



THE
BIOOPTIMIZATION
BLUEPRINT

The 3 Steps For Becoming A
Biologically Optimized Human Being

TABLE OF CONTENTS

INTRODUCTION

Why This Book Will Change Your Life3

Why Should You Care About My Thoughts?5

Chapter 1

What is Biological Optimization?7

PART 1: THE PROBLEM

Chapter 2

Toxicities In Your Life9

Chapter 3

The 5 Deadly Deficiencies18

7 Critical Factors You Need To Know About Water25

PART 2: THE SOLUTION

Chapter 4

The Difference Between Bioworkers And Biomaterials27

The Three Steps To BiOptimization: A Bird's Eye View28

Chapter 5

BiOptimization Phase 1: Assimilation31

Chapter 6

BiOptimization Phase 2: Nutrification34

Chapter 7

BiOptimization Phase 3: Optimization39

Chapter 8

The 90 Day Protocol41

Chapter 9

Resources For BiOptimization44

CONCLUSION49

INTRODUCTION

Why This Book Will Change Your Life

Imagine being able to perform at the highest levels for hours and hours without a single drop in energy... without any wavering in mental clarity... and without resorting to stimulants and other toxic chemicals.

Imagine being able to easily burn fat or build lean muscle, without starving yourself and experiencing unbearable food cravings.

Imagine a world where you can walk into virus and bacteria infested environments with absolutely no fear, because you're confident your immune system can protect you.

In this blueprint, you're going to discover what we consider the foundation for super health.

Here's a few enlightening things you're going to learn:

- How my sister's death from cancer lead to my first big breakthrough.
- The 2 vital "bio-workers" that perform almost every function in your body. Plus, how to easily fix the serious deficiency of these critical bio-workers in your body right now.
- Why traditional vitamins and minerals are a complete waste of money. Discover the latest breakthroughs in nutrient absorption.
- The shocking story of how I followed the "best fitness advice" and gained 42 lbs of fat after winning a national bodybuilding competition.
- The #1 nutrient you need to be taking with every meal. It could be the missing link your body desperately needs to super health, feeling great and looking great.
- You'll finally understand the shocking truth about diets and the real reason why they consistently fail.
- You'll know exactly why most nutritional supplements don't work and why 99% of them are a complete waste of money.

Your body is a miraculous machine. But in order to function at its best, it needs your help.

I discovered the painful truth that doctors, drugs and surgeries couldn't save my fit sister from dying of cancer at the age of 22.

Why This Book Will Change Your Life

This heart breaking experience led me to research enzymes, probiotics, vitamins, minerals, amino acids, essential fats and their relation to acid/alkaline balance, cellular health, and biological optimization.

I'm happy to share everything I know with you inside this book. I hope it improves your life as much as it's improved the lives of those around me who apply its principles.

Armed with this information, you'll be able to experience a peak state of physical performance and super health... We call it the "Healthy High Performance Edge".

But be warned.

Once you start down this path you're going to be hooked on your new found energy and vitality. You're going to feel so good that you won't want to stop.

Your health will continue to get stronger and stronger. Your energy will soar to new heights. Your metabolism will function the way Mother Nature intended it to.

I'm confident this can happen for you because thousands of friends, family and clients have experienced this with the same BiOptimization Blueprint you're reading right now.

For example...

- My 67 year old aunt was hit by a truck while driving her snowmobile. Her injuries included a broken ankle, fractured vertebrae, multiple lacerations, a serious concussion and an assortment of other injuries. The doctors had little hope for her recovery. In just a few months, she was fully recovered and pain free thanks to principles in this book.
- In just 16 weeks, I helped a group of 40 year old women get into bikini shape and compete in a fitness show, beating out women half their age.
- A burnt out 50 something hair stylist used these principles to detoxify his body from the countless chemicals he was exposed to over decades of working in the industry. Now over a decade later, he has more energy than he had in his twenties, and travels internationally as a guest artist for one of the biggest hair product companies in the world.

The bottom line is: we build healthy high performance bodies from the inside out.

Are you ready for super health, a great looking body and amazing energy?

If you answered "YES" - read on...

Why Should You Care About My Thoughts?

My name is Wade T Lighthouse, advisor to the American Anti Cancer Institute, and 3-time all natural bodybuilding champion. I'm also a certified sports nutrition advisor.

Despite my lousy genetics, I became one of the only vegetarians to ever compete at both the IFBB Mr. Universe contest and in the INBA Natural Mr. Olympia contest. Over my career, I won 13 bodybuilding titles in 5 different weight categories.

For many years I followed conventional bodybuilding protocols outlined by some of the most respected coaches and experts in the industry.

But in the last years before the Mr. Universe competition, like many high performance athletes, I was hiding a dark secret.

The long months of contest prep were excruciating. I could hardly sleep. My joints ached constantly. I was tired all the time and my muscles were so stiff and sore I could barely get out of bed in the morning.

The years of training, dieting, whey protein pounding, enzyme deficient diets, artificial sweeteners, and stimulants had taken their toll. I was burnt to a crisp.

After achieving my dream and competing at the Mr. Universe contest, I gained 42 pounds of fat and water in just 11 weeks.

I went from Mr. Universe to Mr. Marshmallow. I felt like a walking nightmare.

I remember thinking to myself - *"How could this be considered acceptable? There has got to be a better way?"*

As destiny would have it, I was invited to a seminar being held by a remarkable doctor who had reportedly healed himself and hundreds of patients from a variety of serious conditions.

The doctor was using a specialized protocol of medical-grade enzymes, probiotics, and live amino acids. Intrigued yet skeptical, I decided to investigate the doctor and his so-called "miracle protocols" for myself.

Over the course of two hours, his philosophy challenged almost every belief I had as a formally trained exercise physiologist, nutritionist, and world class athlete.



Why Should You Care About My Thoughts?

It blew our minds.

My business partner, Matt Gallant, and I both decided to take a chance on his radical ideas and apply them, even though we have very different metabolisms and performance based diet philosophies.

We used therapeutic dosages of enzymes and probiotics along with plant based protein to kickstart the most amazing transformation of our lives.

In 6 months I had completely healed my body, renewed my energy and vitality levels. I looked and felt better than I had in years.

Matt dropped over 40 pounds and completely changed his health.

We both became very excited about the possibilities.

Over the next 3 years we tested, optimized and perfected the protocols with thousands of clients from around the world. The results were outstanding.

Our clinical experience led us to develop a high performance, protease-loaded enzyme formulation to improve recovery and amino acids assimilation. This combo coupled with a patented, proteolytic probiotic and organic plant based protein has delivered incredible results.

After optimizing my body from the inside out, I returned to competition and shocked the bodybuilding community by winning a national championship with only 5 weeks of preparation.

The best part is I felt amazing during the entire contest preparation with no rebound effects after the competition. I avoided the post-show weight gain and binging that most athletes experience.

This book reveals our best protocols and discoveries. If followed, they will aid you in achieving super health, and give you the tools to successfully deal with the increasing toxicities in the world.

Please enjoy this free book as an introduction into a world of healthy high performance from the inside out.

I am grateful to the many mentors, experts and experiences that have led to this blueprint and sincerely believe in the benefits of these practices. After a few short weeks you'll be very, very impressed with your new found levels of health, vitality and energy.

*Wade T. Lighthart CSNA
Vice President & Director of Education BiOptimizers
3 Time All Natural Bodybuilding Champion of Canada
Certified Sports Nutrition Advisor
Advisor to the American Cancer Institute*

Chapter 1

What is Biological Optimization? (BiOptimization)

There exists many definitions of health. It seems everyone's definition is a little different. The traditional medical definition of health is the "absence of disease."

While many people haven't been diagnosed with disease, most of us would agree that the lack of disease is not necessarily a good indicator of health.

Our definition of health goes beyond what many people consider "healthy." This state of health is far closer to our genetic potential as humans than mainstream medical science has led us to believe.

Everything from fitness to emotional well-being, immune system capacity, digestive health, brain function and a host of other factors are all an integral part of health.

