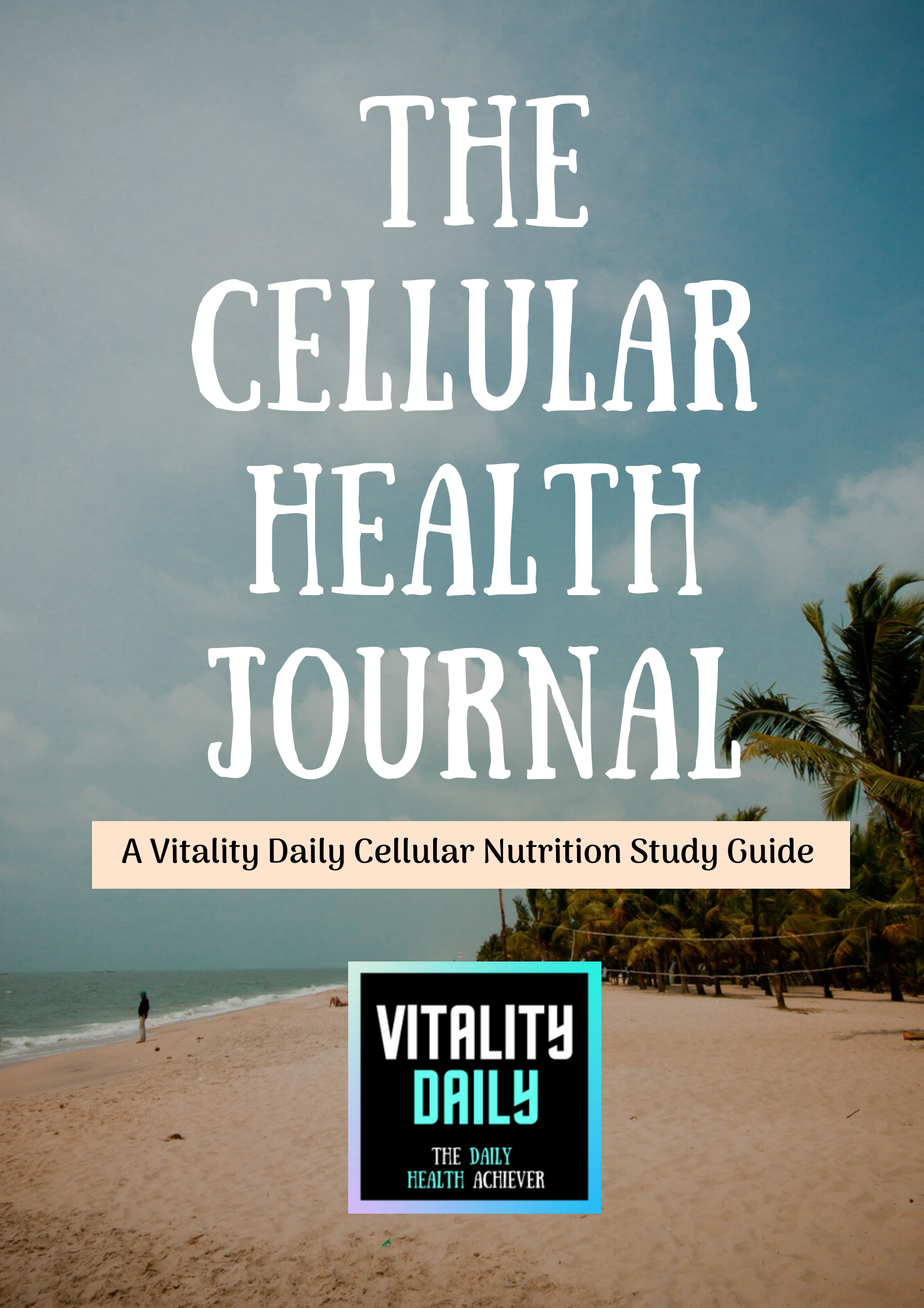


THE CELLULAR HEALTH JOURNAL

A Vitality Daily Cellular Nutrition Study Guide

VITALITY DAILY

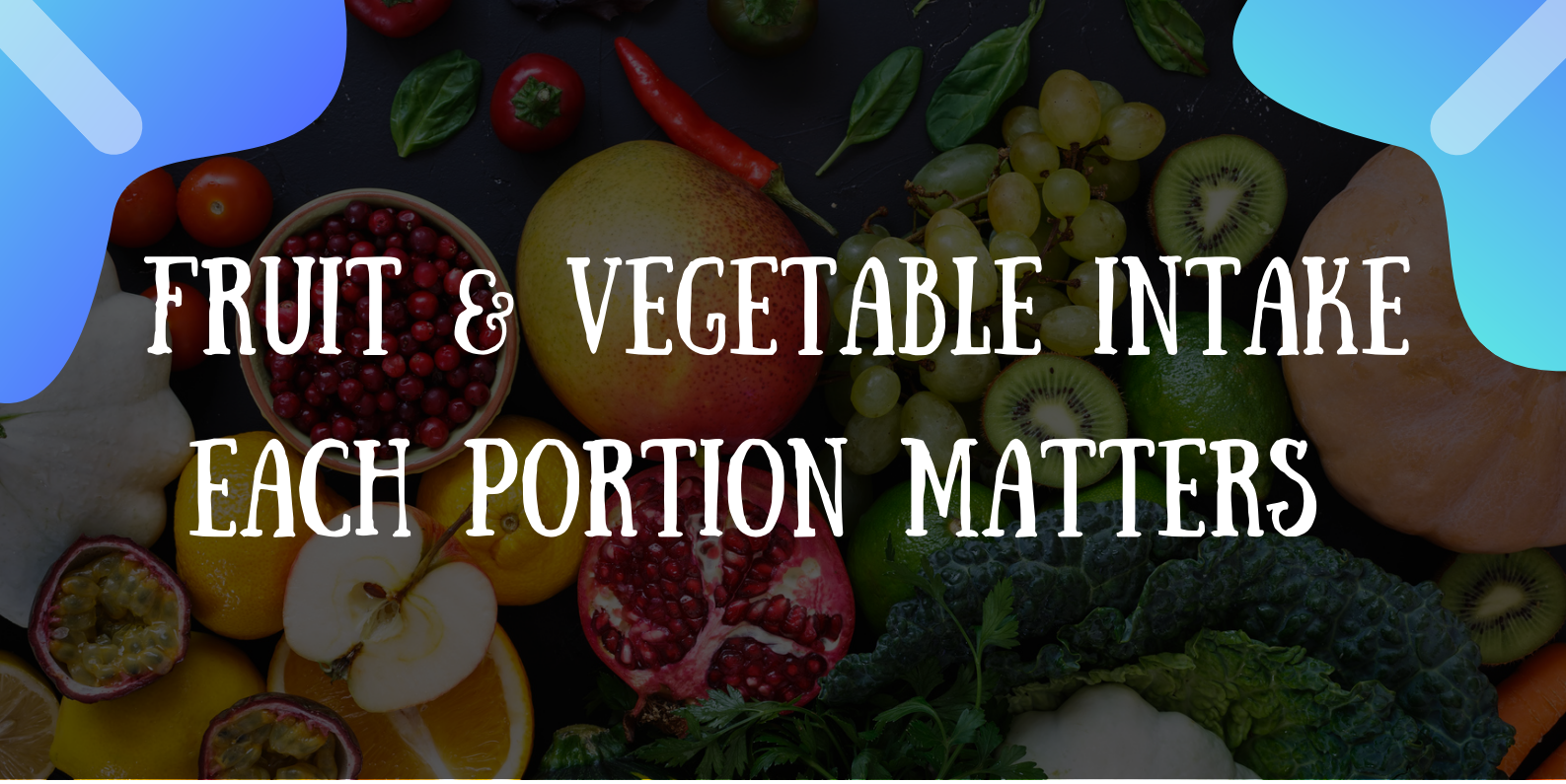
THE DAILY HEALTH ACHIEVER

HOW NUTRITION AFFECTS YOUR HEALTH TODAY & TOMORROW

The foods and supplements we consume make up our diet. The diet is our body's only source for raw materials it needs to perform its day-to-day functions. These cellular workings are complicated and continual. Fortunately, our cells perform their jobs automatically, without any forethought on our part. Our only responsibility to this intricate, dynamic system is to **"Provide the high-quality nutrients the body needs to do a good job."**

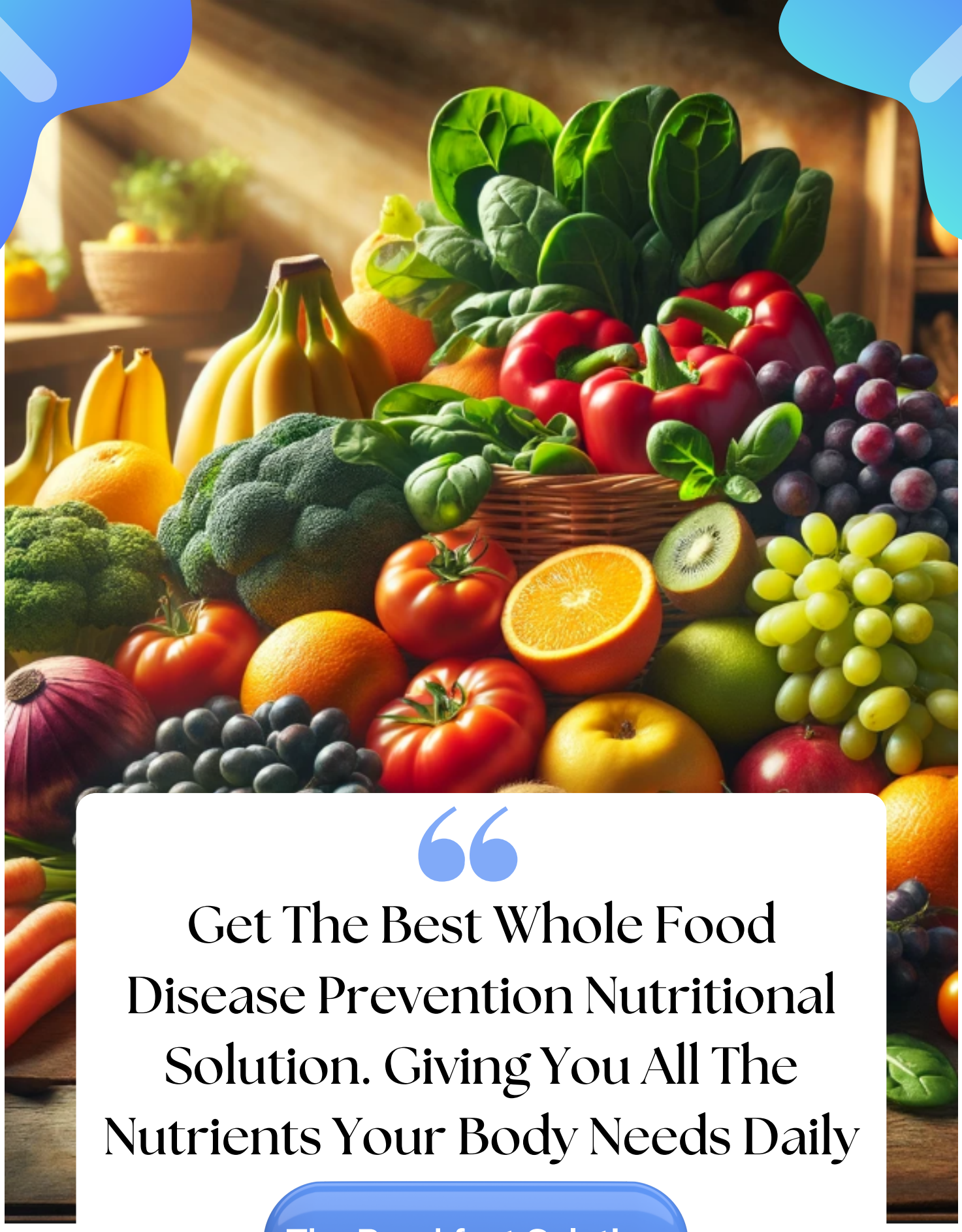
This task is challenging since every day billions of cells are created, destroyed, and replaced. Over the course of seven years, most of our cells, with the exception of brain cells and a few very specific glandular cells, are replaced. For example, red blood cells, which carry oxygen throughout your body, have a life span of only four months before they're removed from the bloodstream and destroyed. The human body contains about 25 trillion red blood cells, so the demand for nutrients to constantly replace these cells is enormous! Some cells, such as those of the mouth or intestines, turn over even faster every day, in fact! In addition, different cells and tissues have special nutritional requirements. For instance, lung cells have a higher requirement for vitamin C than many cells, whereas eye tissue has a higher need for lutein and other carotenoid phytonutrients. The body's nutrient supply, provided by foods and supplements, must exceed demand, or deficiency symptoms result.

“Over the short term, a nutrient-deficient diet compromises day-to-day health.” For instance, carotenoids colorful plant pigments responsible for the red in tomatoes, the orange in carrots, and the yellow in squash are critical to the function of certain blood cells that defend the body against microbial invaders. Studies show that a carotenoid-deficient diet weakens immunity. Conversely, a carotenoid-rich diet boosts immunity. So may vitamin C and zinc, both may shorten the duration of a cold. Short-term effects of nutrient deficiencies are also apparent evidenced as lower energy levels in people whose diets are deficient in B-vitamins or iron. **“Over the long term, suboptimal nutrition may predispose us to early aging and declining health and sickness.”**



FRUIT & VEGETABLE INTAKE EACH PORTION MATTERS

Researchers from Imperial College London have examined 95 studies on fruit and vegetable intake, covering all regions of the world. The team concluded that **The greatest protection against diseases and premature death occurs with a daily consumption of 10 portions of fruits and vegetables.** They attributed the protection effects to the **“complex network of nutrients they hold.”**

