

The 6 Foundations of Health

Getting and staying healthy is more than just eating right and exercising. It's a lifestyle. Here are six foundations of health to live by and apply to your life if you are on the path to living well.



How many times have you said to yourself that you're going to get healthy? You say it, but never actually mean it, or you say it, then try it, and your plans fall through the cracks. Usually, this happens because getting healthy is more than just eating vegetables, fruits, and proteins. It's more than following a fad diet and sticking to an exercise routine. Getting healthy is a lifestyle and you have to commit to learning about nutrition and what the body needs to thrive. You need to learn about the six foundations of health.



Nutrition

“Real food builds real health. A diet rich in nutrient-dense, properly prepared, whole foods is the ultimate foundation of optimal health.” (Nutritional Therapy Association. (2020). Basics of Nutrition. Retrieved from <https://nutritionaltherapy.com/>).

The road back to health starts with eating, moving, and living in a way that honors the hunter and gatherer, two qualities developed and exercised by early man. Today this is known as the “western diet,” and it has evolved throughout our history through the agricultural revolution and the industrial revolution. Hunter-gatherers or horticulturalists used to be a more well-rounded name for the diverse ways in which indigenous people would nurture their relationship with their environment. Meaning, early human diets varied based on location and the four seasons.

Before the industrial revolution, food used to be nutrient-dense, seasonal, locally sourced, and more importantly, minimally processed (Nutritional Therapy Association. (2020). Basics of Nutrition. Retrieved from <https://nutritionaltherapy.com/>). Societies used to thrive off of an omnivorous diet. Though some societies relied heavily on plant foods, no early human diets were completely free of animal foods. According to Dr. Stephen Lee (NTA, 2020), to live a healthy lifestyle we must consider doing four things. One, we must move how early man or our ancestors did. Walking up to two hours a day would be the norm. Two, we must stick to eating traditional foods and cuisines. Three, we must eat sustainably raised plants and animals that adapted to our local environment rather than food shipped from far away. Finally, we must avoid any fad diets, as it is known that our bodies thrive on a wide range of foods.

Growing our food can also provide the nutrients needed for our bodies. Consider a healthy microbiome by making your cultured foods. In doing this, you would be making family meals a ritual. This encourages you to enjoy a meal in the “rest and digest” state by slowing down and connecting with family. Lastly, supporting local farmers and fresh markets near you is also a way of life to practice and live by.

Digestion and Elimination

“Eating a nutrient-dense diet is essential, but you must absorb the nutrients you eat to benefit from them.” (Nutritional Therapy Association. (2020). Basics of Nutrition. Retrieved from <https://nutritionalththerapy.com/>).

When it comes to living a healthy lifestyle, digestion is the foundation of nutritional therapy. The digestive system is what provides every cell with the nutrients they need for structure and function. The cells of the human body are dependent upon this process. Digestion is more than just eating and then letting your food settle. Digestion begins in the brain - thinking and smelling your food and body to be in a parasympathetic state. Optimal digestion relies on a balanced microbiome. Food is chewed in the mouth to offer early carbohydrate and fat digestion. Chewing also gives the body a good sense of what ingredients are inside. The process of chewing and swallowing is called a bolus.

The process continues into the stomach. The stomach has three main jobs; disinfect food, break down protein, and free certain nutrients. The food is washed in hydrochloric acid, also known as HCL. When the HCL acidity is high enough it releases Pepsin, which is a chemical that helps break down proteins. Once the bolus enters the stomach they change into chyme, which is an acidic fluid that consists of stomach juices, protein, and fats. After the chyme reaches the correct acidity level, it passes through the pyloric sphincter into the duodenum. Then begins the digestion within the small intestine. The acidity level in the chyme stimulates the duodenum cells to release secretin, which triggers the pancreas to release bicarbonate to neutralize the chyme acidity. The presence of fat or protein in the chyme here stimulates the duodenum to release CCK (Cholecystokinin) triggering the gallbladder to contract to release its stored bile. The pancreas then secretes digestive enzymes that work further to break down fats, proteins, and carbs. At this point in the digestive process, most of your nutrients have been absorbed.

In the large intestine, the remaining nutrients are absorbed along with water. The prebiotic fiber is digested by microbes, which release further nutrients like Vitamin B and Butyrate for our bodily functions. The remainder of our waste passes out through defecation.

Blood Sugar Regulation

“What goes up, must come down.” (Nutritional Therapy Association. (2020). Basics of Nutrition. Retrieved from <https://nutritionalththerapy.com/>).

Another health matter to consider when living a healthy lifestyle is BSR or Blood Sugar Regulation. Your body's blood sugar level refers to the amount of glucose circulating through your blood at any given time. It is one of the body's sources of energy which utilizes amino acids and fatty acids. Blood sugar regulation is controlled by the central nervous system's communication with the pancreas, adrenals, adipose tissue, liver, and skeletal muscles or also known as the PAALS. It wasn't until now that we had the emergency need to lower blood sugar. You may be wondering what triggered this necessity.

