOLE form because all the

mount Per Serving		Value	Amount Per Serving	% Dally	N.
tamin A les Acetate and 14% as Beta Cal	3,500 IU rotene)	70%	Pantothenic Acid (as d-Calcium Pantothenate)	16 mg	-
tamin C (as Ascorbic Acid) tamin D ₂ (as Cholecalciferol)	60 mg	100% 175%	Calcium (as Calcium Carbonate & Dicalciu	213 mg	H PS
famin E	22.5 IU	75%	Magnesium (as Magnesium Oxide)	140 mg	35
(as d-Alpha Tocopheryl Acetate) Ramin K (as Phytonadione)	20 mcg	25%	Zinc (as Zinc Oxide) Selenium (as Sodium Selenate)	15 mg	_
hamin (as Physionadione) Thiamin (as Thiamin Mononitrate)	1.35 mg		Copper (as Coppper Oxide)	110 mg	_
Riboflavin (Vitamin B-2) Nacin (as Niacinamide)	1.7 mg	100%	Manganese (as Manganese Sulfate)	2 mg	_
famin B-6 (as Pyridoxine HCI)	3 mg	150%	Chromium (as Chromium Chloride)	120 mag	10
Folic Acid	400 mcg	100%	Lycopene	300 mos	
flamin B-12 (as Cyanocobalarmin)	18 mcg	300%	** Daily Value not established.		
Biotin (as d-Biotin)	75 mcg	25%			

vitamins, minerals, antioxidants and enzymes are together in one package (the fruit or the vegetable) and work synergistically together to bring your body the nutrition that it needs. When you take one part away from the whole, you get "Synthetic," "Isolated" or "Fractionated" pieces of the whole, but it is simply not the same end product and does not have the same effect

on the body.

So, for example, when you just take "Vitamin C," you are only taking the Vitamin C that would have been extracted (hopefully) from say, an orange. But what

about all the other nutrients in that orange that we need to have? By not taking a whole food supplement or eating the orange, you are missing out on lots of different healthy phytochemicals that would do your body good! The other problem is that by taking isolated vitamins, sometimes we are getting "massive" doses of some vitamins, but not enough of others. Over time, this can cause health problems too. Aren't we trying to get healthy rather than cause *more* problems? Remember that nature designed foods

	Amount Per Serving	% DV
Vitamin A (as Beta-Carotene from Organic Food Blend)	375 mcg	42%
Vitamin C (from Organic Food Blend)	90 mg	100%
Vitamin D (as Cholecalciferol from Organic Algae)	50 mcg	250%
Vitamin E (from Fermented D-Alpha Tocopheryl Acetate)	15 mg	100%
Thiamin (Vitamin B ₁) (from Organic Food Blend)	2.2 mg	183%
Riboflavin (Vitamin B ₂) (from Organic Food Blend)	2 mg	154%
Niacin (from Fermented Niacinamide, Organic Food Blend)	10.6 mg	66%
Vitamin B ₆ (from Organic Food Blend)	2.2 mg	129%
Folate (from Organic Food Blend)	400 mcg DFE	100%
Vitamin B ₁₂ (as methylcobalamin)	12 mcg	500%
Biotin (from Fermented Biotin)	135 mcg	450%
Pantothenic acid (from Organic Food Blend)	3.8 mg	76%
Iron (from Brown Rice Amino Acid Chelate)	8 mg	44%
lodine (from Brown Rice Amino Acid Chelate)	150 mcg	100%
Zinc (from Organic Food Blend)	1 mg	9%
Selenium (from Organic Food Blend)	55 mcg	100%
Manganese (from Brown Rice Amino Acid Chelate)	0.75 mg	33%
Chromium (from Brown Rice Amino Acid Chelate)	70 mcg	200%
Organic Food Blend: Organic Beet (Beta vulgaris) (Root), Organic Dunaliella (Dunaliella salina) (Whole Plant) Extract, Organic Amla (Phyllanthus emblica) (Berry) Extract, Organic Fermented Chastetree (Vitex agnus-castus) (Berry), Organic Fermented Amla (Phyllanthus emblica) (Berry), Organic Guava (Psidium guajava) (Fruit) Extract, Organic Fermented Ashwagandha (Root), Organic Lemon (Fruit) Extract, Organic Mango (Mangifera indicia) (Fruit) Extract, Organic Guava (Psidium guajava) (Leaf) Extract, Organic Mustard (Brassica juncea) (Seed) Extract, Organic	2 g	
Vitamin K (as menaquinone-7)	120 mcg	**
** Daily Value (DV) not established		
Other Ingredients: Organic Carnauba Wax		

to have the appropriate amount of vitamins and minerals in them; someone in a lab "creating" a vitamin, will not create something as nature would have.

Whole-Food based supplements are different. Typically, they will list the foods that the supplement was made from. Here is an example of what to look for when searching for a Whole-Food based product. Notice that under the Supplemental Facts, you'll still see some of the same vitamins listed as in the other product. BUT, look at the difference under the ingredients section...now, there is actual WHOLE food listed!

What a difference this 2nd product will make in your body vs. the first product! You'll actually be gaining benefits from the WHOLE food and all of the vitamins, minerals, antioxidants, phytochemicals and enzymes that occur naturally in the food or plant.

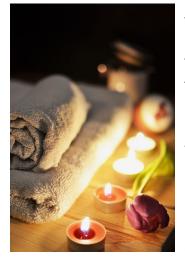
Another way that might make sense is to look at the source. When a supplement label says "Vitamin C" on the label, what is the source of that Vitamin C? Where does it come from? What you want to see listed in the ingredient list is the foods; i.e., Citrus Fruits, Papaya, Bell Peppers, etc. If you see "Ascorbic Acid" listed but no food is listed, that means it is an "Isolated" product and a chemical made in the lab, not from a whole food. 210 Keep searching for one that lists the names of the whole foods on the ingredient label.

In summary, just like with food, be sure you read your labels when it comes to nutritional supplements! It is important to educate yourself about what you'll be putting into your body and supplements are no different than food. In Chapter 2, I discussed the importance of reading the labels on the foods you're eating, but it is just as important if not more so, to be sure you're reading all of your nutritional supplemental labels! Consume supplements that have actual whole food, plants or herbs listed on the label; that way you know it is as close to natural as possible! Natural and herbal supplements can help to restore the body to a place of balance, but understand that no supplement alone will help you achieve the level of health you desire...you will have to make lifestyle and behavior changes AND take nutritional supplements in order to achieve ultimate health. If you feel overwhelmed with the wide variety of supplements available or if you're dealing with a complicated health situation, make sure you enlist the services of a natural health practitioner that can help guide you on which supplements are the best ones for you and your unique health circumstances

Chapter 18 – Giving YOUR Best to Your Client

Now that we've discussed extensively how you can achieve your physical best utilizing food and making healthier choices, it's also worthwhile considering how you can pay it forward – by giving your best to your clients.

Remember that the close personal contact that comes with massage therapy makes personal hygiene vitally important in creating a positive experience for your client. Make sure to wash your hands and forearms

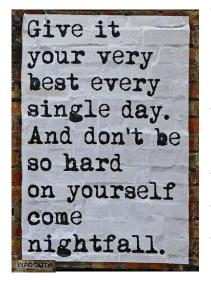


with hot, soapy water before and after every massage. Apply lotion or a barrier cream to prevent your skin from drying out. Keep your nails trimmed, clean and neat. There is nothing worse as a massage client than to feel a therapist's fingernails while they are giving a massage. Also, even though nails are to be kept short, be sure you scrub your nails with a brush to get rid of any bacteria that might be lurking under there.

If your hair is long, keep it pulled up and away so that it doesn't accidentally drape across the client when you are leaning over them during massage techniques.

Throughout a massage session, make sure to monitor your own breathing...breathe slowly and rhythmically and try to breathe deeply along with the client. They will intuitively follow your rhythm.

An excellent tip from experienced therapists: *Trade massages with other therapists on a regular basis*. This not only will help to keep YOUR muscles loose and flexible, but also help you learn new massage techniques and to experience things from your client's perspective.



Take time to really get to know your clients. It is critical for you to remember that our business is a "relationship-business." Yes, there will always be those clients that just come for "pain relief." But more often than not, most of your clients will come to you because of YOU and the massage you give them. Can you imagine visiting a massage therapist who wasn't friendly? Even if they did help my stress level, the massage would not be

enjoyable for me as I want to get massaged by someone who I 'clicked' with and who took an interest in me and my life outside of the massage room. So be friendly, ask them about their life; treat them like a person (not just the fifth massage of the day!) and you will develop a long-term relationship with them that will result in them becoming a long-term client.

In a nutshell, take whatever measures you can to portray yourself and your work environment in a way that is welcoming, professional and clean. You'll enjoy the atmosphere of your work, and your clients will appreciate the entire experience, from the moment they step foot into your treatment room until the time they leave, feeling relaxed, rejuvenated and ready to book their next appointment!

Chapter 19 – Closing Thoughts: You Can Regain Your Health!

No matter your age, or your current health status, it's NEVER too late to make changes in your lifestyle that can directly have a positive impact on



your health! As a licensed massage therapist working as a complementary medical provider, you have even more reason (and hopefully now more motivation) to start making those changes today!

Every day I talk to clients that struggle to regain their health. They send me lists of prescription meds they are taking that they want to stop taking. Other people are just starting to have some health challenges; they're not on prescription meds yet, but their physician may be threatening them with the prospect of having to start them. And yet other people have a severe debilitating or even life-threatening illness. It's *NEVER* too late to start to make positive changes and it doesn't matter which one of the three categories you belong to...you can improve the quality of your health and your life. Chances are good — even excellent — that you can have visible and positive changes in your health and get your life back if you are suffering from an illness or disease.

But there is a rule when it comes to your health, particularly when working in the natural health world:

80% of what needs to be done is YOUR responsibility

20% is the healthcare provider's responsibility

What this means is that YOU ARE the one that will have to stop eating garbage. YOU ARE the one that will have to make time to exercise. YOU ARE the one that will have to work on nurturing, growing or ending a toxic relationship that is making you emotionally **and** physically sick. YOU ARE the one who will schedule your appointments with appropriate rest periods throughout the day to care for your personal needs. YOU ARE the one that will have to take nutritional supplements and follow the regime that your health practitioner has given you. YOU ARE the one that will have to make sacrifices of "wants" and utilize those dollars to **invest in your health and your long-term career**. **There are no quick fixes, no magic pills or bullets.** Make no mistake...the supplements, the diet and lifestyle changes, exercise and stress control can help you obtain a level of health you never thought possible. But in the end, it is up to YOU to make that choice to do it.