Until now only a smart percentage of the population have experienced it and know how to maximize the various biological systems to optimal levels.

Thanks to the ground-breaking discoveries in nutrition, brain physiology, bio-chemistry and so on... we believe this state is attainable by almost everyone. Super health naturally occurs when all of the right biological components are present and organs are functioning at their best.

However, we live in a complex, nutrient deficient, highly toxic world. This world can make it difficult to maintain health.

In chapter 2, you'll learn the various forms of toxicity around you. Simply being aware of the various chemicals and their sources will help you and your family avoid them.

In chapter 3, you'll discover how nutrient deficiency is the other major source of health problems today.

Those 2 chapters are the first part of this book which we call: *THE PROBLEM*.

In chapter 4, 5 and 6 we will move into Part 2: *THE SOLUTION*.

The solution is a process we call Biological Optimization.

There are millions of biochemical and bioelectrical processes going on in your body at any given moment. Cells are growing, dying, and dividing constantly. Tens of thousands of enzymatic reactions are constantly happening in your blood, intestinal tract, muscles and brain.

What is Biological Optimization? (BiOptimization)

Cellular functions and processes become compromised when the essential biological components are not present, or if there's an overload of toxic elements.

With Biological Optimization (*aka BiOptimization*), we give our cells and organs all the resources they need to serve us in achieving super health, high performance and awesome aesthetics.

This blueprint will give you the key concepts and help you integrate them in your life.

This is the beginning of your journey to Biological Optimization.

We are happy to share with you the practices, principles and products that have allowed us, and thousands of our clients achieve remarkable levels of super health.

PART 1: THE PROBLEM

Chapter 2 *Toxicities In Your Life*

We hear a lot of information in the news today about toxins. Whether it's heavy metals, pollutants from the air, food additives, preservatives, or genetically modified foods.

We define a toxin as anything that interrupts the optimal metabolic functions of the body.

Let's use an example of a common toxin that virtually everybody's exposed to, chlorine.

Chlorine has been used to kill bacteria in water and it's been very successful, too. But after 30 or 40 years of using chlorine, scientists discovered that it's correlated with cancer rates.

If you put chlorine next to a bacteria culture, it kills bacteria. So if I'm drinking chlorinated water, that chlorine is now going into my digestive tract and wiping out good AND bad bacteria. It's not differentiating between the two.

Our intestinal flora (good bacteria) is essential for digesting and assimilating food, as well as defending you against viruses and toxic bacteria.

Fluoride is another example. It's present in 99% of toothpastes and can block "T4-T3 conversion", which is critical for healthy thyroid function.

Additionally, here's some other toxins most people don't think about on a regular basis:

- Mercury from dental surgery can compromise brain chemistry, and may cause unnatural cell mutation and brain damage.
- Few people consider the negative effects of antibacterial cleaners and other common chemical cleaning agents. Every time we "disinfect", we're ingesting some of these toxins through our skin. Many of these chemicals kill good bacteria as well as bad bacteria.
- Prescription drugs like antibiotics don't discriminate between good bacteria and bad bacteria. They're wiping out the good with the bad, which has an impact on our digestive health and immunity.

Any time you destroy your intestinal flora with antibiotics, two things happen:

1. Your digestion is impaired. Your body will struggle to break down and absorb the nutrients from your food. It doesn't matter what kind of diet you're following: paleo, vegan, low carb, slow-carb, or whatever.

Chapter 2

Toxicities In Your Life

2. Your body loses its primary defenders. Your body becomes vulnerable against viruses, bad bacteria and other invaders. In this state, it's easy for your body to catch the flu and get sick.

With compromised digestion, your body doesn't have the ability to get the building materials (the nutrients) to the job site (your cells and organs).

Another serious potential problem that has been proven to occur with various toxins is bacterial mutation.

Anytime you expose a certain amount of those bacteria to artificial sweeteners, chlorine, fluoride, or antibiotics, you're setting yourself up for further complications.

It was recently discovered that one of the reasons artificial sweeteners can create health problems is because the intestinal flora becomes glucose resistant within 1 week of daily artificial sweetener consumption.

In another study, it was shown that GMO (genetically modified) food created a mutation of the bacteria.

What's the long term consequences of this?

No one's certain - but I can assure you it's not good.

A final example - there is a serious proliferation of Candida inside a lot of people. It's a fungal overgrowth that's causing health problems for people's health, vitality and sexuality.

All 3 examples are caused by the bombardment of unnatural toxins that assault the intestinal flora. Over time that creates serious health problems.

There are over 15,000 new man-made chemicals that the human organism hasn't evolved enough in order to deal with. We don't know what the real risks are.

Are you going to wait another 20 years to find out what the health consequences are?

A simple truth is: toxins impair optimal biological function.

In the case of athletic excellence, fitness or health optimization, toxins inhibit your ability to perform at its highest capabilities.

Chapter 2

Toxicities In Your Life

AN EYE-OPENING LOOKAT THE TOXINS IN OUR LIVES

According to legendary football coach Don Shula, any time you wish to reach an objective, you have to realize there are opposing forces working against you. The best strategy is to know the opposing forces and plan exactly how to overcome them to achieve your goal.

Likewise, in order for you to achieve super health and high performance, it's good to know the challenges and obstacles we must overcome.

Failure to recognize these challenges will spell almost certain doom. However, the Blueprint for BiOptimization has taken into account virtually all of these obstacles.

We have developed a step-by-step, easy to follow system that allows you to kick toxins' asses, and other energy sucking adversaries to the curb, in record time.

Here's a brief look at what we're up against, when it comes to toxins impairing our attainment of healthy high performance.

25 SOURCES THAT REVEAL THE PROBLEMS WITH TOXINS IN FOOD, PHARMACEUTICALS AND LIFE

Here's brief summaries of 25 studies that reveal just a small sample of the toxicities we're facing today.

1. **Heavy metals in plants you consume have an impact on your health.**

"Dietary intake of many heavy metals through consumption of plants has long term detrimental effects on human health."

(J Environ Biol. 2005 Jun;26(2 Suppl):301-13.)

2. **Pesticides may have cancer-causing potential.**

"The most significant harmful effects come from fertilizer that is designed to kill or prevent weeds. According to the EPA's Office of Pesticide Programs, 12 of the most popular pesticides in the United States have ingredients known to cause cancer."

(LiveStrong, 2010)

Chapter 2

Toxicities In Your Life

3. **Consumption of contaminated plants or animals can harm humans indirectly.**

“Soil that is not significantly polluted may still harm humans indirectly, according to Pollution Issues. One way such soil pollution can harm humans is by bioaccumulation. Plants that are grown in lightly polluted soil continuously absorb molecules of the pollutants. Since the plants cannot get rid of these molecules, they accumulate in the plant, causing higher amounts of pollution to exist in the plant than in the soil. Animals who eat many of these polluted plants take on all the pollution those plants have accumulated. Larger animals who eat the plant-eating animals take on all the pollution from the animals they eat. Humans who eat plants or animals that have accumulated large amounts of soil pollutants may be poisoned, even if the soil itself does not contain enough pollution to harm human health.”

(LiveStrong, 2014)

4. **Sugar intake may depress immune response.**

“Excess sugar depresses immunity. Studies have shown that downing 75 to 100 grams of a sugar solution (about 20 teaspoons of sugar, or the amount that is contained in two average 12-ounce sodas) can suppress the body’s immune responses. Simple sugars, including glucose, table sugar, fructose, and honey caused a fifty- percent drop in the ability of white blood cells to engulf bacteria.”

(Dr. Sears, 2013)

5. **Brain development and behavior may be impacted by antibiotics given to food animals.**

“There is an increasing amount of evidence suggesting that the sub-therapeutic use of antibiotics in food animals can pose a health risk to humans. If a group of animals is treated with a certain antibiotic over time, the bacteria living in those animals will become resistant to that drug. According to microbiologist Dr. Glenn Morris, the problem for humans is that if a person ingests the resistant bacteria, have a significant impact on brain development and subsequent adult behavior.”