Well, it is the increased consumption of processed and refined foods, added sugars, simple carbs, environmental toxicity, and stress that create this unique and critical need. The yearly consumption of approximately 174,000 metric tons of processed sugar worldwide and the average of 180 pounds a person per year in the American population is drastically affecting our health. Through adjustment of Macronutrient ratios, an individual can create a balanced hormonal release and utilize all Macronutrients- fats, carbs, and proteins for energy.

The first step to understanding BSR is to learn what is happening in the body concerning blood sugar regulation. If blood sugar levels get too high, we call that hyperglycemia. Food comes into the digestive system, which the Central Nervous System (CNS) detects. It is broken down into glucose and released into the bloodstream. Glucose is the primary fuel that powers our bodies at the cellular level. We get glucose from the food we eat. The CNS detects the presence of glucose and then signals the pancreas to release insulin which unlocks the cells to allow the glucose to enter through the cell wall. Once inside the cell, the glucose enters the Krebs Cycle and produces ATP for cellular energy.

If blood sugar levels get too low we call that hypoglycemia. The CNS detects low blood sugar which then signals the liver to start gluconeogenesis, or protein to glucose, and glycogenolysis, or glycogen to glucose. The liver alerts the pancreas to release glucagon which in turn stimulates the release of glycogen from stored locations in the liver, adipose tissue, and skeletal muscles. Glycogen stored in the muscles is used there in the muscles. The glycogen in the liver is released into the bloodstream and adipose tissue releases free fatty acids into the bloodstream which are broken down through the process of lipolysis into glucose. If glucose drops too low or too quickly then the CNS alerts the adrenal glands. The adrenal glands release epinephrine and norepinephrine which trigger a rapid emergency release of glucose into the bloodstream.

If the glucose levels continue at a low level then the adrenals release cortisol which creates a sustained stress response to keep glucose levels up until the food is consumed. If you currently have issues managing BSR or have plans to manage it, some basic changes need to be made. Those changes include eating every three hours, having three meals, breakfast, lunch, and dinner, and two snacks. Other changes include decreasing or eliminating refined flours & sugars. Furthermore, eating whole food (making sure not to undereat), increasing protein, fat, and fiber, and adding daily movement, as well as making routine changes to improve sleep, can all help maintain balanced blood sugar. According to Weston A. Price (2017), eating three meals a day that consists of animal protein and healthy natural fats such as butter, egg yolks, cream, and meat fats, would all suffice to help maintain a BSR.

Fatty Acids

“Most fats are your friends. Healthy fats are required for stable energy, optimal brain function, hormone balance, and satiety.” (Nutritional Therapy Association. (2020). Basics of Nutrition. Retrieved from <https://nutritionaltherapy.com/>).

Enough about the misconceptions when it comes to fats! Not all fats are bad for you. Most are a necessity when it comes to living a healthy lifestyle. There are two main important facts when it comes to understanding fatty acids. First, healthy fatty acid deficiency is critical. Without it, our bodies could suffer from many health problems including musculoskeletal issues, endocrine issues, cardiovascular issues, immune issues, allergies, and skin problems, as well as depression. Second and lastly, inflammation can be effectively managed with nutritional therapy, therefore reducing healing time.

Fats are so important for stable energy. It builds blocks for cell membranes and hormones and aid in the absorption of fat-soluble vitamins A, D, E, and K. Fats also allow proper use of protein to help regulate energy by slowing the absorption of food. This also increases satiety, which makes food taste great. When it comes to BSR, fats help the body heal when inflammation is present. Healthy fats such as grass-fed butter, unrefined coconut oil, tallow, ghee, and duck fat are examples of foods to include in your diet.

Essential fatty acids to also include in your diet are linoleic acid and alpha-linolenic Acid. These acids are found in polyunsaturated oils, that become rancid easily, and are unstable oils. It is important to keep in mind when consuming them that they should never be heated. These are to be used as finishing oils only. The body cannot make essential fatty acids and they must be found in polyunsaturated fats. If you aren't sure about what specific foods to look for or consume when incorporating these oils into your diet, here are a few examples. Linoleic Acid precursor or Omega 6 can be found in peanuts and sunflower seeds. Alpha-linolenic Acid precursor or Omega 3 can be found in flaxseed and salmon. Consider either consuming these foods regularly or you could always including Omega 3 vitamin supplements in your diet.

Hydration



“Water is life. Life is water. Water is the most important nutrient. It’s required for numerous body processes and makes up 60% of the body.” (Nutritional Therapy Association. (2020). Basics of Nutrition. Retrieved from <https://nutritionaltherapy.com/>).