As a licensed massage therapist, with a long rewarding career as a possibility, making and implementing changes in your health will help you to have a successful career and be an inspiration to your clients. My intention with this e-book class is for you to find the information to be educational, informative and to help you be the best in your career.

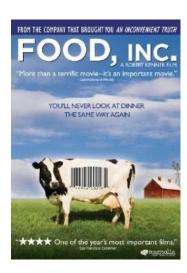


APPENDICES

Appendix A – Movies to See for Your Health

Food Inc. This film is a documentary; highlighting and exposing the ugly truth about how our food is grown and processed. Do you really think that the meat you eat is safe and comes from animals frolicking among pastures? Think again. What is happening to the small, independent farmers who are trying to make a living...they are getting bought up and put out of business by huge food conglomerates. Unfortunately, even some of the organic food companies are owned by huge corporations. And of course, our governmental agencies like the FDA and USDA are in there helping to perpetuate this problem. Not only are animals being horribly abused but so are the workers that work for these companies.

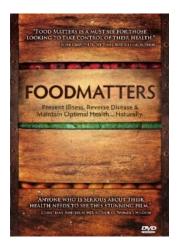
I believe this film should be seen by every person on this planet. It is absolutely imperative to educate yourself about what you are putting into your body everyday and where that item comes from and how it is made/grown and processed. Then, you can make a decision as to what food to choose to eat and whether or not that food is going to be beneficial to you and your family, your health, and of course, the health of this planet.



Please watch with your family; even young children are capable of understanding and helping to make changes within your household.

Remember that your health should be your most valued and prized possession. As a society, it is up to each one of us to take care of ourselves, be responsible about our mind and body so that we are each high functioning and healthy. Take the time to watch this film so that you are an informed consumer.

Food Matters is another MUST see film for everyone on this planet. It is a documentary about the importance of nutrition in our lives; how we are being over-medicated by the medical community and BIG PHARMA. I think a lot of us know this intuitively already, but this film really brings it out in to the open! We must begin to actively accept and take responsibility for our own health, rather than relying on our doctors (who have very little if ANY

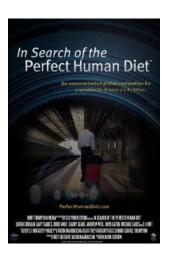


nutritional training) to make our decisions for us. We must educate ourselves as to what truly helps our bodies heal.

If you are suffering with an illness, please know that your body can heal itself! But you must give it the right tools and in the right conditions, in order for it to do this. You can get better. You can get rid of your disease. You can get off your medication! This movie will answer a lot of your questions and help you understand why nutrition (not drugs) is the way to go! We need to have education and valuable nutrition in our lives, not more medication and poisonous toxins.

In Search of the Perfect Human Diet travels through time and around the world with C.J. Hunt as he embarks on an unprecedented global exploration to find a solution to the exploding epidemic of overweight, obesity and dietrelated disease.

From excavations containing the remains of Neanderthals and early modern humans tin Jonzac,

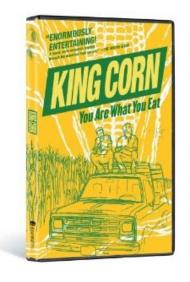


France to the bio-molecular anthropology analysis labs at the Max Plannck Institute for Evolutionary Anthropology in Leipzig, Germany, we discover breakthrough scientific facts that could change we think about food.

Featuring rare interviews with some of the foremost authorities on evolutionary anthropology and Paleolithic human nutrition, this film offers a new opportunity to see what our species needs for optimal health. In Search of The Perfect Human Diet introduces a practical, sustainable method of eating based on these breakthrough scientific facts.

King Corn is Engrossing and eye-opening, KING CORN is a fun and crusading journey into the digestive tract of our fast-food nation where one ultra-industrial, pesticide-laden, heavily subsidized commodity dominates the food pyramid from top to bottom: Corn.

Fueled by curiosity and a dash of naïveté, college buddies Ian Cheney and Curt Ellis return to their



ancestral home of Greene, lowa to figure out how a modest kernel conquered America. With the help of some real farmers, oodles of fertilizer and government aid, and some genetically modified seeds, the friends manage to grow one acre of corn. Along the way, they unlock the hilarious absurdities and scary but hidden truths about America's modern food system.

Burzynski, The Movie is a documentary about a biochemist and medical doctor who is curing cancer. Never heard of him? That's not surprising since the FDA and the Texas medical boards have gone to great lengths to silence him. This is Burzynski, the story of a medical doctor and Ph.D. who won the largest and possibly the most convoluted and intriguing legal battle against the FDA in American history.

His victorious battles with the U.S. government were centered on Dr. Burzynski's belief in and commitment to his gene-targeted cancer medicines he discovered in the 1970s called Antineoplastons, which have currently completed Phase II FDA-supervised clinical trials in 2009 and began the final phase of testing in 2010.

Burzynski takes the audience through the treacherous, yet victorious, 14-year journey both Dr. Burzynski and his patients have had to endure in order to obtain FDA-approved clinical trials of Antineoplastons. What was revealed a few years after Dr. Burzynski won his freedom



helps to paint a more coherent picture regarding the true motivation of the U.S. government's relentless prosecution.

Appendix B – Natural Health Modality Listing

Acupressure	Acupressure is an ancient Chinese healing method that uses the fingers to apply pressure to certain meridian points on the surface of the skin to stimulate the body's natural self-curative abilities and to relieve pain. It deals with all the aspects of a person like the body, the mind, emotions and spirit as one. It relaxes the muscular tension and also balances the vital life forces of our body.
Acupuncture	Acupuncture is mostly popular in China and other Asian countries. It Involves stimulating certain points on the body by inserting thin needles through skin in order to get relief from various medical ailments.
Alexander Technique	The Alexander Technique is a method that educates students about various body postures and movements that reduces the physical and mental stress on human body. It is a technique to balance life with proper coordination of body movements. It is a self-based learning to release stress from daily activity by simply correcting the body postures and movement.
Applied Kinesiology	Applied kinesiology is a technique used to assess nutritional status on the basis of the response of muscles to mechanical stress. When a person experiences poor health it could be due to imbalance of Structural, Biochemical or mental aspect, the technique evaluates all the aspect to figure out the root cause of the problem and direct therapy toward the imbalance side of the problem. Manual muscle testing and other standard diagnosis is essential to this technique to evaluate any mechanical, chemical, or mental activities that effects patient's physiology to help restore balance and harmony in the body.
Aromatherapy	Aromatherapy is the use of fragrant substances, called essential oils extracted from flowers, plants, roots, leaves herbs, woods and resin in order to alter mood or improve health. It is a healing technique using Aromatic plant oils to reduce digestive problems, Eczema, headaches, insomnia, stress or any health ailment. The essential oils are extracted from plants using a steam distillation process. They can be inhaled, applied to skin and certain oils can be consumed.
Ayurveda	Ayurveda is a Sanskrit word that means the science of life. It is a traditional way of healing the body using herbs and nature products to lead a healthy and balanced life. It teaches you to prevent as well as to eliminate the root cause of any disease in a natural way. The technique involves Panchakarma (meaning Detoxification), to purify the whole body by elimination the accumulated toxin from the body by massaging the entire body with warm oil and herbs.
Bach flower remedies	The system of thirty-eight plant and flower-based remedies developed by Edward Bach in the early 1900s help to manage the emotional demands of everyday life by working on the subtle body instead of the physical body. Bach flower remedies are also considered as vibrational medicines which contain the energetic or vibrational nature of the flower or the living plant which influences the nature or emotions of the human being.
Biofeedback	Biofeedback is a method to control how the body functions for example muscle tension, heart rate, blood circulation throughout the body and body temperature. It is basically monitoring the physical condition of the human body using special sensors and devices attached to the body and based on these devices feedback and symptoms one can take preventive measures.

Body Alignment	Body alignment focuses on improving the functioning of the musculoskeletal system and is somewhat similar to Chiropractic practice. It is an art of applying pressure (Vibrational energy) to the patient's body to heal and align physical detriments and any delicate body issues. The technique is used to generate positive energy in the body to help safeguard against environmental pollution.
Bodytalk	Bodytalk is a revolutionary form of healthcare that utilizes the wisdom of bio- energetic philosophy, the insights of modern physics and mathematics and applied Kinesiology to optimize the body's internal communication. It helps to synchronize body parts by incorporating a series of techniques such as tapping, breathing and focusing to enhance the immune system and help the body to repair itself by communicating more efficiently.
Bowen Technique	Bowen Technique is hands-on remedial therapy applied using gentle pressure with thumbs and fingers on certain points of the body. This involves using Bowen's unique set of rolling-type moves to stimulate muscles and tissues of the body, which indeed improves the body's own healing process to repair, balance and reset itself.
Breath Therapy	Breath Therapy is a technique that utilizes proper and deep inhaling and exhaling exercises to open respiratory organ passages and clear any gaseous toxins from inside the human body. This technique allows releasing physical and emotional trauma from the 'breathing mechanism' of the human body and thus giving life a new definition with love, joy and energy.
Chelation therapy	Chelation Therapy helps to remove heavy metals intoxication including mercury that builds up in the body. It involves intravenous injections of a chelating agent so that when infused into the blood it binds to these toxins. The kidney plays an important part to segregate the chelating agent and bound metals, which are then urinated away. This therapy helps to remove calcium from fatty plaques, lowering of cholesterol levels, reduces the damaging effects of oxidation stress and improves blood vessel functions.
Chinese Medicine	Chinese Medicine also referred to as Oriental Medicine is a natural way of healing system that has been practiced for thousands of years. An expert knows how the body functions and what might have caused the illness and based on same the illness is treated. It considers holistic view of each individual which includes emotions, mental and both internal & external environments in which one exists; and believes that every human body has an ability to overcome illness and problems related to health.
Chiropractic	Chiropractic is a health care profession related to the diagnosis, treatment and prevention of the musculoskeletal system and the nervous system disorders as well as the effect of these disorders on general health of the people. They typically use non-surgical techniques to align and manipulate the spine and other joints.
Colon Hydrotherapy	Colon Hydrotherapy or Colonics is a natural method of cleansing the colon using soothing, sterilized and purified flow of warm water to remove out fecal matter.
Color Therapy	Just like a proper balanced diet we also need balance of all color vibrations in order to be energetic. Color Therapy is an ancient way of non-intrusive form of vibrational healing using optimum balance of color energies as a source of rays on an area of the body in order to restore health and promote harmony between the mind, body and the soul.
Craniosacral Therapy	CranioSacral Therapy (CST) is a gentle, hands-on approach to enhance the function of the craniosacral system that includes the membranes & the cerebrospinal fluid surrounding and protecting the brain and the spinal cord. CST releases tensions deep in the body to relieve pain and dysfunction and improve whole-body health and performance.