(Scientific American, 2011)

6. **Artificial sweeteners may disrupt blood sugar regulation.**

“Artificial sweeteners may disrupt the body’s ability to regulate blood sugar, causing metabolic changes that can be a precursor to diabetes, researchers are reporting.”

(New York Times, 2014)

Chapter 2

Toxicities In Your Life

7. Over 3,000 preservatives, flavorings, colors, and food ingredients do not require testing for estrogenic activity.

“More than 3,000 preservatives, flavorings, colors and other ingredients are added to food in the United States, and none of them are required to undergo testing for estrogenic activity, according to the Food and Drug Administration.”

“We need to be mindful of these food additives because they could be adding to the total effect of other estrogen mimicking compounds we're coming into contact with,” said Clair Hicks, a professor of food science at the University of Kentucky and spokesperson for the Institute of Food Technologists, a nonprofit scientific group.

(Scientific American, 2009)

8. Genetically engineered foods may lead to leaky gut syndrome.

“Genetically engineered food genes transferring to our own genes could lead to problems like leaky gut syndrome: Leaky gut syndrome happens when the intestinal lining becomes inflamed, and the microvilli on the lining become damaged; this prevents the microvilli from absorbing nutrients and producing necessary enzymes and secretions for healthy digestion and absorption.”

(Alliance for Natural Health USA, 2011)

9. Gluten may be linked with neurological disorders.

“The main neurological disorder believed to be at least partly caused by gluten is cerebellar ataxia, a serious disease of the brain that involves an inability to coordinate balance, movements, problems talking. It is now known that many cases of ataxia are directly linked to gluten consumption. This is called gluten ataxia and involves irreversible damage to the cerebellum, a part of the brain that is important in motor control.”

(AuthorityNutrition.com) (Cerebellum. 2008;7(3):494-8.)

10. Artificial food coloring may have an impact on behavior.

The link between artificial colors and behavioral problems is a concern, especially for parents of children diagnosed with ADHD. The safety of products containing artificial colors has been a point of debate for decades - adversaries claiming that they are toxic, carcinogens and contributors to ADHD.

(Forbes, 2012)

Chapter 2

Toxicities In Your Life

11. **Synthetic vitamin behavior may be different from natural vitamins.**

Even though the chemistry may be identical there is a significant difference between man-made and natural nutrition. Light passing through a natural vitamin always bends to the right due to its molecular rotation. This is a (d) configuration for dextrorotatory. Synthetic vitamins behave differently.

(Dr. David Jockers, Natural News 2011)

12. **Unsanitary conditions at slaughterhouses may be affecting your food.**

“And workers who needed to go to the bathroom weren’t allowed to take a break. They were forced to pee right on the slaughterhouse floor, near meat that people would soon be eating.”

(Eric Schlosser, Chew on This: Everything You Don’t Want to Know About Fast Food.)

13. **Prevalence of fecal matter in ground beef.**

“A nationwide study published by the USDA in 1996 found that 78.6 percent of the ground beef contained microbes that are spread primarily by fecal matter. The medical literature on the causes of food poisoning is full of euphemisms and dry scientific terms: coliform levels, aerobic plate counts, sorbitol, MacConkey agar, and so on. Behind them lies a simple explanation for why eating hamburger meat makes you sick: There is shit in the meat.”

(Eric Schlosser, Chew on This: Everything You Don’t Want to Know About Fast Food.)

14. **Soy supplementation and cancer risk.**

On the relationship between soy and cancer: “Avoid soy supplements until more research is done”

(Dr. McCullough, RD. The Bottom Line on Soy and Breast Cancer Risk.
Published on the American Cancer Society 2012)

15. **Mercury found in fish and shellfish are a bigger concern than many believe.**

Mercury found in fish and shellfish is considered by WHO as one of the top ten chemicals or groups of chemicals of major public health concern.

(World Health Organization 2013)

Chapter 2

Toxicities In Your Life

16. **Our drinking water can be contaminated from a number of sources**

“Dirty water is the world's biggest health risk, and continues to threaten both quality of life and public health in the United States. When water from rain and melting snow runs off roofs and roads into our rivers, it picks up toxic chemicals, dirt, trash and disease-carrying organisms along the way. Many of our water resources also lack basic protections, making them vulnerable to pollution from factory farms, industrial plants, and activities like fracking.”

(Natural Resources Defense Council)

17. **Vitamin D deficiency may be linked to sunscreen use**

“According to the CDC, in 2006 a whopping one fourth of the population was deficient in vitamin D. Eight percent were “at risk” for vitamin D deficiency illnesses and one percent had levels that were considered imminently harmful.

What’s causing this epidemic of low vitamin D levels? One theory is that we are not outside as much as prior generations, and when we are, we slather on the sunscreen which prohibits UVB (the rays responsible for suntans) from penetrating the skin. These same UVB rays naturally produce vitamin D.”

(Psychology Today, 2013)

18. **Stroke, heart attack, and pulmonary edema may result from performance enhancing drug use.**

On performance enhancing drugs: “Inappropriate use of erythropoietin may increase the risk of thrombotic events, such as stroke, heart attack and pulmonary edema.”

(Mayo Clinic, 2012)

19. **The are reports of neurological effects resulting from mercury in dental routines.**

“Dr. Hal Huggins, an expert dentist in mercury removal, reports on numerous psychological disorders that appear to be the effect of mercury in amalgams, including but not limited to, borderline personality disorder, depression, anxiety, insanity of all kinds, schizophrenia, panic attacks and obsessive compulsive disorder (OCD).”

(Livestrong, 2011)

20. **The overuse of antibiotics is resulting in the occurrence of “superbugs”**

“Infections we thought we had conquered once and for all are coming back because of a new breed of germs that doctors call “superbugs” -- bacteria that are resistant to almost all antibiotics. The latest culprit is called MRSA, a staph bacteria that triggers infections so virulent they can - and have - turned deadly within days.”

(CBS, 2004)

Chapter 2

Toxicities In Your Life

21. *Drug overdose is a cause of death and leading cause of injury in the US*

“Deaths from drug overdose have been rising steadily over the past two decades and have become the leading cause of injury death in the United States.”

(Centers for Disease Control and Prevention)

22. *Our respiratory health can be impacted by our living spaces*

““Many building materials like flooring, carpets, insulation and paints, contain asthmagens-chemicals that are linked to asthma-as well as chemicals that can trigger asthma attacks,” says Ted Schettler, MD, MPH from the Science and Environmental Health Network.”

(Green Lodging News, 2013)

23. *Statistics show dieting is not a long-term solution*

“95% of all dieters will regain their lost weight within 5 years.”

(The Renfrew Center Foundation for Eating Disorders,
“Eating Disorders 101 Guide: A Summary of Issues, Statistics and Resources,” 2003.)

24. *Societal pressures may breed traits that are linked to eating disorders*

“A comparison of the psychological profiles of athletes and those with anorexia found these factors in common: perfectionism, high self-expectations, competitiveness, hyperactivity, repetitive exercise routines, compulsiveness, drive, tendency toward depression, body image distortion, pre-occupation with dieting and weight.”

(Bachner-Melman, R., Zohar, A, Ebstein, R, et.al. 2006.
How Anorexic-like are the Symptom and Personality Profiles of Aesthetic Athletes?
Medicine & Science in Sports & Exercise 38 No 4. 628-636.)

25. *How lighting we use in our homes can damage our health*

““Our study revealed that the response of healthy skin cells to UV emitted from CFL bulbs is consistent with damage from ultraviolet radiation,” said Professor Rafailovich. ‘Skin cell damage was further enhanced when low dosages of TiO2 nanoparticles were introduced to the skin cells prior to exposure.’”

(Science Daily, 2012)
(Tatsiana Mironava, Michael Hadjiargyrou, Marcia Simon, Miriam H. Rafailovich.
The Effects of UV Emission from CFL Exposure on
Human Dermal Fibroblasts and Keratinocytes in Vitro.
Photochemistry and Photobiology, 2012)

Chapter 2 *Toxicities In Your Life*

We Can't Eliminate All The Toxins In The World.