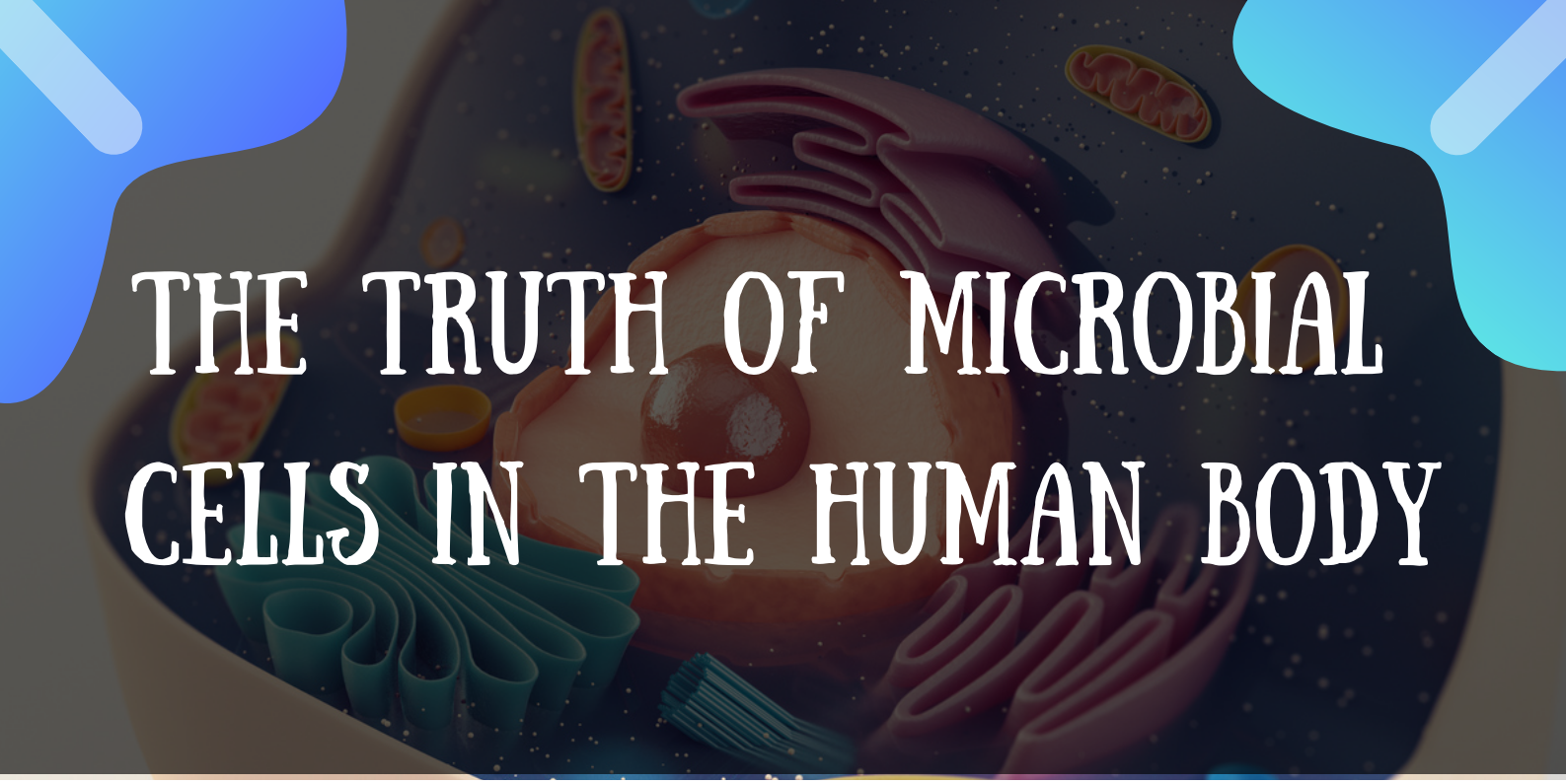


Get The Best Whole Food Disease Prevention Nutritional Solution. Giving You All The Nutrients Your Body Needs Daily

The Breakfast Solution

THE NUMBER #1 CAUSE OF DIET RELATED DEATH

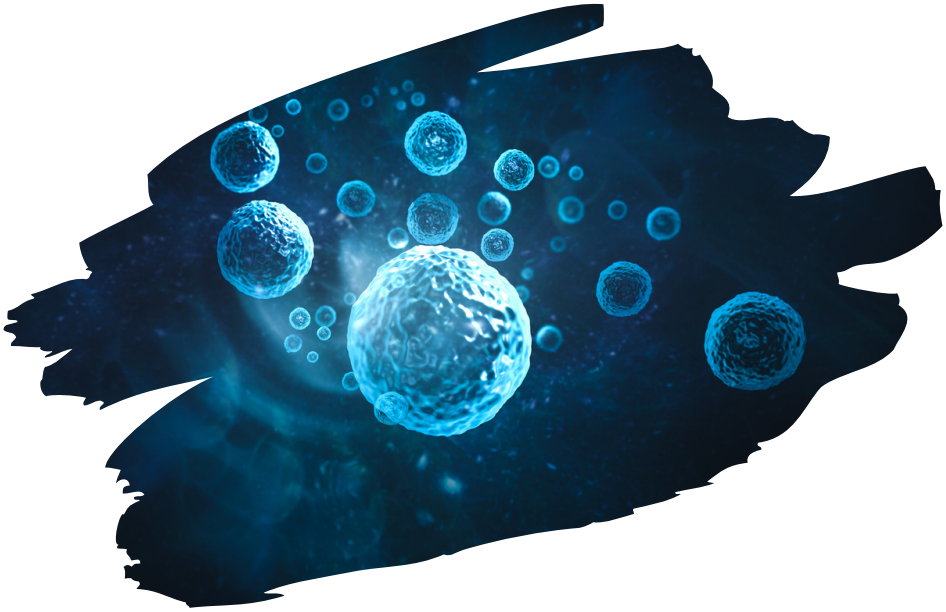
On April 3, 2019, a new study was published, funded by the Bill & Melinda Gates Foundation, looking at the Health effects of dietary risks in 195 countries. The study revealed that **The Number # 1 risk factor for diet-related death in the United States is a lack of whole grains.** This was also true for India, Brazil, Pakistan, Nigeria, Russia, Egypt, Germany, Iran, and Turkey, and for many more countries, it came in second or third. Interestingly, this does not mean people weren't eating whole grains but instead ate highly processed grains lacking nutritional value. **Low intake of fruits and vegetables, omega-3s, and nuts and seeds were also among the top 10 causes of diet-related death.** With the help of Vitality Life together we can End the Trend of Poor Health by getting the daily nutrients we need!



THE TRUTH OF MICROBIAL CELLS IN THE HUMAN BODY

Believe it or not, **The average human contains 10 times more microbial cells than human cells.** In fact, our microbiome or our microbial “ecosystem” together with our DNA is what makes each of us unique. The only time we are microbe-free is during the 9 months we spend in the womb. During birth, after birth, and during the first few years of life our resident microbes establish themselves in and on our body as a balanced and stable community helping us grow and develop into healthy adults. Exactly how our resident microbes become established is determined both by our genetics and the environment we live in. So, when all goes well, we live in harmony with a stable community of microbes which confer upon us numerous health benefits.

In particular, the microbes that live within our gut help shape our immune system and play a vital role within our protective gut barrier which defends us from harmful environmental influences. **Anything that disturbs the balance and stability of our gut microbes can contribute to the weakening of our defenses and allow disease-causing microbes to populate our gut barrier and even cross over into our blood.** One all too frequent example of such instability is that which may result from the use of antibiotics which destroy both our good and bad gut bacteria. Our enemies, the bad bacteria and also fungi are quick to take advantage of the altered available space in the niche of our gut and the usual balance is lost. It is therefore absolutely vital that we reestablish harmony of our resident microbes.



Maintaining and restoring balance and harmony of our resident microbes as we go through life depends to a large extent upon the quality of the food we eat. So, when we eat high-quality whole food nutrients, we establish a diverse and stable resident community of gut microbes that work with us to maintain a healthy metabolism. In contrast, eating a high sugar, high processed food diet encourages a different kind of resident in your gut, the kind which makes your metabolism sluggish. These microbes are also really good at extracting calories from your food, so they tend to help you gain weight, usually not what you want!

To get extra help with maintaining and restoring a harmonious balance of friendly gut microbes we may choose to eat fermented foods such as yoghurt which contain natural probiotics such as strains of Lactobacillus and Bifidus. Or, we may conveniently get that help by taking a probiotic supplement.

GROWING AT YOUR BEST

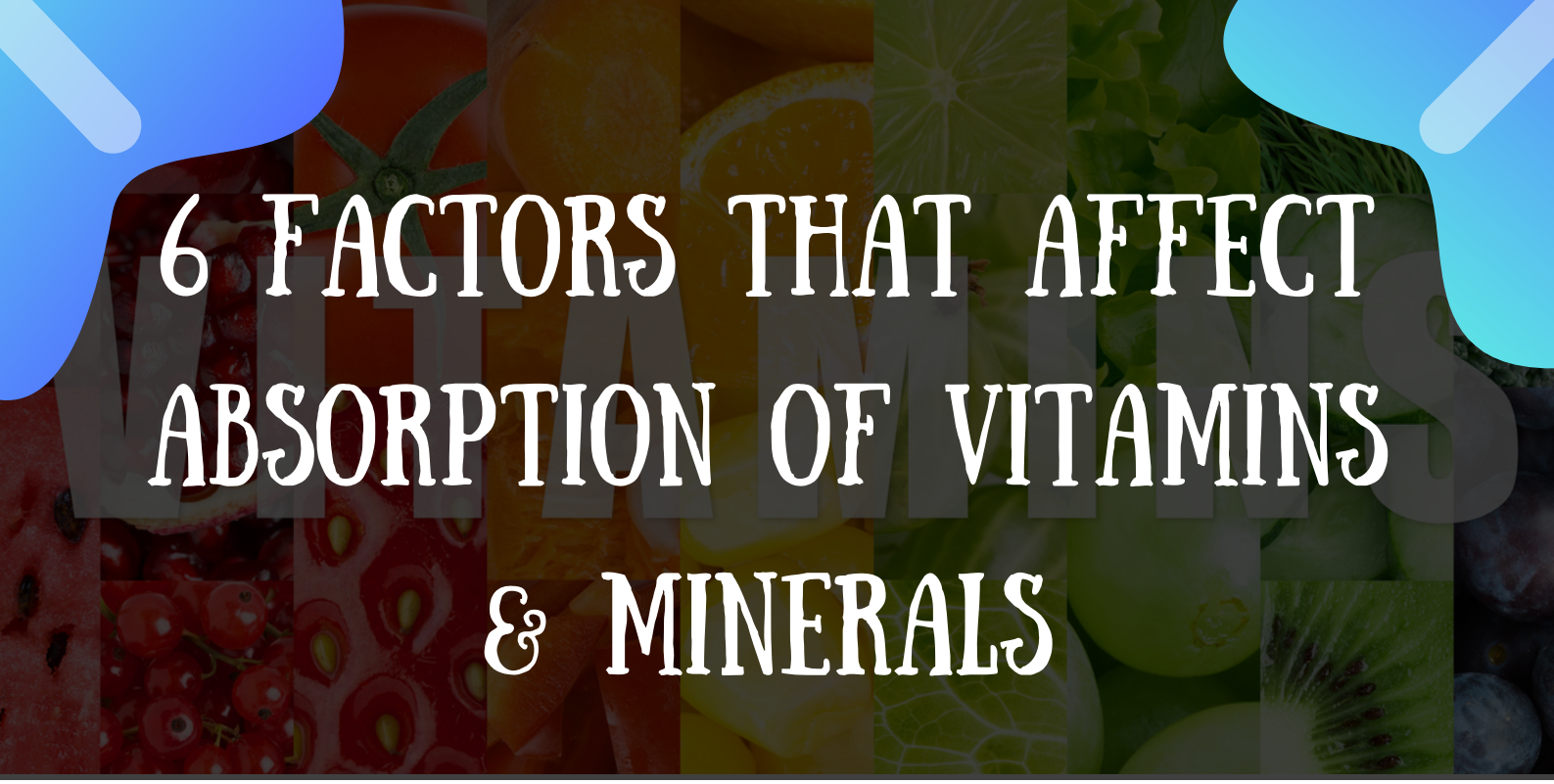
As a new parent, making sure your newborn is getting the right nutrition is bound to be a priority and that's normal! Proper early stage nutrition is key to establishing a healthful pathway for your child. Omega-3s are essential for so many aspects of early growth and development, particularly for the brain, the eyes and the cardiovascular system where omega-3s are really concentrated. It is important that pregnant and breastfeeding mothers are consuming adequate amounts to help provide the most benefits to their newborn. It has been shown that the amount of omega-3s that a mother ingests directly impacts how much omega-3 is in her fetus. When a baby is forming in the womb, organs start developing at a rapid rate, and good omega-3 nutrition is particularly vital to proper brain and retina (found in the eye) development.

How do omega-3s contribute to proper brain and eye health in fetal development? Let's focus on the eyes. Omega-3s are embedded in the membrane of the photoreceptors in our eyes' retinas. This means that of all the fatty acids in the membrane of our eyes, long-chain omega-3s make up approximately 60% of the total. DHA is the most important long chain omega-3 for the brain and eye health of an infant, contributing to normal eyesight and brain function. To obtain long-chain omega-3 fatty acid health, it is recommended that pregnant or breastfeeding moms consume 8-12 ounces of seafood per week, based on the 2015-2020 Dietary Guidelines for Americans. Knowing these important roles of omega-3s in fetal development, many studies have sought to understand the benefits of maternal omega-3 supplementation during pregnancy and lactation. One study evaluating the effects of supplementation, with a total of almost 2.5g (2,500mg) omega-3s, during pregnancy and lactation found that supplementation favorably impacted children's mental processing scores, reflecting differences in mental development.

The benefits of omega-3 supplementation during pregnancy have included enhanced infant problem-solving skills, improved hand and eye coordination among children, and decreased levels of inflammation in mothers. A recent study published in 2018 examined whether low plasma levels of omega-3 fatty acids in Danish mothers were associated with an increased risk of early preterm birth and found that women who had the lowest amount of EPA plus DHA had a 10 times greater risk of early preterm birth compared to women who had the highest amounts of EPA plus DHA. This showcases the importance of dietary omega-3 intake impacting birth outcomes. The changes during infancy and childhood are fast and exciting. Motor development and dietary patterns are established and then the teenage year comes along with adulthood.

Get The Best Whole Food Salmon Oil Nutritional Solution. Giving You All The Omega-3 Fatty Acids Your Body Needs Daily

Salmon Oil Omega-3



6 FACTORS THAT AFFECT ABSORPTION OF VITAMINS & MINERALS

Just imagine you are consuming a colorful plate of food containing vegetables, a protein source, grains or dairy it looks good, but also forms a delicious matrix of nutrients ready to be taken in by your body. Though there is an abundance and variety of amazing food in the world, there are some factors that may impact how well our body uses the foods that we eat specifically, there are some food factors that may improve absorption of nutrients, such as vitamins and minerals, and there are some that may hinder absorption of nutrients. Below are the top factors that may influence overall absorption

INCREASE ABSORPTION

1) Dietary Fat

Fat-soluble vitamins are vitamins that can be dissolved in fat and these include vitamins A, D, E, and vitamin K. Because they can be dissolved in fat, they can be most absorbed when consumed with a dietary fat. For example, consider a baby carrot rich in vitamin A. If you eat this on its own, you will be getting the vitamin A within the food but if it is within a food component that has some dietary fat in it (let's say, olive oil), this will increase the uptake of the vitamin A in your body. Vitamin E is similar to vitamin A in that it is influenced by the amount of fat and components of a meal.