Dance/Movement Therapy	Dance/movement therapy is a creative arts therapy that emphasizes personal expression and psychotherapeutic use of movements. It is a form of authentic communication based on the belief that the body, the mind and the soul are interconnected. As a result, this therapy enhances the emotional, social, physical and psychological integration of an individual.
EMF Balancing Technique	EMF Balancing Technique helps to restore the proper flow of energy via electromagnetic field. EMF balancing technique is like T'ai Chi which helps to build and repair relationships, clean up the energy flow in an environment and also help to acquire knowledge for self-improvement. During an hour-long session, a practitioner may gently place their hands on the client's body to enable the flow of energy for some part of the session.
Energy medicine	Energy Medicine uses two kinds of energy, one which can be measured (Veritable energy fields) and another that cannot be measured (Putative energy field). The Vibrational energy like sound and electromagnetic energy such as rays of light, lasers are example of Veritable energy. There are many diagnosis centers which uses measurable energy fields to diagnose and treat the illness, like radiation therapy, laser surgery for eyes sight correction, Psoriasis correction using UV light. Magnets are also used as part of magnetic therapy to relieve body pain by just placing on a body. Music and sound therapy is part of energy medicine that helps to lower blood pressures and anxiety by listing to some music or using turning forks to create healing sound frequencies.
Feldenkrais method	Feldenkrais Method, named after its founder (Dr. Moshe Feldenkrais) is a form of somatic education that enhances human body functioning, flexibility and coordination by use of gentle movements and directed attention. Awareness through movement and functional integration are the two formats of instruction used in this method. In the first format students are guided verbally through sequence of easy, difficult and complex movements depending upon student's ability to do the task. This type of classes is done in a room or an open area with group of students and known as "Awareness Through Movement".
Feng Shui	Feng shui is a combination of two words feng meaning wind and shui meaning water. Chinese believe that both wind and water are essential part of life and associated with good health and good fortune. Feng Shui is based on few principles like cleaning the environment where you work or stay, positioning items such as plants or wooden furniture in the east Area. Feng Shui promotes prosperity, happiness, balance and good health by examining the flow of energy through a particular house, office or room and living in harmony with natural and man-made environments.
Five-Element Shiatsu	Five Element Shiatsu is based on Chinese theory and symbolic representation of movements and objects that can be applied macro-cosmically to the entire world, and micro-cosmically to an individual. Shiatsu therapist uses finger pressure along the body meridians to balance energy by releasing energy from the areas where there is energy build up and by toning areas of the body where there is little energy and thus re-establish the energy balance within the body. One need to wear loose fitted cloths made from natural fibers to allow an energy transfer to take place.
Flower essence therapy	Flower essence is a modern method begun by Dr. Edward Bach that involves treating people using flowers Essences. It helps to heal and balance a person's physical, emotional and spiritual system. They are mainly for use with emotional stressors.

Guided Imagery	Guided Imagery is an ancient alternative therapy to induce relaxation and to restore physical emotional and mental health by simple visualization and direct suggestions. It involves focusing our attention on the images related to the problem and being able to figure out a communication and discover what it has to teach, reveal or offer to a patient. This Information helps in tapping inner resources for curing and pain relief.
Herbalism	Herbalism is the science and art of using diet and herbal therapies to strengthen the body and enhance the process of healing. Being well means a state of body and mind being in balance and also being satisfied with the quality of one's life. Plants have been used by our forefathers for medicine as well as food since the presence of human beings on this planet. In addition to vitamins and minerals which form the basis of our nutrition, plants are exposed to many of the pressures and influences that challenge us like bacteria, viruses and local environmental stresses. Plants are energetically suited to patterns that arise in people such as hot, cold, dry, and damp and consuming these plants makes us stronger and more viable.
Holographic Memory Release	It is a form of mind-body therapy which promotes self-healing by revealing past memories using a safe setting. Being based on the theory of quantum physics it is a culmination of theories and fieldwork set forth by a few pioneers in the field of energy medicine. The elements of holographic memory release techniques reside in the energy distribution points located within the connective tissue system which correlates to whole-body microsystems and increases an individual's somatic awareness by releasing accumulated tension patterns in the body or mind.
Homeopathy	Homeopathy is a medical science that is based on the principle (like cures like). It involves treating an individual with highly diluted substances given mainly in tablet form with the aim of triggering an individual's body natural system of healing. The concept uses conventional medicine for example small doses of allergens (pollen's) used to de-sensitive allergic. Homeopathic medicines are non-toxic as substances are used in ultra-high dilutions.
Hydrotherapy	Hydrotherapy is a form of therapy that uses water (either hot or cold) to bring about healing to the body.
Hypnotherapy	Hypnotherapy is psychotherapy or counseling done in a one-to-one session with the client. This session focuses on verbal communication made by the hypnotherapist in which the client experiences a sense of deep relaxations. They often will be guided by the hypnotherapist to help their brain form new patterns and eliminate unhelpful patterns (smoking, weight loss, etc.
Iridology	Iridology is the science of analyzing the iris of the eye which reveals the body constitution, inherited strengths and weaknesses, state of well-being and the transactions which take place in our body organs, glands and tissues depending on the way we live our lives.
Jin Shin Jyutsu	Jin Shin Jyutsu is a Japanese healing art also known as acupuncture without using needles that synchronizes the vital energy of a person. It is a physio-philosophy where the therapist uses their hands to balance the flow of energy in the human body. The hands are used as 'Jumper cables' to contact 26 pathways on each side of the body known as 'safety energy Locks' to unblock or redirect the flow of energy along its pathway.
Lypposage	Lypposage treatment is blend of deep-tissue massage modalities derived from physical therapy, including lymphatic drainage and tightening of muscles by lifting or lowering the skin. The main purpose of this therapy is to break up the lymphatic fluids which are responsible for cellulite and fatty deposits by applying pressure so that fluid begins to breakup and eliminate cellulite deposits from the body and tighten the muscles to give perfect shape.

Magnet Therapy	Magnetic therapy involves using magnets of varying sizes and strengths on the human body to relieve pain or to treat diseases. It is based on the fact that some cells and tissues in the human body give off electromagnetic impulses and presence of illness disrupts these fields which can be corrected by magnetic therapy. This therapy also helps in healing many physical and emotional disorders such as joint pain, headaches, migraine and stress.
Manual Lymphatic Drainage	Manual lymphatic drainage is a gentle massage technique used to stimulate the flow of lymphatic fluid that picks up toxins and filters them out for removal from the body. This technique involves using slow and light strokes to work on the connective tissues right below the skin and to promote fluid circulation which thereby help to detoxify the body and to enhance the body immunity.
Meditation	Meditation is a practice that helps an individual to keep the mind calm and silent and reach a state of profound deep peace. It helps to promote relaxation, enhance internal energy and develop patience, compassion and forgiveness.
Muscle Testing	This is partly based on the self-evident fact that structure and nutrition deficits result in impaired muscle functioning, which can be analyzed by physically evaluating the strength of muscles. This method is widely used by physical therapists, chiropractors, osteopaths and some body workers and the treatment may include various reflex procedures and specific joint manipulation and mobilization.
Music Therapy	Music Therapy is an alternative form of therapeutic treatment that focuses on planned and creative use of music to improve and maintain health and well being. An individual can benefit from the Music Therapy program without any musical skill and background. Music Therapy addresses psychological, emotional and social needs with the therapeutic relationships.
Myofascial Release	Myofascial Release is soft tissue massage specially the group of cells within the body and also includes stretching and massaging of the connective tissues or fascia with hand massage. The therapist identifies the areas of tension and then works on areas to stretch and also on the fascial layers. This therapy helps to release tension and stress from the muscles and leaves a sense of well-being. Regular therapy can improve posture, eases soreness from muscles and improves flexibility.
Nambudripad's Allergy Elimination Technique (NAET Treatment)	NAMBUDRIPAD'S ALLERGY ELIMINATION TECHNIQUE uses selective combination procedures such as acupressure, allopathy, Kinesiology and nutrition to balance the natural energy flow of the human body with the electromagnetic energies of living environment. It helps to unblock the blockage in energy meridians or pathways and balance the flow of energy through energy channels and thus restoring the normal functioning of the human body and prevents allergies or diseases.
Naturopathic medicine	Naturopathic Medicine is the use of natural therapies to prevent disease using therapies including homeopathy, therapeutic essential oils, Chinese medicines and botanical herbs & medicine. A Naturopathic practitioner will observe the patients physiological, structural, emotional, environment and lifestyle factors affecting health and will educate and guide preventive measures to lead a healthy and balanced life by providing natural made medicines or natural therapies and also guidance about the change of diet as per the symptoms found in patient's body. The primary goal is to treat and prevent the root cause of the disease.
Neuromuscular Therapy	Neuromuscular Therapy is a manual therapy based on physiology of the nervous system and its effect on the muscular and skeletal system of the human body. This therapy involves static pressure on specific myofascial points and manipulating the soft tissues to balance the central nervous system to maintain normal functioning and overall health.