It's virtually impossible because there's so many of them. You would have to move into a pristine jungle where man has never visited before and eat off the land.

Our approach is to gently remove them from the body and to optimize the cellular environment.

We are not treating disease. Our approach helps your body return to it's natural state and do it's own healing.

While detoxification is important, it's only half of the equation.

Biological Optimization Blueprint, primarily focuses on increasing biological capacity.

This is because it will enhance detoxification, while simultaneously improving personal capacity, almost immediately.

Let's focus on a realistic solution, by increasing our capacity to handle toxins. And the only way to do that is to improve the functioning of our cells.

Don't let the mind opening facts inside this chapter scare you.

I don't want you to get lost inside of all the toxins and chemicals, because it's a negative-based focus.

Being aware of the obstacles is important, but overly focusing on the problem or developing a paranoid psychology is self-destructive.

Instead put your energy on positive, proactive solutions.

Chapter 3

The 5 Deadly Deficiencies

Deadly Deficiency #1: Minerals And Vitamins

Here's how deficiency is traditionally defined:

What is the basic nutrient amount that prevents one from getting disease?

The early research was with sailors. They discovered that when they were on long journeys, they would get a condition called scurvy.

Scurvy was caused by lack of vitamin C. So eventually they started adding lemons and limes onto boats.

At that time, medical research began to discover the minimum component to prevent the development of a given disease was.

Eventually this led to the development of the RDA (Recommended Daily Allowance). For instance, how much iron did you need to prevent anemia?

How much vitamin D do you need to prevent osteoporosis?

How much vitamin C to prevent scurvy?

Doctors and scientists have figured out that many of the obvious diseases stem from a lack of the major vitamins and minerals.

To illustrate our current state of deficiency, take a look at what was published in Scientific American in 2011, with regards to the vitamin content of food we consume:

“A Kushi Institute analysis of nutrient data from 1975 to 1997 found that average calcium levels in 12 fresh vegetables dropped 27 percent; iron levels 37 percent; vitamin A levels 21 percent, and vitamin C levels 30 percent. A similar study of British nutrient data from 1930 to 1980, published in the British Food Journal, found that in 20 vegetables the average calcium content had declined 19 percent; iron 22 percent; and potassium 14 percent.”

This is thought to be a result of modern day agricultural practices, which are decreasing the soil quality used to grow our food.

Magnesium has an impact on mental health. Calcium is essential for the strength of your bones. Zinc is required for vitamin transportation. Iron is required for oxygen to get to your cells.

Chapter 3

The 5 Deadly Deficiencies

If we're not getting these minerals from our food, we have to get them from somewhere else, if we want to become biologically optimized.

According to Dr Joel Wallach, all diseases are simply the result of a nutritional deficiency.

As a doctor and veterinarian, he was curious as to why mainstream medical practice wasn't curing diseases through nutrition.

Being a veterinarian, he knew that many of the disease people were taking drugs for as humans, were cured with low cost nutritional products in animals.

He began developing liquid nutritional products to give people instead of drugs. And his results were phenomenal.

The one curious thing about Dr Wallach is that he recommended people not to exercise because he believed that athletes exhausted their nutrient reserves faster than sedentary people.

Since I wasn't willing to give up on my physical and cosmetic ideals, I decided that I had better start taking higher dosages of nutrients to support my athletic endeavours.

Dr. Linus Pauling, Dr. Abram Hoffer and Dr. David Hawkins published a book called *Orthomolecular Psychiatry*, in the early 70s.

These doctors had developed megadose vitamin and mineral protocols to treat advanced states of medical illness like schizophrenia.

Although many traditional scientists and doctors refuted their work, thousands of people from around the world poured into their clinics for treatment. Many of these patients came from some of the most affluent families in the world who had tried everything with their ill family members.

Often times these clients were completely healed from mega dosages of various nutrients, the elimination of sugar, and the removal of chemical toxins.

Here's an important question: What's the optimum vitamin and mineral dosage for super health or high performance?

Over the last few decades, most medical practitioners have been focusing on symptom management through pharmaceutical drugs.

Chapter 3

The 5 Deadly Deficiencies

Let's consider for a moment what deficiency is from a BiOptimized perspective.

If you take a 15-year-old teenager, a 22-year-old athlete, and a 27-year-old pregnant woman...

Do you think their mineral and vitamin requirements are going to be different?

They've got completely different lifestyles, genetics, physical capacities, energy requirements and goals.

Yet remarkably, many nutrition schools, universities and so called "experts" cling to the outdated beliefs that requirements are generally similar for most adults.

They have no differentiation in requirement between the individuals.

The appropriate levels of bio-available minerals and vitamins are essential for optimizing your health.

Deadly Deficiency #2: Enzymes

According to Dr. Edward Howell, author of *Enzyme Nutrition*, enzymes have both a biochemical and biological function. Enzymes are the bridge between inorganic matter and organic living tissue.

Enzymes are required for virtually every single metabolic and biochemical function in the body, and there are literally thousands of different enzymes in the body. Dr. Hiromi Shinya estimates the number of enzymatic reactions in the body at 25,000.

Enzymes are the catalyst behind virtually every biological reaction in your body. Every time you think a thought, blink an eye or flex a muscle - enzymes were responsible.

Dr. Howell first got turned onto the idea of enzymes around 70 years ago after reading a shock study performed by Dr. Pottenger with cats. This experiment revealed the severe negative consequences of an enzyme deficient diet.

In this experiment, Dr. Pottenger fed one group of cats an enzyme deficient diet (cooked food), and another group of cats ate enzyme rich foods.

In all cases the cats fed the enzyme deficient diet developed diseases sooner, died earlier, and passed on various mutations to their offspring.

Chapter 3

The 5 Deadly Deficiencies

By the third generation of cats, genetic disease became widespread. There was an inability to procreate, and unusual social behaviour, such as eating their young.

These findings were later replicated by Dr. Howell with an array of animals. He saw similar results, outlined in his books *Enzyme Nutrition* and *Enzymes for Health and Longevity*. This has profound implications and applications to humans.

Most people's diet have almost no enzymes. Why?

Every time you cook food with heat higher than 114F (41 C), all enzymes in the food die. Every time a food is sprayed with pesticides, fungicides and herbicides - the enzymes in the food die.

Every time you eat cooked food, you need to use your own body's enzyme supply to digest the food into utilizable biomaterials.

So the only way to get enzymes in a diet is to eat organic, raw food.

Your body has a limited amount of enzymes, often referred to as the enzyme potential. According to Dr. Howell, "the length of life is inversely related to the enzyme potential of the organisms".

Loosely translated, this means the more enzymes you have in the body, the longer you can live, and the more capacity your body has to perform biochemical functions.

What's fascinating is longevity studies have shown a correlation between eating less and longer lifespan.

Could it be that consuming less food preserves the body's enzyme reserves? Dr. Howell certainly seemed to think so, as does many of the leading enzyme researchers on the planet.

How does this relate to High Performance?

Let's look at athletes and people who are looking to building strength, increasing muscle mass or operating at peak physical performance levels. These individuals tend to consume massive amounts of cooked protein, processed protein, whey protein, and casein protein.

They're eating all these proteins that have zero enzymes in them.

Virtually every time they consume protein, they're asking their bodies to produce protease to digest the food (proteases digest protein to amino acids).

Chapter 3

The 5 Deadly Deficiencies

Athletes who consume large amounts of enzyme deficient protein start converting their muscle mass into enzymes to digest the high protein diet. Your body will breakdown protein out from your muscle tissue and organs to make enzymes.

Athletes often increase protein consumption more and more because they believe it helps them recover from their workouts.

Over time, the high levels of protein consumption is draining enzymatic reserves and compromises the body's abilities to build muscle and recover from workouts.

They're not able to assimilate and utilize the protein that they're taking, without a sufficient enzyme supply.

