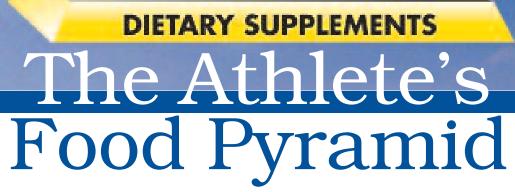
THE CORY HOLLY SERIES



H20

PERFORMANCE NUTRITION FOR THE

ACTIVE LIFESTYLE

Book Two

Audio eBook Series

The Cory Holly Series

The Athlete's Food Pyramid (Book Two)

Performance Nutrition For The Active Lifestyle by Dr. Cory Holly

Also available in audio format (MP3)

Publisher

Cory Holly Institute Inc. 108-3605 30th Ave Vernon BC V1T 6Z5

CoryHolly.com/Bookstore

Copyright © 2019

Cory Holly Institute Inc.

First Edition Edited by Dr. Cory Holly

Copy Editor: Tracy Kaye Holly

Cover Design: Randy Ellis

Notice of Rights

No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system, unless written permission is first obtained from the author or publisher (except by those wishing to quote brief passages).

The information contained in this book is not intended as a substitute for medical treatment or advice and is best applied by the reader with discretion and expert medical consultation. It does, however, advance the cause of health care freedom and our constitutional right to educate ourselves in medical science and progressive health care knowledge. The author and publisher do not accept any liability for the use of any agents, procedures or products mentioned in this book.



The Athlete's Food Pyramíd

Performance Nutrition For The Active Lifestyle

Contents

	Contents	4
	Introduction	5
Chapter 1	Dietary Supplements Filtered	13
Chapter 2	Pure Water	30
Chapter 3	Fresh Live Juice	33
Chapter 4	Fresh Organic Vegetables Fresh	37
Chapter 5	Organic Fruit	39
Chapter 6	Wild Lean Tissue Protein	42
Chapter 7	Cultured Dairy Products	45
Chapter 8	Peas, Beans, Lentils, Legumes Whole Grains, Nuts and Seeds	48
Chapter 9	Fresh Live Oils	51
Chapter 10	Natural Sweeteners	54
	Afterword	57
	About The Author	60

Introduction

If you think this book was written specifically for athletes you're absolutely right, but who or what is an athlete? According to author Dan Millman author of Way of the Peaceful Warrior and the Inner Athlete, the athlete exists deep within each and every one of us, and I agree.

Relatively speaking then, everyone is an athlete engaged in the sport of living, like it or not. Trouble is most people don't know who they are or that they've got an athlete hiding deep inside, but believe me it's down there. For certain there's an athlete inside just waiting for the opportunity to fully and truly express itself, waiting for its host to turn on the ignition key to get the motor running. Perhaps not today but in time and hopefully very soon you too can release the potential energy and athletic power you have locked in the blueprint and machinery of your DNA.

For the sake of objectivity the Oxford Dictionary defines athlete as a *"skilled performer in physical exercise or a healthy person with natural athletic ability."* Therefore if you run, swim, cycle, weight train, play any sport or engage in any form of exercise or physical recreation on a regular basis, you qualify as an athlete. In this case a fitness athlete.

Don't be misled by the incorrect social reference of what many people think an athlete is or isn't. Although the term is frequently applied only to an elite group of people who devote their lives to organized professional or competitive sport, the fact remains that if you are willing to move your body in a progressive matter and seek wellness with passion, then you're definitely in the same boat moving in the right direction. To achieve that which lies within you, you have to see yourself as you truly are. So have a good look in the fitness mirror and look beyond the silver lining through the veneer. Don't think for a minute you have to reach a certain level of perfection to call yourself an athlete. Perfection doesn't exist. Not in this life, on this planet or anywhere in the cosmos. Maturity is a much better term than perfection.

Perfection means without flaw, without error. Everything on this planet that starts out fresh, vital and alive is subject to the catabolic and destructive forces of nature that cause erosion, weakness, fatigue, and death. As long as we are mortal we can never be perfect. So the 'imperfectionists' out there who strive illogically for perfection are doomed to fail. It's much more sensible to strive for progress.

"Success is the progressive realization of a worthy ideal." E. Nightingale

To succeed as an athlete, you have to set your mind on optimum health, work towards improving your performance, and take a calculated degree of action towards that goal day by day. And if you don't see yourself as a fitness athlete but workout routinely and enjoy sports or recreational physical activity, then my question to you is; what are you?

Who are you?

The New Sports Nutrition

Sports nutrition is an art and science. The art consists of nourishing an active body with quality food and dietary supplements in a skilful, safe and consistent manner. This pertains to not only what we eat and why, but also to when and how much. If for example your goal is to build lean mass or lose inches from your waistline, then missing meals or

forgetting to take your supplements is just as 'bad' as eating the wrong food at the right time.

Is there ever a right time to eat the wrong food?

The science of sports nutrition helps all of us to understand the how and when and the why. Through observation, research and repeated experiment, clinical experts dedicated to the field of sports nutrition and human performance, investigate the effect of controlled exercise, food and natural health products on the health, recovery and performance of athletes.

To be successful in the world of sport, fitness and health, and to remain well and injury free, one must apply the art as a derivative of logic and sound science. This is the essence of the natural health food and fitness movement. Both are inseparable and equally essential.

Which do you think is more important, exercise or nutrition? Well here's the answer, once and for all. Neither. Both are equally essential, although each can achieve things the other cannot.

For example, you can't build your biceps alone by simply consuming more protein, and in contrast, your biceps will not grow reliably in response to training stimulus, however frequent or intense, if you don't consume enough high quality protein to maintain a consistent state of positive nitrogen balance.

It's surprising how many athletes disregard the importance of consuming whole organic real food. Many feel they simply burn off the

7

empty calories they consume in the form of polished rice, milled white flour, homogenized milk, dead vegetable oils and processed commercial breakfast cereals.

This myth, perpetuated by ignorance and supported by misleading, irresponsible advertising only serves to strengthen the power and might of the food conglomerates that continue to thrive from the mass addiction they foster.

Meanwhile countless numbers of innocent children and young people committed to sport and athletics literally burn out their neural, immunological and interconnected biological networks with the refined empty food they ingest, and by age 30 or younger often experience depression, eating disorders, syndrome X, systemic joint inflammation, or chronic fatigue, caused by depletion of organ reserve, adrenal exhaustion and immune system failure.

Following government approved Food Guides will steer you in the wrong direction (although the 2019 Canada Food Guide isn't half bad). You'll survive, but you'll never thrive. You'll live short and die long. Any food guide that tolerates the consumption of refined, high-glycemic grain based carbohydrates as a principal source of nourishment for our species is not based on objective nutrition science.

So out of need and response to requests and concerns from thousands of students, athletes and active lifestyle consumers worldwide I developed the Athlete's Food Pyramid© as a guide for anyone seeking better health and performance through nutrition. It consists of real food, food that nourishes, heals and sustains us, mind and body.

8

On the one hand you've got the 'athletes' who train and exercise with vengeance and will eat almost anything, refined or whole, empty or nutritious. But on the other hand you have the health food junkies. They eat fresh organic food religiously, drink their carrot juice and assemble what appears to be a never-ending stream of vitamins taken throughout the day like clockwork, never missing a hit.

Trouble is they don't exercise progressively based on a structured, periodized training routine like the so-called 'athletes'. So over time they lose muscle, bone density, and lean mass and accumulate body fat. In the end, and this is ironical, they lose their digestive capacity to even use the food they so gloriously uphold as righteous.

Ultimately they develop a condition known as sarcopenia, which means 'poverty of flesh' and all of its symptoms of weakness, fatigue and decay. Many think these symptoms are caused by old age when in fact they are caused mainly by old age thinking and failure to comply with the science of living well.

One thing's for sure, any lifestyle that excludes controlled exercise and physical activity, which are two different things, reduces the health span of any human being, guaranteed. Health span is not the same as life span.

Our life span as a species is about a hundred and twenty years. Human life expectancy varies considerably depending on where you live. In Canada it's about 80 years.

Health span is the length of time you spend on this planet free of pain, illness, infection, injury, chronic disease, disability and the need for prescription medication. It's a true state of wellness and independence. It's a functional state that sustains independence.

Genuine health demands presence of function and function is something you can measure. Optimum health is much more than the absence of disease. It's the presence of energy, vitality and a genuine desire to be well. It's the presence of function.

