

WELL MATRIX

Health Resiliency Program



Patient Handbook

WELL MATRIX

Health Resiliency Program

Welcome to Wellbeing!

Welcome to the WellMatrix Patient Handbook. This guide is designed to help you better understand the factors, both internal and external, that may affect your wellbeing. Our health care system is set up to treat disease, while prevention or resistance to disease gets little attention. The goal of this handbook is to help you understand the key markers of wellness, build your health reserves and achieve lasting vitality through diet and lifestyle choices.

The definition of wellness is rather simple. The World Health Organization defines it as “a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity” while the National Wellness Institute defines wellness as “a conscious, self-directed and evolving process of achieving full potential.” Merriam-Webster’s dictionary defines wellness by looking at the goals of the patient: “the quality or state of being in good health especially as an actively sought goal.” It comes down to the individual decision to make consistent lifestyle choices that support good health in mind, body and spirit.

Yet, we see commercials selling wellness with different supplements, gadgets, creams and more. The WellMatrix Program is designed to take you from a state of disease into true wellbeing and vitality, or your ability to live flourish and grow in physical, mental and spiritual wellness. The WellMatrix program improves your vitality by focusing on four key markers of wellbeing. These markers are Nutritional Wellbeing, Physical Wellbeing, Emotional Wellbeing and Environmental Wellbeing, and each are discussed in-depth in this handbook. As part of the WellMatrix program, you may be asked by your clinician to read a specific chapter or two, but each page of the handbook contains useful information for you, your family and friends to help restore your health reserves, increase your resistance to disease, and improve your overall wellbeing.



Introduction

page 1



What is Wellness?

page 2



Chapter 1: Nutritional Wellbeing

page 4



Chapter 2: Physical Wellbeing

page 12



Chapter 3: Emotional Wellbeing

page 16



Chapter 4: Environmental Wellbeing

page 22



Appendix 1: Nutrients and Symptoms of Depletion

page 32



Appendix 2: What is the Mediterranean Diet?

page 34



Appendix 3: WellMatrix Food Diary

page 36



What is Wellness?

Most patients want to feel healthy and be well, but often, the definition of being healthy is the absence of symptoms combined with a myriad of possible solutions. Perhaps exercising is the path to being healthy. Or maybe it is eating more vegetables and fewer processed foods. Choosing salads instead of hamburgers? Managing stress? Supplements? Avoiding plastic and BPAs? Statins for cholesterol?

It's not only difficult for patients to define wellness, but physicians as well. Not only is it difficult for you to define wellness, it is just as difficult for physicians as well. On a typical day, physicians are moving from one treatment room to the next, focusing on symptoms, defining disease and treating their patients for these defined disorders. But there are populations, five to be exact, that have figured out how to be truly well.