Athletes often start using steroids to counteract the catabolic effects of their training and diets.

Deadly Deficiency #3: Probiotics

Probiotics (means pro-life) are bacteria that are essential to life. In fact, they were amongst the first life forms on Earth.

Every person on the planet has trillions of bacteria inside them, which digest food, create vitamins and other vital immune system factors.

Probiotics are the keystone of your immune system. They are the first line of defense against viruses, bugs and flus. They create a shield within your intestinal tract that stops the bad guys dead in their tracks.

Probiotics have been linked in research to easier weight loss, anti-depression effects and more.

Probiotics have been used for thousands of years in optimizing health functions.

We get them from organic foods that haven't been cooked and fermented foods.

In Chapter 2, we revealed how antibiotics wipe out good and bad bacteria strains. Then foreign invaders can easily get a hold of your digestive system and create havoc.

The other challenge these unfriendly organisms create is, they make it harder for "good strains" to reclaim the terrain. Often people pound even more antibiotics to counterattack

Chapter 3

The 5 Deadly Deficiencies

these bad strains, which further upsets the body's health.

Unfortunately because of the consumption of cooked food and overload of toxins in people's lives - many people are severely deficient in probiotics.

The good news is, it's relatively easy to fix this problem once you know how. We'll reveal the simple protocol in chapter 4.

Deadly Deficiency #4: Protein

After scoping 370,000 colons over his career, Dr. Hiromi Shinya, who was the leading colon doctor in the world, found that almost all of the cancer patients he dealt with, had massive quantities of putrid, undigested meat and dairy inside their intestinal tracts.

Based on these disgusting discoveries, we can safely assume that most people aren't absorbing 100% of the protein they're consuming.

Most athletes are advised by nutritionists to consume 1 gram of protein per pound of bodyweight.

For someone who weighs 200 lbs, their target would be 200 grams of protein a day.

What's happening with all this protein if most can't be digested without enzymes?

Is it possible that it's contributing to the rise in colon cancer?

I'll let you make your own conclusion.

Protein deficiency is also a leading cause of the gradual muscle loss that happens after people turn 28.

By the time most people turn 60 and 70, there is a massive drop in strength and lean muscle. Often this can lead to catastrophic accidents that could of easily been avoided with stronger muscles.

The point is: we're severely overestimating how much usable protein we're actually digesting and absorbing.

We'll reveal how to reverse this problem in chapter 4.

Chapter 3

The 5 Deadly Deficiencies

Deadly Deficiency #5: Dehydration

Dehydration may be the biggest enemy to optimized performance.

“Many people think they get plenty of fluids on a daily basis. What they don’t realize, however, is that they may be dehydrated which could lead to a slew of health issues including fatigue, joint pain and weight gain.

Most people know that they are supposed to drink water, but up to 75 percent of Americans may be functioning in a chronic state of dehydration, according to new research.

We have a tendency in the U.S. to drink a lot of beverages that are mildly dehydrating, said Mary Grace Webb, Assistant Director for Clinical Nutrition at New York Hospital.”

(CBS, 2014)

The human body is approximately 75% water. This water is separated into two distinct categories. Fluid outside the cells, such as the blood, and fluid inside the cells, which maintain the cell rigidity and function.

Both are critical to optimal health and performance. Over the last two or three decades, there has been tremendous misinformation on hydration and performance.

I’ve researched hundreds of experts in the field of hydration, and all experts agree that hydration is a critical factor in optimal health, nutrient absorption and toxin elimination.

Dr. William Agre won a Nobel prize for his work on demonstrating how protein chains act like a gate on the cells of your body. These channels let water in and out depending on the size of molecule, osmotic pressure, pH, and charge of the water.

The channels play a key role in whether a liquid hydrates you or dehydrates you at a cellular level.

We have personally tested over 150 different types of water technologies.

7 Critical Factors You Need To Know About Water

- I. *It's best not to consume water with chlorine, fluoride or chloramine in it. Removing these contaminants from your water is important. Many plastic water bottle companies add fluoride to the water, which has been shown to have a variety of physiological impairing effects. Especially in thyroid metabolism and pineal gland function.*
- II. *Bottled water contains plastics that lead to increased levels of phytoestrogens in the body. These contribute to birth defects, low sperm count, and other diseases. There's a documentary called "The Disappearing Male" that dives deep into this.*
- III. *Reverse Osmosis (RO) water is great for getting contaminants out of water, but tends to have a negative effect on pH, energy levels and long term health. If you currently use RO water, be sure to add organic minerals to the solution to boost its effectiveness.*
- IV. *Most municipalities fail basic water safety parameters. Most of the government regulations are over 35 years old. A recent White Paper suggests the US government would have to spend 1 trillion dollars on its water systems to upgrade to acceptable health standards put forth by water experts.*
- V. *High pH Ionized water penetrates the cells 6 times faster than tap water or bottled water, according to nuclear resonance imaging shown to me by Harvard Medical Vascular Surgeon Dr. Horst Filtzer.*
- VI. *By altering pH through electrical currents, you can alter water to serve as a powerful antioxidant by increasing donor electrons that pick up free radicals. You can also create water that can kill viruses, bacteria and other harmful pathogens. You can alter the water to emulsify oil, tone skin, or to remove pesticides from food.*
- VII. *4 to 6 liters of water consumption per day is sufficient enough water to maintain hydration, assuming the water is devoid of chemicals. For optimal levels we suggest using a medical grade ionizer hooked to your tap with the appropriate pre-filters installed, based on your municipalities water contaminants. We also suggest consuming the water fresh or keeping it sealed in dark amber glass bottles to retain charge, pH and freshness of water.*

7 Critical Factors You Need To Know About Water

Over the last 7 years, I have developed an optimal intensive hydration protocol that allows virtually anyone suffering from chronic dehydration to optimize their body's pH, hydration, intracellular and extracellular fluid levels.

I have also found that ionized water from a medical grade ionization (look for ISO 13485 Certification) device hydrates your body faster than any other beverage. It reduces Delayed Onset Muscle Soreness, free radicals in the blood, and boosts your energy.

Now you understand why people's health, energy and body fat levels continue to plummet for the past few decades.

Don't let these new revelations worry you. In the next 3 chapters, you'll discover the simple solutions that can reverse and fix these deficiencies and remove toxins.

Let's move into the solution.

PART 2: THE SOLUTION

Chapter 4

The Difference Between Bioworkers And Biomaterials: Your Body Doesn't Absorb Everything You Feed It

Most of the information in the dietary world, inside of the medical research, focus on materials.

You need this much vitamin D, this much protein, this many carbohydrates, and this many fats.

If you're building a house, this is the equivalent of accounting for the bricks, mortar, cement, mixers, roofing, plywood for the walls. The materials.

In other words, they're essentially inert substances and they require workers to put them together.

If you were building a house and you took all the materials to the job site, you wouldn't expect it to be built without workers.

Inside the body, the only workers are enzymes and probiotics. They do the work of virtually every metabolic, digestive, and immune system process.

Keep reading to gain a comprehensive understanding of how enzymes and probiotics play a significant role in optimizing your biological state.

The Three Steps To BiOptimization: A Bird's Eye View

Step 1 Assimilation

The first step is optimizing your ability to extract nutrients from the food you're currently getting.

This involves increasing our “bioworkers”: enzymes and probiotics.

These are the agents who do all the work as far as digesting and assimilating these nutrients into the system. They're also involved in clearing out toxins from your body.

Enzymes enhance your body's ability to move toxins out of the body, and more importantly, rebuild tissues that have been damaged from chemical toxins and oxidative damage.

Most formulations of various enzymes are made up of: amylase, lipase, and protease.

They break down your carbohydrates, fats and proteins, respectively.

If you're looking to build muscle mass, you need to shunt more protein into the cells where it can be used to build muscle. Proteolytic enzymes help with this.

The evidence is showing that we're able to maintain high levels of muscle mass on very low protein diets because of our efficiency of using the bio workers.