So what is the answer? I hope it's obvious. The new sports nutrition combines the best of both worlds and stands on the solid ground of objective science. It's about crossing over into the world of optimum nutrition if you're a fitness fanatic or getting into the world of fitness.

If your health food nut, it's about balance and finding the perfect blend of both nutrition and fitness to suit your biological needs and personal aspirations. No more extremes, no more one or the other. No more fasting or purging because of recent uncontrolled food or drug binges; whether driven by physical, mental or emotional means.

It's two camps forming a perfect union based on the mutual desire to compress morbidity or increase health span and sustain the highest quality of life possible for as long as possible. It's called bridging the gap and it's not possible to achieve without education, discipline, selfcontrol, and above all a sincere and genuine desire to be well.

Most food guides are not designed to serve the needs of physically active people who desire optimum health. Instead they exist as basic survival nutrition tables for sedentary population groups. Follow such a guide as a health conscious, functional athlete and you're bound to get sick and lost.

Conventional food guides are far removed from the high quality, fresh, organic food standards advocated within the natural whole food movement. You'll never thrive if you make enriched processed grains your daily fair but you will however, definitely increase the likelihood of experiencing chronic inflammation, elevated cholesterol, headaches, food addiction, obesity, heart disease, and diabetes.

Just look at people and watch what they eat. Processed grains, white flour and a ton of salt hiding in buns, bagels, muffins and pasta, typically dehydrate the body, decrease insulin sensitivity and spike both glucose and insulin levels. They provide no vital living food energy because bread is dead and contains extremely low levels of essential micronutrients.

Most of the vitamins and nutrients are chemically altered and destroyed by heat or lost in milling. Processed grains are generally loaded with excess sodium and contain gluten and lectins, which countless numbers of humans are allergic or intolerant to. And of course almost all grains are acid forming and contain phytic acid, which binds to important minerals like calcium, zinc and iron, potentially blocking their uptake from the gut into the blood.

Until recently (Canada Food Guide 2019) food guides never mentioned water, the 'universal solvent' and transport medium that inhabits more of us than any other substance. By necessity tap water should be filtered prior to consumption. Water quality is critical to health.

Conventional food guides make no mention of organic food or the enormous life saving value of dietary supplements. In spite of mounting evidence to the contrary, they provide little or no information pertaining to our biological need for essential fatty acids.

Natural whole food is a powerful, unappreciated, wonderful medicine and must be taught to everyone as such, especially our children. However, like truth itself, food can cut right down to the bone and render our health asunder. Without science and a consciousness of wellness as a guiding light, the palate of man by nature is like a ship without a rudder. Without navigation and control of its direction (by reason) it's bound to end up on the rocks. Just watch what people eat and tell me I'm wrong.

Conventional food guides also tolerate many health destroying imitation foods including white flour and all its concoctions, white rice, luncheon meats, processed breakfast cereals, margarine, and literally hundreds of other chemically altered micronutrient deficient wonders of modern food technology. When it comes to health and athletic performance one should follow a dietary food model that is based on objective science and the pursuit of optimum health and function, regardless of political intervention or legal pressure from powerful food conglomerates.

What you eat is your personal health business but government and commercial industry has turned almost all the food we have access to into their business, a business of profit that perpetuates disease and decay, and it's all driven by the same single underlying motive: commerce without concern for health and wellbeing.

Chapter One

Dietary Supplements



Some people still think you take supplements to complement for a bad diet but that's old hat. The new paradigm is that you add the finest supplements you can find to the best possible diet you can eat and then combine that strategy with controlled exercise.

The new paradigm of sports nutrition focuses on health, biological age and function. It parallels nutrition science and clinical research and human performance. The objective is to minimize damage to your body as you age, extend your health span and maximize the quality of your life. Interested?

Simple observation and decades of experience analyzing thousands of diets in detail has taught me that no one obtains optimum quantities of each and every single essential nutrient from food alone in spite of what conservative government funded, nutrition research councils and scientific advisors tell us. Don't be fooled by any guide that implies a provision of everything you need. Everything has yet to be defined.

Just what is meant by 'everything' anyway?

For example the average North American male consumes about two milligrams of zinc or less daily. This is clearly well below current

recommendations standards of nine to twelve milligrams. Most of us have no idea what zinc does or where it's found. And if you don't believe me, just ask a colleague, friend or someone in the family. Do you think they could tell you point blank, off the cuff that zinc plays a biochemical role in prostate function, testosterone chemistry or cell immunity?

Would they know for certain that the best food sources of zinc include oysters, red meat or pumpkin seeds? No way. But I bet they could tell you the make, model and engine size of their car, what teams are playing in the Stanley Cup playoffs or the Superbowl or when the next long weekend is. How many times have you heard someone say, *"I get everything I need from the food I eat"* or *"I eat really well so I don't need to take vitamins"*.

Wrong. Your diet no matter how natural, how organic or how fresh does not, will not and cannot supply you with everything you need.

Consider the fact that the average diet is far from ideal and when scrutinized under a microscope falls woefully short in quality. But let's clarify 'need'. Biological medicine does not use the lowest common denominator of health as a standard. Nor does it accept the common notion of living without any concern for preventing disease because we know there is a safety net below to catch us when we fall.

When we talk about need or function from an integrative, complementary or natural health care point of view, we're talking about walking the tightrope of life as if there is no net. It's a mental thing. With no safety net below to break your fall, you have to be extra careful. You have to take really good care of yourself. You have to be responsible for every decision you make and think twice.

You have to be 100% accountable for your health. Day by day, you have to wilfully stride to get what you need to achieve a high level of functional health. This means living free of prescription medication, feeling good, looking good, feeling energetic, setting goals, living above mediocrity and demonstrating excellent physical, sexual, mental and emotional performance.

You have to step out of the box, expand your mental horizons and find the courage to think for yourself. Emerson said, *"The most difficult thing for men to do is think."*

Albert Schweitzer said, "The problem is that men simply don't think."

You must ask why. It's the shortest most important question in the world. Sidestep the politics and examine the science objectively. Challenge all conventional, conservative thinking. If you conform to the masses and obey all the dietary laws taught by convention, you'll end up physiologically and immunologically bankrupt by the time you're 30. Don't look for anyone or anything to blame, just saddle your own horse and blaze your own trail.

The perfect diet doesn't exist and it never has. We didn't even discover vitamins until the early 20th century and scientists are still adding to the list. In the so-called 'good old days', when food was relatively wholesome and fresh, millions went blind and still do because vitamin A is absent from the diet.

Millions died worldwide of scurvy, pellagra and beriberi not knowing why or how. Many died needlessly from infectious disease caused mainly by poor hygiene and limited sanitation.

Today we are dying of heart disease, cancer, stroke and diabetes, but the cause is still somewhat the same. What is the cause? Massive vitamin and mineral deficiency (modern malnutrition) coupled with the simultaneous consumption of toxic food that actually injures the body.

Modern malnutrition is caused by eating loads of empty foods made of white flour, white sugar, white rice, homogenized milk, white salt and white oils. White oils are oils that have been damaged or chemically altered through modern processing.

Even if you think you eat well, which is purely subjective and always bias, adding supplements to your menu can still improve your tolerance to stress, retard tissue degeneration and support long-term function.

I can tell you that for every thousand people who have told me that they eat well, only one gets close and even knows what eating well really means. Upon observation and analysis, I always discover that their concept of what constitutes 'well' is far removed from what is truly nutritious. Processed noodles, most bread, canned foods, and bottled pasteurized juices for example, are not nutritious.

Eating well means sucrose is a foreign substance, and you have control of your appetite, especially at night when many of us turn into dietary werewolves and vampires. Objective sports performance research from clinics, human performance labs, and universities worldwide, continues to provide an overwhelming degree of irrefutable evidence in favour of using dietary supplements and natural health products to enhance recovery from workouts, build strength and protect against training induced oxidation, glycation and sports related injuries.

Correctly utilized, dietary supplements are what I call the intelligent choice'. And although we have thoroughly convinced ourselves otherwise, many of the signs and morbid symptoms associated with senescence such as obesity, type 2 diabetes, insulin resistance, elevated blood fats and high blood pressure, are not functions of chronological age.

They have in fact more to do with Nurture; as in lifestyle, state of mind, stress management, nutrition, fitness, rest and environment than nature. Nature (our genetic hardware) always plays a simultaneous role but not to the extent previously thought by biological determinists.