2) Cooking Techniques

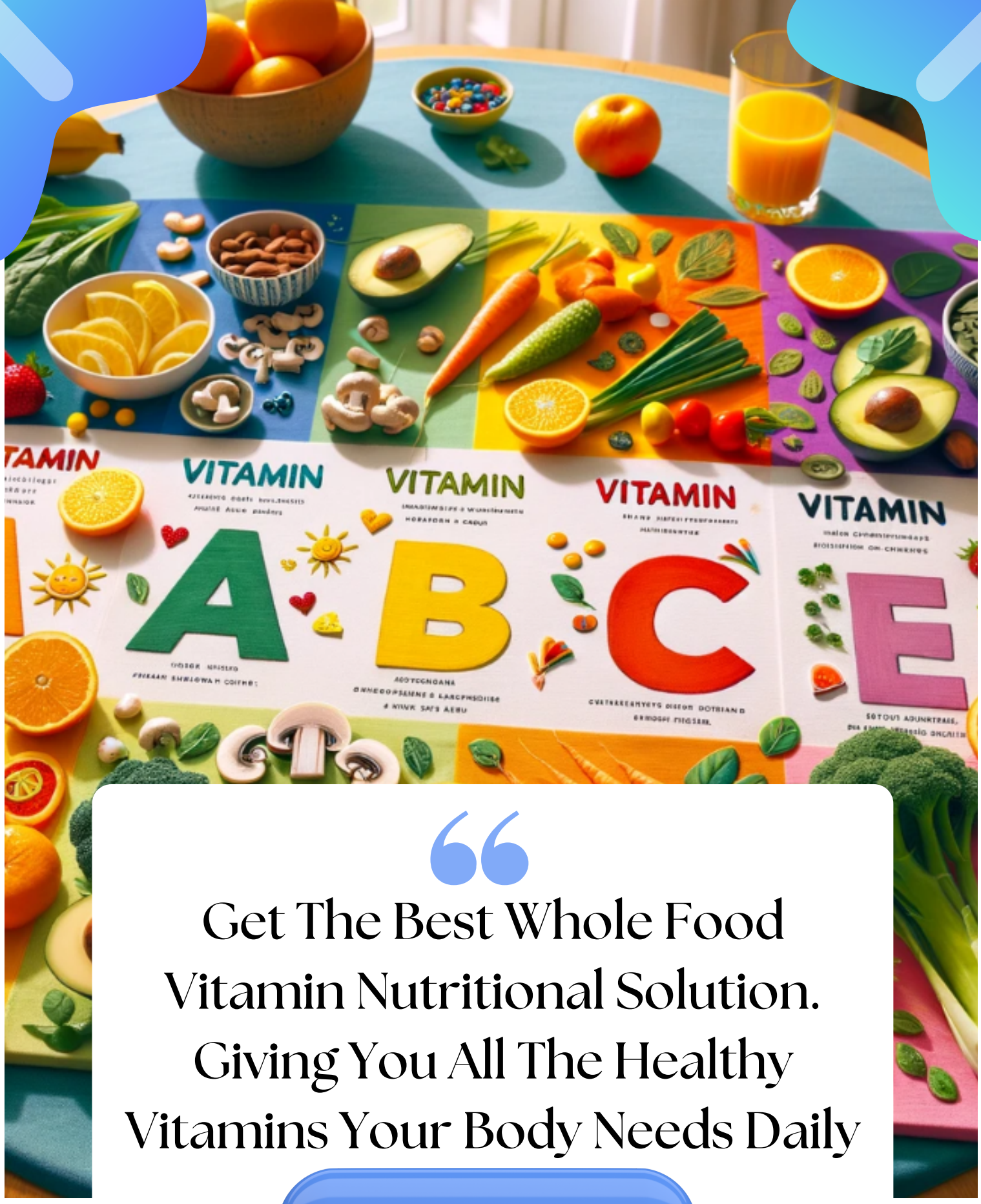
Cooking techniques vary from sautéing, boiling, baking, or roasting and these techniques can influence the vitamin/mineral content of foods both positively or negatively. One cooking technique known as blanching may result in loss of vitamins and minerals from foods. Blanching is a cooking technique where a fruit or vegetable is cooked quickly in boiling water and is then “shocked” in cold water or an ice-cold bath to stop the cooking process of the fruit or vegetable. The processing of food can impact the availability of minerals such as iron, zinc, and calcium, as well as some vitamins including vitamin C, thiamin, and folic acid. In some cases, heat processing increases the bioavailability of some minerals, such as iron or calcium. Certain vitamins, such as the beta-carotene from vitamin A and folate, may have improved bioavailability since cooking helps release the vitamins from the food matrix it is in.

3) Vitamins & Minerals That Work Together

Some vitamins and minerals work well with one another and they may enhance the absorption of the other. Calcium plays an important role in bone health, and vitamin D ensures improved calcium absorption. These two nutrients come hand-in-hand to optimize your body's ability to absorb calcium and to work to promote the use of calcium throughout the body. Another nutrient pair to mention is the powerful effect of vitamin C on iron uptake. Vitamin C is good for immune health and works as an antioxidant and iron helps transport oxygen throughout the body. Vitamin C can help with non-heme iron absorption (the type of iron primarily in plant-based sources). Other minerals that work together include sodium and potassium and they are both important in regulating blood pressure within our body system.

3) Vitamins & Minerals That Work Together

However, although we are most likely to have more sodium from our diet (think of salt), potassium is needed to counter the harmful load of too much sodium. Another duo you may have heard about are in the B vitamins category vitamin B12 and folate. Both of these vitamins are often added to breakfast cereals and other foods (where folate is added to cereal grains by law) and are important for cell division and replication.



Get The Best Whole Food Vitamin Nutritional Solution. Giving You All The Healthy Vitamins Your Body Needs Daily

The Vitamin Threshold

DECREASE ABSORPTION

4) Phytates & Tannins

Phytates are found in bran and certain whole grain items but can sometimes be found in legumes as well. Phytates are known to impact the absorption of some minerals including zinc, iron, and calcium. Iron seems to be the mineral whose absorption is most impacted by food substances! Some compounds in tea, known as tannins, may influence iron absorption and for this reason, it is recommended to consume tea between meals if one is iron-deficient.

Get The Best Whole Food Calcium, Zinc, Magnesium, and Iron Solution. Giving You The Core Nutrients Your Body Needs Daily

Absorption Nutrients

DECREASE ABSORPTION

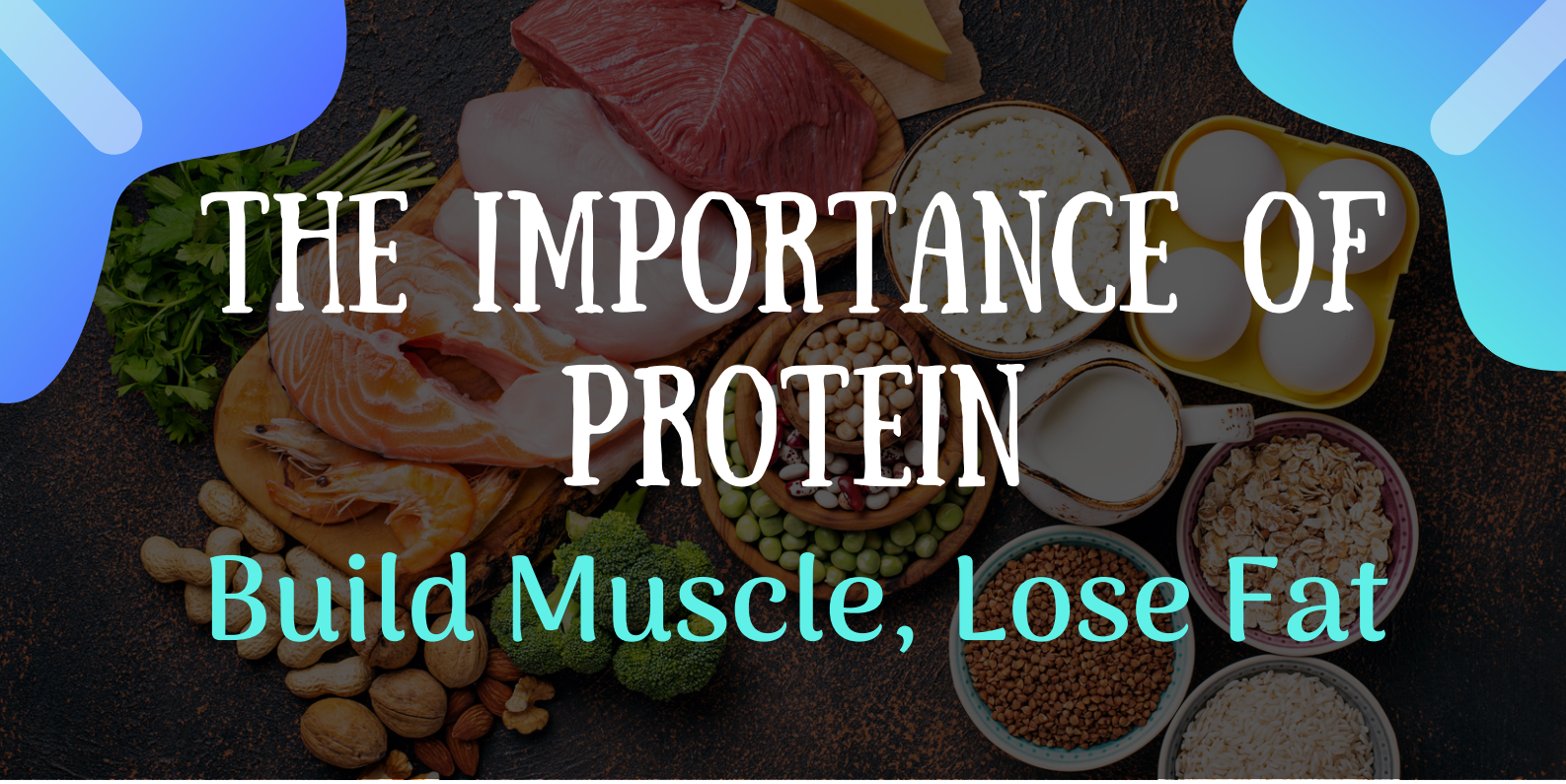
5) Health Conditions & Lifestyle Factors

Some health conditions can impact how your body absorbs some nutrients. For example, infectious illnesses can impact the absorption of vitamins and minerals through increased losses in the gastrointestinal tract, or effects in your gastrointestinal system impacting absorption. Smoking is a lifestyle factor that can impact how your body absorbs vitamins and minerals such as vitamins C and D, and calcium.

DECREASE ABSORPTION

6) Vitamins & Minerals That Act Against Each Other

Although vitamins and minerals are essential for many processes in our body, too much of some substances can impact the amounts of other substances. One example is very high doses of zinc (of up to 4 times the tolerable upper limit of 40 mg/day!) impacting the absorption of magnesium and to another extent, calcium has been suggested to negatively impact iron absorption. In the case of calcium and iron, it is suggested to take the individual supplements at different times of the day.



THE IMPORTANCE OF PROTEIN

Build Muscle, Lose Fat

Consuming high-quality protein at every meal is a really important part of successful weight management and is key to retaining or building muscle. High quality protein is defined as being highly digestible and containing all essential amino acids in the proper ratio for human nutrition. The accepted standard for rating protein quality is the Protein Digestibility Corrected Amino Acid Score (PDCAAS). The higher the PDCAAS, the higher the quality of the protein.

THE IMPORTANCE OF PROTEIN

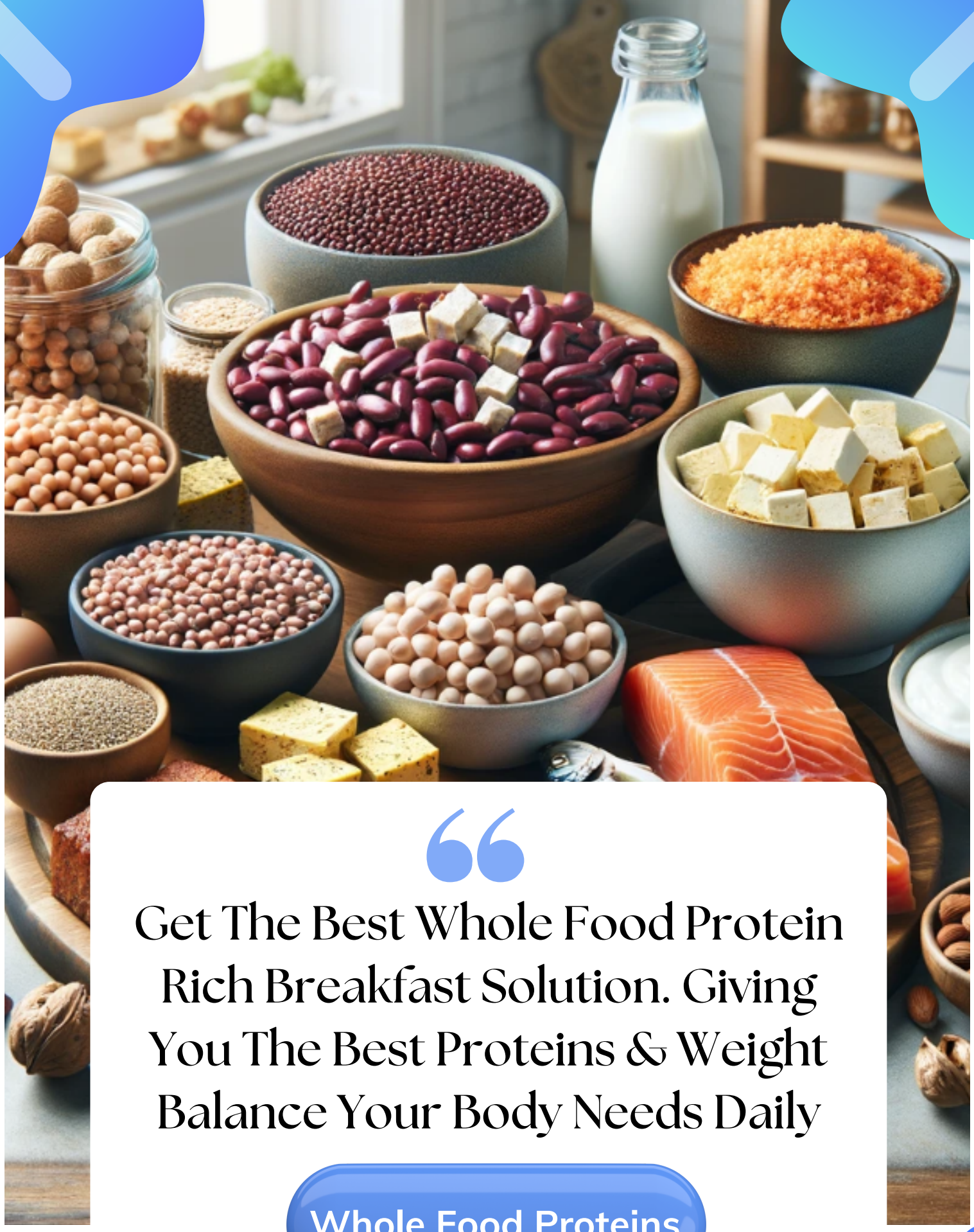
Burn More, Eat Less

There are a number of reasons that higher protein diets are useful to weight loss and weight management. First, the body burns more calories metabolizing protein than it does metabolizing fats or carbohydrates, so shifting to a higher protein diet will help your body burn more calories. Then it is known that protein is really satiating keeping you full for longer, so you are less likely to snack. How does protein do that? First by slowing gastric emptying compared to carbohydrates and fats which makes you feel fuller, secondly by influencing the secretion of hunger and satiety hormones the body's energy balancing systems. Protein stops the secretion of ghrelin, and at the same time it stimulates the secretion of "satiety hormones." These satiety hormones make you feel satisfied and help curb your urge to eat.

THE IMPORTANCE OF PROTEIN

Meal Timing & Protein Pacing

The latest research in protein consumption, nutrition and weight loss indicates that it is not only the consumption of protein that is important but also the time of day the protein is consumed that has a pronounced effect on satiety and weight loss. Research shows that consuming a protein-rich breakfast has a positive effect on satiety and helps to keep the satiety system activated throughout the day, which contributes to consuming fewer calories and to weight reduction. The satiety effects, as well as reduced hunger and cravings after consuming a protein-rich breakfast have even been measured in the brain using a high-technology technique called functional magnetic resonance imaging (fMRI).



Get The Best Whole Food Protein Rich Breakfast Solution. Giving You The Best Proteins & Weight Balance Your Body Needs Daily

Whole Food Proteins

Recent research has also emphasized the benefit of regular protein consumption through the day. A concept which is called protein pacing.

This means that it is far better for the body's retention of protein and muscle building, to have a reasonable amount of protein (20-30g) at a few time points throughout the day rather than in a single high protein meal at the end of the day.

If at all possible it is also generally recommended to avoid late night dinners and take in more of the day's calories earlier on in the day, either at breakfast or at lunch time. So, to give yourself the best chance to lose fat and build muscle it is really important to incorporate high quality protein into your daily meal planning.

THE UNIVERSAL LIFE GIVING VITAMIN

Over the last decades there have been over 400 articles reporting on research projects devoted to Vitamin D. Why such a number of research projects? It would appear from the list of reports that Vitamin D is being shown to be required for many other functions in the human body than was traditionally known. Why do we need Vitamin D and what are the consequences of its deficiency? To refresh our memories there are several reviews which describe why we need Vitamin D and its sources and the results of its deficiencies. Vitamin D is a fat-soluble vitamin that is found in few foods. It can be produced within your body when ultraviolet rays from the sun strike the skin and stimulate the production of vitamin D.