Nia technique	The Nia Technique also known as Non-Impact Aerobics and Neuromuscular Integrative Action is an exercise program based on the fact that movement is the key to self-discovery and personal transformation. Generally, it is practiced barefoot and integrates a number of fitness disciplines which result in creating a healthy workout to burn out extra calories. Just like yoga, Nia is also regarded as a body-mind-spirit exercise.
Ortho-Bionomy	Ortho-bionomy is a gentle, non-invasive body therapy style based on osteopathy which recognizes the self- healing and self-regulatory capacity of the body and enhances this curative potential. It involves stimulation of the body using gentle movements, short compression, comfortable positioning and delicate touch. During a typical session, the patient remains fully clothed, and the therapist will assess the client's areas of discomfort and may also give a number of exercises to enhance the neuromuscular re-education.
Osteopathic Medicine	Osteopathic Medicine also referred to as Holistic Medicine, meaning treatment of the person as a whole, with regard to their bodies and symptoms and also with regard to their home, work and environment to make a full assessment of their health and well-being. The practice of osteopathic medicine includes using advance scientific knowledge and research to promote health and specialized skills to identify restrictions and tensions of the tissues in an individual's body.
Pilates Method	The Pilates Method is a system of movement and exercises widely used by dancers to strengthen the weak and to challenge the strong. It was developed in the 1920s by a German physical therapist named Joseph Pilates to strengthen the body's core like the abdominal and the back regions by developing pelvic stability and abdominal control. The movements are precise and controlled, which further help to tone the body and the muscles.
Polarity Therapy	Polarity therapy is a combination of modern science and complementary medicine based on the fact that a person's health and wellness is determined by the natural flow of energy through the body. Polarity focuses on the positive and negative charges of the body's electromagnetic energy field. Practitioners uses touch, movement, and other methods to help this energy flow. It helps to maintain good health and energy flow as disruptions caused by depression, stress, poor nutrition, and other factors lead to energy imbalances, tiredness and illness.
Qigong	QIGONG is a combination of two words, Qi meaning life energy and it is believed that the health of the human body depends upon the proper flow of Qi (energy) within the body. QIGONG practices are classified as martial, medical and spiritual as they all involve posture, breathing techniques & exercises and concentration or focus.
Quantum-Touch	QUANTUM-TOUCH is a powerful vibration touch therapy that involves the use of touch, meditation and various breathing exercises to focus and to enhance life force energy. The principles of this therapy is to adjust the proper alignment of bones and facilitate body's self-healing process which is done by a practitioner using his or her hands to activate and run energy into recipients body that is to be treated.
Raindrop Technique	Created by Gary Young, the founder of <u>Young Living Essential Oils</u> , Raindrop Technique uses a sequence of nine therapeutic-grade essential oils applied to the spine using a technique called Vitaflex in which oil is applied in "drops" along the spine and massaged lightly into the neck, feet and back. A moist warm towel is then used to drape the entire back to allow the oil to penetrate deep into the skin. This technique results in detoxifying the body and eliminating symptoms related to sciatica, scoliosis, chronic pain and immunity disorders.

Reflexology	Reflexology is a non-intrusive ancient healing art based on the theory that specific points on the feet, hands and ears correspond to specific organs and different parts of the body and manipulation of these points can be used to treat pain and stress throughout the body.
Reiki Healing-Usui System	REIKI is a Japanese technique for deep relaxation and stress reduction that promotes healing. It is administered by 'Laying on hands' and is based on the idea that unseen 'energy of life' flows through us and is attributed to us being alive. The therapy is basically considered as a way of overcoming stress and depression and providing calmness to a person and making the person feel better. Reiki practitioners are called Reiki healers as they are said to transfer healing energy from universe around them to the body that need healing by gently placing their hands non-intrusively in a sequence of positions which cover the whole body mainly twelve positions on the body. Reiki supports the body's natural ability to heal itself by restoring physical and mental balance in one's life.
Rolfing	Rolfing is a form of myofascial bodywork that involves touching skin to feel imbalances of tissue texture and manipulate the connective tissue in order to balance and align the body parts which includes head, shoulders, thorax, pelvis, and legs. This helps to restore flexibility and revitalize the energy thus enhancing postural inefficiencies and freedom of movement from left to right sides of the body.
Shiatsu	Shiatsu is a form of Japanese healing using finger pressure massage along with combined methods of acupressure, stretching, breathing exercises and movements to restore the energy balance in the body. The main concept is to circulate the positive energy through meridian in the body to ease out negative energy and revitalize the body physically and emotionally.
Sound Therapy	Sound Therapy is use of sound in different frequencies and Vibrations as a tool for well-being. Sound therapy has the ability to influence the mood and behavior of the person. It is believed that if right frequencies are used in the right combination, it can bring biological changes that can boost immune system and even heal the body.
T'Al Chi	T'AI CHI is series of gentle movements, also referred as joy through movements. T'Ai Chi is not an exercise but an art of circulation and balancing the energy. All moves should be practiced without any effort and in continuous motion without any tension and with proper posture and flexibility. This can be practiced by people of all ages to release tension and free the body from any burden and to feel relaxed.
Trager Approach	The Trager Approach, also known as Trager psychophysical integration, is a unique method of body education that involves extremely gentle and painless hands-on manipulation of the joints and muscles by a trained practitioner. This is done on a special table on which the client is made to lie down, and the practitioner gently and rhythmically stretches various parts of the body to loosen up the tight muscles.
Yoga	Yoga is a traditional form of meditation originating from India. The word yoga means 'unity' or 'oneness', and finds its root in Sanskrit, where the word 'yuj' which means 'to join'. Essentially, yoga is an exercise in physical, mental and verbal realms, cultivating in generation of good health (arogya), contributing to longevity (chirayu), and the total intrinsic discipline culminating into positive and lasting peace and happiness. Yoga uses posture and breathing techniques to promote physical and mental relaxation; and its benefits include: flexibility and strength, good posture, stable sleeping patterns, relaxation, higher concentration and ability to cope with stress better.

Appendix C: Organic Vegetable Soup Recipe



- 3 cloves of minced garlic
- 1 small to medium diced yellow onion
- 3-4 medium to large sliced carrots
- 1 large diced zucchini
- 2 cups of chopped cauliflower
- 2 cups of chopped broccoli
- 1 small red or orange diced bell pepper
- 2 stalks of diced celery with tops
- 2 cups of chopped green cabbage
- 2 cups of chopped Swiss chard
- 1 can of Ro-Tel
- 6-8 cups of vegetarian vegetable broth
- ½ tsp. of sea salt
- ½ tsp. of fresh ground black pepper
- 2 tsp. of ground thyme
- 1 cup of frozen green beans
- 1 cup of frozen peas
- 1 cup of frozen lima beans (if preferred or can of cooked beans like pintos or black-eyed peas)
- 2 tbs. of fresh parsley

Note: This recipe purposely does not have any potatoes or corn added. You can add either if you like.

Stir-fry garlic and onions in a little broth for about 3 minutes. Then, add all remaining ingredients except peas and beans. Cover and bring to boil. Reduce heat to simmer. Stir and check for doneness frequently. Generally, vegetables should not be mushy and not crunchy, just firm. Simmer, usually, for about 10-15 minutes.

Add frozen peas, frozen green beans, frozen lima beans (or canned beans) and parsley. Cook for additional 2 minutes.

You can add other vegetables and more or less broth depending on your liking!

I enjoy a cup of Power Veggie Soup before each meal.





Endnotes, References & Resources

¹ Berman, Robby. Fact Check: Flynn, Hannah, MS. Massage Measurably Reduces Stress. 30 Sept. 2020. https://www.medicalnewstoday.com/articles/massage-measurably-reduces-stress.

- ⁵ Griffin, R. Morgan. The Benefits of Healthy Whole Foods. WebMD.com. Accessed 13 May 2022. http://www.webmd.com/diet/features/the-benefits-of-healthy-whole-foods.
- ⁶ Helmenstine, Anne. Science Notes. Food Additives List: Names and Uses. 13 Nov 2021. https://sciencenotes.org/foodadditives/.

http://www.health.harvard.edu/newsletters/Harvard Heart Letter/2011/September/abundance-of-fructose-not-good-for-the-liver-heart

- ⁹ Perelman School of Medicine at the University of Pennsylvania. Penn Medicine. 29 Jun 2020. https://www.pennmedicine.org/news/news-releases/2020/june/the-gut-shields-the-liver-from-fructose-induced-damage#:~:text=When%20large%20quantities%20of%20fructose,stored%20in%20the%20liver%20cells.
- ¹⁰ Mawer, Rudy, MSc, CISSN. Reviewed by Arnarson, Atli, BSc, PhD. 27 Sept. 2019. 6 Reasons High-Fructose Corn Syrup is Bad for You. https://www.healthline.com/nutrition/why-high-fructose-corn-syrup-is-bad.
- ¹¹ DeChristopher LR, Tucker KL. Excess free fructose, high-fructose corn syrup and adult asthma: the Framingham Offspring Cohort. Br J Nutr. 2018 May;119(10):1157-1167. doi: 10.1017/S0007114518000417. Epub 2018 Mar 28. PMID: 29587887.

² Texas Department of Licensing and Regulation. Massage Therapy Basic Curriculum Outline 500 Hour Course. Accessed 7 July 2022. https://www.tdlr.texas.gov/mas/forms/curriculumoutline500.pdf.

³ Business Wire. Global Pain Management Drugs Market (2021 to 2026) – Industry Trends, Share, Size, Growth, Opportunity and Forecasts. Accessed 23 June 2021. https://www.businesswire.com/news/home/20210623005437/en/Global-Pain-Management-Drugs-Market-2021-to-2026---Industry-Trends-Share-Size-Growth-Opportunity-and-Forecasts---ResearchAndMarkets.com

⁴ Mordor Intelligence. Pain Management Market – Growth, Trends, Covid-19 Impact, and Forecasts. Accessed 11 November 2021. https://www.mordorintelligence.com/industry-reports/pain-management-market

⁷ Powers, Lisa. *Fibromyalgia and Your Health*. Powers Health and Wellness. 22 Jul 2013.

⁸ Harvard Medical School. Abundance of fructose not good for the liver, heart. Harvard Health Publications. 1 Sept 2011. Accessed 1 Aug. 2022.

 $\frac{https://pubmed.ncbi.nlm.nih.gov/29587887/\#: \sim : text=There\%20 is \%20 growing\%20 evidence\%20 that, may\%20 contribute\%20 to \%20 enteral\%20 formation.$