Chronic pain, illness and disability are more a function of biological age accelerated by damage and injury, some of which is reversible, most of which is preventable. But to prolong vitality you must take action against the forces that cause the pyramids to crumble, namely oxidation, cosmic radiation, gravity and entropy.

Essential Vitamins and Minerals

Essential means "indispensable and absolutely necessary for life".

To optimize performance you need to obtain all of the essential micronutrients with precision in the right balance. Insufficient micronutrient intake is a common cause of the fatigue, disordered eating, sports injuries, physical weakness, poor workout recovery and the development and progression of degenerative disease and premature aging.

Athletic demands and strenuous exercise increase the excretion of many nutrients from the body, in sweat and urine. Routine physical activity increases the need for an entire network of antioxidants many of which are utilized to quench reactive oxygen species produced by athletes who typically consume up to 20 times more oxygen than sedentary individuals.

The best time to take your essential vitamins, minerals, enzymes, antioxidants and trace elements is with your pre- and post-workout protein shake. Taking a vitamin complex and a separate mineral complex in capsule form several times throughout the day helps ensure adequate intake of essential micronutrients. But this is just for starters.

Once you get into the groove of real health centered consciousness and are willing to pay the price for living free from disease, the sky's the limit. But like exercise and health food, dietary supplements must become secondary by nature. Resistance is futile.

Fighting the science is like trying to stand up against an ocean wave. Experienced surfers never fight the wave. They ride it, roll with it or dive underneath it. Those who fight the ocean always lose. To get positive results you must think in positive terms and work with the program. Thousands of clinical studies show that taking high quality supplements 'work', but you have to take them consistently, at the right time and in the right amounts.

Combining supplements with whole food improves resistance against infection, disease, and stress, better than whole food alone. Rats fed a natural ideal diet for rats, reinforced with generous amounts of essential micronutrients and antioxidants, always outperform and outlive their genetic contemporaries, who live on food alone, without supplements. Add physical stress to the experiment and the results are even more striking in favor of dietary supplements.

Do you think you have the same exact body today at 40 or 50 that you did at 15? Of course not! Granted you've got the same DNA making copies as best they can, but 50+ years of living large is long enough to have caused a significant amount of oxidative irreversible damage. As we age DNA is slowly and continuously damaged thus the trick to staying young is to minimize cell injury.

The enzyme glucosamine synthetase declines with age in every body. Just like the hormones melatonin and DHEA. That means you produce less and less glucosamine in your body from glucose and glutamine, explaining in part why the cartilage in your joint matrix tends to erode over time.

But if you take glucosamine sulfate as a staple supplement you can overcome this rate limiting step and this is just one of dozens of examples I could give. But don't wait until you're 50. Take it now to prevent the erosion of your knees, especially if you're physically active and athletic which you need to be to stay well, lean and fit.

In addition to what I typically refer to as essential in the vitamin and mineral world, consider the benefits of taking extra antioxidants and botanical medicines such as coenzyme Q10, lipoic acid, grape seed extract, glutamine, garlic extract, Maca or ginkgo biloba. These supplements are utilized by the body to improve cardiac health, combat free radicals, improve vision and strengthen immune response to bacteria and environment pathogens.

Vitamins, minerals, antioxidants, herbs, and homeopathic remedies go hand in hand. Be generous and give your blood and body the resources they need. Don't be a Scrooge when it comes to your own personal health.

Become One With Your Blender

There's another side to the supplement coin that everyone in this new age of information and technology should consider. This other side emphasizes the importance and quality of macronutrients, which are the proteins, carbohydrates and fats, as opposed to the micronutrients, which are the vitamins, minerals, and enzymes.

Special emphasis on high quality, non-denatured protein and essential Omega-3 and Omega-6 fatty acids help heal and nourish the body. When used correctly macronutrients are simply outstanding as many of them are designed to enhance immune function, improve insulin

deficiency, increase one's fat burning capacity, improve strength, endurance and stamina and encourage long-term participation in sport and physical activity.

You've got a personal relationship with your gym bag and water bottle. Now develop one with your blender. The protein shake should be the anchor of your diet. It's one of the best ways to sharpen your metabolic pencil and supply your biological demand.

Add whey protein isolate, a liquid sport oil rich in omega-3 essential fatty acids, and fresh or frozen fruit to filtered water or freshly squeezed juice. Add a variety of food supplement powders such as a glutamine, d-ribose, calcium ascorbate, colostrum, creatine, fresh raw bee pollen or Hawaiian spirulina.

When blended correctly in the right amount and consumed at the right time, a custom designed protein shake enhances immune function, improves insulin efficiency, increases your fat burning capacity, improves performance and recovery, and encourages long-term participation in physical activity. This is my workout 'sandwich' and any construction worker or kid will tell you it's what's inside the sandwich that really counts. Don't underestimate what this technique can do for your health, performance and body composition.

One of the best ways to improve your diet immediately is with a blended protein health shake. That's how Tracy and I begin every day, after drinking one to two glasses of filtered water upon rising. The shakes we make are quick, easy to prepare and incredibly nutritious. They are also delicious. Shake'n'Take!

Powdered supplements added to a shake with intellectual precision and knowhow, have the advantage of superior digestion, integration into the bloodstream and cellular utilization. Every mouthful should be swished around from side to side before swallowing. To optimize digestion and absorption, remember to chew your liquids and drink your food.

As an exercise, sport, or activity primer try mixing in a blender, one half to one cup of freshly squeezed organic orange or grapefruit juice, half a cup of filtered water and a couple of ice cubes, one tablespoon of your favourite sport oil, one quarter to one teaspoon of vitamin C powder (calcium ascorbate) and one to three servings of plain or flavoured whey protein isolate. Press the juice fresh with a citrus juicer first then add it to the blender. Don't use pasteurized juices. These juices are dead. Work at your nutrition with the same passion as a natural drug-free athlete working out in the gym.

You have to eat as hard as you train.

Oranges and grapefruits have a low glycemic index, which means the sugar they contain filters into the bloodstream relatively slowly. This helps prevent hyperglycemia (high blood sugar) and rebound hypoglycemia (low blood sugar). When combined with an omega-3 rich sport oil blended with a high quality whey protein isolate, this mixture will stabilize your blood sugar and insulin levels. For energy and endurance, stability is exactly what you want to achieve and because the juices are squeezed fresh they are alkaline forming, teaming with enzymes and loaded with self-protective antioxidants.

Sport Specific Essential Fatty Acid Oil Blend

Athletes require generous amounts of essential fatty acids to assist in energy transfer, muscle contraction, hormone production, joint flexibility and the metabolism of stored body fat. EFA's enhance neurogenesis, improve function, strengthen the immune system, improve neurological function, speed wound healing and accelerate recovery from workouts. They also combine with the sulphur in whey protein isolate to produce healing anti-inflammatory proteins that improve cardiovascular health, aerobic fitness and muscular strength.

This is why a sport specific oil, ideally a mix from land and sea, that provides both linoleic and alpha-linolenic acid and a direct source EPA, DHA and GLA should be a primary component of your protein shake. EFA's work closely with essential vitamins, minerals and antioxidants to build a strong foundation of health and wellness.

Essential fatty acids can be of particular benefit to someone with damaged, inflamed intestines. They are also extremely beneficial for skin problems and painful joints. The best oil for nutrition will provide both EFA's and a direct source of EPA (eicosapentaenoic acid), DHA (docosahexaenoic acid) and GLA (gamma linolenic acid).

Whey Protein Isolate

Whey protein isolate by definition contains no less than 90 percent protein. Cross-flow ultrafiltration and advanced microfiltration

extraction methods, create a highly soluble, alkaline forming, 99% nondenatured protein isolate.

Heat damage that denatures protein is ruinous to health. Want cancer? Eat lots of over cooked dry animal flesh. Burnt black is best. Whey protein isolate provides exceptional levels of branch chain amino acids, known as the BCAA's, a full complement of essential and non-essential amino acids and a complete range of biologically active peptide microfractions including lactoferrin, immunoglobulin, bovine serum albumim, beta-lactoglobulin, alpha-lactalbumin and glycomacropeptides.

The peptides in whey protein isolate are what make it so unique and powerful. Whey protein isolate outperforms every other protein in the world when it comes to biological value and nitrogen retention.