THE UNIVERSAL LIFE GIVING VITAMIN

Vitamin D obtained from sun exposure, food, and supplements is biologically inert and must go through two activations in the body before it can be used: the first occurs in the liver and the second occurs primarily in the kidney and forms the physiologically active 1,25-dihydroxyvitamin D, also known as calcitriol. Vitamin D has various functions including the absorption of calcium in the gut, helps your bone have normal mineralization, and it works to prevent hypocalcemic tetany (a condition of continued spasm of a muscle resulting from chronically low blood calcium). It is also needed for bone growth and bone remodeling by osteoblasts—cells which build bone, and osteoclasts cells which break down bone.

THE UNIVERSAL LIFE GIVING VITAMIN

Without enough vitamin D, bones can become thin, brittle, or misshapen. Having enough vitamin D prevents rickets in children and osteomalacia, or the softening of bones, in adults. Together with calcium, vitamin D helps protect older adults from osteoporosis, where bones are very brittle and can easily fracture. It also enhances intestinal absorption of iron, magnesium, phosphate and zinc. Vitamin D has other roles in the body, including regulation of cell growth, neuromuscular and immune function, and reduction of inflammation. The main theme that comes out of these reviews is that there is a general Vitamin D deficiency which is a worldwide problem with many serious health consequences.

THE UNIVERSAL LIFE GIVING VITAMIN

Vitamin D deficiency is now recognized as pandemic and may be caused by the lack of sun exposure among humans which in turn, can lead to low levels of vitamin D in the body. Further, very few foods naturally contain vitamin D, and foods that are fortified with vitamin D are often inadequate to satisfy either a child's or an adult's vitamin D requirement and of course if these fortified foods are not consumed then the benefits of the fortification are not obtained. Vitamin D deficiency causes rickets in children and can worsen and lead to osteopenia (when bones are weaker than normal), osteoporosis, and fractures in adults. Vitamin D deficiency has been associated with increased risk of common cancers, autoimmune diseases, hypertension, and infectious diseases.

THE UNIVERSAL LIFE GIVING VITAMIN

If the case of not having enough exposure to the sun, at least 800–1000 IU vitamin D3/day may be needed to achieve adequate levels of vitamin D to confer beneficial health effects in children and adults. Vitamin D2 may be equally effective for maintaining circulating concentrations of 25-hydroxyvitamin D when given in physiological concentrations. The above problems go a long way to answer the question originally posed as to why there are currently so many research projects concerning Vitamin D. It is clear that if its deficiency can produce many potential health problems then its correct level in the body can probably overcome certain serious health problems.

Get The Best Whole Food Vitamin D Solution. Giving You The Best Vitamin D Rich Nutrients Your Body Needs Daily

Vitamin D Solution

THE UNIVERSAL LIFE GIVING VITAMIN

From the above it is also clear that there are very good reasons to study Vitamin D in such detail as it is becoming the universal Vitamin, having effects on many different systems in the body. How to make sure we get the required recommended levels of Vitamin D? There are several food sources as described above, such as cod liver oil and milk. Obviously other foods are available especially in the USA that are fortified with Vitamin D.

HOW MAGNESIUM SUPER POWERS YOUR WORKOUT

For both competitive and recreational athletes, this mineral plays a critical role in physical performance. Magnesium plays a vital role in cellular reactions that release energy from carbohydrates and fats; it also plays a direct role in proper muscle contraction which is of particular importance during strength training and endurance activity. Studies show that the poor magnesium status due to a diet lacking in this mineral (or potentially due to the intake of certain medications such as those used to treat high blood pressure) may lead to decrements in performance. A study from the University of Hertfordshire in the U.K. revealed muscular strength was improved with magnesium supplementation in those subjects who started with poor magnesium status.

HOW MAGNESIUM SUPER POWERS YOUR WORKOUT

Other research suggests that the demand of exercise on carbohydrate metabolism (using the sugar glucose for fuel by the brain and muscles) is impaired when magnesium levels are low due to a poor diet. Many competitive and recreational athletes (similar to the general population) fail to meet their need for magnesium due to low intake of magnesium-rich food sources such as leafy greens, nuts, and beans.

Get The Best Whole Food Magnesium Solution. Giving You The Best Magnesium Rich Nutrients Your Body Needs Daily

Magnesium Complex

HOW TO FILL THE GAP WITH FIBER

It seems that very often we are told about the importance of having fruits, vegetables, and whole grains in a balanced diet to obtain needed vitamin and minerals. With all the benefits of these foods, we forget that these foods also contain fiber which is an important part of our everyday diet. Fiber can help you in multiple ways. It can help you with controlling your weight by making you feel full for a longer time and it can also help you with digestion as it aids with the movement of food through your digestive system. Foods with higher fiber amounts may make you feel full longer as they are more satisfying. Consider what may make you feel full longer drinking a glass of apple juice or eating an apple whole. A whole apple may make you full longer because of the fiber in the apple and in its skin.

HOW TO FILL THE GAP WITH FIBER

Also, with enough fluid, fiber can help glide food through your system more quickly, helping you with issues of constipation. Some types of fiber provide the benefits of lowering levels of blood sugar and blood glucose, which in turn, can lower your risk of getting diabetes or heart disease. Fiber is a powerhouse for providing benefits to your digestive and heart health and overall wellbeing. Although the benefits of fiber are known, fiber is under-consumed among adults in the United States. Recommended adequate intake amounts for fiber for adult's ranges from 25 to 38 grams per day, but in reality, trends have shown that people consume an average of fewer than 16 grams per day. Adults may not be getting all the great benefits that fiber has to offer.

HOW TO FILL THE GAP WITH FIBER

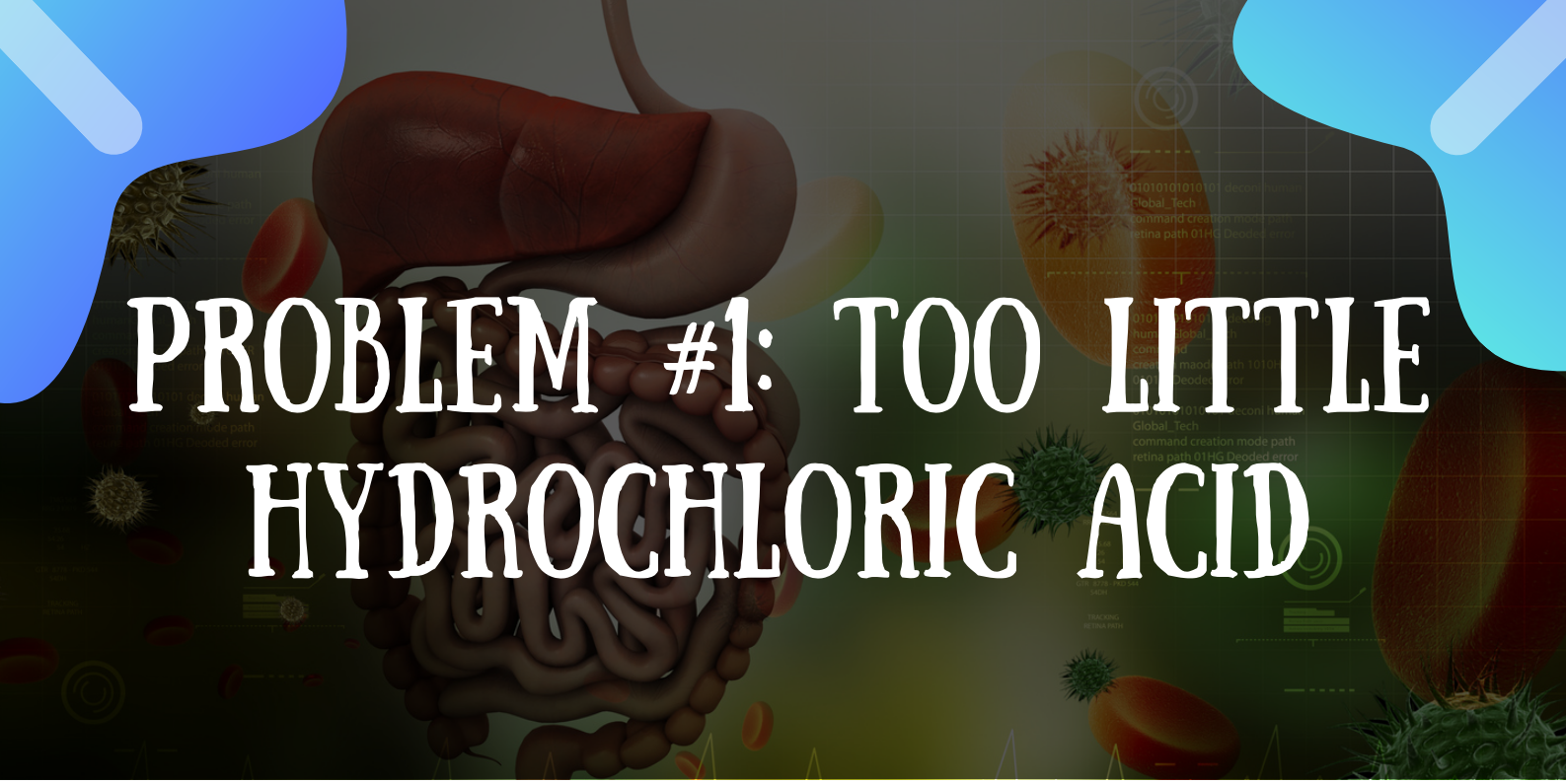
To show dietary fiber amounts in perspective, 1 medium banana has 3.1 grams of fiber and 1 slice of whole-wheat bread has 1.9 grams of fiber. As a female, you may need to eat an orange, 1 cup of oatmeal, 2 slices of bread, 1 cup of brown rice, 1 cup of broccoli, and half a cup of black beans a day to have your daily requirement of around 25 grams of fiber. Generally, whole foods are recommended to get a diverse set of nutrients such as vitamins, minerals, and fibers available in foods. However, it may be challenging for some to obtain these consistently in the diet while on the go during breakfast time or while hectically running errands throughout the day. This is why we have the best complete whole food fiber solution for you to take on the go every day.

Get The Best Whole Food Fiber Solution. Giving You The Best Fiber Rich Nutrients Your Body Needs Daily

All Natural Fiber Mix

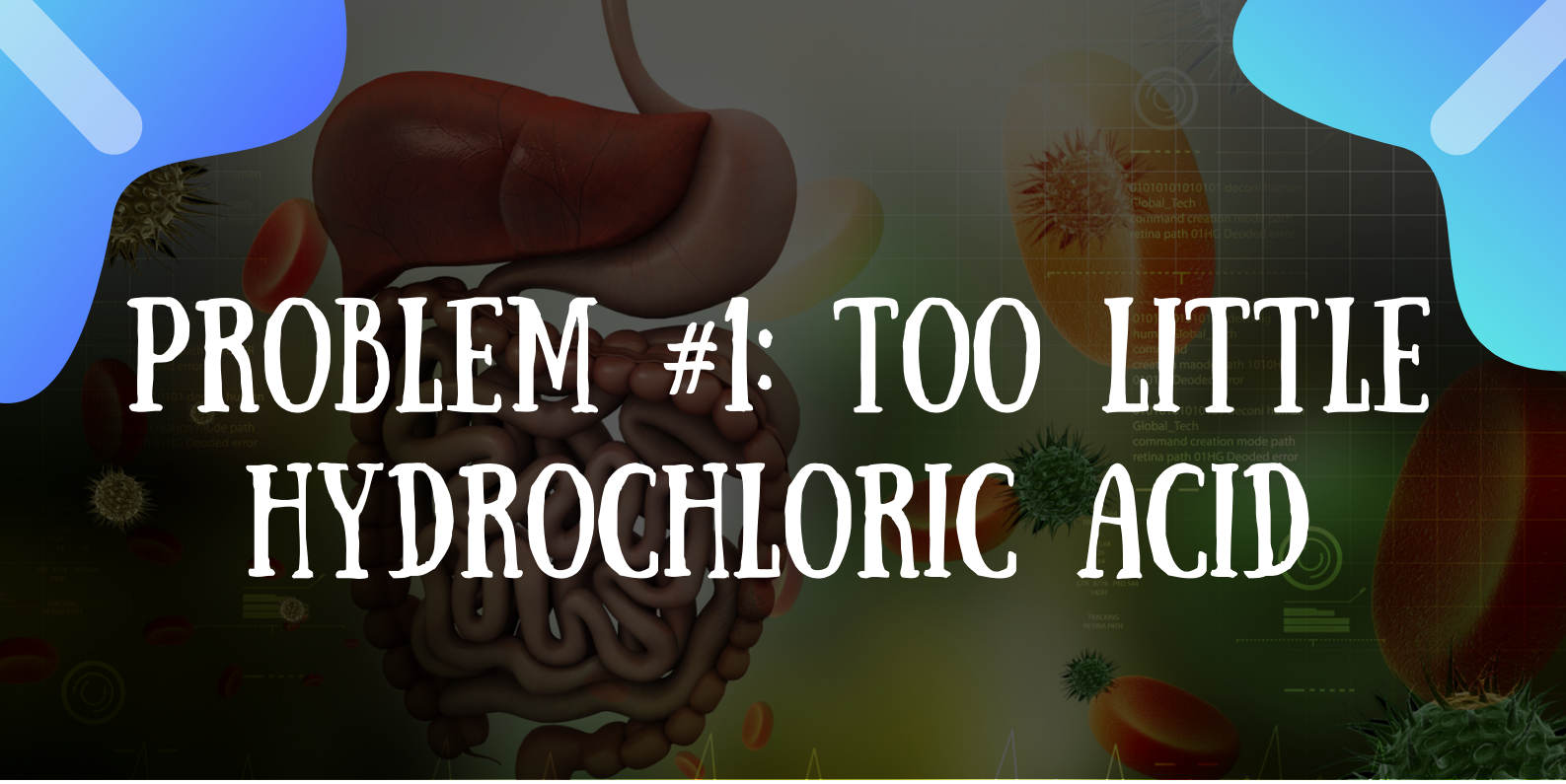
NATURAL SOLUTIONS TO 6 COMMON DIGESTION PROBLEMS

The market for over-the-counter digestive aids is in the millions. While many of the common approaches to address digestive troubles may temporarily treat the symptoms, they don't address the long-term cause of the problems. And as the symptoms reappear, people increase their consumption of digestive aids, leading to a long-term heavy use which can make the underlying problem worse. Here's a look at the 6 most common problems with digestion.



PROBLEM #1: TOO LITTLE HYDROCHLORIC ACID

Hypochlorhydria — too little hydrochloric acid in the stomach — is a common digestive disorder. Around age 30, the stomach begins to secrete less hydrochloric acid. This decline continues over the years. Overeating, excessive alcohol, or the habitual use of antacids may also dilute the concentration of stomach acid, reducing the total amount of hydrochloric acid available for digestion. Without sufficient hydrochloric acid, most foods cannot be broken down enough to release certain nutrients for absorption. Or nutrients whose carriers require an acid environment in the stomach may not be absorbed efficiently later on in the intestines.