Yes, it’s redundant, but hydration, hydration, and hydration are essential for our bodies. It’s so critical that many Americans live in a state of chronic dehydration. The body can go 8 weeks without food but only days without water. It only takes a drop of 2% of the body’s water content for mild symptoms of dehydration to begin. We often don’t recognize these signs or our thirst signals due to busyness. Water plays an essential role in our bodily functions. It improves oxygen delivery to cells, helps transport nutrients, cushions our bones and joints, removes waste, and even flushes toxins.

Here is a comprehensive approach to think about when it comes to water consumption. Drink water at the first sign of being tired, anxious, having difficulty concentrating, and when you have a sensation of thirst. Sip pure water slowly throughout the day vs. drinking large quantities at a time. Consider adequate water intake for the age group and evaluate bio-individual factors affecting water requirements for lifestyle and environmental needs.

Early signs of dehydration include thirst, fatigue, dry mouth, darker urine, and muscle cramps, as well as headaches and migraines. Chronic signs of dehydration include heartburn, joint pain, back pain, and constipation.

Mineral Balance

“Minerals equals the body’s spark plugs. Minerals help build bones and lend a helping hand in balancing hormones and many other key body processes.” (Nutritional Therapy Association. (2020). Basics of Nutrition. Retrieved from <https://nutritionaltherapy.com/>).

You’ve probably never thought about it, but mineral balance plays a vital role in our healthy diet. If anything, you’re probably thinking, “well I get enough minerals already by drinking water.” Sure, there are minerals in water and maybe even in those supplements and vitamins that you’re taking. But remember, we are talking about the six foundations of health here. We are talking about health being a lifestyle. To understand why mineral balance is important we must understand the role they play in the body and why they are critical to optimal health.

Mineral balance is essential for enzyme functions. They act as the spark plug which ignites enzyme reactions. It’s also essential for hydration. Minerals are electrolytes that enable our bodies to retain fluids. They help facilitate the transfer of nutrients across cell membranes by maintaining proper nerve conduction. This enables the muscles to contract and relax, which helps regulate tissue growth. Mineral balance also provides structural and functional support.

The most important mineral to consume is calcium, which is known to be a game of cofactors. Calcium levels in the blood perform many important bodily activities such as maintaining the skeleton, regulating hormonal secretion, the transmission of nerve impulses, and vascular activities. Almost everyone gets enough calcium in their diet, but they are missing the cofactors that allow the body to absorb it. Those cofactors include hormonal function, parathyroid hormone, calcitonin, hydration, and digestion.

Surely you know by now calcium is also good for our bones because you’ve been told as a kid to drink your milk so that your bones grow strong! Calcium homeostasis is key when it comes to bone remodeling. Bone remodeling is the breakdown and rebuilding of portions of the bone. It is significant in calcium homeostasis because it provides a mechanism by which the body can pull calcium from stored resources and resupply the stored calcium. Bone remodeling helps support three types of bone cells and their function.

Those bone cells include Osteoblasts, Osteoclasts, and Osteocytes. Osteoblasts are the bone builders which work at times of normal blood calcium levels. Osteoclasts are known as bone chewers. When these bones are stimulated by Parathyroid Hormone and Vitamin D, they work to release calcium into the bloodstream when blood calcium is low. Finally, Osteocytes are the primary bone cells. In addition to calcium, other minerals include Vitamin D, which supports intestinal absorption.

The Takeaway

We know that a lot of grounds have been covered here in this ebook when it comes to maintaining a healthy lifestyle. The information provided can be a little overwhelming at times. So let's summarize some of the key takeaways, which are health's six foundations.

First is nutrition, which is vital and the beginning of living well. To do this we must get back to eating natural nutrient-dense foods. There are not enough nutrients in processed foods. Therefore, we must act as the early man once did and become hunter-gatherers once again, but in a more modern way.

Second, digestion and elimination, which centers around taking the time to enjoy a meal and allow our bodies to digest and allow the acids from our stomachs to break down our foods.

Third, maintain our BSR by eating healthy fats and proteins. Being sure to eat every three hours, having three meals, breakfast, lunch, and dinner, and two snacks.

Fourth, we now know that not all fats are bad! So, don't be afraid to consume those Omega 3's, which can be found in flaxseed and salmon.

Fifth, hydration, hydration, and more hydration. It's self-explanatory, drink your water!

Lastly, increase your Calcium intake to help sustain your bones. Now that you have all the key factors that you need to live a healthy lifestyle committing to it may not be so hard. At this point, you just have to want it!

References

Sugar Alert References. (n.d.). The Weston A. Price Foundation. Retrieved February 28, 2023, from <https://www.westonaprice.org/health-topics/abcs-ofnutrition/sugar-alert-references/>. Retrieved from <https://www.westonaprice.org/wp-content/uploads/SugarFlyer.pdf>.

Home. (n.d.). Nutritional Therapy Association. Retrieved February 28, 2023, Retrieved from <https://nutritionaltherapy.com>.