Whey protein isolate raises metabolic rate, strengthens immune function, helps build excellent quality muscle, tastes great, and is extremely well tolerated by consumers of mixed ethnic origin. In addition, look for a whey protein isolate reinforced with guar gum and inulin. Whey protein isolate reinforced with guar gum and inulin has an excellent direct anti-inflammatory effect. Guar gum is much more than a thickening agent. It contains betaglucans; hydrocolloidal compounds of soluble fibre that when acted upon by friendly bacteria in the colon produce short chain fatty acids including acetic acid, butyuric acid and proprionic acid.

Inulin supplies fructooligosaccharides that fuel the production of friendly bacteria. It is the short chain fatty acids liberated in the gut

from the betaglucan of guar gum that reduce inflammation in the small intestine and joints, inhibit enzymes that synthesize cholesterol, stabilize blood sugar, modify appetite and stimulate immune cells to become highly functional. When combined and blended with an Omega-3 rich sport oil from land and sea in a shake before and after exercise, for breakfast or as a night time snack, the benefits only get better.

When it comes to nitrogen retention and biological value whey protein isolate will conquer any challenger including soy, pea, rice, eggs, fish, meat, nuts and seeds. No human can live without protein and many people especially women and children, either don't consume enough high quality protein or they consume too much of the wrong kind, like canned tuna for example.

Whey protein isolate is leaner than wild game and suitable for the whole family young and old. It's very clean, contains no animal related contaminates, is extracted without heat and extremely soluble. Whey protein isolate is definitely the 'way to go'.

I also add powdered vitamin C (calcium ascorbate) to my blended smoothies for several reasons. It mitigates cortisol related damage, reinforces collagen production, strengthens my adaptive capacity to physical and mental stress, detoxifies blood and lymph, supports adrenal function and quenches free radicals generated via strenuous exercise.

Doctors Erwin Stone and Linus Pauling were right on the money. Vitamin C is the world's most underrated and underestimated vitamin.

It has powerful anti-aging and disease prevention benefits, but only when used generously on a regular basis. Tracy and I take 10-15 grams each per day in divided doses.

Take your vitamin supplements and antioxidants with your shakes and I guarantee you will feel stronger and have more endurance, especially if you are consistent. This is called Shake'n'Take. First, put your supplements in capsule or tablet form in your mouth. Now take a swig of your shake. Swish the shake and supps around together for a bit, then swallow everything.

For best results, put my workout sandwich to the test, which includes a pre- and a post -work out shake every time you train, play sport or workout. Flooding your bloodstream with branched-chain amino acids before and after training, protects muscle, enhances fat burning and delays fatigue. It also has a built in anti-catabolic effect.

For a nutrient rich, balanced and complete breakfast, or as a postworkout recovery drink, add a mix of fresh and frozen fruit, such as papaya, mango, banana, blueberries, to one cup of filtered water, one tablespoon sport oil, one quarter to one teaspoon vitamin C, and one to three servings of flavoured or plain, unsweetened whey protein isolate. For added muscle strength, cartilage support and recovery value, you can also add things like creatine, L-glutamine or ribose powder. The amount you take of each depends on your weight, lean mass, gender, frequency of training and volume of activity.

Without functional healthy muscle, you can't lift yourself out of the bathtub, let alone exercise or play recreational sport. Muscle is our

health engine. The secret to maintaining muscle strength as we age is to contract, flex and extend each muscle group routinely against resistance through a full range of motion, and to nourish them with the building blocks of which they are made. Otherwise they shrink and wither away along with our vital capacity, physical form and strength, stamina and vertical height.

Resistance to infection, fatigue and disease also declines with sedentary age related muscle loss, which again is called sarcopenia.

Like the earth, our cells work best in a pristine, whole, well hydrated environment. Healthy muscle fibres require optimum amounts of oxygen and the right nutrients. If they are not challenged, adequately sustained and nurtured their functional capacity and ability to withstand stress and decay definitely declines. Scientists believe we have the ability to live in good health to the age of one hundred and twenty plus years. But we abuse ourselves, poison ourselves and neglect ourselves. And because almost everyone is doing it, we think it is normal.

Hydration and Electrolytes

Sports nutrition begins and ends with water but how much do we need? To optimize cellular hydration, drink 30ml or 1oz of clean filtered water per kilogram of lean body mass daily. This quantity is based on the logic of how much cellular space you have to fill with water.

Medical science teaches that an optimum percentage of body water for the entire body is 65 to 70%, the same ratio as land and water on the earth. The earth is about 70% water or just like our bodies should be. Muscle cells hold up to 75% water. Fat cells max out at 15-20%. We also know that athletic performance and risk of sports injury increases as percentage of body water decreases, which is why all fitness athletes should consume an extra 1-2 litres of water during workouts to compensate for fluid loss.

To determine your lean body mass accurately, you will need a body composition analysis. I measure mine daily using Tanita brand technology. The method is called Bioelectrical Impedance Analysis (BIA).

Drinking filtered clean water alone does not cover electrolyte loss. Electrolyte deficiency can lead to fatigue, impaired glucose metabolism, muscle weakness, cramping, abdominal pain, adrenal exhaustion and headaches.

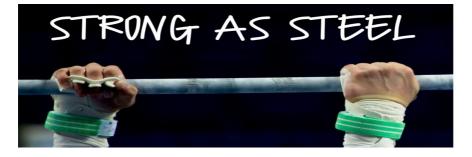
A good hydration mix added to your drinking water will quench your thirst, maximize fluid replacement and replenish electrolytes lost in sweat. The ideal potassium to sodium ratio is 7:1, the same ratio found in all natural plant and animal food when calculated as an average.

Added buffered vitamin C, calcium ascorbate, helps stabilize blood sugar, supports adrenal function and secures a healthy and stable collagen base throughout the body. Like the mind, exercise training must be progressive, and vitamin c is critical to compensate for heavy and intense and strenuous lifting. A light carbohydrate percentage of 7% will sustain energy and prolong endurance during fitness events, gym workouts and recreational activity without impairing fluid absorption. Optimum health, outstanding physical performance and successful body composition management is reliant on the foundation you build from the beginning. To look and feel like a health and fitness champion you've got to train, eat, sleep and think like one.

Do you know anyone who eats fresh whole organic food on a regular basis, trains five days a week or more with intensity and knowhow, and takes generous amounts of supplements at the right time? Not many, right? And yet such an approach is obviously a great way to go. Just imagine the health and vitality you could achieve if you applied what many of us know is right but struggle to apply.

Here's how I see the function and role of NHPs. Whole food alone versus combining whole food with supplements is similar to the difference between iron and steel. Let's liken iron to the best diet you could possibly choose, and steel to that same diet supplemented with the best known NHPs.

Iron (whole food) is strong, very strong, but steel (whole food + supplements) is stronger, more flexible and more resistant to oxidation than iron alone. To create steel (whole food + supplements) you have to add a tiny bit of carbon (NHPs) to iron (whole food). We all have a limited shelf life. The goal is to serve and protect. One man chooses iron. Good choice. I choose STEEL!



Cory Holly Institute

Chapter Two

Filtered Pure Water



Clean pure water is essential to the health of every cell in your body. With optimum hydration the body is affectively able to breath, digest, eliminate and perspire. Even hormone release and enzyme activity relies on the presence of water.

Less than 2% of North Americans drink sufficient amounts of the wet stuff resulting in a steady state of dehydration. Slowly, ever so slowly, our thirst mechanism begins to fail. Over time as we age and specifically because we do not drink enough water, eat too much dry food, such as flour and overcooked animal flesh, smoke, drink alcohol and coffee and take medication, the water content inside the cells of the body gradually decreases.

The cell water volume ratio drops an average from 1.1 to 0.8 from age 15 to age 85. This is a very serious reduction and drastic negative contrast. Think of your brain and heart cells slowly drying out over time like a grape shrinking into a raisin. This is why people shrink over time and lose height. The spine and disk core slowly dry out, reducing the space between individual disks of the vertebrae. The physical size and dimensions of the disks themselves are also reduced.

A tremendous amount of joint, disk and lower back pain are caused by simple dehydration. Synovial fluid, of which water is a major constituent, acts as a lubricating agent and bears the force of our weight in all weight baring joints. Drought management is how we survive. Our bodies are forced to adapt to a water depleted state, which the body recognizes as a form of stress. In managing our biological terrain under these stressful conditions, a great variety of signs and signals are made evident.