We're able to get more out of the protein we're consuming, and subject ourselves to less oxidative stress.

Probiotics act like highly specialized super intelligent organisms that manufacture very specific enzymes that fight off invaders, remove toxic garbage, and run an incredible array of biological functions for digestion.

They're the best weapons to protecting your immunity, and maintaining optimal digestive function.

Virtually all of our clients consume powerful probiotics and enzymes on a daily basis to help them detox and perform at their highest capacity day in and day out.

The Three Steps To BiOptimization: A Bird's Eye View

Step 2 Nutrification

In this stage we flood your system with essential nutrients required for you to achieve your health and performance goals. We have developed these principles based on Two Time Nobel Prize Winner Dr. Linus Pauling's research on Orthomolecular Nutrition.

We call it the “plant theory of nutrification.”

THE PLANT THEORY OF NUTRIFICATION

Imagine your body is a plant, a beautiful glorious plant.

For a plant to be strong and hardy, it needs an optimal mix of soil (probiotics and minerals), sun (vitamins), water and enzymes (innate in the seed).

When the plant lacks any of these, it suffers.

When the plant has too much water it can drown. When it has too much sun, it can dry out. If it has too much minerals, it can kill the plant.

Your body is the same. It needs the optimal levels of oxygen, water, proteins, fats, carbohydrates, minerals, vitamins, enzymes and probiotic to rock and roll.

The goal of phase 2 is to give your body all the nutrients it needs to be at it's best.

This is where your personal lifestyle needs to be factored.

Athletes have a higher burn rate than someone who's sedentary. They're exhausting their resources at a faster rate.

In the nutrification stage, we give your body all the macronutrients it needs including live plant proteins, essential fatty acids, low glycemic carbohydrates, phytonutrients, and therapeutic levels of vitamins and minerals with delicious organic Protein Breakthrough Shakes that contain Primergen-V (liquid vitamins in a fulvic base) and Primergen-M (85 minerals in a liquid fulvic base).

Instead of restricting calories and portions, we load up on everything that's good and wholesome. The nutrification stage is super fun because we fill-up your soil with health-boosting goodness.

Once the pot is full you simply optimize your intake to match your burn rate.

The Three Steps To BiOptimization: A Bird's Eye View

Step 3 Optimization

This is where we tweak or optimize the specific BiOptimizer products and health protocols to your specific challenges, biochemistry and blood work.

For example, if you're traveling a lot, we'd probably be focused a little bit more on the probiotics to enhance your immunity.

If you're looking to gain maximum muscle mass, we'd be focusing on enzymes and protein.

If you're looking to burn fat, we'd probably be looking at increases in probiotics, vitamins and minerals.

If you have too many heavy metals in your body, we'll go on a healthy detox phase.

Your bio feedback, blood work and other health analysis is what guides phase 3 of the BiOptimization Blueprint.

Chapter 5



BiOptimization Phase 1: Assimilation

Assimilation is one of the biggest factors in determining whether or not you absorb the nutrients from food you consume.

There are a couple of factors that are involved with increasing assimilation.

First and foremost, digestion requires enzymes.

According to Dr. Howell, the enzyme pool of an individual determines how quickly, or how well you're able to absorb and utilize the nutrients you're consuming.

In today's world, we're eating a lot of cooked, processed, chemical-laden, and genetically modified foods.

The scientific evidence has shown this exhausts our enzymatic pool, and affects probiotics levels. This impacts gut flora and compromise our ability to absorb nutrients.

BiOptimization Phase 1: Assimilation

Probiotics And Enzymes: Finding BiOworkers You Can Trust

With enzymes, we're looking specifically for a wide-range enzyme formula that has high levels of protease designed for full pH range of the intestinal tract. This is because different amino acids are assimilated at different pH levels.

During digestion your food is first broken down by chewing. Take 3 to 7 capsules of a strong enzyme formulation with every meal. Especially when you eat flesh protein such as fish or meat, we suggest 7 capsules to maximize the amino acid absorption.

Then as we go through the upper cardiac portion of the stomach, the initial stages of digestion begins.

Remember all the food that's cooked, pasteurized or processed with heat, does not possess any enzymes. That's why we always use a few caps of enzymes and probiotics with every meals.

How To Choose A High Quality Enzyme

In 30 minutes, hydrochloric acid is released by the stomach and the digestion of various amino acids occur at the different pH stages. A high quality enzyme will survive the stomach acids and start breaking down food into utilizable nutrients.

That's why we created a tri-phase protease formulation that contains not just one protease, but three different proteases in our medical-grade enzyme formula: MassZymes. Each capsule contains more protease than any other enzyme on the market.

These proteases work at the various pHs so that we get maximum assimilation of amino acids.

It's a critical point of digestion because if you miss the pH window of digestion, certain amino acids don't get digested.

Most enzyme formulations are low on protease simply because it's very expensive to produce.

You also want an enzymatic formulation that is stable, utilizable, and based on a plant-based formulation as opposed to an animal-based.

A lot of companies go to animal-based enzymes because they're less expensive.

BiOptimization Phase 1: Assimilation

We've found that animal-based enzymes don't work nearly as well as plant based enzymes. Animal enzymes tend to be less consistent in strength and function.

Also, it's good to have a multipurpose enzyme contains the other enzymes, such as lactase, amylase, lipase, and other enzymes.

Each enzyme breaks down specific macronutrients. For an example, amylase digests carbohydrates and sugars. Lipase breaks down fats into usable fatty acids.

The Probiotic Protocol

In regards to probiotics, there are a couple of key components. You want to have a bacteria strain that is transient.

You want powerful bacteria that can over-throw bad bacteria. In other words, a strain that's strong enough to wipe-out bacteria cultures that have been taken over your digestive terrain.

Here's a big key: you want a potent proteolytic probiotic strain. This means the probiotic will help your digest protein.

Probiotics And Enzymes: The Ultimate 1-2 Combo

Proteolytic probiotics and protease-rich enzymes work together synergistically to break down protein into amino acids.

Your body can then use those amino acids to produce neuro-transmitters (which are vital to the health of your brain).

Your body will use the amino acids to rebuild muscle tissue. They are vital to speed up recovery from your workouts.

Probiotics and enzymes will help you ASSIMILATE maximum nutrients from the food you eat. They are the foundation of your BiOptimization Blueprint.



Chapter 6



Phase number two is nutrification. This is when we start adding essential components to the system.

Your goal is to give your body all of the micro-nutrients, conductive minerals, bio-available vitamins, phytonutrients, amino acids, essential fatty acids, enzymes and probiotics it needs to achieve a PEAK physiological state.

We'll divide this chapter into 2 sections: *macro-nutrification* and *micro-nutrification*.

BiOptimization Phase 2: Nutrification

MACRO NUTRIFICATION: PROTEIN AND ESSENTIAL FATTY ACIDS

Your body needs amino acids to survive and thrive. Amino acids are obtained from the protein your body breaks down.

Your body also requires essential fatty acids to build hormones and rebuild organs.

Those are the 2 most vital macro-nutrients your body needs.

Yes, your body uses carbohydrates for energy, however I can assure you that there's no lack of carbohydrates missing in most people's diets.

You can actually get the perfect ratio of both macro-nutrients from hemp seed based protein such as [Protein Breakthrough](#).

BiOptimization Phase 2: Nutrification

7 Key Factors For Selecting Your Protein

1. First and foremost, you want your protein coming from whole foods. We suggest avoiding synthesized, chemically extract protein isolates (like whey). This is critical.
2. You want a protein that contains all the essential amino acids. In other words, it has the eight essential amino acids that your body doesn't manufacture, and it's even better if it has the other 12 that your body does make.
3. You also want to make sure that the protein contains essential fatty acids. It helps with hormonal profile, and makes for more balanced nutrition.
4. Fiber is a critical component to your protein source, because it allows you to maintain digestive health, and slows the release of protein into the bloodstream. This is important for building muscle and maintaining blood sugar.

When it comes to protein, you want something that has a little bit of texture. A little bit of granules to it.

