# PRIMAL BLUEPRINT

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BY MARK SISSON

### **Primal Blueprint Fitness**

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Publisher: Primal Nutrition, Inc.

P. O. Box 6250 Malibu, CA 90265

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### INTRODUCTION

## Struggling, Suffering, and Burnout: Flawed Conventional Wisdom

I spent over half my life training for high-level competition in endurance sports, carefully following the extreme training regimen recommended by Conventional Wisdom. I ran and bicycled thousands of miles each year, lifted at the gym several days a week, stretched like crazy every day, and covered my body with expensive, super high-tech gear. I sacrificed, endured and suffered because I truly believed it was necessary to achieve a healthy, lean, fit body. I fueled my constantly depleted muscles with the obligatory high-complex-carb diet, suffering all manner of diet-related health problems without even realizing it.

Yes, I could race a marathon or triathlon faster than almost anyone else around, but the consequences of earning medals and trophies on the race course were severe. In no uncertain terms, my devotion to fitness severely compromised my health. Thousands of other extreme athletes suffer a similar fate, as do millions of less fit folks who try valiantly to follow the struggle and suffer approach of Conventional Wisdom in pursuit of even modest exercise goals.

For the duration of my career as an endurance athlete, I was emaciated, physically fatigued, and battling one injury or illness after another. Aside from possessing superior cardiovascular endurance, I was actually a pretty useless physical specimen. I didn't dare take up any new sports or even play any fun physical games for fear of getting hurt or straining unfamiliar muscles. I missed out on any semblance of a social life because I was exhausted from my year-round training. By contrast, some of my plump couch potato friends seemed to be healthier and, in some important measures, fitter than me. They certainly enjoyed life more.

Primal Blueprint Fitness is just one component of a healthy Primal lifestyle. Pick up a copy of The Primal Blueprint to learn the rest and get a FREE Poster and FREE S&H.

### **Shortcuts Changed My Life**

My real epiphany came after I had retired from competing, when the endorphins wore off and I realized that throughout all my pain, suffering and sacrifice, during all those hundreds of endurance contests in which I had competed, from the time the gun went off until the time I crossed the finish line, not once could I ever truly say to myself "isn't this fun!" How sad, really. Life's too short not to be enjoyed to the maximum, especially when it comes to physical pursuits and pleasures.

Granted, I enjoyed a tremendous sense of accomplishment from pursuing and achieving compelling athletic goals, and learned many valuable character lessons from the journey. As legendary sub-four minute miler Sir Roger Bannister said in reflecting upon his accomplishments on the track, "Struggle gives meaning and richness to life". As you pursue your fitness goals with my guidance, I want to inspire you to be the best you can be, shatter mental and physical barriers to peak performance, and achieve personal growth and enlightenment in the process. However, I want to help you establish parameters so that your journey—your struggle to be the best you can be—is healthy and fun, instead of destructive.

Luckily for me, I was forced to retire from endurance competition due to a broken down body while I was still a young man. I've been able to enjoy the past couple decades exploring what it really means to be a strong, fit, lean, healthy and happy human being. On the occasion of my 40th birthday, still under the influence of lingering fatigue from my racing days, I got a few laughs when I made the profound statement that, "I'd really rather just look fit than be fit." Really though, my guip had a measure of truth to it, and actually became the impetus for me to search for effective shortcuts to fitness, strength, leanness and health, that required the least amount of time, pain, suffering, and sacrifice. That's what Primal Blueprint Fitness (PBF) is all about. This booklet will describe in detail how you can get fit quickly and then maintain your strength, fitness, leanness and health well into your 70's, 80's and beyond. And I'll explain in detail how you can arrange your physical activities to include the most pleasure, fun, enjoyment and satisfaction possible.

### PBF = LGN

The Primal Blueprint Fitness strategy will help you build or maintain lean muscle mass, reduce your body fat, increase your energy, improve your strength, agility and power-to-weight ratio, reduce your risk of getting injured, improve insulin sensitivity, boost immune function and increase organ reserve. A major side effect, of course, is that you'll look good naked (we affectionately call it "LGN")! Not like a greased up, muscle-bound cover boy or girl...more like a Calvin Klein underwear model. SI Swimsuit model, Olympic Gymnast, or Linda Hamilton in Terminator 2: well-muscled and proportioned, with minimal body fat. No matter what your family history, you'll arrive naturally at the optimum expression of your own unique genetic makeup. Oh sure, you may vary a few percentage points in body fat from those with world-class athlete genetic attributes, but you'll be able to maintain your fitness and your new body easily on very little work, for the rest of your life.

It's important at this point to restate one of my most important caveats from *The Primal Blueprint:* that 80 percent of your body composition is determined by how you eat. If you've read the book

and started eating Primally, you'll already have the direct experience of losing body fat without needing to do much exercise. That's one of the principles that make the Primal Blueprint Fitness program work so well: once you dial in the eating to reprogram your genes to selectively burn body fat for fuel, you really don't need to do very much exercise to shape, tone, build muscle and get stronger. In fact, more is not necessarily better. You can maximize your potential on relatively little "work."