Unfortunately, most people become accustomed to dehydration and misinterpret their health problems as a need for medication instead of a biological need for water. If you base consumption simply on thirst or a dry mouth alone you will never achieve a state of optimum hydration because, except under resting conditions, thirst is not recognized as a sufficient stimulus for optimum fluid replacement.

The sensation of thirst is a survival mechanism and by the time fluids are low enough to stimulate cells in the hypothalamus to give you the sensation of thirst, gulping water down to the point of satiation only covers just half of what is actually required.

Don't base your water consumption on how you feel. Instead base them on what science teaches. Most scientific truth including reality itself is non-intuitive and impossible to determine without the right tools and technology.

I recommend 30ml or 1 fluid ounce per kilogram of lean body mass, not total body weight per day, and an additional one to two litres to compensate for elevated body temperature and lost fluids caused by sweating due to physical labour, sport and workouts. This will keep your body well hydrated, reduce fatigue and prevent a many unnecessary sports injuries. Water affects every aspect of our lives and like it or not, your functional potential will be determined by the quality and quantity of pure clean water you consume.

Water is critical to fundamental cell chemistry. By weight, we need more of it than any other dietary substance as it provides multiple

detoxification benefits and removes acidic waste liberated during athletic activity. That's why its purity is such an important issue.

Consuming two to four litres of tap water per day, which is how much an active athletic person needs just to prevent dehydration, means you are consuming on average a thousand litres per year. That's a lot of H20 potentially contaminated with chlorine, bacteria, parasites, heavy metals, prescription medication residue and literally thousands of toxic industrial chemicals.

Adequate water prevents overheating in the body and protects the kidneys from the potential threat of eating heat damaged protein. When protein is oxidized some of the nitrogen is converted to ammonia, which the body then converts to urea in the liver. Urea is soluble in water and excreted in urine. So it should be obvious that a chronic state of dehydration permits the concentration of cellular waste throughout the entire body, which then compromises performance and threatens overall health.

Keep this saying in mind. "The solution to pollution is dilution". J.Bland

Use distilled water or water filtered by carbon and reverse osmosis, to which additional oxygen and ozone is added. Splitting hairs over which process is superior is less important than actually drinking the amount required, although distilling your own is probably best. Some of the new living waters are now electro-magnetized and/or pH modified to simulate the effects of natural atomization. This may improve water absorption, its transport and cellular retention.

Water is almost always the cure for what ails us.



Cory Holly Institute

CoryHolly.com



Fresh fruit and vegetable juices are natures own thirst quenchers, cleansers and tonics. Think of them as liquid gold, a vital health enhancing living food that contains a broad array of vitamins, minerals, proteins, carbohydrates, chlorophyll, enzymes, antioxidants and various cofactors that both enhance and compliment individual nutrients.

In liquid form your body is able to absorb a much greater percentage of the available micronutrients. Their digestion requires very little effort and frees up your digestive energy. Together with a whole natural food diet, it's possible to fuel your body with the best possible nutrients to enhance your performance and well-being.

The world 'chemical' comes from the Greek work chemeia, meaning the juice of the plant. Live fresh juices nourish and replenish the body with vital chemicals during periods of stress and illness. Fresh fruit and vegetables juices alkalize your system and are high in alkaline minerals, such as potassium, zinc and magnesium.

Remember the enzyme component, the 'vital force', which improves the absorption of many nutrients and at all costs, try to avoid dead concentrates and pasteurized juice products, especially if you want to get lean or stay lean for life. When making fresh pressed juices, I suggest adding ascorbic acid to the juice to increase its ability to preserve nutrients and prevent oxidation. The best time to consume them is early in the morning when insulin is most sensitive. Identify the glycemic index of the fruits and vegetables you like to juice. In general the glycemic index will increase by up to 20% when the juice in consumed compared to eating the whole plant. The intestinal absorption of nutrients present in the juice is significantly higher when compared to eating a whole carrot for example. Both ways of consuming carrots are recommended. It doesn't have to be an either or thing. Do both.

I recommend using fresh juices as a fluid portion of your pre-workout shake. This provides a source of enzyme rich, alkaline carbs for fuel, the effects of which on insulin response are modified when combined with a good omega-3 rich sport oil and whey protein isolate.

Prior to a workout you want a slow gradual release of glucose in to the bloodstream and a constant provision of energy over time instead of a massive surge all at once. You also want something that is utilized efficiently with a high degree of predictability.

Perhaps the finest tonic know, fresh juices should never be stored as they begin to lose their micronutrient and enzyme value in just minutes of being pressed through a juicer. If you do need to store them for a short time, use an airtight thermos and add some vitamin C powder.

Organic carrots for example are high in beta-carotene and rich in minerals and trace elements. Carrot juice is extremely alkaline and useful for anyone following a high protein diet. It is healing to the intestines and contains a very pure form of atomically charged water.

<u>Note</u>: the high glycemic index of carrots is important for timing of consumption and water dilution may be necessary. Carrot juice makes for an excellent post-workout shake base because it's high on the glycemic scale.

Carrots juiced on their own are delicious but don't forget how incredibly nutritious it would be to mix other vegetables along with the carrots. I enjoy adding beets, celery, cilantro, parsley, garlic, kale and the lists go on.

Each vegetable is unique in its vitamin and mineral picture, so having a range on hand to pick from will make for some very healthy choices. Something as simple as a glass of fresh carrot and apple juice in the morning makes for a pleasant treat. I often have a small glass of carrot, ginger and garlic juice just before dinner as an aperitif.

The difference between fresh squeezed juice and the canned, bottled or boxed variety is that fresh juice is alive, alkaline forming and teaming with enzymes, whereas virtually all-commercial juices are deactivated, acid forming and dead as a result of being pasteurized. In other words they are sterile. Many also have added sugar which adds insult to injury.

Vitamin C and the bioflavonoids are destroyed by heat, as are many naturally occurring micronutrients. If everything you eat and drink is sterile you yourself will eventually also become sterile. Think about that.

There's a rule in natural medicine that goes something like this; eat food that spoils but eat it before it spoils. If the food you're eating won't spoil then it's most likely been compromised and manufactured for profit instead of for optimum health.

Modern food industry technology by design functions to prolong the shelf life of every item on the supermarket shelf. Nature herself in her natural state however, packs the very best punch, but that punch unfortunately doesn't last forever.

Pasteurized juice concentrates are frequently loaded with sucrose, fructose, artificial colours and flavours and a host of other chemicals, most of which are not listed on the label. One such offender is brominated oil added to prevent settling in the formation of rings. Brominated oil is known to cause changes in heart tissue, enlarge the thyroid gland and cause problems with the liver.

Is that what you want your kids to drink or would you prefer what's been juiced below?



Chapter Four

Fresh Organic Vegetables



Why did mum tell us to eat our vegetables? Perhaps she intrinsically knew and understood the power of their chemical makeup and health promoting value. Organic root and ground vegetables provide a wide range of minerals and trace elements, the very same factors that make up our composition.

Minerals are responsible for catalyzing thousands of enzyme reactions simultaneously throughout the body, reactions without which we couldn't sleep, digest our food or even think. Many of us lack more minerals, such as chromium, zinc, iron and selenium, than vitamins. Vitamins seem to get all the press but minerals are just as critical for health and vitality.

Vegetables are typically high in carbohydrates and rich sources of potassium and magnesium, which makes them alkaline forming. Besides supplying an excellent source of pure water, enzymes, carotenoids, fibre and antioxidants, green vegetables are an invaluable source of chlorophyll, which is anti-mutagenic and heralded as one of nature's best natural healing agents.

Eat at least three to five times more vegetables than fruit per day and emphasize the green, magnesium centered jewel of chlorophyll.

Chlorophyll is a life-giving substance that I think should be included as an essential component of the human diet.

Raw vegetables provide hidden antioxidant value behind every color and pigment. A serving of lightly steamed kale for example is alkaline forming, loaded with nourishing phytochemicals and enzymes, high in insoluble fibre, provides a slow release of natural sugars into the blood stream, contains chlorophyll and hydrates the body.

In contrast whole wheat bread is acid forming, provides zero enzyme value, is low in fibre due to the effects of grinding and cooking, provides a relatively higher concentration and quicker release of sugar into the bloodstream causing a high insulin burst, contains the common allergen gluten and dehydrates the body.