- ¹² Stanhope, Kimber L., and Peter J. Havel. "Endocrine and metabolic effects of consuming beverages sweetened with fructose, glucose, sucrose, or high-fructose corn syrup." *The American journal of clinical nutrition* 88.6 (2008): 1733S-1737S.
- ¹³ National Agricultural Library. USDA. Accessed 22 Aug. 22. <a href="https://www.nal.usda.gov/legacy/fnic/how-many-calories-are-one-gram-fat-carbohydrate-or-protein#:~:text=Information%20for%20Researchers-,How%20many%20calories%20are%20in%20one%20gram%20of%20fat%2C%20carbohydrate,provides%209%20calories%20per%20gram.
- ¹⁴ Youdim, Adrienne MD, David Geffen School of Medicine at UCLA. Merck Manual: Consumer Version. Carbohydrates, Proteins, and Fats. Last Modified Dec 2021. Accessed 4 Aug, 2022. https://www.merckmanuals.com/home/disorders-of-nutrition/overview-of-nutrition/carbohydrates,-proteins,-and-fats.
- Gunnars, Chris BSc. 8 Mar 2019. 10 Science-Backed Reasons to Eat More Protein. https://www.healthline.com/nutrition/10-reasons-to-eat-more-protein.
- ¹⁶ Allarakha, Shaziya, MD.; reviewed by Uttekar, Pallavi Suyog, MD. What Deficiency Causes Carb Cravings. 14 Jul. 2021. https://www.medicinenet.com/what deficiency causes carb cravings/article.htm.
- ¹⁷ Harvard T.H Chan School of Public Health. The Nutriton Source. Accessed 4 Aug 2022. https://www.hsph.harvard.edu/nutritionsource/carbohydrates/#:~:text=What%20are%20carbohydrates%3F,sugar s%2C%20fibers%2C%20and%20starches.
- ¹⁸ Harvard TH Chan School of Public Health. The Nutrition Source. Carbohydrates and Blood Sugar. Accessed 11/30/2021. https://www.hsph.harvard.edu/nutritionsource/carbohydrates/carbohydrates-and-blood-sugar/.
- ¹⁹ DeBoer, Mark D. "Ethnicity, obesity and the metabolic syndrome: implications on assessing risk and targeting intervention." *Expert review of endocrinology & metabolism* 6.2 (2011): 279-289.
- ²⁰ National Heart, Lung and Blood Institute. What is Metabolic Syndrome. U.S. Department of Health & Human Services National Institutes of Health. 18 May 2022. http://www.nhlbi.nih.gov/health/health-topics/topics/ms/.
- ²¹ Kurl, Sudhir, et al. "Metabolic syndrome and the risk of stroke in middle-aged men." *Stroke* 37.3 (2006): 806-811.
- ²² Noubiap JJ, Nansseu JR, Lontchi-Yimagou E, Nkeck JR, Nyaga UF, Ngouo AT, Tounouga DN, Tianyi FL, Foka AJ, Ndoadoumgue AL, Bigna JJ. Global, regional, and country estimates of metabolic syndrome burden in children and adolescents in 2020: a systematic review and modelling analysis. Lancet Child Adolesc Health. 2022 Mar; 6(3):158-170. doi: 10.1016/S2352-4642(21)00374-6. Epub. 2022 Jan 17. PMID: 35051409. https://pubmed.ncbi.nlm.nih.gov/35051409/.
- ²³ National Heart, Lung and Blood Institute. What is Metabolic Syndrome. U.S. Department of Health & Human Services National Institutes of Health. Updated 18 May 2022. http://www.nhlbi.nih.gov/health/health-topics/topics/ms/.

- Food and Nutrition Board. National Academies. Accessed 7 Aug. 2022. https://www.nationalacademies.org/fnb/about.
- ²⁸ Center For Disease Control and Prevention. Micronutrient Facts. Accessed 8 Aug 2022. https://www.cdc.gov/nutrition/micronutrient-malnutrition/micronutrients/index.html#:~:text=The%20World%20Health%20Organization%20recommends,essential%20micronutrients%20is%20outlined%20below.
- ²⁹ Harvard T.H. Chan School of Public Health. B Vitamins. Accessed 18 Aug 2022. https://www.hsph.harvard.edu/nutritionsource/vitamins/vitamin-b/.
- ³⁰ What would be considered the perfect diet. Forbes. 28 Feb. 2018. https://www.forbes.com/sites/quora/2018/02/27/scientifically-what-would-be-considered-the-perfect-diet/?sh=1cd08571640e
- ³¹ Stampfer, Meir J.; Walter C. Willett. Rebuilding the Food Pyramid. Scientific American. 1 Dec 2006. Accessed 7 August 2022. https://www.scientificamerican.com/article/rebuilding-the-food-pyramid/#:~:text=After%201992%20more%20and%20more,complex%20carbohydrates%20good%20for%20you.
- Nestle, Marion. PBS Frontline. Did the low-fat era make us fat? Accessed 7 Aug. 2022. https://www.pbs.org/wgbh/pages/frontline/shows/diet/themes/lowfat.html#:~:text=During%20the%201990s%2C %20the%20low,journalist%20Gary%20Taubes%2C%20and%20Dr.
- Harvard Health Publishing. Harvard Medical School. Stop Counting Calories. 1 Oct. 2020. https://www.health.harvard.edu/staying-healthy/stop-counting-calories.
- ³⁴ Taubes, Gary. *Good calories, bad calories: fats, carbs, and the controversial science of diet and health.* Anchor, 2008.
- ³⁵ Caraher, Erin. Mather Hospital Northwell Health. Accessed 30 Nov. 2021. https://www.matherhospital.org/weight-loss-matters/all-carbohydrates-are-not-created-equal/.
- ³⁶ Cordain, Loren. *The Paleo Diet: Lose Weight and Get Healthy by Eating the Foods You Were Designed to Eat*. Wiley, 2010.

²⁴ Macronutrients: A Simple Guide to Macros. Avita Health. Accessed 5 Aug 2022. https://avitahealth.org/health-library/macronutrients-a-simple-guide-to-macros/.

²⁵ Trans Fat. American Heart Association. Reviewed 2017. https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/fats/trans-fat#:~:text=Artificial%20trans%20fats%20(or%20trans.ingredient%20list%20on%20food%20packages.

²⁶ Medline Plus. US National Library of Medicine. Facts About Saturated Fats. Reviewed 26 May 2020. https://medlineplus.gov/ency/patientinstructions/000838.htm#:~:text=Saturated%20fat%20is%20a%20type,high %20amounts%20of%20saturated%20fat.

- ³⁷ Sadeghi, McKenzie. USA Today. Fact check: Drinking water while eating does not lead to digestive issues. 19 Aug. 2020. https://www.usatoday.com/story/news/factcheck/2020/08/19/fact-check-drinking-water-while-eating-doesnt-cause-digestive-issues/3375622001/.
- ³⁸ Fisher, Robert S. MD; Malmud, Leon S., MD; Bandini, Paul MD; Rock, Elizabeth M.D. Gastric Emptying of a Physiologic Mixed Solid-Liquid Meal. Clinical Nuclear Medicine: May 1982 Volume 7 Issue 5 p 215-221 https://journals.lww.com/nuclearmed/Abstract/1982/05000/Gastric Emptying of a Physiologic Mixed.5.aspx.
- ³⁹ Nash, Madeleine. Addicted: Why do people get hooked? Time. 5 May 1997. Accessed 8 Aug 2022. http://content.time.com/time/magazine/article/0,9171,986282,00.html.
- ⁴⁰ Murray, Krystina. Sugar Addiction. Addiction Center. Edited 8 Aug. 2022. https://www.addictioncenter.com/drugs/sugar-addiction/.
- ⁴¹ Nicolson, Garth L., and Richard Ngwenya. "Dietary considerations for patients with chronic illnesses and multiple chronic infections." *TOWNSEND LETTER FOR DOCTORS AND PATIENTS* (2001): 62-65.
- ⁴² Paoli A, Tinsley G, Bianco A, Moro T. The Influence of Meal Frequency and Timing on Health in Humans: The Role of Fasting. Nutrients. 2019 Mar 28. 11(4):719. doi: 10.3390/nu11040719. PMID: 30925707; PMCID: PMC6520689. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6520689/#B59-nutrients-11-00719
- ⁴³ Johns Hopkins Medicine. Intermittent Fasting: What is it, and how does it work? Accessed 23 Aug. 2022. https://www.hopkinsmedicine.org/health/wellness-and-prevention/intermittent-fasting-what-is-it-and-how-does-it-work
- ⁴⁴ Cedars-Sinai Staff. Cedars Sinai. Autophagy: Recycling is Good for Your Body Too. 16 Apr. 2019. https://www.cedars-sinai.org/blog/autophagy.html.
- ⁴⁵ Gunnars, Kris, BSc; Reviewed by Richter, Amy, RD. Intermittent Fasting 101-The Ultimate Beginner's Guide. 16 Jun 2022. https://www.healthline.com/nutrition/intermittent-fasting-guide.
- ⁴⁶ **Ibid.** <u>https://www.hopkinsmedicine.org/health/wellness-and-prevention/intermittent-fasting-what-is-it-and-how-does-it-work</u>
- ⁴⁷ Paoli A, Tinsley G, Bianco A, Moro T. The Influence of Meal Frequency and Timing on Health in Humans: The Role of Fasting. Nutrients. 2019 Mar 28. 11(4):719. doi: 10.3390/nu11040719. PMID: 30925707; PMCID: PMC6520689. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6520689/.
- ⁴⁸ Mayo Clinic staff. Water: How Much Should You Drink Every Day? MayoClinic.com. 14 Oct 2020. http://www.mayoclinic.com/health/water/NU00283
- ⁴⁹ Ibid.
- Mayo Clinic staff. Nutrition and Healthy Eating. MayoClinic.com. Accessed 17 Aug 2022. http://www.mayoclinic.com/health/medical/IM00594.

- Mayo Clinic staff. MayoClinic.com. Dehydration Symptoms. Accessed 17 Aug. 2022. http://www.mayoclinic.com/health/dehydration/DS00561/DSECTION=symptoms.
- Mayo Clinic staff. MayoClinic.com. Hypoglycemia Symptoms. Accessed 1 Aug. 2022. http://www.mayoclinic.com/health/hypoglycemia/DS00198/DSECTION=symptoms.
- Higuera, Valencia. Medically Reviewed by Kennedy, Kelly, RN. 12 July 2019. Detailed Guide to Matcha and the Health Benefits of the Buzzy Green Tea. https://www.everydayhealth.com/diet-nutrition/diet/matcha-benefits-risks-weight-loss-effect-top-sellers/.
- Mei Leaf. The Health Benefits of Matcha. 20 Jan. 2022. https://meileaf.com/article/the-health-benefits-of-matcha/.
- ⁵⁷ Ratetea.com. Caffeine Content of Tea. 26 Jan. 2018. http://ratetea.com/topic/caffeine-content-of-tea/21/.
- ⁵⁸ Loria, Kevin. Consumer Reports. From yogurt containers to bath mats, stuff you use every day may come with hidden risks. Here are tips to minimize exposure. 2 Oct. 2019. <a href="https://www.consumerreports.org/toxic-chemicals-substances/most-plastic-products-contain-potentially-toxic-chemicals/#:~:text=Don't%20heat%20up%20plastic,of%20concerning%20chemicals%2C%20says%20Vandenberg.
- ⁵⁹ University of Missouri-Columbia. "Think all BPA-free products are safe? Not so fast, scientists warn." ScienceDaily, ScienceDaily, 18 February 2020.