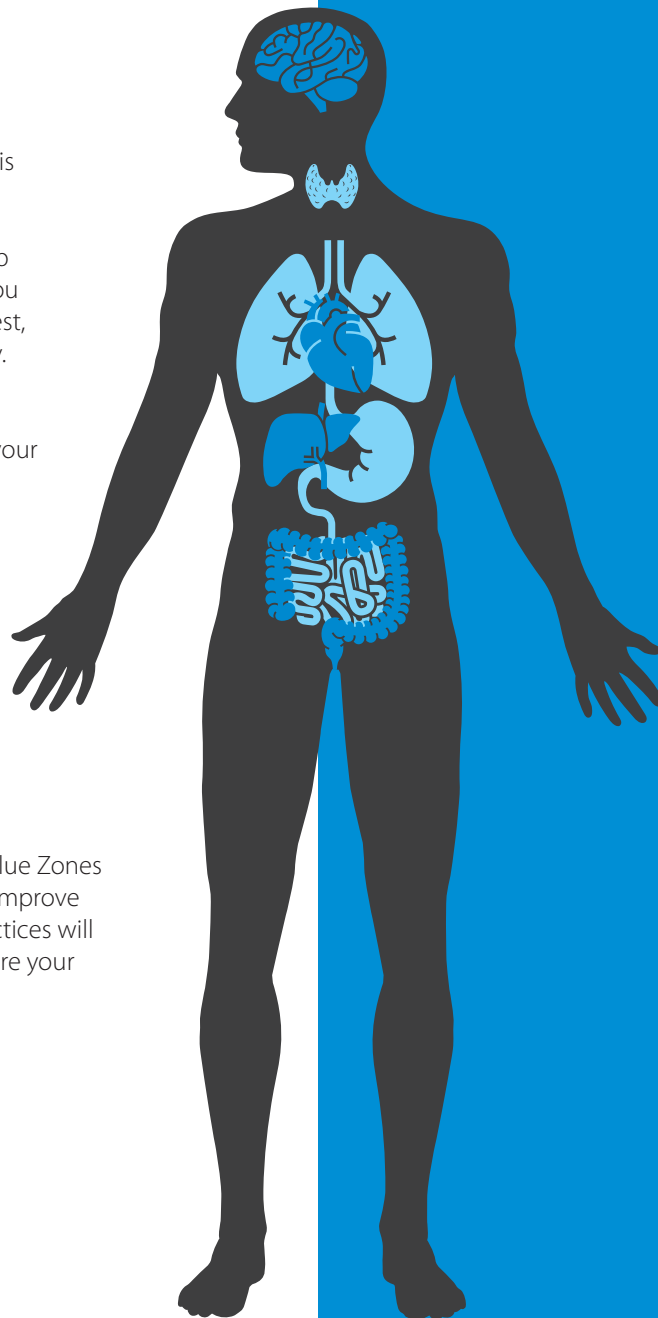
These populations are found in the Blue Zones, or areas of the world in which the locals have low disease prevalence and routinely live well into their nineties, with many centenarians. Researchers credit their remarkable health and wellness to their lifestyles: They eat diets consisting of mostly vegetables, fruits, nuts, healthy fats and proteins, and they often eat with family. Many families grow their own gardens and raise their food for themselves and their community. Their communities are important to them—families are tight-knit and homes are multigenerational. Many are spiritual, practice stress management activities and live in safe and healthy environments. Keep these principles in mind as you read through the guide.

Regardless of where we live, our bodies fight off various diseases, environmental toxins, physical ailments and other stressors. This is called **physiological resilience**. Think of it this way: When you eat, your body must break down your food and then use it in a variety of ways. Your body may use some of this food immediately. You may store some of

it for later use. Your body has built-in mechanisms to handle your food. You will produce insulin and other hormones, enzymes, and other chemicals to handle this automatically. Then, when you are done handling the digestion of your meal, your digestive system powers down until the next time you eat. If your resilience is up to par, you do not know this is happening. However, you must have the right components for your body to digest, as well as perform millions of other activities, every day. Proteins and fats are used as building blocks. Vitamins and minerals are used to catalyze millions of chemical reactions every day. All these components are part of your **metabolic reserve**.

If your body begins to run out of those reserves, your resilience begins to suffer. If you do not have components to make specific enzymes, you will not be able to digest the proteins that you are consuming, which means the building blocks you need will not be available for growth and repair. If your body is overly focused on stress, it is using up metabolic reserve that may be needed somewhere else.

The WellMatrix program is based on principles of the Blue Zones and wellness to increase your metabolic reserves and improve your physiological resilience. These transformative practices will not only increase your disease resistance but also restore your vitality and wellbeing!





Nutritional Wellbeing

Today, physicians are beginning to understand that it is not necessarily the quantity, but quality of the food we eat that is important in health. Americans eat a diet full of calories but short on nutrients. In the past, our diets were rich in vegetables, fruit, good fats, complex carbohydrates, nuts and seeds. We ate lean proteins in limited amounts. Today, our plate has flipped with limited and poor-quality vegetables and fruits, minimal nuts and seeds, low quality fats, large amounts of simple sugars and heavy on the not-so-lean proteins.

The nutrients you consume are used to maintain your metabolism for daily function. You must fix and/or replace cells in your body on a regular basis. You have approximately 10 trillion cells in your body. From bones to brain, digestive to endocrine systems, liver to your colon, feet to scalp; they are all performing genetically pre-determined activities. Each of these cells, tissues and organ systems are going through normal activities daily such as digestion and respiration. These tissues perform their specific activity and then rest. We call this physiological resilience or how your body responds to the daily needs of your environment. Think it of a stretchy rubber band. Your digestive system, for example, needs to be prepared to digest. When food goes in, it goes to work! Like a rubber band holding something together, once food has been digested, the system waits the next time you eat, and the rubber band relaxes. Digestion takes a team of physiological processes to effectively digest your food.