See the difference?

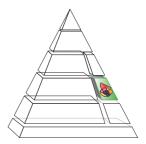
Salads are a goldmine of potential nourishment. I like a huge salad for lunch and dinner consisting of organic romaine lettuce, organic spinach leaves or mixed organic greens. Mix up a big salad with Tracy's Everyday Salad Dressing. You'll find this recipe in book three of this series titled, The Athletes Cookbook.

Add a decent piece of high-quality protein to your salad such as prawns, chicken breast or wild salmon and you've got yourself a decent meal rich in energy and vitality.



Chapter Five

Fresh Organic Fruit



The general rule with most fruits is to consume them before noon or after exercise when insulin sensitivity is highest. Fruit provides relatively light sources of antioxidant rich carbs for shakes and like vegetables, fruits consist mainly of carbohydrates, but in a more concentrated simple sugar form.

Fruit is a good source of some rather exotic but powerful antioxidants, like the polyphenols, flavonoids and proanthocyanidins, which improve capillary strength and strengthen the immune system by scavenging free radicals.

Many fruits are packed with carotenoids including alpha-carotene, betacarotene, lycopene, lutein and zeaxanthin. Carotenoids are a large family of fat-soluble nutrients that act as important cell protective antioxidants. They are transported in blood by low-density lipoproteins and other fat-soluble nutrients, such as vitamin E and co-enzyme Q10.

Organic mangos, kiwi, berries, pineapple, grapefruit, nectarine and peaches and apricots are all excellent sources of carotenoids. In fact it is the carotenoids in nature that are responsible for the great variety of colors seen in fruit. My favourite fruits are berries, papaya, mango, kiwi, pears and cherries. Follow the blood type diet if you want some direction choosing the right ones.

Part of the trick with fruit is learning when to apply them based on their glycemic index. Here's where timing is everything. As a general rule don't consume high-glycemic fruits prior to a workout or before bedtime for example.

High-glycemic means the carbohydrate sugars in the fruit are rapidly absorbed into the blood. The consequence is an immediate sharp rise in the hormone insulin, which drives the sugar into cells provided there is room. This can then result in a dramatic drop in blood sugar and a consequent feeling of fatigue or depression or a craving for more sugar. If a large quantity of sweet fruit is eaten at one time and the cells are full of energy, then the body is forced to convert excess blood sugar into fat. It literally has no choice.

After exercise however when muscle glycogen is depleted and needs to be replenished, it's definitely okay to spike insulin with sweet, highglycemic fruits like bananas, medjool dates or mangos blended in a post-workout protein shake. Insulin elevated after training and exercise actually improves glycogen replenishment and creatine transport. It also mitigates or defers the catabolic influence of the hormone cortisol but beware, insulin is a two edged sword.

Stimulated correctly insulin acts as an anti-catabolic agent. It helps build muscle, helps get you lean and helps maintain energy stability. But

driving insulin through the roof at the wrong time like late at night will turn your body into a powerful fat-storing machine.

Organic fresh fruit is always a better alternative to any refined empty carbs such as white bread, white rice, sucrose, corn syrup, or scoops of maltodextrin. Cleopatra didn't have access to refined white sugar back in Egypt. While soaking in goat's milk, she probably moistened her lips with organic wine and satisfied her sweet tooth with figs, dates and fresh berries. Next time you give in to a sweet sensation, give nature a chance. Have a protein shake and grind out on some dried figs, raisins or dates. In Hawaii they say, *"Good grinds brah"*.

Fruit also hydrates the body with pure naturally distilled living atomized water. Dried organic fruit like medjool dates or figs are a much better snack than cookies made with sucrose, salt, white flour and hydrogenated oil.



Chapter Six

Wild Lean Tissue Protein



Commercial domesticated meats are typically high in arachidonic acid, provide little or no essential omega-3 fatty acids and are frequently contaminated with one or more of the following substances: pesticides, antibiotics, parasites, prions, salmonella or e-coli.

Animals suffer in the same manner as we do when they become inactive, lack physical activity and consume no fresh, whole, live food. They become weak and subject to immune system failure. Domesticated animals lack the fortitude and strength of their wild counterparts. The quality of any animal protein we consume is equal to the quality of their staple food supply, how they are treated and the conditions in which they live.

For fear of being poisoned many of us habitually cook animal proteins to 'death'. However, the worst way to eat meat is well-done. Red meat is best eaten rare and all animal protein should be moist when eaten. The rule of thumb with animal proteins is to eat them only if they are 'wet'. If not, then don't eat them. Low temperature and enzyme marination over a long period of time is the ideal way to cook animal proteins.

Dry overcooked tissue proteins are extremely difficult to digest and lacking in much of their original nourishment potential.

High temperature denatures protein. When heated, all amino acids lose much or all of their immune enhancing potential. A lock without the right key makes for difficult entry. Excessive heat destroys the biological properties of peptide microfractions. This results in decreased cell communication, which can negatively affect insulin chemistry and reduce the formation of insulin-like growth factors under the influence of growth hormone.

Generally, wild game meat is extremely lean, micronutrient dense and free of most chemical toxins and biological intruders. Fresh fish and seafood from clean oceans, lakes and streams, are a true health food. Like our ancestors, nature forces wild animals to forge, hunt, gather, and fish. Physical movement, driven by hunger, caused an expenditure of energy resulting in a continuous balance of energy transfer.

All tissue proteins regardless of source become prone to rancidity when they are ground and exposed over time to heat, light and oxygen. Fresh ground meat should not be stored in the light with a clear cover such as plastic wrap. Examples of common damaged proteins include hamburger, luncheon meats, sandwich spread, wieners and canned tuna. Over cooked, heat damaged animal flesh is mutagenic. Sterilized, rancid animal flesh is carcinogenic.

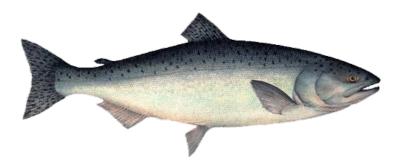
Wild game, such as elk, venison, bison and caribou is far more nutritious, easier to digest, much, much leaner and typically higher in protein, B complex vitamins and trace elements.

Unlike plants, tissue proteins provide natural sources of creatine, carnitine, carnosine, EPA, DHA, CLA, heme-iron, preformed vitamin A

(retinol) and vitamin D. Animal flesh also provides a much higher source of biologically active, correctively assembled amino acids. I prefer fresh fish and especially sashimi, which is raw fish. Tuna tataki is my favourite. I also love wild salmon and halibut, shellfish, venison, New Zealand lamb, turkey breast and free-range omega-3 rich fertile eggs.

Our original ancestors were hunters and gatherers, not farmers. Today, both hunting and farming is an option. Omnivores are highly adaptive. Carnivores are survivors. Never underestimate the power of flesh to heal, especially organs meats which are virtual warehouses of many essential hard-to-get micronutrients. But consumed in a damaged overcooked form, like something deep fried in oil, they can also cause massive inflammation and oxidative damage.

For all you bodybuilders and athletes out there hungry for muscle, strength and power, remember this; if you want to build flesh, you have to eat flesh, just eat it in a non-damaged, non-denatured form. According to evolutionary biological science, our DNA, brain size and intelligence is all related to our hunting and gathering past.





When consumed direct from the breast, human milk is whole, raw, suited biologically for our species and teaming with friendly bacteria, colostrum, enzymes, HMB, GLA, EPA, DHA, and other fatty acids not present in infant formula.

On the other hand, commercial cow's milk is pasteurized, homogenized, reinforced with synthetic additives, and typically contains residues of hormones, antibiotics, and pesticides, derived from GMO grains fed to cattle.

The premise that our bone density is entirely dependent on the continued consumption of cow's milk is a complete fallacy and nothing but clever marketing hype. From a global perspective, billions of people are lactose intolerant or allergic to non-fermented casein, the principle protein in cow's milk. Casein can trigger autoimmune disease and whack the human brain with extreme detriment.

Are you heavy set? Do you want to get lean? Then stop drinking cow's milk. Drink filtered water instead. But you might need some professional therapy to deprogram yourself. Drinking cow's milk is entrenched in the minds of millions in North America by decades of deceitful marketing by the conventional dairy industry. In fact some people actually believe that they will die unless they drink it everyday.