 $\frac{\text{https://www.sciencedaily.com/releases/2020/02/200218182202.htm\#:} \sim \text{:text=Using\%20\%22BPA\%2Dfree\%22\%20}}{\text{plastic,the\%20National\%20Academy\%20of\%20Sciences.}}$

- ⁶⁰ Mayo Clinic Staff. Whole Grains: Hearty Options for a Healthy Diet. MayoClinic.com. Accessed 1 Aug. 2022. http://www.mayoclinic.com/health/whole-grains/NU00204.
- ⁶¹ Oghbaei, Morteza. Prakash, Jamuna. Yildiz, Fatih, Reviewing Editor. (2016) Effect of primary processing of cereals and legumes on its nutritional quality: A comprehensive review, Cogent Food & Agriculture, 2:1, DOI: https://www.tandfonline.com/doi/full/10.1080/23311932.2015.1136015#:~:text=When%20wheat%20is%20milled%20into,(2002).
- ⁶² Thiel, RJ. Natural vitamins may be superior to synthetic ones. Med Hypotheses. 2000 Dec;55(6):461-9. doi: 10.1054/mehy.2000.1090. PMID: 11090291. https://pubmed.ncbi.nlm.nih.gov/11090291/
- ⁶³ WebMD Health News. Fortified Foods Can Be Too Much of a Good Thing. WebMD.com. Web. 22 May 2013. http://www.webmd.com/food-recipes/news/20000710/fortified-foods-too-much.

⁵¹ Global Health Solutions Inc. Frequently Asked Questions: How Do You Know If You're Dehydrated? The Water Cure. Accessed 17 Aug 2022. http://www.watercure.com/fag.html.

⁵² Zeratsky, Katherine. Nutrition and Healthy Eating Question. Caffeine: Is It Dehydrating or Not? MayoClinic.com. Accessed 17 Aug 2022. http://www.mayoclinic.com/health/caffeinated-drinks/AN01661.

- ⁶⁴ Dunne, Annette. "The effect of food on emotional wellbeing and mental health." *Nursing & Residential Care* 12.4 (2010): 165-168.
- ⁶⁵ Gallagher, R. Michael. "Headache pain." JAOA: Journal of the American Osteopathic Association 105.suppl 4 (2005): S7-S11.
- ⁶⁶ Eigenmann, P. A. "Food allergy: a long way to safe processed foods." Allergy 56.12 (2001): 1112-1113.
- ⁶⁷ Johanson, Paula. Fake Foods: Fried, Fast, and Processed. Rosen Central, 2011.
- ⁶⁸ Monteiro, Carlos Augusto, et al. "Increasing consumption of ultra-processed foods and likely impact on human health: evidence from Brazil." *Public health nutrition* 14.1 (2011): 5. https://pubmed.ncbi.nlm.nih.gov/21211100/.
- ⁶⁹ Eigenmann, P. A. "Food allergy: a long way to safe processed foods." Allergy 56.12 (2001): 1112-1113.
- ⁷⁰ Dunne, Annette. "The effect of food on emotional wellbeing and mental health." *Nursing & Residential Care* 12.4 165-168. 29 Sep 2013. https://www.magonlinelibrary.com/doi/abs/10.12968/nrec.2010.12.4.47096.
- ⁷¹ Johanson, Paula. Fake Foods: Fried, Fast, and Processed. Rosen Central, 2011.
- ⁷² Vojdani, Aristo. "Detection of IgE, IgG, IgA and IgM antibodies against raw and processed food antigens." Nutr Metab (Lond) 6. 12 May 2009. https://pubmed.ncbi.nlm.nih.gov/19435515/.
- ⁷³ Names of Ingredients That Contain Processed Free Glutamic Acid (MSG). Truth in Labeling. Updated May 2021. http://www.truthinlabeling.org/hiddensources.html
- 74 Ibid
- ⁷⁵ Mayo Clinic staff. Artificial Sweeteners and Other Sugar Substitutes. MayoClinic.com. Accessed 22 Aug 2022. http://www.mayoclinic.com/health/artificial-sweeteners/MY00073.
- ⁷⁶ An Overview of the Imbalances. Royalrife.com. Accessed 22 Aug 2022. http://www.royalrife.com/hbal.html.
- ⁷⁷ Whitehouse, Christina R., Joseph Boullata, and Linda A. McCauley. "The potential toxicity of artificial sweeteners." *AAOHN JOURNAL* 56.6 (2008): 251.
- ⁷⁸ Kanarek, Robin B. "Artificial food dyes and attention deficit hyperactivity disorder." *Nutrition reviews* 69.7 (2011): 385-391.
- ⁷⁹ Peatfield, R. C. "Relationships Between Food, Wine, and Beer-Precipitated Migrainous Headaches." *Headache: The Journal of Head and Face Pain* 35.6 (1995): 355-357.
- ⁸⁰ Hering-Hanit, R., and N. Gadoth. "Caffeine-induced headache in children and adolescents." *Cephalalgia* 23.5 (2003): 332-335.
- ⁸¹ Medina, Jose L., and Seymour Diamond. "The role of diet in migraine." *Headache: The Journal of Head and Face Pain* 18.1 (1978): 31-34.

- ⁸² Peatfield, R. C. "Relationships Between Food, Wine, and Beer-Precipitated Migrainous Headaches." *Headache: The Journal of Head and Face Pain* 35.6 (1995): 355-357.
- ⁸³ Nordt, Sean Patrick, and Anthony Manoguerra. "5-Year analysis of mushroom exposures in California." *Western Journal of Medicine* 173.5 (2000): 314.
- ⁸⁴ Kathy. What Are Toxins in My Body? Detox 101. Facts and Myths. Lunchboxbunch.com. Updated 20 Mar 2020. http://kblog.lunchboxbunch.com/2009/09/what-are-toxins-in-my-body-detox-101.html.
- ⁸⁵ Endocrine Disruptors. National Institute of Environmental Health Sciences. Reviewed 18 August 2022. http://www.niehs.nih.gov/health/topics/agents/endocrine/.
- ⁸⁶ Cooper, James E., Eric L. Kendig, and Scott M. Belcher. "Assessment of bisphenol A released from reusable plastic, aluminium and stainless steel water bottles." *Chemosphere* 85.6 (2011): 943-947.
- ⁸⁷ Mercury. MedlinePlus. Reviewed 5 Jul 2021. http://www.nlm.nih.gov/medlineplus/ency/article/002476.htm.
- ⁸⁸ Parker, Kay, Michelle Salas, and Veronica C. Nwosu. "High fructose corn syrup: production, uses and public health concerns." *Biotechnol Mol Biol Rev*5.5 (2010): 71-8.
- ⁸⁹ Dufault, Renee, et al. "Mercury from chlor-alkali plants: measured concentrations in food product sugar." *Environmental Health* 8.1 (2009): 2.
- ⁹⁰ Chang, Louis W., and Henrik A. Hartmann. "Ultrastructural studies of the nervous system after mercury intoxication." *Acta neuropathologica* 20.4 (1972): 316-334.
- ⁹¹ Oken, Emily, et al. "Maternal fish intake during pregnancy, blood mercury levels, and child cognition at age 3 years in a US cohort." *American Journal of Epidemiology* 167.10 (2008): 1171-1181.
- ⁹² Needleman, Herbert L., et al. "The long-term effects of exposure to low doses of lead in childhood: an 11-year follow-up report." *New England Journal of Medicine* 322.2 (1990): 83-88.
- 93 Mutter, Joachim, et al. "Mercury and autism: accelerating evidence." *Neuroendocrinol Lett* 26.5 (2005): 439-446.
- ⁹⁴ Wong, V. "Attention-deficit hyperactivity disorder and blood mercury level: a case-control study in Chinese children." *Neuropediatrics* 37 (2006): 234-240.
- ⁹⁵ Kern JK, Geier DA, Sykes LK, Haley BE, Geier MR. The relationship between mercury and autism: A comprehensive review and discussion. J Trace Elem Med Biol. 2016 Sep;37:8-24. doi: 10.1016/j.jtemb.2016.06.002. Epub 2 Jun 2016. PMID: 27473827. https://pubmed.ncbi.nlm.nih.gov/27473827/.
- ⁹⁶ Smith, Jeffrey M. *Genetic roulette: The documented health risks of genetically engineered foods.* Fairfield, IA: Yes! Books, 2007.
- ⁹⁷ Ibid.
- 98 Ibid.

- ⁹⁹ IAFNS. Food and chemical safety. Accessed 22 Aug 2022 https://iafns.org/our-work/food-safety/food-and-chemical-safety/.
- ¹⁰⁰ Karwowska M, Kononiuk A. Nitrates/Nitrites in Food-Risk for Nitrosative Stress and Benefits. Antioxidants (Basel). 2020 Mar 16. 9(3):241. doi: 10.3390/antiox9030241. PMID: 32188080; PMCID: PMC7139399. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7139399/.
- ¹⁰¹ Centers for Disease Control and Prevention. Nitrates/Nitrites Poisoning Patient Education Care Instruction Sheet. https://www.atsdr.cdc.gov/csem/nitrate 2013/docs/nitrate patient-education.pdf.
- ¹⁰² Varraso R, *Jiang* R, Barr RG et al, Prospective study of cured meats consumption and risk of chronic obstructive pulmonary disease in men. *Am J Epidemiol*. 2007;166(12):1438-45.
- ¹⁰³ "State of the World 2006," Worldwatch Institute, p. 26.
- ¹⁰⁴ Animal Feeding Operations. NRCS. Accessed 22 Aug 22. https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/livestock/afo/#:~:text=The%20U.S.%20 Environmental%20Protection%20Agency,on%20a%20small%20land%20area.
- ¹⁰⁵ Industrial Livestock Production. GRACE Communications Foundation. Updated 10 Dec 2020. http://www.sustainabletable.org/859/industrial-livestock-production.
- ¹⁰⁶ Sarmah, Ajit K., Michael T. Meyer, and Alistair Boxall. "A global perspective on the use, sales, exposure pathways, occurrence, fate and effects of veterinary antibiotics (VAs) in the environment." *Chemosphere* 65.5 (2006): 725-759.
- Footprint.org. Industrial Livestock Production. Updated 10 Dec 2020. http://www.sustainabletable.org/859/industrial-livestock-production.
- About.com Animal Rights. Factory Farming FAQ. Updated 18 Mar. 2021. http://animalrights.about.com/od/animalsusedforfood/tp/FactoryFarmingFAQ.htm.
- ¹⁰⁹ Hribar, Carrie. Understanding Concentrated Animal Feeding Operations and Their Impact on Communities. Centers for Disease Control and Prevention. Accessed 23 Aug 22. http://www.cdc.gov/nceh/ehs/docs/understanding cafos nalboh.pdf.
- ¹¹⁰Robin, Marie-Monique. *The world according to Monsanto: pollution, corruption, and the control of the world's food supply*. The New Press, 2010.
- 111 Munch, Regina. 'Seed Money' Explores Monsanto's Troubling Past and its Impact on the Future of Food. 20 Dec. 2021. https://civileats.com/2021/12/20/seed-money-explores-monsantos-troubling-past-and-its-impact-on-the-future-of-food/.
- ¹¹² Center for Food Safety. https://www.centerforfoodsafety.org/issues/1044/rbgh/about-rbgh.
- ¹¹³ World Health Organization. Stop using antiobiotics in healthy animals to prevent the spread of antibiotic resistance. 7 Nov. 2017. https://www.who.int/news/item/07-11-2017-stop-using-antibiotics-in-healthy-animals-to-prevent-the-spread-of-antibiotic-resistance.