Macronutrients consist of proteins, fats and carbohydrates that are the building blocks and energy sources needed to replace, maintain and repair your body every day. Micronutrients, including vitamins, minerals and trace elements, are key components for the billions of chemical activities in your body for normal function or homeostasis. A few examples of these activities that require various micronutrients include digestion, brain activity, liver detoxification, proper immune and thyroid function, and normal neuromusculoskeletal function! Not only do you need these systems working normally, but you need fuel to run these systems. The fuel needed comes from little engines in most of your cells called mitochondria. These little engines rely on macro and micronutrients to make the fuel for almost all activity in your body. In fact, your body relies on macronutrients and micronutrients every second of your existence!



Researchers now understand that certain foods, common in the global food supply, are major contributors to inflammation, poor cellular and mitochondrial function, and impaired digestion. You may need to avoid certain foods due to gastrointestinal or autoimmune conditions.

- Gluten (celiac disease, leaky gut, psychological disorders)
- Soy (endocrine disruptors, early puberty)
- Sugar (excess weight/fat storage, cross-linking of collagen contributing to wrinkles, unstable blood sugar levels)
- Artificial sweeteners (increases cravings, contributes to inflammation)
- Fast/processed/pre-packaged foods (inflammation, toxic chemicals, weight gain)

Very Berry Wonder Smoothie

12 oz almond milk
2 scoops of vanilla protein functional food
1 cup spinach
2 cups frozen mixed berries
1 tbsp ground flax
½ cup unsweetened yogurt

Blend and enjoy!

It's Not a Diet, It's a Lifestyle

Success with any eating plan is about commitment and a mindset. Instead of sensational short-term fixes like crash diets and weight loss pills, optimal health and wellness is a lifelong commitment. Other lifestyle changes that are important for good digestion include chewing food thoroughly, preparing and eating your meals with your family and friends, and taking time to digest your meal. By following WellMatrix Program, you will discover an easier and sustainable way to establish healthy eating habits that provide your body with the nutrients it needs for optimal functioning. Looking and feeling your best will be the results!

While the MedDiet will help many people live well and thrive, it contains foods that may be challenging for people who have food sensitivities such as gluten, dairy or eggs. We have included a weekly food plan in Appendix 2 that addresses gluten sensitivities and emulates the Paleo diet. Your physician will work with you on suggestions to guide you through this plan.

Are there healthy sweeteners?

We know that many processed foods contain sweeteners of all kinds that are not good for us. How about artificial sweeteners such as Splenda, NutraSweet and Sweet N' Low? Studies using these artificial sweeteners do not stop the crave for sweetness and increase hunger. Other studies have connected headaches, including migraines, with the use of aspartame and sucralose. The 2008 report from the Center for Sciences in the Public Interest (CSPI) found artificial sweeteners have no food value, contain potential byproducts with harmful toxic side effects, and trick the body into thinking it is eating something sweet, which amplifies sweet cravings. CSPI suggests everyone, especially kids, should avoid consuming artificial sweeteners. There are, however, some sweeteners that are considered healthier alternatives. If you're looking for a sweetener, choose from the list below.

- Wild honey
- Blackstrap molasses
- Fruit concentrate
- Stevia
- Brown rice syrup
- Monk fruit

Physical Wellbeing

As the saying goes, movement is life. Without the wind, many vegetables do not get pollinated. Bees must move to pollinate fruit. Your body is nourished by blood moving through your vessels. Movement is vital for cellular activity, which in turn, helps tissues in your organs to perform to their optimum. Sensible movement is medicine, helping reduce obesity and blood pressure, and improve bone health and cardiovascular fitness. But there are other important effects as well.

Effects of regular physical activity on the body

- Reduces global inflammation
- Reduces incidence of autoimmune disease
- Increases serotonin production
- Improve oxygen delivery to your cells and organs
- Reduces the production of obesity related hormones
- Improves insulin sensitivity



Musculoskeletal fitness appears to be particularly important for the elderly people and their ability to maintain functional independence. With worsening physical activity, the elderly are at risk of losing their ability to carry out routine daily activities.

Physical movement also has positive effects on a cellular level. Interval exercising such as biking and walking increases protein synthesis in the little energy engines in each cell, called mitochondria. Physical movement leads to increased cellular energy production and proteins synthesis for muscle growth in all ages.

Global, or whole body, inflammation is different than inflammation seen on a local area such as a sprained ankle. Chronic inflammation can lead to joint pain and limit your physical activity. An inflammatory diet contributes to your whole-body inflammatory load. Your physician will evaluate your food diary and provide guidance to lower your global inflammation. Labs may be ordered by your physician to identify your inflammatory state and specific exercises and/or supplements may be prescribed to help reduce your inflammation.