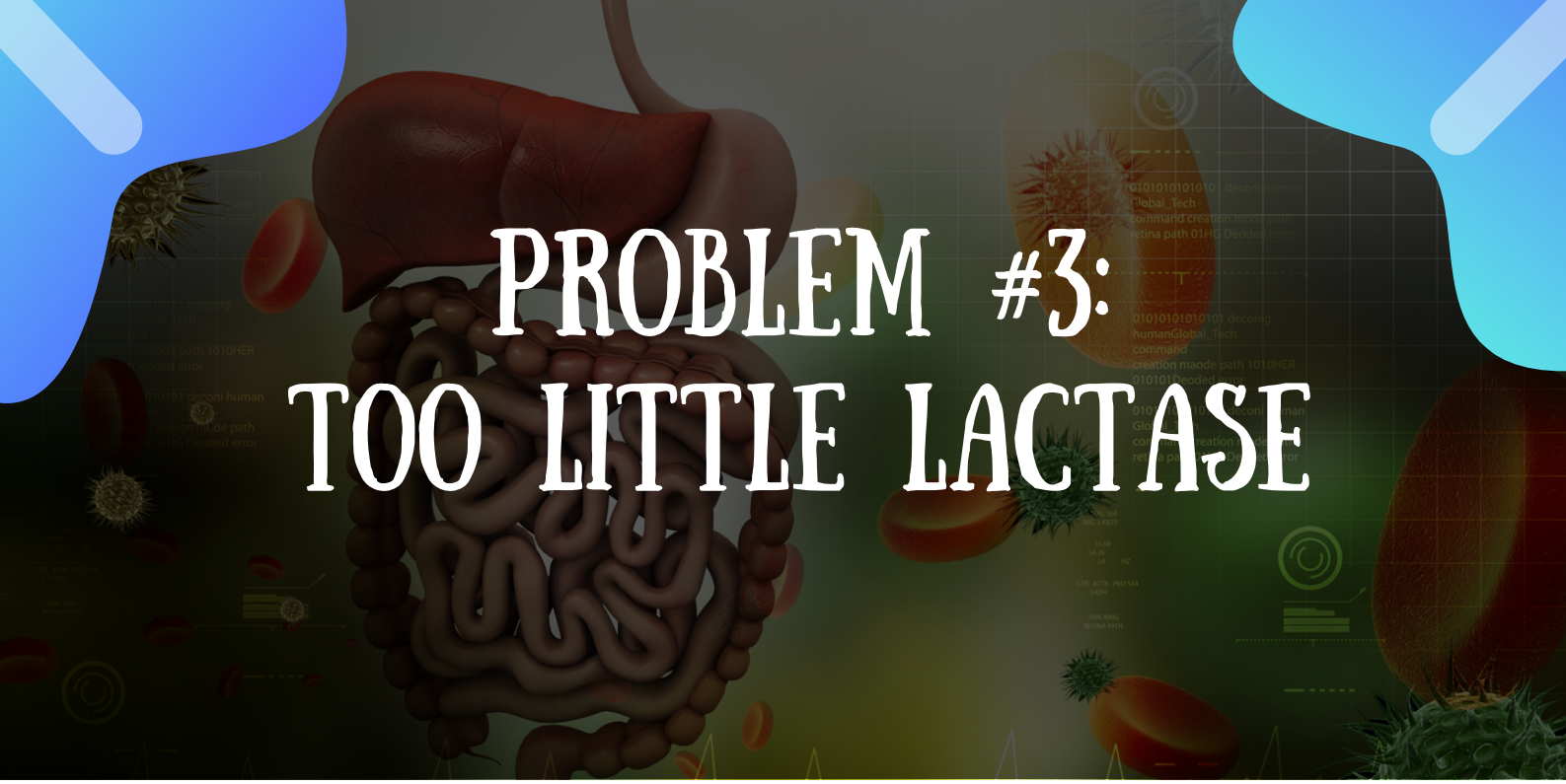


PROBLEM #1: TOO LITTLE HYDROCHLORIC ACID

The result may be wasted nutrients, intestinal discomfort, or medical problems. Therefore, even if the diet is nutrient-rich, incomplete digestion can contribute to a nutrient deficiency. Food that is only partially digested is hindered in its movement through the digestive tract.

PROBLEM #2: OVERBURDENED ENZYME SUPPLIES

At times we overindulge in the wrong kinds of foods. Or we eat too fast. Too much food may overburden the capacity of a limited supply of digestive enzymes to break down complex foods into their simpler components.

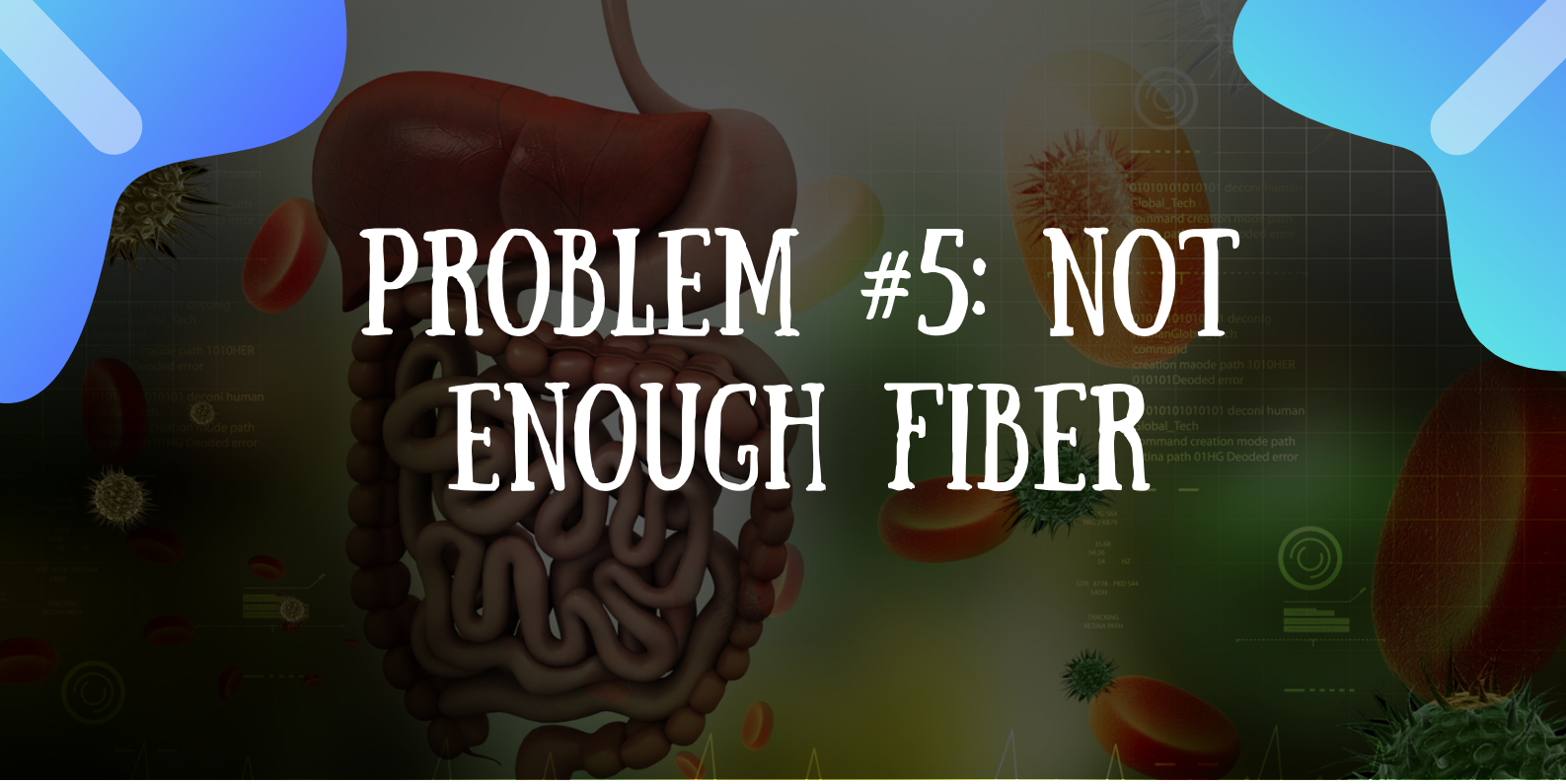


PROBLEM #3: TOO LITTLE LACTASE

Lactose is a sugar found in milk and other dairy products. The digestive enzyme that breaks it into components small enough to absorb and utilize is called lactase. Insufficient lactase may result in lactose malabsorption, or intolerance, characterized by abdominal pain, bloating, flatulence, and diarrhea. The severity of the symptoms varies depending on the amount of lactose ingested and the degree of the enzyme deficiency. Lactase added to foods may reduce discomfort associated with lactose malabsorption.

PROBLEM #4: UNBALANCED INTESTINAL FLORA

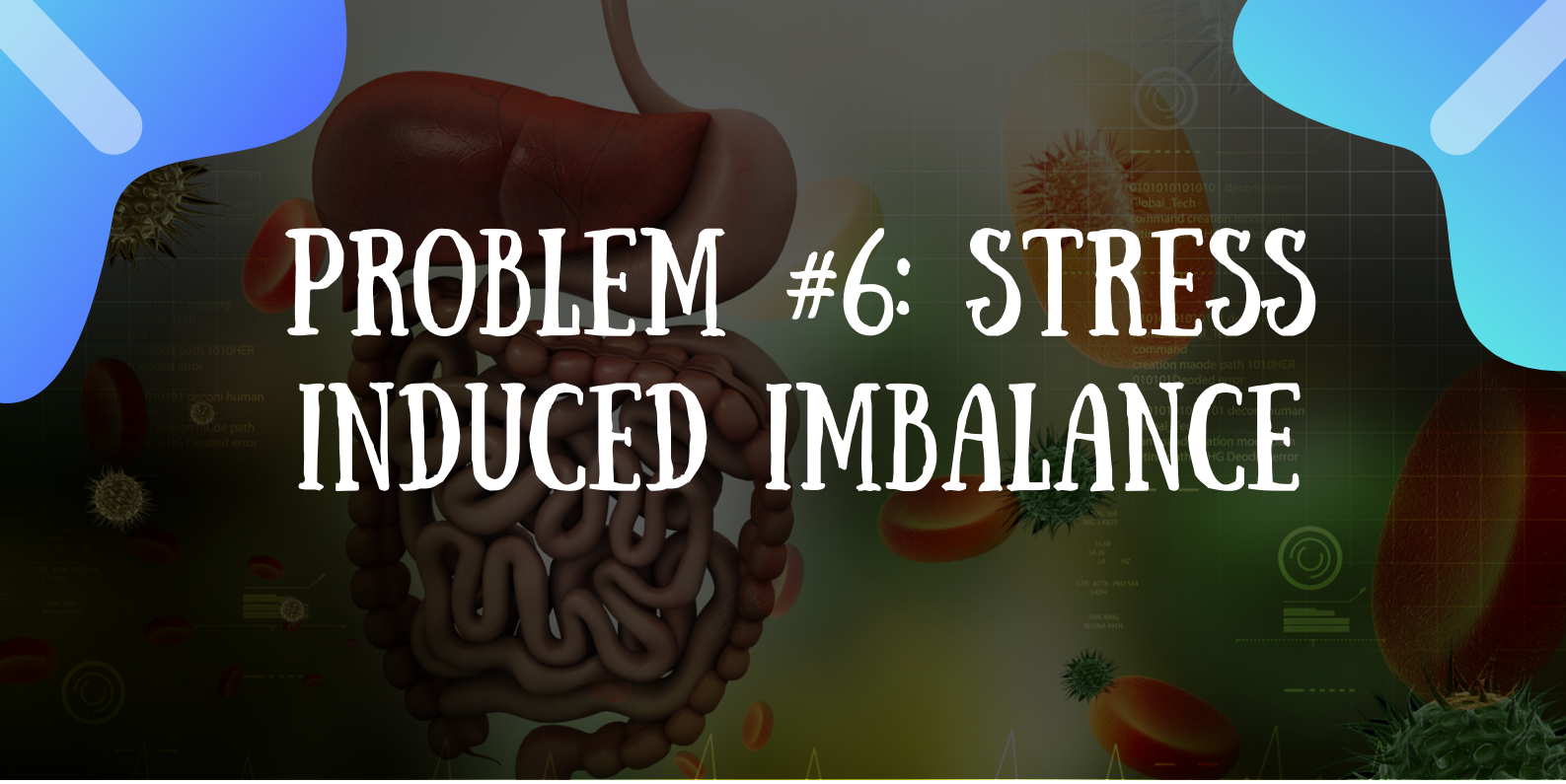
When beneficial good bacteria are destroyed by poor diet choices, use of antibiotics and other prescription and OTC pharmaceuticals, stress, and poor health, unhealthy microorganisms can take over and wreak havoc on the digestive and immune system.



PROBLEM #5: NOT ENOUGH FIBER

A high-fiber diet helps keep intestinal function smooth and regular and supports optimal health. Dietary fiber does more than just contribute to the feeling of “fullness.” It increases the bulk of the intestinal contents, speeding their transit through the intestines and increasing the frequency of elimination. It also supports the metabolic activities of “good” bacteria and binds bile acids and cholesterol. Populations consuming high fiber diets have a low incidence of intestinal disorders such as diverticulitis, polyps, colitis, hemorrhoids, and cancer.

However, despite fiber's many proven benefits, most people don't get anywhere near the 20-35 gm of dietary fiber recommended by the National Cancer Institute. The average person only consumes 12 gm of fiber per day.



PROBLEM #6: STRESS INDUCED IMBALANCE

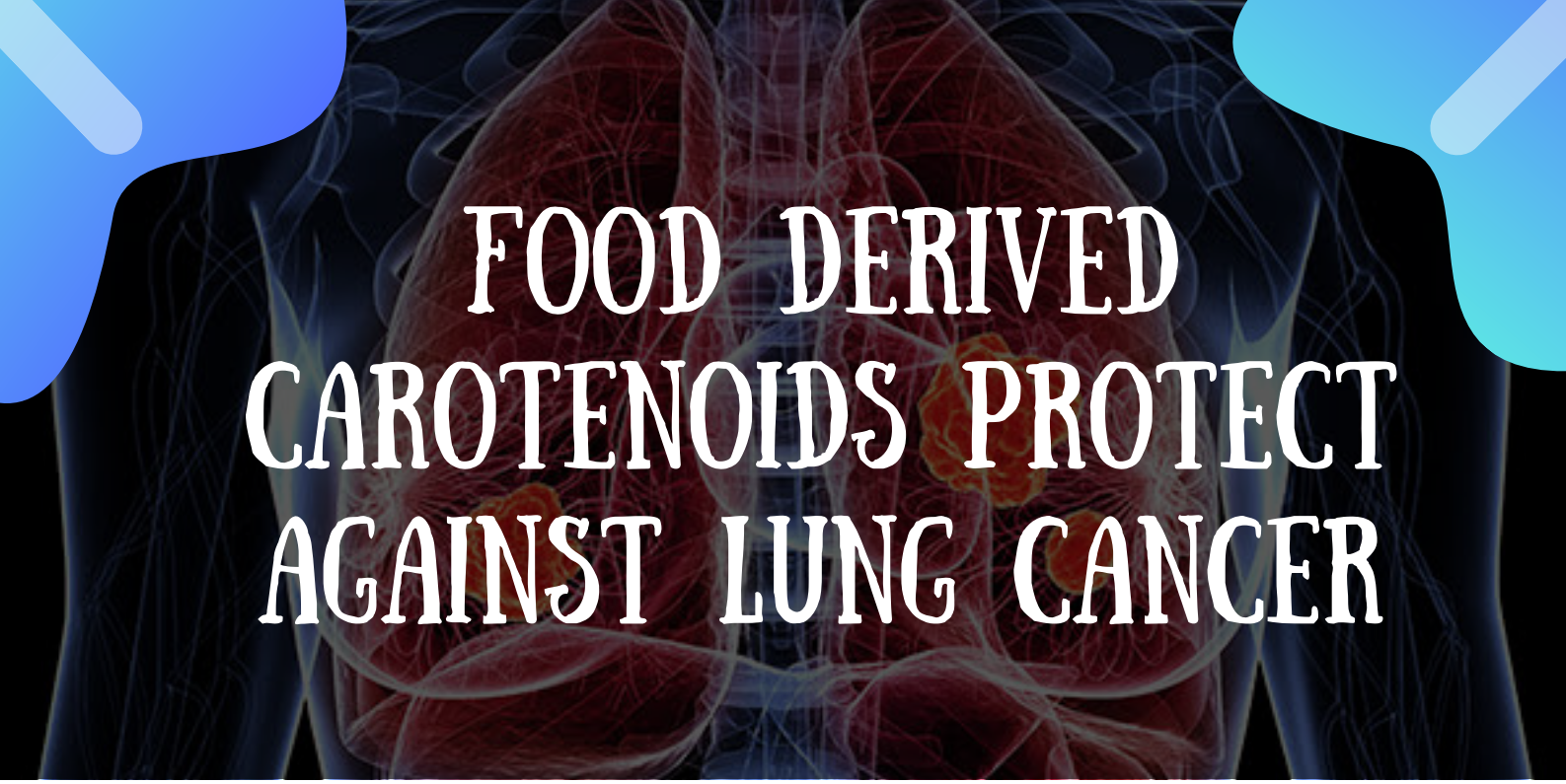
Stress is a major cause of digestive imbalance and digestive system illness.