- ¹¹⁴ Klein, Ezra. Wonkbook: Why You Should Care That 70% of Antibiotics Go Into Animal Feed. The Washington Post. Web. 23 May 2013. http://www.washingtonpost.com/blogs/wonkblog/post/wonkbook-why-you-should-care-about-antibiotics-in-animal-feed/2012/04/12/gIQAOEfZCT blog.html.
- ¹¹⁵ Ibid. Antimicrobial Resistance. World Health Organization.
- ¹¹⁶ Shiva, Vandana. Regulation in the USA: Hormones in Beef Cattle. You-Need-Food.com. Accessed. 23 May 2013. http://you-need-food.com/2012/09/04/hormones-in-beef-cattle/.
- ¹¹⁷ Breast Cancer Prevention Partners. Bovine Growth Hormone (rBGH) or Recombinant Bovine Somatotropin (rBST). Accessed 25 Aug. 22. https://www.bcpp.org/resource/rbgh-rbst/#:~:text=Milk%20from%20rBST%2Dtreated%20cows,the%20European%20Union%20in%201990.
- ¹¹⁸ Wiebe, John P. "Progesterone metabolites in breast cancer." *Endocrine-related cancer* 13.3 (2006): 717-738.
- ¹¹⁹ Finding Non-GMO Soybean Seed Becoming More Difficult. The Organic & Non-GMO Report. Accessed 25 Aug 22. http://www.non-gmoreport.com/articles/jul08/non-gmo_soybean_seed.php.
- USDA Economic Research Service. Livestock and Meat Domestic Data. 29 Aug 2022. https://www.ers.usda.gov/data-products/livestock-and-meat-domestic-data/.
- ¹²¹ Natural Society. How Biotech Corporations and GMO Crops are Threatening the Environment and Human Kind Alike. 4 Nov 2011. https://naturalsociety.com/how-biotech-corporations-and-gmo-crops-are-threatening-the-environment-and-humankind-alike/.
- Gunnars, Kris, BSc. Medially Reviewed by Arnarson, Atli, BSc, PhD. Grass-Fed vs. Grain-Fed Beef What's the Difference. 4 Dec. 2019. https://www.healthline.com/nutrition/grass-fed-vs-grain-fed-beef#differences.
- Hjalmarsdottir, Freydis, MS. 17 Science-Based Benefits of Omega-3 Fatty Acids. 15 Oct. 2018. https://www.healthline.com/nutrition/17-health-benefits-of-omega-3#TOC TITLE HDR 5.
- ¹²⁴ Decava, Judith A. The Worth of Organic Foods. International Foundation for Nutrition and Health. Accessed 25 Aug. 22. https://ifnh.org/newsletter/the-worth-of-organic-foods/.
- 125 Ibid.
- ¹²⁶ Wolff, Mary S., et al. "Organochlorine exposures and breast cancer risk in New York City women." *Environmental Research* 84.2 (2000): 151-161.
- ¹²⁷ Whorton, Donald, et al. "Infertility in male pesticide workers." *The Lancet* 310.8051 (1977): 1259-1261.
- ¹²⁸ Restrepo, Mauricio, et al. "Birth defects among children born to a population occupationally exposed to pesticides in Colombia." *Scandinavian journal of work, environment & health* (1990): 239-246.
- ¹²⁹ Ecobichon, Donald J., and Robert M. Joy. *Pesticides and neurological diseases*. Informa Healthcare, 1993.
- Whitty, Julia. EPA Pesticide Tests Seriously Shortsighted. Mother Jones. Accessed 25 Aug 2022. http://www.motherjones.com/blue-marble/2009/08/epa-pesticide-tests-seriously-shortsighted.

- ¹³¹ Llyod, Robin. "Chemical Body Burden" Researchers and Advocates Raise Questions About Biomonitoring Studies and Hazards Regulations. Scientific American. 20 Feb 2011. http://blogs.scientificamerican.com/observations/2011/02/20/chemical-body-burden-researchers-and-advocates-raise-questions-about-biomonitoring-studies-and-hazards-regulations/
- ¹³² Rice, Maureen. Revealed... The 515 Chemicals Women Put On Their Bodies Every Day. The Daily Mail. 20 Nov. 2009. Accessed 25 Aug. 2022. http://www.dailymail.co.uk/femail/beauty/article-1229275/Revealed--515-chemicals-women-bodies-day.html.
- Sodium Dodecyl Sulfate. Wikipedia. Accessed 25 Aug. 2022. http://en.wikipedia.org/wiki/Sodium_dodecyl_sulfate.
- ¹³⁴ Rodrigues, Robim M., et al. "Autofluorescence microscopy: a non-destructive tool to monitor mitochondrial toxicity." *Toxicology letters* 206.3 (2011): 281-288. https://journals.sagepub.com/doi/pdf/10.3109/10915818309142005#:~:text=In%20absorption%2C%20metabolis m%2C%20and%20excretion,1.10%20g%2Fkg%20in%20rats.
- ¹³⁵ Russ, Karin. "A Review of the Evidence: Health Effects of Personal Care Products." *Nursing for Women's Health* 13.5 (2009): 392-401.
- ¹³⁶ Green, Keith, et al. "Detergent penetration into young and adult rabbit eyes: comparative pharmacokinetics." *Cutaneous and Ocular Toxicology* 6.2 (1987): 89-107.
- ¹³⁷ Harrold, S. P. "Denaturation of epidermal keratin by surface active agents." *The Journal of investigative dermatology* 32.5 (1959): 581.
- ¹³⁸ Kauffer, Zara; May, Paul. University of Bristol. Sodium lauryl sulfate. Accessed 26 Aug. 2022. http://www.chm.bris.ac.uk/motm/SLS/SLSh.htm
- ¹³⁹ Propylene glycol. Wikipedia. Accessed 26 Aug 2022. https://en.wikipedia.org/wiki/Propylene_glycol
- ¹⁴⁰ FDA. 1,4-Dioxane in Cosmetics: A Manufacturing Byproduct. Reviewed 3 Mar 2022. https://www.fda.gov/cosmetics/potential-contaminants-cosmetics/14-dioxane-cosmetics-manufacturing-byproduct.
- ¹⁴¹ Ethylene Oxide. Mind the Science. Accessed 26 Aug 2022. https://www.mindthescience.org/chemicals-in-products/ethylene-oxide.
- Physicians for Social Responsibility. Accessed 26 Aug 2022. https://psr.org/wp-content/uploads/2018/05/triclosan-handout.pdf
- ¹⁴³ FDA. FDA Issues final rule on safety and effectiveness of consumer hand sanitizers. 11 Apr. 2019. https://www.fda.gov/news-events/press-announcements/fda-issues-final-rule-safety-and-effectiveness-consumer-hand-sanitizers.

- ¹⁴⁴ Perrone, Matthew. Safety Of Triclosan, Antibacterial Soap Ingredient, Being Reviewed By FDA. Huffington Post. Accessed 23 May 2013. http://www.huffingtonpost.com/2013/05/02/triclosan-safety-antibacterial-soap-safe-fda n 3202847.html
- ¹⁴⁵ FDA. 5 Things to Know About Triclosan. Accessed 26 Aug 2022. <a href="https://www.fda.gov/consumers/
- ¹⁴⁶ University of North Carolina at Chapel Hill. Science Daily. How triclosan, found in many consumer products, is triggered to harm the gut. 10 Jan. 2022. https://www.sciencedaily.com/releases/2022/01/220110103250.htm.
- Physicians for Social Responsibility. Accessed 26 Aug 2022. https://psr.org/wp-content/uploads/2018/05/triclosan-handout.pdf
- ¹⁴⁸ Cooney, Catherine M. "Personal care products: triclosan comes under scrutiny." *Environmental Health Perspectives* 118.6 (2010): A242.
- ¹⁴⁹ Saint Louis, Catherine. The New York Times. Why a Chemical Banned From Soap Is Still in Your Toothpaste. 7 Sep. 2016. https://www.nytimes.com/2016/09/07/well/live/why-your-toothpaste-has-triclosan.html.
- ¹⁵⁰ FDA. Q&A for Consumers: Health Care Antiseptics. 19 Dec. 2017. https://www.fda.gov/drugs/information-drug-class/qa-consumers-health-care-antiseptics.
- ¹⁵¹ Chemical Body Burden. Chemicalbodyburden.org. 23 May 2013. http://www.chemicalbodyburden.org/
- ¹⁵² Bains, J.S., Sharkey, K.A. Stress and immunity—the circuit makes the difference. Nat Immunol 23, 1137–1139 21 Jul 2022. https://doi.org/10.1038/s41590-022-01276-1. https://www.nature.com/articles/s41590-022-01276-1.
- ¹⁵³ Pugliesi, Karen. "The consequences of emotional labor: Effects on work stress, job satisfaction, and wellbeing." *Motivation and Emotion* 23.2 (1999): 125-154.
- ¹⁵⁴ Yaribeygi H, Panahi Y, Sahraei H, Johnston TP, Sahebkar A. The impact of stress on body function: A review. EXCLI J. 21 Jul. 2017. 21;16:1057-1072. doi: 10.17179/excli2017-480. PMID: 28900385; PMCID: PMC5579396. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5579396/.
- ¹⁵⁵ Kiecolt-Glaser, Janice K., et al. "Emotions, morbidity, and mortality: new perspectives from psychoneuroimmunology." *Annual review of psychology* 53.1 (2002): 83-107.
- ¹⁵⁶ National Institute of Drug Abuse. Overdose Death Rates. 20 Jan. 2022. https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates
- ¹⁵⁷ Join Together Staff. Number of Prescription Painkiller Deaths More Than Tripled in Last 10 Years. Drugfree.org.
- ¹⁵⁸ Prescription Painkiller Overdoses in the US. Centers for Disease Control and Prevention. Accessed 23 May 2013. http://www.cdc.gov/vitalsigns/painkilleroverdoses/.
- ¹⁵⁹ Sheridan, Kerry. U.S. prescription drug overdose 'epidemic' kills more than cocaine and heroin. The National Post. Accessed 23 May 2013. http://news.nationalpost.com/2011/11/01/u-s-prescription-drug-overdose-epidemic-kills-more-than-cocaine-and-heroin/