Did you know that cow's milk contains bovine insulin which causes those who drink it to produce antibodies against it? These antibodies can then attack their own insulin, increasing their risk for diabetes. And if you think drinking skim milk is the answer, think again.

Although skim milk is low in fat, it is higher in the sugar lactose, to the tune of about 56%. Carbohydrate has to be controlled and monitored if fat reduction and the health of your arteries is a concern. A cup of skim milk has about 86 calories, consisting of about 0.4 grams of fat, 8.4 grams of protein and 12 grams of carbohydrates (lactose).

My advice is to get off the calorie bandwagon, and contemplate the chemistry of food, which is by far more important to understand but unfortunately, more difficult to comprehend. Count quality and you will never have to count calories. I think the entire notion of counting calories is a misdirection of nutrition logic.

Tracy and I never count calories. Why? Because food is actually a form of digitized electromagnetic information that directly influences hormones, neurotransmitters and gene expression. We want to eat food that is compatible with our genome, which is why we seek the cleanest energy from nature possible.

Used soured, plain, active cultured milk products in moderation, such as yogurt, quark, cottage cheese, kefir and feta cheese. Choose goat or sheep over cow's feta. Use blocks of high quality, European style white hard cheese for grating over salads.

Fermented dairy products are much easier to digest for most people. When selected for health and smart body composition management, they provide a superior protein, carbohydrate and fat ratio. What your body does with what you eat begins in the gut. Those who wish to consume dairy products as a staple should consider individual tolerance, digestion, blood type, quality and milk source. Cattle should be grass fed and antibiotic free. Feeding them grains is highly detrimental.

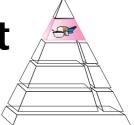
For best results choose high-fat dairy products loaded with naturally occurring fat-soluble vitamins, including vitamin A, D, E and K.

Clean functional fat doesn't make you fat. It provides an excellent noninsulin dependent source of energy and plays a critical role in brain function, nervous system health and immune system activity.



Chapter Eight

Peas, Beans, Lentils, Legumes, Whole Grains, Nuts and Seeds



Whole, non-refined cereal grains are high in carbohydrates and low in protein, meaning, all of them. The germ should never be removed, as this nutrient dense component of the seed is where all of the vitamin E, essential fatty acids and co-enzyme Q10 reside.

In terms of allerginicity and intolerance, wheat, oats, rye, corn, and barley are the most common culprits, with quinoa, amaranth, millet, buckwheat and brown rice, the least suspect.

Almost all grains are acid-forming and when consumed as flour often tend to cause problems in the gut, the brain and in joint capsules. A lowgrade form of inflammation may arise in the small intestine causing leaky gut syndrome and malabsorption. Flour is definitely an overrated staple.

Nuts and seeds are high in fat, to the tune to about 68 to 78%, not protein. They are good sources of minerals, lignins and fat-soluble nutrients but need to be thoroughly chewed or ground into a fresh meal or nut butter.

Nuts and seeds are easily corrupted by heat, light, and, oxygen as their oils are volatile and therefore prone to rancidity. Nuts and seeds should always be purchased unsalted, and in the shell, fresh, like Christmas nuts (walnuts, almonds, brazil nuts and hazelnuts). The worst way to buy them is fried, salted, and in bulk bins without protection from light.

Assume that nuts without their protective jackets (shells) sitting in bins for who knows how long, are rancid.

Lentils, legumes, peas and beans are high in carbohydrates, low in fat, possess low-glycemic indexes, but again are relatively low in protein (20 to 30%) and score very low on the biological value index. At 35% protein soy is a rare exception, but still ranks low in terms of biological value. Biological value (BV) relates to the amount of nitrogen we can utilize from any protein source. The highest known is whey protein isolate, followed by tissue (animal) proteins. Vegetable proteins are at the bottom of the BV ladder.

Lentils, legumes, peas and beans are a great source of steady state, slow release carbs for ectomorphs or hard gainers and runners, cyclists and triathletes. Not everyone can tolerate then however, and their complex carbohydrate density calls for long periods of soaking in water and many hours of cooking. Lentils, legumes, peas and beans are great for making hearty natural soups and refilling depleted muscle glycogen, after prolonged physical activity.

Grains, lentils, legumes, peas and beans are highly concentrated in lowwater volume carbohydrate, or what I call *"biological gasoline"*. Seeds supply lots of fat energy and therefore must be consumed with discretion. Ectomorphs and endurance athletes have a much higher tolerance for these foods because they have higher metabolic rates and their expenditure of energy, because of their endurance training, is much greater.

With nutrition and everything else a healthy, functional human needs to survive and thrive, you have to supply your biological demand.

This is our CHI Prime Directive. SUPPLY YOUR BIOLOGICAL DEMAND

If you have a slow metabolic rate, as in 80% of the North American population, eating too much concentrated starch, such as bread, potatoes and porridge, can make you fat, or keep you fat as their natural sugar or carbohydrate content can drive circulating insulin up in the blood and keep it high. The effect is much more profound when physical activity is low or absent.

If you don't believe me, drop the bread, bagels, muffins and pasta and eat the same amount of calories (if you can) from kale, cauliflower, radishes, cucumbers, and spinach. Now watch the fat disappear.

Carbohydrate mismanagement is the downfall of dieters and binge eaters worldwide. Let's face it, sweets, chocolate and cookies can be very difficult to resist for those who thrive on the sensation and pleasure of taste. If you are addicted to bread, as many claim to be, you will resist the notion of abstinence with the fervour and tenacity of a caged wild animal.

The very thought of not eating bread, including whole meal, sprouted black bread, will be incomprehensible. But if you can muster up the courage, you'll be very pleased with the outcome and your appearance in the mirror.

Bread is dead.



Chapter Nine



Fresh Live Oils

The primary purpose of consuming fat is to obtain energy, the essential fat-soluble vitamins and the two essential parent fatty acids, (1) cislinoleic acid (omega-6) and (2) alpha-linolenic acid (omega-3).

Fatty acids are a critical structural component of our brain, nervous system and cell membranes. Without them, and especially the members of the omega-3 fatty acid family, we are doomed to chronic inflammation, water retention, and loss of tissue elasticity. Omega-3 fats are key missing links in the North American diet.

Healthy living fat transports and provides many important nutrients and cofactors including vitamins A, D, E and K, alpha-lipoic acid, GLA, EPA, DHA, the carotenoids, various vital sterols, and the phospholipids.

We need to carry some fat around, but too much belly and excess storage fat is a serious health risk, especially intra-abdominal fat, or fat around the belly. Fat should be regionally distributed evenly across the surface of the body instead of being concentrated around the middle, buttocks or thighs.

Obesity increases the risk of human morbidity and mortality and is recognized as independent risk factor for coronary artery disease, type 2 diabetes, hypertension, stroke, and many, many forms of cancer. Excess fat isn't funny, although it's often covered up with a sense of humour. Did you know it carries a disease and damage potential risk equal to and even greater than tobacco use? For most sports, a high lean mass to fat mass composition ratio is associated with superior performance, although too little fat can compromise body health and biological function, especially in female athletes. Excess fat is detrimental to athletic performance because it adds non-force producing mass. You can't flex fat.

Based on the fact that force conforms the Einstein's equation E=MC2, we know that strength from power producing muscle is the key to both athletic speed and endurance. Sprinter, marathon and triathlete champions are always lean.

The vast majority of commercial oils sold in North America are worthless. They are simply dead, white oils, high in fat calories, and low in life sustaining fat-soluble micronutrients. Most of their original goodness is lost, destroyed or chemically altered through commercial refining methods.

Choose your oils well. I prefer organic flax, hemp, borage, and extra virgin olive oils, pressed without heat in the absence of light. My favourite is a combination of oils blended from land and sea with special emphasis on long-chain omega-3 fatty acids including EPA and DHA.

Live fresh oils should be dated, packaged in opaque containers and flushed with nitrogen or argon before and after filling to prevent spoilage. Additional protection is obtained when manufacturers committed to health instead of profit only, add natural antioxidants such as rosemary extract, tocopherol, ascorbyl palmitate or citric acid.

New age non-permeable plastic or glass are both acceptable, remember not to major on minor issues. I've seen countless numbers of people respond extremely well to fresh live oils distributed in both plastic and glass bottles, including myself. The proof is in the pudding or as we say in functional medicine, "You can't argue with the reality of positive outcome".

Where there is health there must be evidence of health and of course the opposite is also true.