APPROACHES TO HEALTHY DIGESTION

Safe and gentle, Vitality Life digestive supplements are formulated to support the natural activities of the digestive system. Based in nature and backed by science, they address the underlying causes of digestive troubles, not just the symptoms. Along with appropriate food choices, they contribute to the stability of the gastrointestinal environment and promote optimal digestive function in the stomach, intestine and colon. Vitality Life has formulated a series of leading-edge products to address the most common “problem areas” within the digestive tract. Employing the most recent scientific findings and selecting only the finest natural ingredients, the Vitality Life Scientific Advisory Board has created a product line of digestive aids to provide complete and balanced support for the entire system.

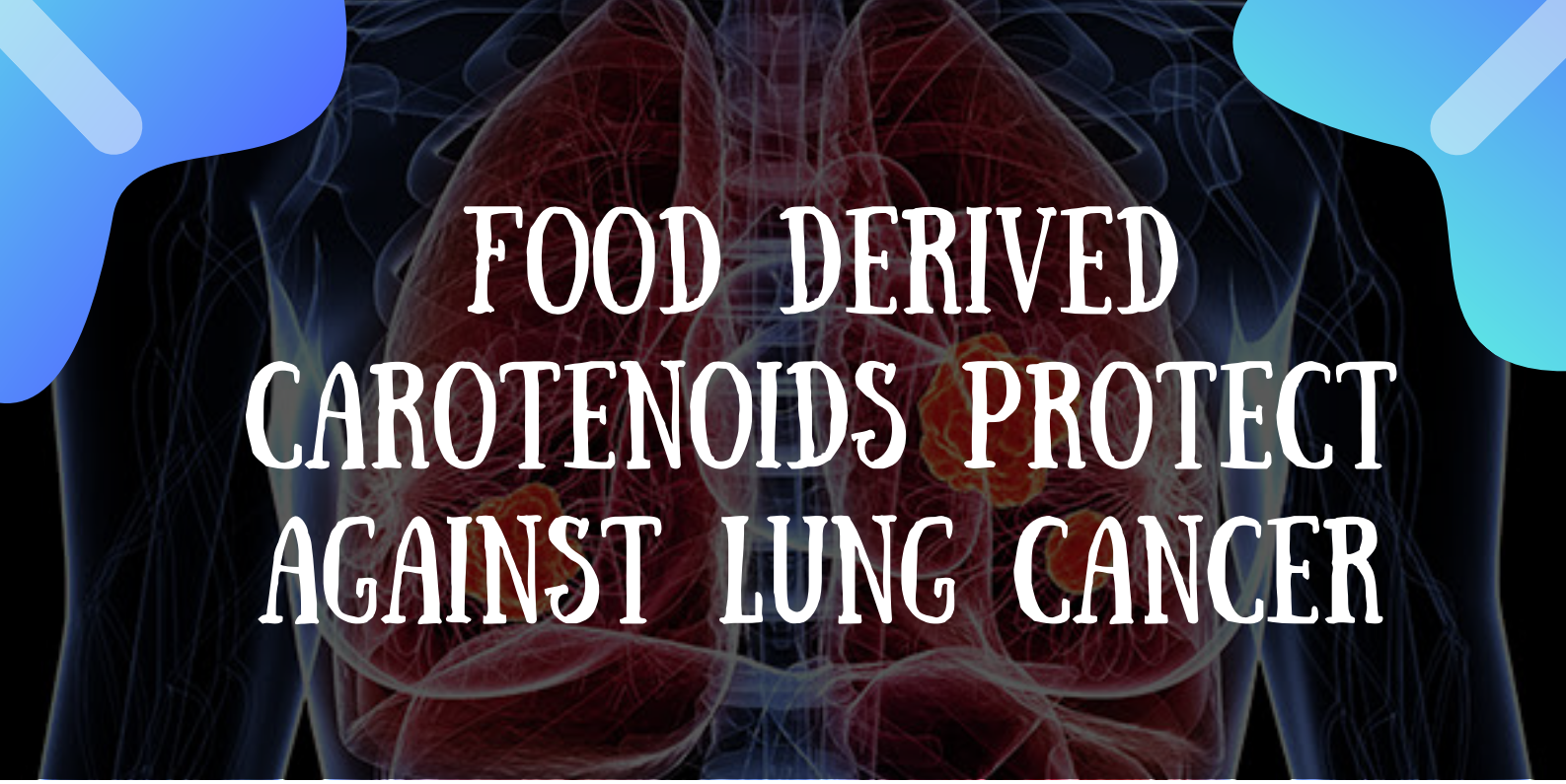
APPROACHES TO HEALTHY DIGESTION

To support the natural balance of the digestive tract, our products provide vital acids, enzymes, “good” bacteria, fiber, and other healthful factors. Plant-sourced and naturally derived ingredients work with the body to enhance digestion so that you are able to unlock the complete nutritional power of the foods you eat. Bring better digestion to the table. Vitality Life’s specifically targeted formulas deliver a broad range of digestive support so you can enjoy a wide variety of foods with confidence and comfort.



FOOD DERIVED CAROTENOIDS PROTECT AGAINST LUNG CANCER

It is well known that carotenoids promote the body's ability to defend against essentially all forms of cancer. You can find compelling evidence in the form of strong references that support that throughout peer-reviewed scientific/medical literature. A new study published by researchers from Montreal University in the journal Frontiers in Oncology reinforces that point by showing that combinations of dietary carotenoids derived from food provide a 25-35% protective factor against lung cancer. Now, before I go any further let me start by saying that the single greatest cause of lung cancer is smoking.

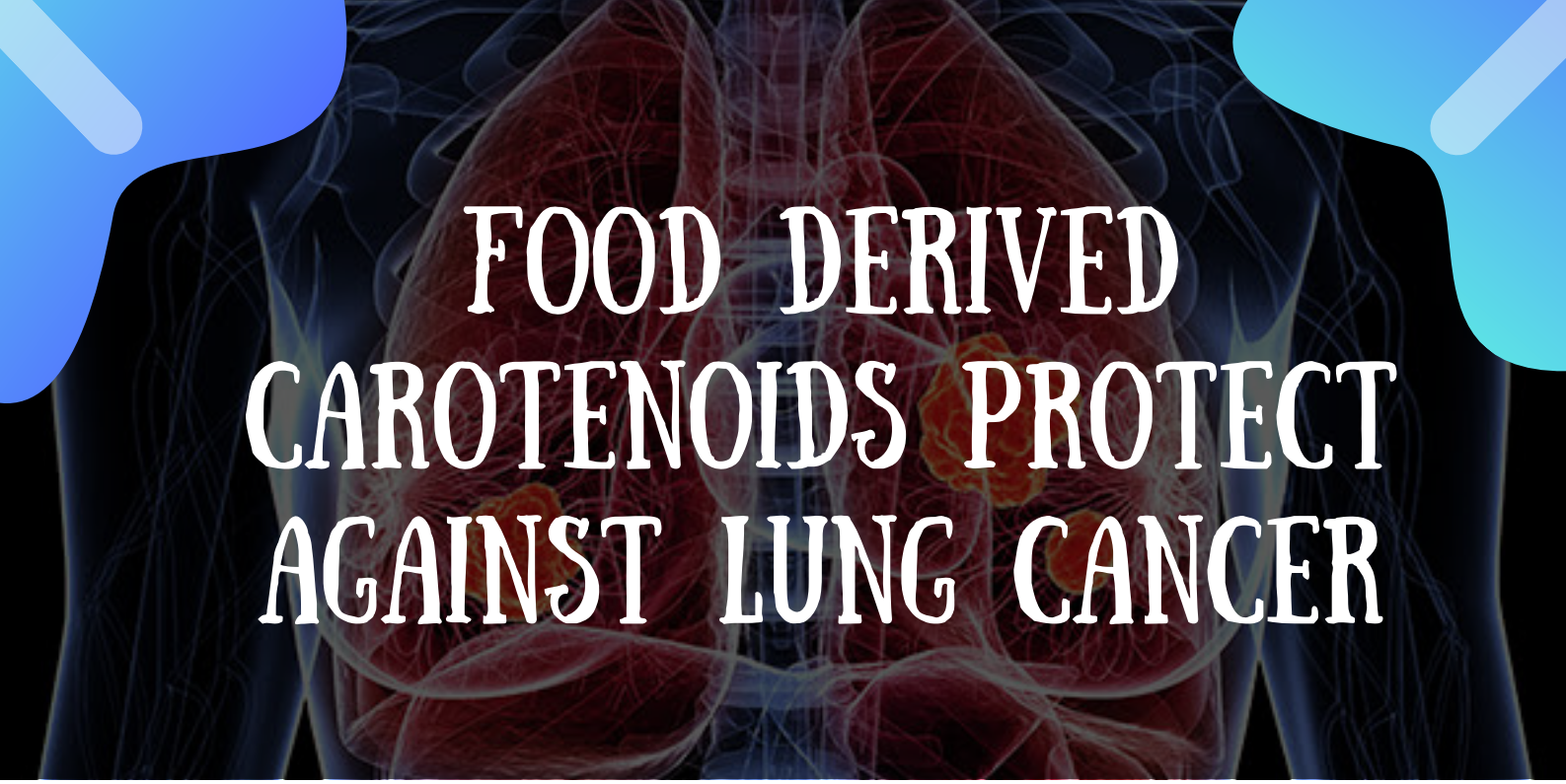


FOOD DERIVED CAROTENOIDS PROTECT AGAINST LUNG CANCER

So if you smoke, stopping will be your strongest cancer prevention step. That said, this study points out that smoker or not carotenoids offer protection to delicate lung tissue. It shows that those in the top 33% of food-based carotenoid consumers received a 25-35% risk reduction for lung cancer compared to the others in the group; irrespective of age, gender or smoking status. That makes this a powerful message for everyone! (For heavy smoking females vitamin C seemed to provide added protection as well.) The study also found that higher intake of food-based carotenoids equated to lowered cell development sub-forms of cancer, including squamous cell, small cell and adenocarcinoma cell growth.

Get The Best Whole Food Carotenoid Solution. Giving You The Best Carotenoid Rich Nutrients Your Body Needs Daily

Carotenoid Complex



FOOD DERIVED CAROTENOIDS PROTECT AGAINST LUNG CANCER

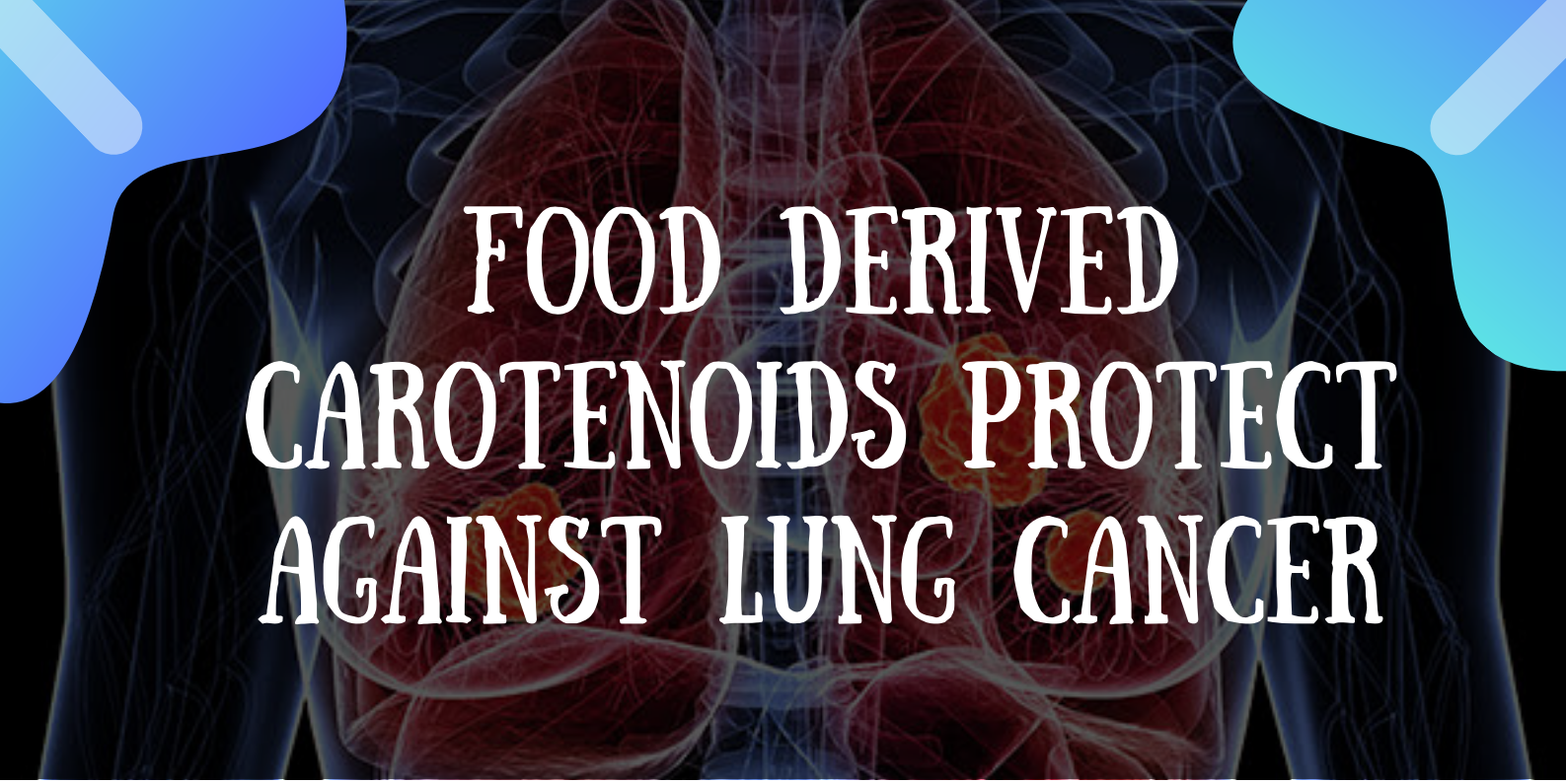
Here A Few Key Takeaways:

1. Dietary abundance of food-derived carotenoids is a strong health protector; for cancer, but other chronic diseases as well. We should all make getting them a priority every day.

2. A diversity of food-derived carotenoids is hugely important. In this study they looked at 4 that work in synergy with each other; alpha and beta carotene, beta kryptoxanthin and lycopene.