Supplements for Inflammation

Nutrient	Dose
Turmeric	1,000 mg/day
Quercetin	1,000 mg/day
Bromelain	200-300 mg/day
Alpha Lipoic Acid	200-300 mg/day
Omega-3 Fatty Acids	1,000-1,500 mg/day
Proteolytic Enzymes	850-2,500 mg/day
Resveratrol	100-500 mg/day



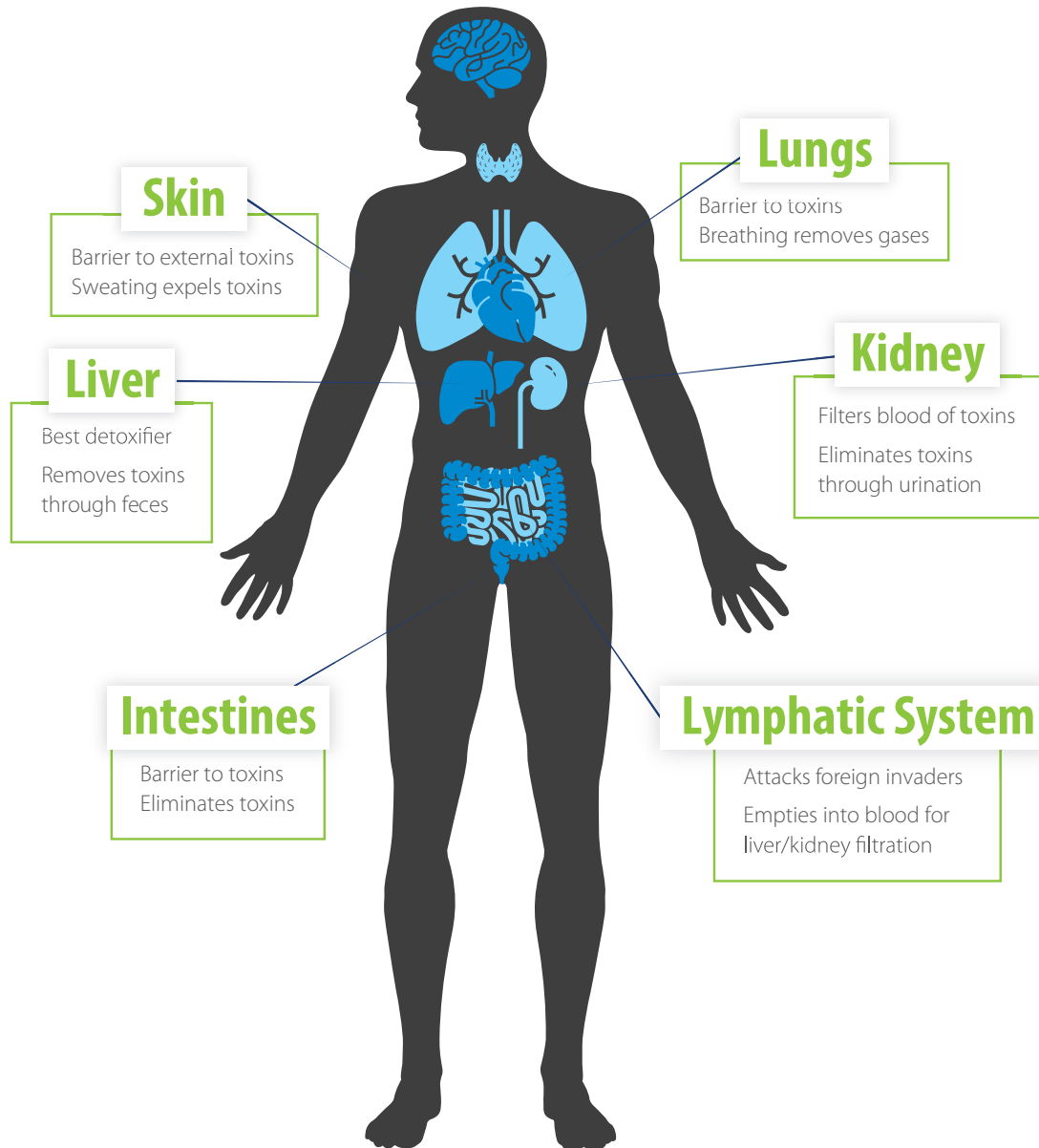
Environmental Wellbeing

People living in the Blue Zones know the importance of their environment when it comes to their health. A safe and clean home is a great place to live and raise a family. A safe community allows for social gatherings and a healthy workplace allows time for breaks, increasing productivity. Growing a garden in good soil provides nutritious food to eat. Clean soil and water are vital for their grazing animals. Clean seas and oceans provide safe seafood to eat.