- Prescription Pain Medicines—An Addictive Path? NIH Medline Plus. Accessed 23 May 2013. http://www.nlm.nih.gov/medlineplus/magazine/issues/fall07/articles/fall07pg22a.html.
- ¹⁶¹ National Institute on Drug Abuse. Accessed 26 Aug 2022. https://nida.nih.gov/publications/research-reports/misuse-prescription-drugs/what-scope-prescription-drug-misuse.
- 162 Ibid.
- ¹⁶³ Szalavitz, Maia. Are Doctors Really to Blame for the Overdose Epidemic? Time. Accessed 2 Nov. 2011. Accessed 23 May 2013. http://healthland.time.com/2011/11/02/are-doctors-really-to-blame-for-the-overdose-epidemic/.
- ¹⁶⁴ Eureka Alert. Ginny Geib. Study Shows Pharmacies Software systems miss potentially dangerous interactions. Accessed 04 May 2013. http://www.eurekalert.org/pub_releases/2011-05/uoac-ssp051711.php.
- ¹⁶⁵ US News. Death By Prescription. Accessed 26 Aug. 2022. https://health.usnews.com/health-news/patient-advice/articles/2016-09-27/the-danger-in-taking-prescribed-medications.
- ¹⁶⁶ Oz, Mehmet. Prescription Pill Addiction. Oprah. Accessed 23 May 2013. http://www.oprah.com/health/Dr-Ozon-Prescription-Pill-Addiction/2.
- Antidepressant Discontinuation Syndrome. Wikipedia. Accessed 26 Aug 2022. http://en.wikipedia.org/wiki/SSRI discontinuation syndrome.
- ¹⁶⁸ Bates, Daniel. Ten Minutes of Exercise is "As Good As Hours in the Gym". The Daily Mail. Accessed 23 May 2013. http://www.dailymail.co.uk/health/article-2259324/Ten-minutes-exercise-good-hours-gym.html
- ¹⁶⁹ Exercise for Your Bone Health. NIH Osteoporosis and Related Bone Disease National Resource Center. Reviewed 2018. Accessed 26 Aug 2022. http://www.niams.nih.gov/Health-Info/Bone/Bone Health/Exercise/.
- ¹⁷⁰ Olson, Eric J.MD. Mayo Clinic. Accessed 29 Aug. 2022. https://www.mayoclinic.org/healthy-lifestyle/adult-health/expert-answers/how-many-hours-of-sleep-are-enough/faq-20057898.
- ¹⁷¹ Ibid.
- Suni, Eric. Medically Reviewed by Dimitriu, Alex. Sleep Foundation. 18 March 2022. https://www.sleepfoundation.org/sleep-deprivation.
- ¹⁷³ Mayo Clinic staff. Sleep Tips: 7 Steps to Better Sleep. MayoClinic.com. 7 May 2022. http://www.mayoclinic.com/health/sleep/HQ01387.
- Regestein, Quentin R. "Treating insomnia: a practical guide for managing chronic sleeplessness, circa 1975." *Comprehensive Psychiatry* 17.4 (1976): 517-526.
- ¹⁷⁵"Addiction: Part I. Benzodiazepines—side effects, abuse risk and alternatives." *Am Fam Physician* 61.7 (2000): 2121-2128.
- ¹⁷⁶ Twain, Mark. "Giving up smoking is the easiest thing in the world. I know because I've done it thousands of times." Brainy Quote. Accessed 29 Aug 2022. http://www.brainyquote.com/quotes/quotes/m/marktwain128157.html.

- 177 Orenstein, Beth. How Do I Know I'm Really Addicted to Nicotine. Reviewed 7 Nov. 2017. http://www.everydayhealth.com/smoking-cessation/three-reasons-nicotine-is-addictive-and-tips-to-help-quit-smoking.aspx
- ¹⁷⁸ Watchtower Online Library. May 2010. Accessed 29 Aug 2020. http://wol.jw.org/en/wol/pc/r1/lp-e/102011085/1/0
- ¹⁷⁹ Mid Coast Center for Community Health & Wellness. The Immediate & Long-Term Benefits of Quitting Smoking. Accessed 29 Aug 2022. https://www.midcoasthealth.com/wellness/newsletter/the-immediate-long-term-benefits-of-quitting-smoking-
- $\underline{pg195.aspx\#:} \text{``:text=Coughing\%2C\%20sinus\%20congestion\%2C\%20fatigue\%2C, the\%20lungs\%2C\%20and\%20reduce\%20infection.}$
- ¹⁸⁰ Guide to Quitting Smoking. American Cancer Society. Accessed 23 May 2013. http://www.cancer.org/healthy/stayawayfromtobacco/guidetoquittingsmoking/guide-to-quitting-smoking-whyquit
- Secondhand Smoke. American Cancer Society. Revised 28 Oct. 2020. http://www.cancer.org/cancer/cancercauses/tobaccocancer/secondhand-smoke.
- ¹⁸² Christensen, J. K., P. Rønsted, and U. H. Vaag. "Side effects after disulfiram." *Acta Psychiatrica Scandinavica* 69.4 (1984): 265-273.
- ¹⁸³ Doran, Christopher M., et al. "Smoking status of Australian general practice patients and their attempts to quit." *Addictive behaviors* 31.5 (2006): 758-766.
- ¹⁸⁴ Maitra, Anirban, and Abul K. Abbas. "The endocrine system." *Robbins and Cotran Pathologic basis of disease* 8 (2005): 1107-1126.
- Hoffman, Matthew, MD. Medically Reviewed by Todd, Nivin MD. Estrogen and Women's Emotions. WebMD.com. 23 July 2019. http://women.webmd.com/guide/estrogen-and-womens-emotions.
- ¹⁸⁶ Ghrelin. Wikipedia. Accessed 29 Aug 2022. http://en.wikipedia.org/wiki/Ghrelin.
- ¹⁸⁷ Hansen, Troels Krarup, et al. "Weight loss increases circulating levels of ghrelin in human obesity." *Clinical endocrinology* 56.2 (2002): 203-206.
- ¹⁸⁸ Cummings, David E., et al. "Plasma ghrelin levels and hunger scores in humans initiating meals voluntarily without time-and food-related cues." *American Journal of Physiology-Endocrinology and Metabolism* 287.2 (2004): E297-E304.
- ¹⁸⁹ Thyroid Hormone. Wikipedia. Accessed 30 Aug 2022. http://en.wikipedia.org/wiki/Thyroid hormone
- Depression, the Thyroid, and Hormones. WebMD.com. Reviewed 14 Mar 2021. http://www.webmd.com/depression/guide/depression-the-thyroid-and-hormones.

- ¹⁹¹ Shomon, Mary. Reviewed by Lee, Do-Eun, MD. Very Well Health. How Thyroid Function Affects Menstruation. Updated 21 Jan 2022. https://www.verywellhealth.com/menstrual-problems-and-thyroid-disease-3231765.
- ¹⁹² Shomon, Mary. Reviewed by Weiss, Danielle, MD. Very Well Health. An Overview of Thyroid Disease in Men. Updated 20 Jan 2022. http://thyroid.about.com/od/symptomsrisks/a/mensexsymptoms.htm
- ¹⁹³ Insulin. Wikipedia. Accessed 30 Aug 2022. https://en.wikipedia.org/wiki/Insulin
- 194 Ibid.
- 195 Ibid.
- ¹⁹⁶ Cortisol in Blood. WebMD.com. Accessed 23 May 2013. http://www.webmd.com/a-to-z-guides/cortisol-14668.
- ¹⁹⁷ Leptin. Wikipedia. Accessed 30 August 2022. http://en.wikipedia.org/wiki/Leptin.
- ¹⁹⁸ Testosterone. Wikipedia. Accessed 30 Aug 2022. http://en.wikipedia.org/wiki/Testosterone.
- ¹⁹⁹ Ibid.
- ²⁰⁰ Ibid.
- ²⁰¹ Dunkin, Mary Anne. Reviewed by Khatri, Minesh, MD. Human Growth Hormone (HGH). WebMD.com. 16 May 2021. http://www.webmd.com/fitness-exercise/human-growth-hormone-hgh.
- ²⁰² Ibid.
- ²⁰³ Anderson JG, Abrahamson K. Your Health Care May Kill You: Medical Errors. Stud Health Technol Inform. 2017. 234:13-17. PMID: 28186008.
- $\frac{\text{https://pubmed.ncbi.nlm.nih.gov/28186008/\#:}^{\text{ctext}=Recent\%20studies\%20of\%20medical\%20errors, third\%20lead ing\%20cause\%20of\%20death.}$
- ²⁰⁴ Philpott, Jane and Bradford, Montse. Seaweed: Nature's Secret for a Long and Healthy Life? Cookingforhealth.biz. Accessed 30 Aug 2022. http://cookingforhealth.biz/resources/Sea%20Vegetables.pdf.
- ²⁰⁵ Baldwin, Keith R. "Crop Rotations on Organic Farms." *Center for Environmental Farming Systems. North Carolina A&T State University* (2006).
- ²⁰⁶ Burkett, Eric. Are You Buying Old Food at the Grocery Store? Fooducate.com. Updated 4 Aug. 2016. http://blog.fooducate.com/2010/12/15/are-you-buying-old-food-at-the-grocery-store/.
- ²⁰⁷ Food Irridation. Wikipedia. Accessed 30 Aug 2022. http://en.wikipedia.org/wiki/Food irradiation.
- Appleton, Nancy. The Dangers of Over-Cooking Your Food. Mercola.com. Accessed 23 May 2013. http://articles.mercola.com/sites/articles/archive/2002/05/29/over-cooking.aspx



²⁰⁹ Downey, Michael. Reviewed by Gonzalez, Gary. MD. Reviewed May 2022. Who Needs Digestive Enzymes? https://www.lifeextension.com/magazine/2018/4/who-needs-digestive-enzymes#:~:text=As%20we%20age%2C%20our%20body,fats%2C%20cellulose%2C%20and%20milk.

²¹⁰ Natural Whole Food Vitamins: Ascorbic Acid Is Not Vitamin C. Thedoctorwithin.com. Accessed 30 Aug 2022. http://www.thedoctorwithin.com/vitaminc/ascorbic-acid-is-not-vitamin-c/.