3. You can only get food-derived carotenoids from food. So eating lots of carotenoid-rich foods is important.

4. If you have trouble consuming an abundance of carotenoid -rich foods each day, try supplementing to fill your whole food-carotenoid gap.



FOOD DERIVED CAROTENOIDS PROTECT AGAINST LUNG CANCER

So, eat smart every day and consume a lot of carotenoid-rich fruits and vegetables. And if you can't do that make sure to fill your whole food-carotenoid gap with superior quality supplements or better yet, do both.

FLAVONOIDS FIGHT OBESITY & INFLAMMATION

In the May 2017 issue of the journal *Nutrition & Diabetes*, a small but important study appeared in the "Short Communications" section. That study showed evidence that the amount of daily flavonoid intake was inversely associated with the risk of obesity as well as the inflammatory burden associated with obesity. That means when flavonoid intake is high the risk of obesity is lower and the inflammatory burden that obesity puts on the body is also reduced. Not an entirely new discovery, but an important affirmation of the power of flavonoid rich foods.

FLAVONOIDS FIGHT OBESITY & INFLAMMATION

Here are two important take-a-ways from that work:

1. A diet rich in flavonoid containing foods is *shown* to protect against obesity. Part of the reason no doubt is that high flavonoid intake means high fruit and vegetable intake as those are the foods we get flavonoids from. But it also adds evidence to the benefits of insuring a high daily flavonoid intake from all sources.

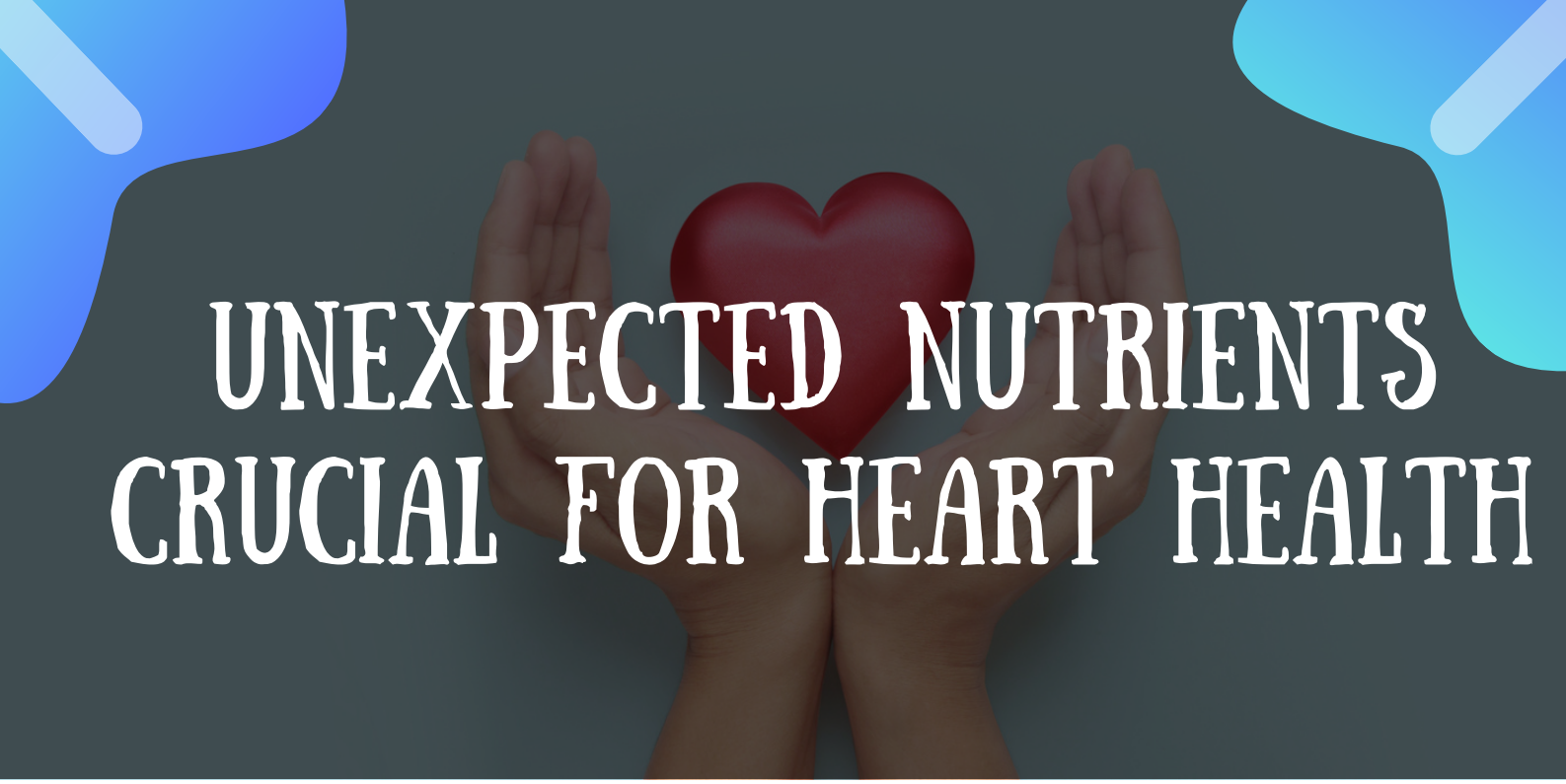
2. Flavonoids are anti-inflammatory nutrients. As this study reaffirms, high flavonoid intake is associated with lower inflammatory burden. In this case it's the inflammation associated with obesity, but it is safe to say that those same anti- inflammatory benefits apply to all of us; overweight, obese, underweight or otherwise. Everyone can benefit from a daily diet high in whole food flavonoid content.

FLAVONOIDS FIGHT OBESITY & INFLAMMATION

So having a plan to assure dietary abundance whole food flavonoids each day would make sense, right? Right! That is not just prudent, but simply smart.

Get The Best Whole Food Flavonoid Solution. Giving You The Best Flavonoid Rich Nutrients Your Body Needs Daily

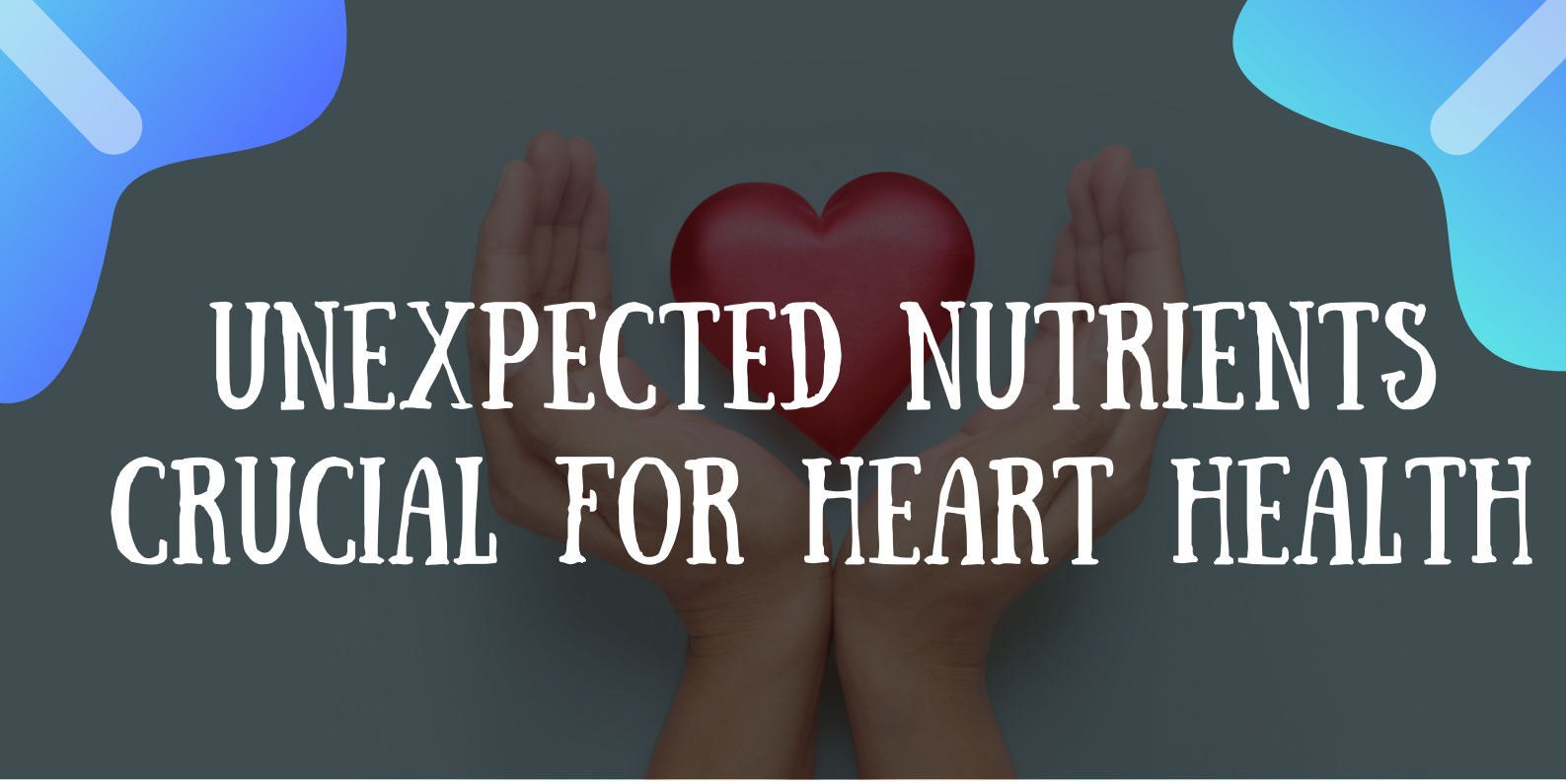
Flavonoid Complex



UNEXPECTED NUTRIENTS CRUCIAL FOR HEART HEALTH

Polyphenols

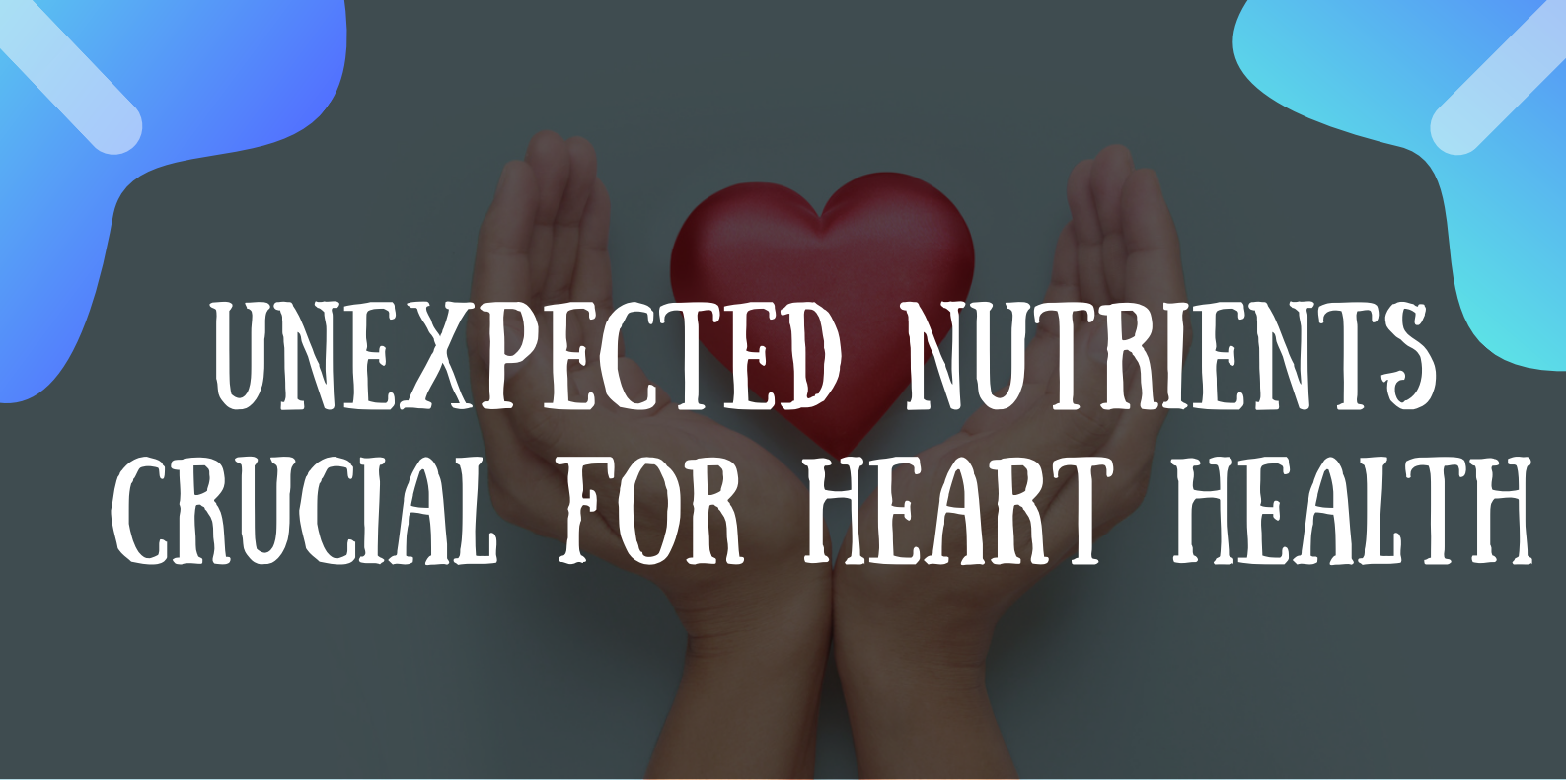
Researchers found that individuals who consumed the highest amounts of foods containing anthocyanins had a 14% lower risk of heart attack and individuals with high intakes of flavanones had a 22% lower risk of ischemic stroke!1 Where do you find anthocyanins and flavanones? Red and blue fruits such as blueberries and cranberries are good sources of anthocyanins, and flavanones are commonly found in citrus fruits.