Approximately 80,000 chemicals are currently used in the United States, and many have not been tested for their effects on human health. Our bodies are constantly under attack from environmental toxins. Pesticides in our homes and our foods have known effects on our brain and development. BPA's found in plastics are known disruptors of our hormones. The furniture in our house and cars are full of chemicals that effect multiple organs in our body. Our water supply contains small amount of toxins such as lead and xenoestrogens that can build up in your body. However, when our bodies are working well, we have multiple systems that are very capable of handling these daily exposures.

Detoxification of these chemicals is performed by the kidneys, lungs, skin, digestive system and liver. The liver is well-known as the major detoxifier. It stores and utilizes micronutrients in the two important phases of detoxification to help your body get rid of toxins. The WellMatrix Program uses the WellMatrix Questionnaire to evaluate your environment for toxins and how well your body handles them. The answers you provide may lead your physician to perform toxicity tests. These may include dried urine, hair or plasma analysis. Based on these findings, your physician may provide you with a plan to help improve detoxification.

How the Human Body Naturally Detoxes



Here are just a few of the environmental toxins that the body must work hard to eliminate.

Toxin	Source
Bisphenol A	Plastic bottles and inner can linings, chronic xenoestrogen exposure
Dioxin	Found in meat and surface water
Mercury	Fish and mercury dental fillings
Perfluorinated chemicals	Non-stick cookware and baking pans
Atrazine	Pesticides found in drinking water
Organophosphates	Pesticides found in baby food
Glycol ethers	Cleaning products, liquid soaps and cosmetics
Phthalates	Plastic containers, cosmetics, toothbrushes, lotions and cosmetics
Arsenic	Rice and some drinking water
Fire retardants	Found in furniture, car seats, changing table pads
Lead	Found in water and lead based paints
Mold	Damp home or workplace
Glyphosate	Herbicide in farming

Our food supply is a victim to environmental toxins as well. Pesticides are applied, at times daily, to fight off bugs of all kinds. Herbicides were once thought to be benign to humans but are now known to cause a variety of problems from allergies to cancer. The foods we eat have residues of these chemicals that we ingest every day and can build up in our bodies over years and decades. The Environmental Working Group publishes each year a list of fruits and vegetables that contain the highest and lowest amounts of pesticides called the Dirty Dozen™ and the Clean 15™. It is important to wash your vegetables and fruit and even better yet, buy organic when you can.