Chapter Ten



Natural Sweeteners

Stick to raw honey, crude molasses, or real maple syrup but consume them sparingly and in small doses. Use dried fruit or its boiled juice to sweeten cookie and muffin mixes made with fresh milled organic gluten free flour. Avoid refined sucrose, fructose, corn syrup, glucose-fructose, and all refined empty calorie granulated white sugars. They are addictive, immunosuppressive and will destroy your bodies' ability to regulate blood sugar and insulin metabolism.

When eaten in the typical form and quantity throughout the day by the average person, which is 45 grams or 9 teaspoons daily, sucrose causes massive free radical damage and destroys insulin function. When consumed beyond 5 kilograms or about 11 pounds per year, sucrose, or white sugar, accelerates aging, creates a breeding environment for yeast and fungus in the gastrointestinal tract and will leach important minerals from vital organ reserves, such as magnesium, potassium and chromium.

The national average in North America is about 60 kilograms or 132 pounds per year per person, if you can believe it. The amount of sugar, consumed daily, is staggering. Eating that much refined sugar is inconsistent with good health; in fact, it's like a form of controlled suicide from a nutrition science point of view. No health conscious biologist in the world would feed any pet or zoo animal that much sugar; in fact it's no longer permissible to feed zoo animals anything except an ideal species specific diet.

Use sucralose or acesulfame potassium as a safe alternative to sucrose and aspartame. I do on rare occasion. They are both heat stable, noninsulin dependent, calorie free and resistant to human digestion.

Like the domesticated urban lives we lead, they are indeed artificial, but that doesn't mean they are necessarily 'bad'. The evidence reviewed objectively without bias, demonstrates a high degree of safety if they are used to sweeten whey protein isolate, sports bars or meal replacements.

Use discretion and logic to weigh the odds and always compare risk to benefit and cost. Be practical and study the science. Hearsay is seldom more than a derivative of rhetoric, a hodgepodge of thinking synthesized in our mind as a result of exposure to incomplete or misapplied data forced on the population through social heredity.

Another good alternative to sucrose is stevia, which is derived from the native Paraguayan Stevia plant.

Proponents of the multi-billion dollar sugar industry will oppose any criticism of sugar and so will almost everyone who eats it, including dieticians, nutritionists, and physicians. They will tell you that it is pure and natural like the islands in paradise where it is grown. They will tell you there is no difference between raw honey from the hive and pure isolated sucrose.

They will tell you it isn't addictive and isn't related in any way to the skyrocketing incidence of diabetes, obesity, heart disease and cancer. Bollocks! It's as if such proponents of sucrose have stock in all the world empires related to sugar including the huge corporations that manufacture it and distribute it.

Sugar is historically rooted in lust and greed. In fact, it reminds me of steroids and tobacco.

"Just one steroid cycle", you say to yourself, "I want to try it".

"Just one puff of a cigarette to see how it feels".

How ironic that we ourselves have become slaves to the very same sweet but deadly substance that was originally grown, harvested and processed by human slaves.

Are you a slave to your passion for sugar and sweets? If so, you're not alone. There are billions of humans addicted to refined sucrose and fructose.



Afterword

In my first book of this health and fitness series, Recipe for Health, I defined optimum health and described the principles essential to its achievement. I outlined the basic steps that I live and walk by because they represent the logic of health care as defined by nature.

In the Athletes Food Pyramid, I have provided a model of complete nutrition based on sound nutrition science and philosophy of the natural whole food industry. The format is designed to keep you well and functional and free from disease, long term. Follow the Pyramid guidelines and I guarantee you'll be fitter, stronger, leaner and sharper for it.

The Athletes Food Pyramid can be viewed or downloaded in PDF format at CoryHolly.com/categories/charts.

No human cell is an island and without the life support efficient to supply the biological demand ordained by nature, our cells will weaken and die prematurely, causing the tissues, organs, and systems of the body they make up, to also weaken and die prematurely.

Nutrition is by necessity a function of energy transfer and the acquisition of micronutrients from the outside world into our internal milieu, our biological terrain. Essentially, we liberate life from the food we eat; therefore the quality of that life must be relative to the quality of the food we eat. How can it not be?

In addition to fats, carbohydrates, proteins and fibre, food can potentially provide a seemingly endless and almost magical resource of

vitamins, minerals, enzymes and trace elements. Add to this hundreds, perhaps even thousands of vital chemicals, carotenoids and flavonoids.

Perhaps this explains why the ritual of prayer and thanksgiving so often precedes the breaking of bread in virtually every culture of the world. Food is a necessity like the air we breathe; we must eat food to live. If we eat what is compatible with our biochemistry and individual genetic make up, it is possible to make the process of nourishment both efficient and enormously pleasurable.

However, because the ultimate function of food as a supply of essential energy and micronutrients has been overlooked and forgotten, or ignored by so many who elevate taste and appearance above food quality and biochemistry, what began as a natural occurrence driven by necessity has evolved for many into a national pastime and horrible addiction.

Addiction to food is tough because unlike recreational drugs, like alcohol, tobacco or cocaine for example, you can't go cold turkey and stop eating food altogether, but in the most positive and beneficial sense, you can stop eating fast food, sweets and junk right now.

Shocking as it may sound the ultimate need of food has less to do with taste, texture and pleasure, than it has to do with the satisfaction of the biological process, a process that we ourselves must learn to respect and uphold.

"Every moment of pleasure responsible for causing disease must be balanced in the equation of life by an equal moment of pain responsible for restoring health".

In other words, don't expect the process of healing or the achievement of optimum health to be entirely pleasurable, especially if you're not well right now as a result of a corpulent, indulgent or hedonistic lifestyle. In the logical world of math and physics, every equation must be balanced.

This book is the second in a series of many to follow, each forming a link in the Cory Holly Series. I invite you to join me on this journey of selfdiscovery and in the meantime please move on the next book in the series, book three, titled, The Athletes Cookbook.

In The Athletes Cookbook, Tracy reveals all her charm and treasure in the miracle of her cooking. Her recipes are simple, but outstanding and based on my personal and intimate experience, I can tell you for certain that I have tasted no better food or enjoyed the culinary experience with such passion anywhere in the world.

For me there is nothing finer in the world of nutrition than eating what is both delicious and extremely nourishing. When I know it's wholesome and good for me, it tastes even better. Tracy calls it *"soul food"*.

Be prepared for a practical approach to preparing meals and cooking with nutrition excellence. Imagine a world of nutrition where everything edible is good for you, made from the finest possible, most wholesome ingredients. That's what you get from Tracy Holly's whole food kitchen.

To live long with vibrant health and function, we must make exercise a top priority and nourish our bodies with the best possible food and natural health products we can find.

This is Cory Holly wishing you all the very best of health and wellness for life.

Stay free and live well!



Cory Holly Institute

CoryHolly.com



About the Author

Dr. Cory Holly is the Founder & President of the Cory Holly Institute (CHI). Cory completed his Doctor of Naturopathy degree at Clayton College of Natural Health in 1992. He studied exercise physiology and biochemistry at Western Washington University and apprenticed at the Colgan Institute of Nutritional Science for seven years. He currently studies philosophy, physics, biology, biochemistry, physiology, genetics molecular human and psychology online at MIT, Standford, UCLA and the Ayn Rand Institute.

As Canada's Ambassador of Sports Nutrition, Health & Fitness, Cory's objective is to strengthen sports nutrition awareness worldwide and bridge the enormous gap that exists between nutrition and fitness. Cory is the recipient of the 2003 CHFA Sports Nutrition Hall of Fame Award. The CHFA (Canadian Health Food Association) is Canada's largest trade association dedicated to natural health and organic products.

Cory has competed in a great variety of competitive sports including hockey, soccer, football, basketball, lacrosse, wrestling, track & field, tennis, table tennis, badminton, volleyball, triathlons, running, swimming, diving, gymnastics, handball, rowing, Tae Kwon Doe, boxing, bodybuilding and power lifting. He was awarded Athlete of the Year in both Junior High and Senior High School.

Cory currently competes on Canada's Masters National Team in track and field (hammer throw) and has several Natural Masters bodybuilding titles including CNBA Canada (Gold) INBA Universe (Silver) INBA Olympia (Silver) and INBA Hawaii (Gold). Each year in Vernon BC he also hosts the <u>Cory Holly Classic</u> (track & field meet).