UNEXPECTED NUTRIENTS CRUCIAL FOR HEART HEALTH

Fiber

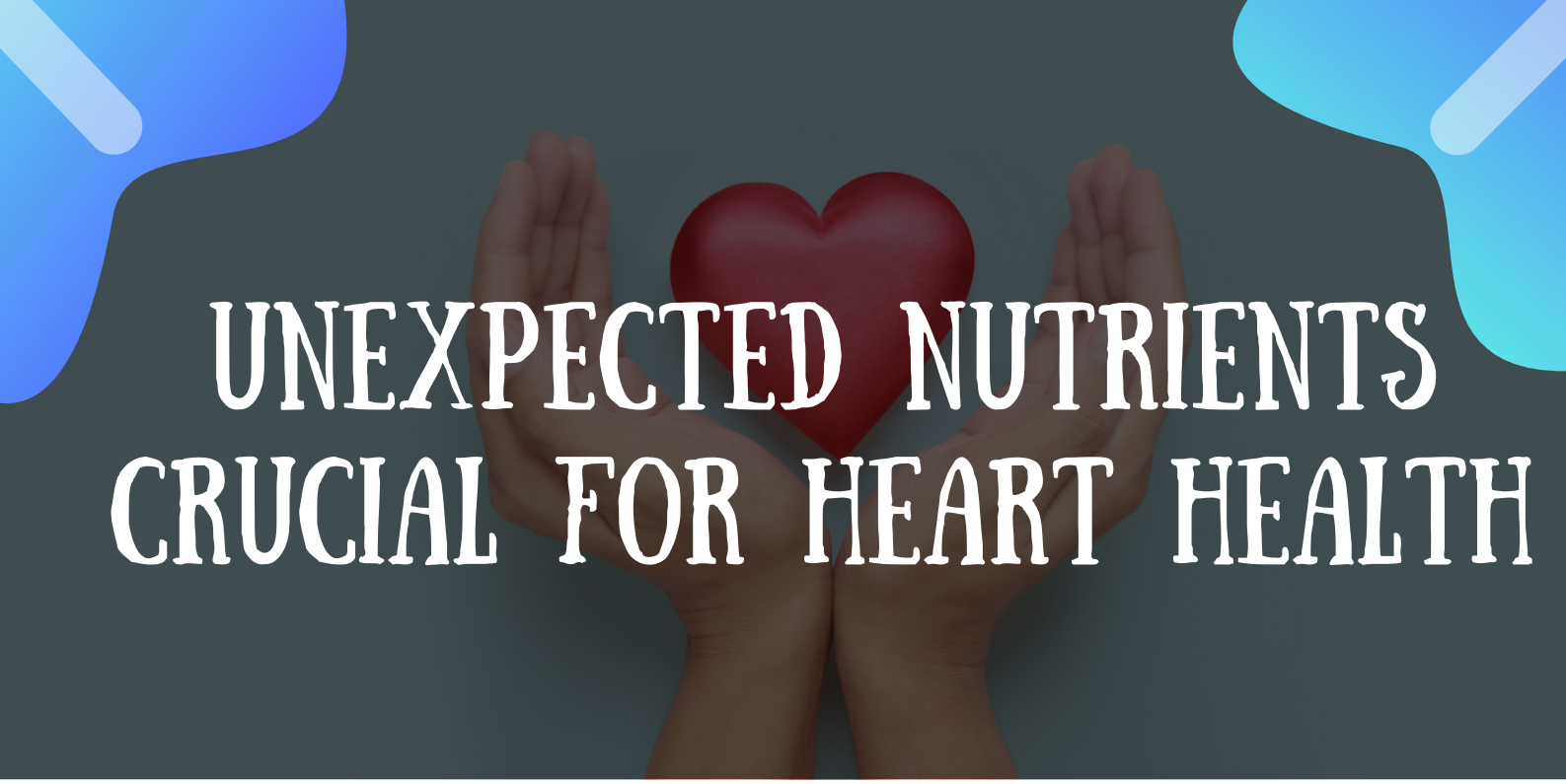
A high-fiber diet now could significantly improve long-term risk for heart problems.2 How much fiber should we aim for? The American Heart Association recommends at least 25 grams of dietary fiber a day for adults.



UNEXPECTED NUTRIENTS CRUCIAL FOR HEART HEALTH

Soy

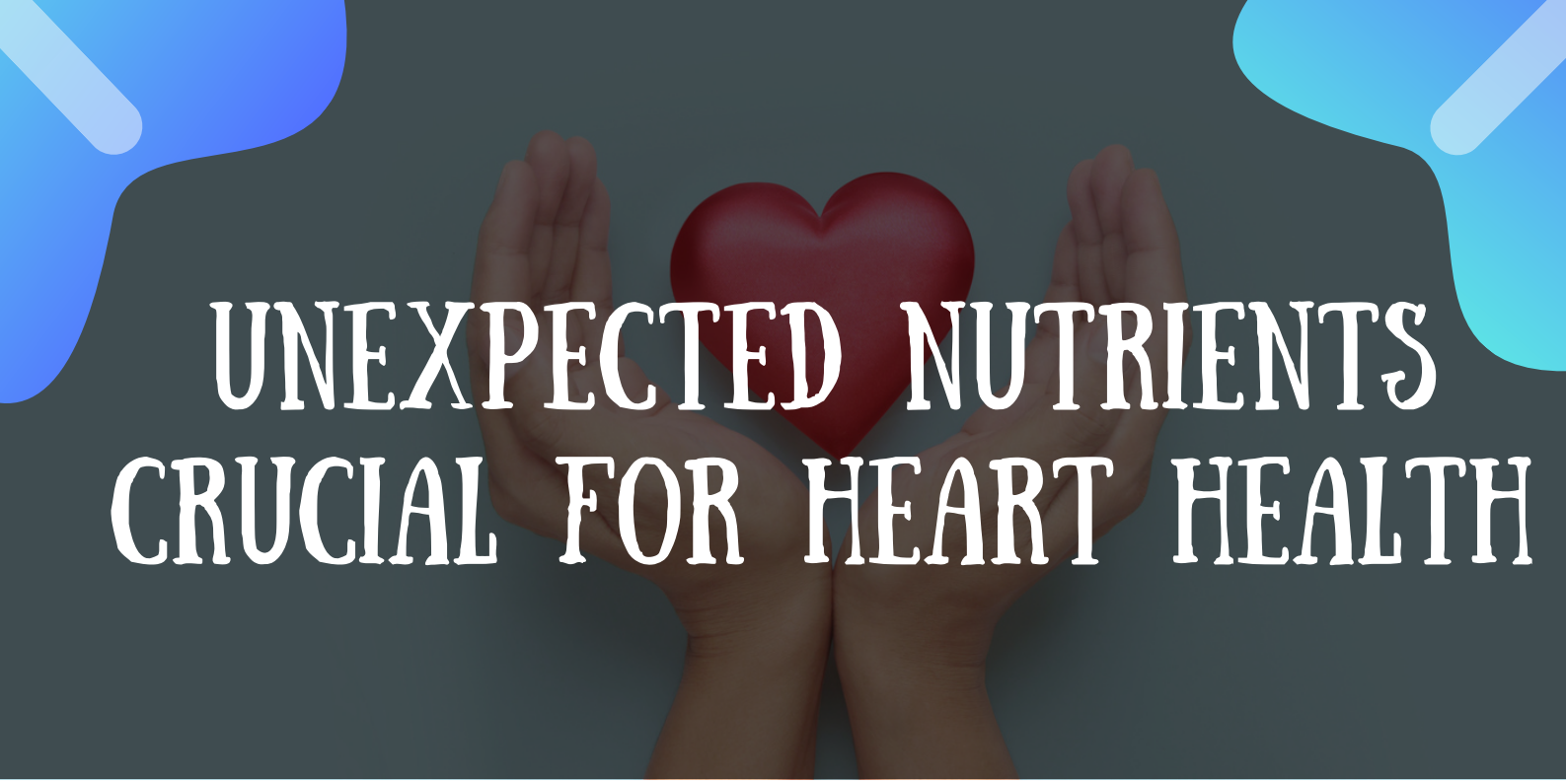
Soy can be beneficial for reducing the bad LDL cholesterol in the body, improving endothelial function, and reducing LDL cholesterol oxidation.3,4 One way soy acts on LDL is by increasing the size of LDL cholesterol, which is associated with a lower risk of heart disease compared to small, dense LDL particles, according to researchers at the Jean Mayer USDA Human Nutrition Center on Aging at Tufts University.



UNEXPECTED NUTRIENTS CRUCIAL FOR HEART HEALTH

Garlic

Study suggests that garlic supplements may be a helpful adjunct to blood pressure and high cholesterol treatments. Garlic supplementation longer than two months was effective in reducing total and LDL cholesterol by 10% among individuals with elevated levels.



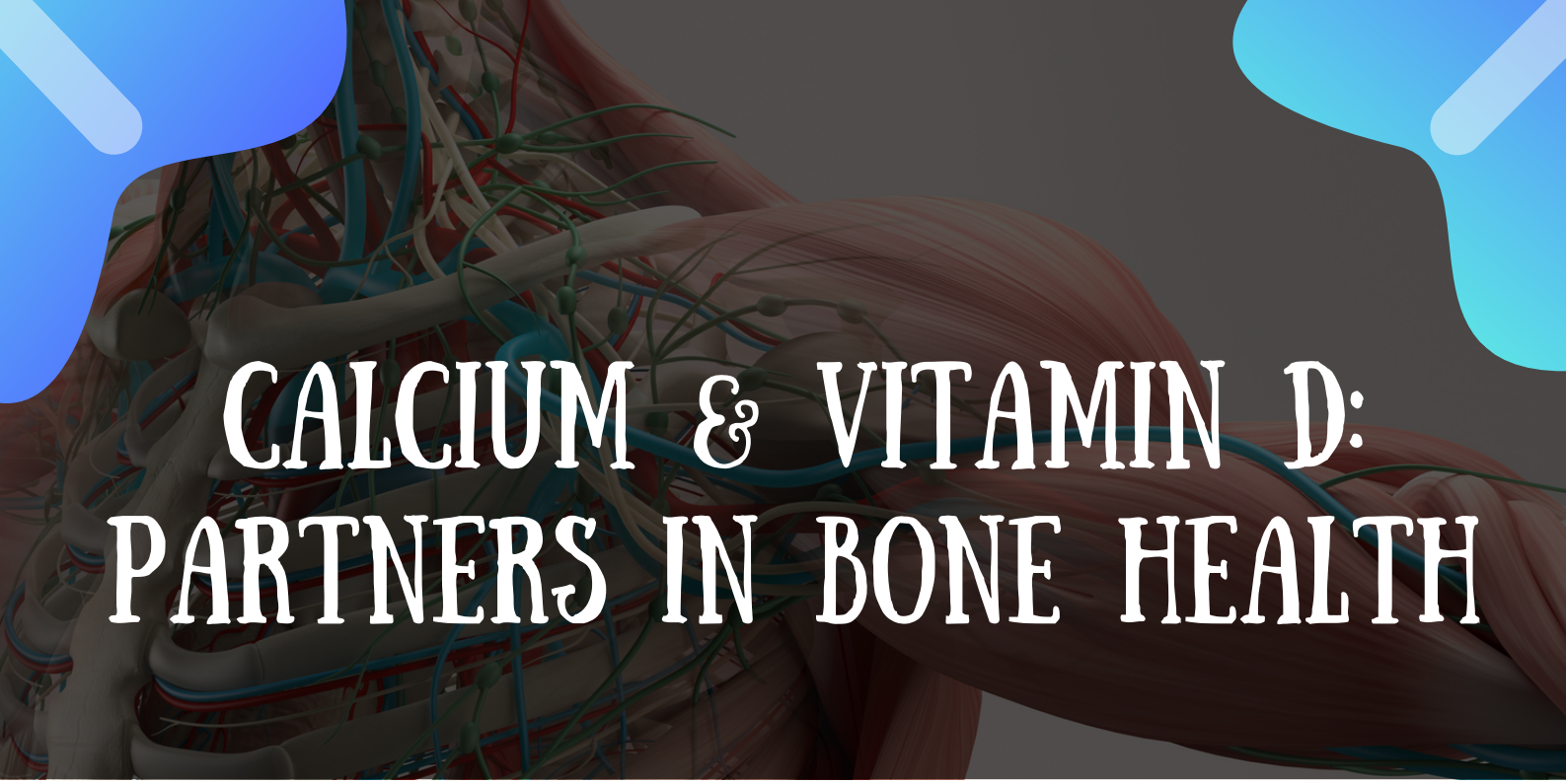
UNEXPECTED NUTRIENTS CRUCIAL FOR HEART HEALTH

Omega-3s, Folic Acid & B-Vitamins

Homocysteine is an amino acid that is synthesized in the body and elevated levels are often associated with increased cardiovascular risk. New research is suggesting that supplementation with a combination of omega-3 fatty acids, folic acid, and B-vitamins may significantly lower homocysteine.

ATHLETES ARE YOU GETTING THE RIGHT NUTRIENTS?

Vitamins and minerals play many roles in an athlete's body including energy production and the maintenance of tissues, bone, and immune function. Exercise stresses many of the biochemical pathways where micronutrients are required, increasing the turnover and loss of these nutrients. Thus athletes may have greater requirements for these micronutrients in order to adequately build and repair muscles and maintain normal physiological function. Discover some of the most common nutrients athletes are lacking: calcium, vitamin D, B vitamins, iron, zinc, chromium and magnesium.



CALCIUM & VITAMIN D: PARTNERS IN BONE HEALTH

Strong bones are integral to athletic training and performance. They provide a strong and rigid frame for muscles. Without the right nutrition, the structure of bone can be compromised and put athletes at risk for weak bones, stress fractures and osteoporosis. In addition to adequate calories and protein in the diet, **calcium and vitamin D are key players in maintaining bone health.** Research suggests that athletes who live at northern latitudes, where there is less sun exposure, or who train primarily indoors throughout the year, such as gymnasts and figure skaters, are particularly at risk for poor vitamin D status and would benefit from eating fortified foods or supplementing with vitamin D.2

B VITAMINS: FOR OPTIMAL ENERGY PRODUCTION & MUSCLE SYNTHESIS

B-vitamins are involved in the metabolism of food for energy as well the production of red blood cells, muscle protein synthesis, and tissue repair and maintenance. Some data suggest that exercise may increase the need for these vitamins by as much as twice the current recommended amount. While most athletes are able to consume enough B vitamins if they meet their energy requirements through nutrient-dense foods, those who do not get enough B vitamins could develop severe deficiencies that negatively impact energy metabolism. Health authorities caution that severe deficiency of vitamin B12 and folate may result in anemia and reduced endurance. Therefore, it is important that athletes consume adequate amounts of these micronutrients to support their efforts for optimal performance and health.

KEY MINERALS: ZINC, MAGNESIUM, CHROMIUM, & IRON

Minerals do not provide energy directly to a cell. Instead, they play a critical role in the diet of athletes by acting as cofactors (non-protein chemical compounds that assist in biochemical transformations) for the enzymes involved in energy metabolism. Our cells have daily requirements for all minerals. But in an exercised state, these requirements are amplified. Athletes are in danger of inadequate mineral nutritional status when they do not have adequate food intake, or when restricting their diets to lose weight or ‘get in shape’ for athletic competitions. This impaired mineral status can be realized as feeling tired, sluggish athletic performance, and slower than normal recovery. There are a few critical ones that athletes should pay close attention to:

Zinc plays a role in growth, building and repair of muscle tissue, energy production, and immune status. Data show that individuals with poor zinc levels experience decreases in cardiorespiratory function, muscle strength, and endurance, all of which can negatively affect health and physical performance.

Magnesium plays a variety of roles in cellular metabolism and regulates membrane stability, cardiovascular, immune, and hormonal functions. A deficiency of magnesium can impair the ability to participate in endurance activities by causing the body to need more oxygen to complete the exercise.

Chromium is an essential mineral that plays a role in how insulin, a hormone that helps balance blood sugar levels, works in the body. Studies have suggested that chromium helps increase insulin sensitivity, which makes insulin more effective in removing excess sugar from the blood stream to be used for later. Keeping blood sugar levels relatively stable is important for athletes so they have a steady supply of blood glucose to fuel their workout.

Iron is required for the formation of hemoglobin and myoglobin (proteins in the blood and muscle cell responsible for transporting oxygen) and for enzymes involved in energy production, all of which are especially important for individuals participating in endurance-type activities. Adequate iron levels are associated with improved work capacity and endurance, increased oxygen uptake, reduced lactate concentrations, and reduced muscle fatigue. Individuals particularly at risk for low iron stores include female athletes, individuals who have inadequate energy intake, vegetarians, those experiencing periods of rapid growth (adolescents), and those who train at high altitudes, regularly donate blood, or experience blood loss. Supplementation is recommended for those with anemia, but there is some evidence that athletes who are iron-deficient, but do not yet have anemia, may also benefit from iron supplementation.

In summary, athletic performance relies on optimal nutrition status. Particularly during high-intensity training, insufficient diets will lead to poor performance, fatigue, increased risk of injury, and negative effects on bone health, cognitive function, immunity, and even reproductive function. Getting the right nutrition throughout your exercise program is vital not only for making the gains and progress necessary to improve fitness and performance, but also for sustaining the normal physiological functions necessary to help you thrive.

Contributing Authors, Doctors, Nutritionists & Scientists on this research:

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