This allows helps to keep the protein from clumping and caking in your digestive tract.

5. Ideally, use plant based protein that's certified organic.
6. Choose a protein that only uses natural and low-glycemic sweeteners. It's quite common for products to have artificial sweeteners, like sucralose, alcohol sugars or aspartame.

Many of these chemical sweeteners negatively affect the digestive system by mutating the flora in the intestinal tract.

When it comes to sweeteners, you want to have something that's easily assimilable and recognized by the body.

That's why we use naturally grown sweeteners like coconut sugar and stevia.

These sweeteners are very easily assimilable. They don't cause massive spikes in blood sugar. That means over the long run we're able to stabilize blood sugar, which is essential to long term performance.

7. You also want you protein source to have Functional Flavors.

Functional Flavors serve two purposes. The first is to make the product taste amazing. For example, we use premium cacao and chocolate. They have specific positive effects on brain function that enhance mental clarity and moods.

With "Rainbow Berry", we selected five different northern berries, because of their powerful nutrient content. Not only do the low temperature dried berries have phytonutrients and antioxidants, these berries enhance recovery.

BiOptimization Phase 2: Nutrification

MICRO-NUTRIFICATION: VITAMINS AND MINERALS

How To Avoid Wasting Your Money On Ground Up Rocks

According to the Dr. Reference Guide On Supplements, only 3% to 5% of a multi-vitamin is absorbed by the body.

Most multi-vitamins are chemicalized, unnatural vitamins and minerals that are compressed together into a pill.

They do very little good to your body if they aren't absorbed or aren't bio-available to your cells.

When it comes to vitamins and minerals, they need to should come from organic mineral deposits like humic shale, or from live plants.

Fulvic acid serves as the nature's delivery system for delivering nutrients into the cell where you need them.

We want to make sure that the fulvic acid comes from a natural source and doesn't use chemical extraction.

Delivery of the nutrients is everything so, we want to have a liquid mineral and vitamin. This allows for easy absorption and assimilation, even in a person that has a compromised digestive system.

When it comes to vitamins, you want to make sure that you have a vitamin supplement that's focused on B and D vitamins, because those are the biggest sources of deficiency.

Vitamin B is vital for energy production in the body.

Vitamin D regulates hormone function. Having an optimal hormonal state is key in light of the toxic world that we're facing.

As far as minerals, your cells function at their best when they have all 85 minerals at trace levels. They are like the little instruments in the orchestra. Together they have a powerful effect.

As well, you want to make sure you have all of the platinum group metals.

BiOptimization Phase 2: Nutrification

Platinum group elements enhance cell-to-cell communication. We're often deficient in them because modern medicine focuses on major minerals like calcium.

Platinum group minerals like gold and silver stimulate the form and function of the glands inside the body. When your glands are producing the right hormones to regulate metabolism, you have more energy, and have a better ability to build the optimum biological environment that supports the growth of new cells.

When you combine everything together: enzymes, probiotics, proteins, essential fatty acids, bio-available vitamins and conductive minerals, you get a synergistic symphony that you can literally feel.

You'll find your energy levels sky-rocket, unhealthy food cravings diminish, and brain function and concentration levels sharpen dramatically.

Phase 1 (Assimilation) and Phase 2 (Nutrification) work hand-in-hand together.

Chapter 7

BiOptimization Phase 3: Optimization

Once we experience the nitrification stage for a period of approximately 90 days, we move onto the third stage of optimization.

This is where we're dialing in and tweaking the specific BiOptimizers protocol relative to your lifestyle and goals.

So for example, if you desire to build muscle mass, you would focus on keeping high dosages of enzymes, probiotics and Protein Breakthrough.

If you're going on a trip, or recently taken a round of antibiotics, you'll want to maximize immune system response. In this case you would load up on probiotics because this will ensure your gut flora is optimized, and potential invaders to the body are wiped out before they cause damage.

Perhaps you are reducing calories and increasing exercise levels in an effort to lose unwanted pounds. A higher dosage of vitamins and minerals is important to keep your essential nutrients high while calories are low. This is where the vitamin and mineral drops

BiOptimization Phase 3: Optimization

are powerful because you can use them to give you a boost in energy, without calories or unhealthy stimulants.

So at this stage your body will be tuned enough to begin trusting your biofeedback. You can “tune in” to its needs, depending on what you’re looking to achieve.

Phase 3 is for those who want to experience the ultimate in human potential.

We recommend doing comprehensive blood work, live blood analysis, hair analysis and other health diagnostics to help us see where there’s room for improvements.

There’s a difference between “normal” and “optimal”.

For an example, naturally boosting key hormones from normal to optimal can make a night and day difference.

Custom protocols, detox phases and supplementation are often suggested to optimize the body to it’s peak state.

If general health of your body is your goal, a simple maintenance program of the BiOpimizer products will keep your system humming.

Chapter 8

The 90 Day Protocol

In the first 30 days, your primary focus is going to be putting enzymes and probiotics into your system to get your digestive system operating efficiently. It makes everything work better.

We recommend doing somewhere between 20 and 35 enzymes per day, and 8 and 12 probiotics a day.

Most people notice how this reduces morning brain fog, and the amount of sleep required to feel rejuvenated.

Switching over to more whole foods products is encouraged. You may consider adding Protein Breakthrough into the diet, so you can get your body used to experiencing whole foods.

For the next 60 days, we'll be aiming to nutrify the body while continuing to give the body the enzymes and probiotics it needs.

You can either maintain the enzymatic and probiotic formula you're on, or you can dial-back a little bit on the probiotics.

Make the shift to having more whole foods.

So if right now you're eating rice cakes, it's better to move to whole grain rice. If you're eating whole grain rice, maybe go to organic rice.

These are tweaks that help, over the long term, make a fundamental difference in your energy levels and regulate your blood sugar levels.

You'll also be adding vitamins and minerals to your regimen, because they're going to enhance virtually every single cellular function, cell-to-cell communication, and allow you to train harder.

What a lot of people find is after they've gone through the first two stages, they require less food in order to achieve their physical goals.

And anytime you use less food, you put less strain on your body's metabolism. That gives you more resources for the long term, which goes to the third stage, optimization.

Here's some basic optimization parameters you can follow:

If you're traveling, double up on probiotics is be a good idea to fend off foreign invaders. Especially when eating foreign food. We've eliminated food poisoning using P3-OM dozens of times in record time.

If you're dieting, consuming 2 to 3 Protein Breakthrough shakes a day and using Primergen-V and Primergen-M will ensure proper nutrition.

PHASE 1: ASSIMILATION

DAY 1 TO DAY 30

Typical Day

5 Masszymes capsules upon awakening with 0.5 liters of water (2 cups)

Breakfast

2 scoops of Protein Breakthrough

(You can create a simple shake with a banana or berries depending on the protein flavor)

4 capsules of Masszymes

2 capsules of P3-OM

7 drops of Primergen-V

7 drops of Primergen-M

Lunch

8 capsules of Masszymes

4 capsules of P3-OM

Dinner

8 capsules of Masszymes

4 capsules of P3-OM

BEFORE BED

6 Masszymes capsules

3 P3-OM capsules

Post Workout

2 scoops of Protein Breakthrough

(You can create a simple shake with a banana or berries depending on the protein flavor)

4 capsules of Masszymes

2 capsules of P3-OM

7 drops of Primergen-V

7 drops of Primergen-M

PHASE 2: NUTRIFICATION

DAY 31 TO DAY 90

Typical Day

5 Masszymes capsules upon awakening with 0.5 liters of water (2 cups)
7 drops of Primergen-V
7 drops of Primergen-M

Breakfast

2 scoops of Protein Breakthrough
(You can create a simple shake with a banana or berries depending on the protein flavor)
4 capsules of Masszymes
2 capsules of P3-OM
7 drops of Primergen-V
7 drops of Primergen-M

Mid-afternoon

7 drops of Primergen-V
7 drops of Primergen-M

Dinner

8 capsules of Masszymes
4 capsules of P3-OM

BEFORE BED

6 Masszymes capsules
3 P3-OM capsules

Post Workout

2 scoops of Protein Breakthrough
(You can create a simple shake with a banana or berries depending on the protein flavor)
4 capsules of Masszymes
2 capsules of P3-OM
7 drops of Primergen-V
7 drops of Primergen-M

Chapter 9

Resources For BiOptimization

P3-OM: Powerful Proteolytic Probiotic

Stop pathogenic invaders such as bacteria, viruses, and other toxic agents in their tracks and BiOptimize your immune system.