The Dirty Dozen™

1. Strawberries



2. Spinach



3. Kale



4. Nectarines



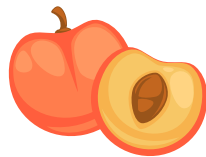
5. Apples



6. Grapes



7. Peaches



8. Cherries



9. Pears



10. Tomatoes



11. Celery



12. Potatoes



The Clean 15™

1. Avocados



2. Cabbages



3. Onions



4. Mushrooms



5. Cauliflower



6. Honeydew Melons



7. Papayas



8. Pineapples



9. Cantaloupes



10. Eggplants



11. Sweet Corn



12. Asparagus



13. Frozen Peas



14. Broccoli



15. Kiwis



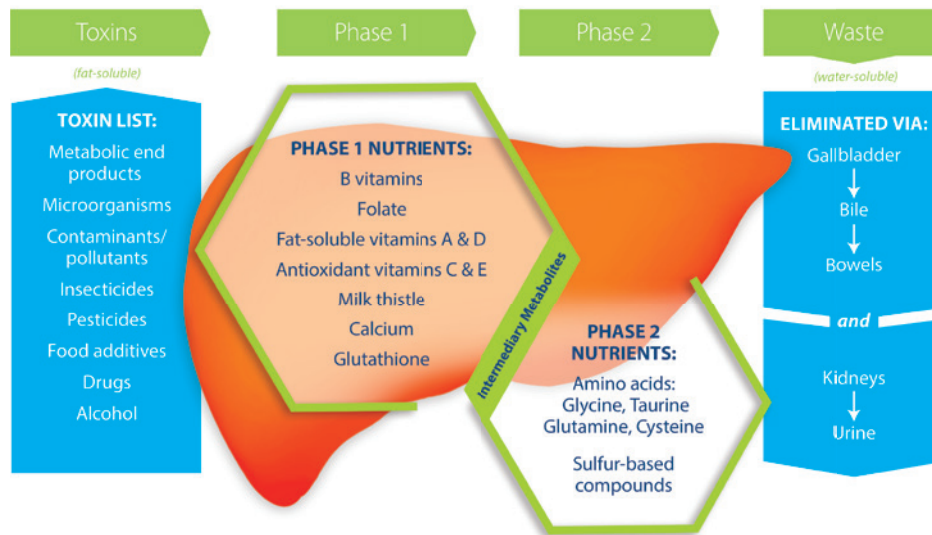
Symptoms of Chronic Toxic Exposure

Symptoms of toxic exposure can be both acute and chronic. They can have an affect any age including in utero and can be found in all tissues including sweat, saliva and breast milk.

- ✓ Poor fetal development
- ✓ Neurological problems
- ✓ Organ failure
- ✓ Blindness
- ✓ Cardiovascular disease
- ✓ Digestive issues
- ✓ Chronic fatigue/ Fibromyalgia
- ✓ Endocrine disruption

Your liver works hard to detoxify your body of foreign and not so foreign chemicals through three phases. The first two rely upon nutrients such as the vitamin B's, amino acids, folic acid and other micronutrients. The second phase takes those chemicals from Phase 1 detoxification and adds small chemicals such as amino acids that help inactivate the toxins and deliver them to your kidneys or through your bile and stool for the final phase of elimination.

Detoxification (Biotransformation) Pathways




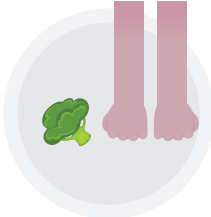
Appendix 2: What is the Mediterranean Diet?


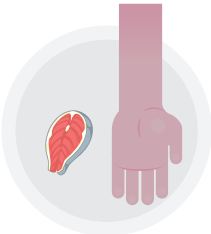

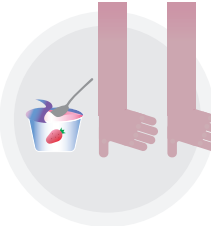


Very good question! There is no distinct definition of the Mediterranean Diet (MedDiet). The MedDiet is loosely defined as a whole-food diet rich in plant material, vegetables and fruits, with whole grains, lean proteins, beans, nuts, seeds and olive oil. They use numerous spices and herbs and very little salt.

How to Build a Healthy Plate for Wellbeing

Approximately two-thirds of your plate will consist of vegetables, fruit and whole grains. Lean protein will only be approximately one-sixth of your plate and healthy fats and oils will make up the last sixth of your plate. But how much makes up two-thirds or one-sixth of your plate? You can use exact measurements such as cups and ounces, or you can use your hand as a good estimate of measurement as well.

Nutrient needs differ by size, sex, age, activity levels, and other metabolic needs. Using the hand method for measuring matches up well with size and sex of the individual and will be perfect portions for most people.

Plants	Food Choices	Make up about 70% of your plate	Approximate portion size: Two fists
Most	Green leafy vegetables Broccoli, cabbage, Brussels sprouts Tomatoes, peppers, eggplant Fruit Legumes, soaked and cooked Starches (red, purple, and sweet potatoes)		
Least	Ancient grains such as quinoa, bulgur, buckwheat		

Lean Protein	Food Choices	Make up about 20% of your plate	Approximate portion size: One palm
Most	<ul style="list-style-type: none"> Fish/seafood Egg whites Organic and free-range poultry Organic eggs from free range chickens 		
Least	<ul style="list-style-type: none"> Red meat, no more than twice a month 		
Dairy	Food Choices	Make up about 10% of your plate	Approximate portion size: Two thumbs
Most	<ul style="list-style-type: none"> Greek yogurt Goats milk cheese, feta and chevre 		
Least	<ul style="list-style-type: none"> Almond or other nut milk 		
Healthy Fats	Food Choices	A very small portion of your plate	Approximate portion size: One thumb
	<ul style="list-style-type: none"> Olive oil Nuts and seeds Avocados Olives 		



Lifestyle Matrix

RESOURCE CENTER

LT-MISC-056-B 03242020