P3-OM is a patented probiotic formula developed by one of the world's leading probiotic experts. P3-OM uses a patented process to enhance L Plantarum's capacities, resulting in a new super strain that may be the most powerful probiotic ever developed.

This probiotic is designed to help you combat: viruses, retroviruses, and super bacteria. P3-OM has shown in clinical trials some remarkable properties which include:

- 1) **Proteolytic** activity (breaks down protein)
- 2) **Anti-tumoral** capability (Reduces *tumors* size).
- 3) **Antiviral** capabilities (Kicks virus asses)
- 4) **Anti-retrovirus activity** as demonstrated against: *the Rauscher virus, human immunodeficiency virus (HIV), and the T-lymphotrophic virus.*
- 5) The strain **can be maintained** in the human digestive system.

We believe this probiotic is the ultimate defense against illness, disease and digestive problems.

Learn more about P3-OM [here](#)

P3-OM has been shown to enhance the protein assimilation of Masszymes by over 50%. It's truly the ultimate 1-2 knockout combo for athletes, bodybuilders and professionals who need protein to recover from their tough workouts.

Learn more about Masszymes [here](#)

P3-OM is used by those who wish maintain their health at the highest levels.



Chapter 9

Resources For BiOptimization

Masszymes: Advanced Enzyme Formula

Masszymes is a medical-grade enzyme formulation that increases your enzyme potential, allowing for optimal protein digestion and absorption necessary for growth.

As well, the formulation cleanses your gastrointestinal system of undigested protein, while improving energy and cognitive function by reducing the resources needed for the metabolism of food.

Masszymes is the strongest proteolytic enzyme formulation on the market today. At 85,000 HUTs, it contains more protease per capsule than any other formula.

Enzymes are critical in digestion, absorption and assimilation of proteins, carbohydrates, fats, vitamins and minerals.

Modern food production using pesticides, chemicals, and cooking destroy naturally occurring enzymes.

According to enzyme expert Dr. Edward Howell, the average human loses 70% of their enzyme reserves by the time they've reached 40 years of age. He also states that lifespan is directly proportional to the rate of exhaustion of enzymes in the body.

Learn more about Masszymes [here](#)



Chapter 9

Resources For BiOptimization

Masszymes: Advanced Enzyme Formula

Enzyme Formulations:	MASSZYMES	Enzymedica Digest Basic	ONNIT DigesTech	Udo's Choice Enzyme Blend	GNC Natural Brand	Now Super Enzymes
Total Protease	170,000 HUT	84,000 HUT	80,000 HUT	25,000 HUT	17,000 HUT	6,150 HUT
- Protease 6.0	20,000 HUT	x	x	x	2,000 HUT	x
- Protease 4.5	140,000 HUT	x	x	x	15,000 HUT	x
- Protease 3.0	120 SAPU	x	x	x	15 SAPU	x
- Peptidase	10,000 HUT	x	x	x	x	x
Bromelain	2,000,000 FCCPU	x	x	100,000 FCCPU	300,000 FCCPU	1,800,000 FCCPU
Diastase	650 DP	x	x	540 DP	125 DP	x
Invertase	850 SU	240 CU	259 SU	200 CU	x	x
Lactase	2,000 ALU	1,000 ALU	900 ALU	1,000 ALU	x	x
Alpha-galactosidase	300 GalU	250 GalU	450 GalU	x	x	x
Amylase	15,000 DU	24,000 DU	23,000 DU	10,000 DU	7,000 DU	830 DU
Glucosylase	20 AGU	50 AGU	50 AGU	9 AGU	11 AGU	x
Lipase	2,000 FIP	1,500 FIP	3,500 FIP	250 FIP	210 FIP	3,400 FIP
Number of capsules per bottle:	250	120	60	60	240	180
Price per capsule	\$0.20 to \$0.28	\$0.33	\$0.55	\$0.39	\$0.17	\$0.09

Protease is the most vital enzyme for athletes, bodybuilders, and high-performing individuals, who require adequate levels of protease to break down protein into usable amino acids for muscle repair and recovery.

Learn more about Masszymes [here](#)

Chapter 9

Resources For BiOptimization

PROTEIN BREAKTHROUGH: BioActive Plant Based Protein

Protein Breakthrough is the best tasting and easiest digesting hemp based organic bioactive protein powder on the market.

Each serving delivers over 17 grams of protein, containing all the essential and branched chain amino acids necessary for muscle tissue recovery. The formulation also includes the essential fatty acids (3,6,9's) in the perfect ratio, which aid in anabolic recovery, brain function, and sex hormone production (testosterone).

As well, Protein Breakthrough is 100% vegan and packed with 17 grams of insoluble fiber per serving, while containing: No soy, No gluten, No dairy products, No corn and no sugar fillers... which are found in most protein supplements.

One of the unique things about hemp seed protein is that 65% of it is globulin edestin, which mimics the actions of the third most abundant protein in your body -- Globulin.

Globulin performs many enzymatic processes within the plasma, including protein synthesis and fat burning.

By supplementing with hemp seed protein, you maintain an adequate level of globulin in your bloodstream to fuel these processes.

Clumping doesn't occur with Protein Breakthrough, as it mixes easily in shakes and smoothies -- so you don't have to chew through powders anymore.

For a delicious power smoothie, blend 2-3 scoops with either water, coconut water, or your favourite nut milk and your favorite fruit.

Learn more about Protein Breakthrough [here](#)



Chapter 9

Resources For BiOptimization

PRIMERGEN-V & PRIMERGEN-M: *Fulvic based vitamins and minerals*

Primergen-V and Primergen-M are the ultimate vitamin and choices for athletes, bodybuilders, executives, and anyone who wants to experience healthy high performance.

They were formulated specifically for...

- Improving metabolism
- Regulating hormone function
- Reducing food cravings during fat loss.
- Boosting energy
- Eliminating brain fog
- Nourishing your cells with biomaterials for cellular action.

Formulated in a liquid form with fulvic acid, Primergen-V and Primergen-M have an absorption potential of up to 98%.

This means your cells receive all the critical nutrients they need to operate at their best.

The dropper dosing technology is designed to give you the perfect dosage for your body weight.

Plus, you can easily optimize your dose for your activity levels and physiological demands.

The portable and convenient 2 ounce bottles can be carried with you at all times. So you'll always have a dose with you no matter where you are.

Learn more about Primergen [here](#)



CONCLUSION

I hope this has been an eye-opening experience for you. Every single day, people all over the world are taking steps to improve their health. Sadly, often these steps don't make much of a difference at all because they are starting with a very weak foundation.

If you follow the advice just given, you can be different. You will be building your foundation so that each and everything you do beyond this to improve your health has a tremendous payoff. And, even better, you will feel great every step of the way.

No matter what health issue you are currently facing, whether it's low energy, a high risk for disease, chronic aches and pains, or difficulty concentrating throughout your workout, BiOptimization can help you. Don't think of this as a 'quick fix' however. While you will see results quickly once you start taking the steps outlined in this book and will notice miraculous differences by the time the 90 day protocol is up, you should be taking care of your body and concerning yourself with optimization for *life*.

This will help ensure that you not only have a healthy tomorrow, but that you don't have to worry about what disease lurk for you down the road. It's time to start taking your health seriously. It's the one thing that money cannot buy and once it's gone, it can be very difficult to get back. Don't wait until it's too late and you can't do anything about it. Take control now and set yourself up for leading your very best life into the future.

Wade Lightheart