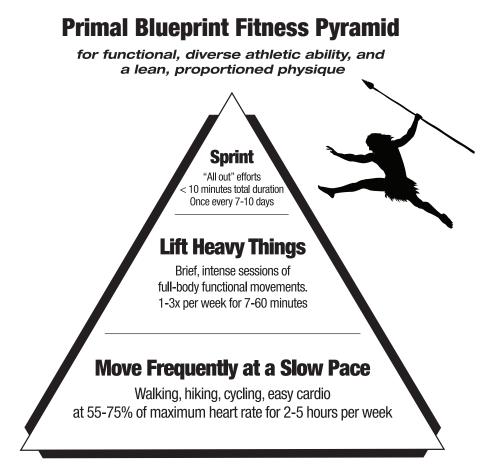
Conversely, no amount of aerobic or cardio exercise will ever make up for a bad eating strategy. Recent research suggests that the sum total of all those hours of sweating in the gyms and open roads of America in the name of weight control simply leads to an increased appetite—particularly for sugar—with minimal effect on body fat percentage. Obviously, exercise has many physical and psychological benefits, but if you are struggling and suffering in the name of losing weight, why not stop right now and try this greatly appealing alternative approach.

### The PBF Schedule

PBF employs the simple principles that I (and now thousands of Primal Blueprint followers) have used to regain, build and maintain superb strength and health. These principles are visually illustrated by the Primal Blueprint Fitness Pyramid, of which anyone that has read my book is intimately familiar.

At 57 years of age, I now work out less than I ever did in my twenties and thirties, yet I am as strong as I've ever been. I can still sprint well and, despite no other specific cardio training, am fit enough to hop into a 10k race, a trail run, or a 50-mile bike ride whenever I feel like it. Most importantly, I've been able to take up new, fun (much more fun!) sports. Ironically, many people say that I look fitter and healthier now than I looked when I was a world-class athlete. But the truth is, I only work out for two reasons now: 1) So I can play more and play harder. 2) So I can reduce the risk of injury while I'm playing more and playing harder!

Today my competitive flame still burns brightly, but instead of fighting to the death on the steaming hot lava fields of the Hawaii Ironman course,



I'm giving it my all playing Ultimate (Frisbee), stand-up paddling, snowboarding, or racing my teenage son down the beach and into the waves. And while the euphoric feeling that comes from "going long" is still in my blood, instead of pushing the pace in the pack till my tongue hangs out, I take my time and enjoy a deeper connection with nature. I might follow the little white ball around the golf course, or hike and explore the remote canyon trails near my home, but I'm not concerned with beeping heart watches or downloading data from a GPS training watch into a computerized mileage log.

Many folks ask me for insightful pearls about my exercise "schedule". Truth is, about the only thing on my schedule is a standing Ultimate game on Sunday afternoons. The rest of my workouts are based on what my mind and body feel like doing, if anything. This sporadic, intuitive, unstructured approach is flat out the most effective and evolved way to become fit and healthy. I must emphasize that I've arrived at this epiphany after forty years of struggling and suffering, so let me underline how strongly I object to the linear fitness approach favored by Conventional Wisdom—a life of graphs, schedules, weekly progressions, and beeping watches.

That said, I understand the desire to have some structure and advance planning for your exercise, so I'll share with you suggested weekly routines that align with the Primal Blueprint fitness principles. As you absorb the information, please remember that you are still the one behind the wheel, while I'm riding shotgun. This is a critical distinction that many programs and experts fail to emphasize, and I have personally suffered the pitfalls from turning the responsibility for my training decisions over to someone else.

Listen to your own voice above everything else. Absorb the information provided, but remember to exercise when you feel like it, do the stuff that's the most fun, and always align your workout choices with your energy level, motivation level and state of health. If I'm tired, jet lagged, or detect a slight sore throat or elevated temperature, I'll do little or no exercise until I feel fine in a resting state. If I'm energized and excited, I will pull out the stops, throw caution to the wind, and push my body to great new heights doing fun new stuff. Excuse my over-the-top enthusiasm, but I can't tell you how awesome it feels to be fitter, healthier, and more energetic at 57 than I felt at 27 or 37. Lifelong functional fitness can be yours too, in as little as a few hours a week of PBF style exercise.

Primal Blueprint Fitness is built around a very simple formula that draws from recent work done in modern exercise physiology labs—as well as from what we know of evolutionary biology—to arrive at the perfect exercise prescription for maximizing fitness with the least amount of time and suffering. PBF workouts are based on real world natural movements that result in functional fitness. PBF combines simple full-body workouts, using as many muscles in combination as possible, with occasional short anaerobic bursts, and then regular longer, easier aerobic efforts to effectively work every muscle, energy and performance system in the body. The science supporting this strategy is irrefutable. After all, it's what our ancestors did for two million years, adapting to selection pressures in their environment to survive and become lean. healthy, fit, and strong.

The actual prescription is simple: conduct an average of one sprint workout a week, two brief, but intense, strength sessions a week, accompanied by plenty of low level aerobic activity (your choice), play and rest. It's that simple. While a week represents an arbitrary block of time on the continuum of pursuing lifelong fitness, and I like to allow for plenty of fluctuation in my weekly, monthly or annual exercise patterns, it's helpful to get a picture of a suggested PBF-style routine that might fit with your busy life and allow for proper recovery between challenging efforts. On the following page you will find the suggested PBF Weekly Schedule.

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
	Sprint	Move Slowly/ Play/Rest	Lift Heavy Things (or WOW)	Move Slowly/ Play/Rest	Move Slowly/ Play/Rest	Lift Heavy Things (or WOW)	Move Slowly/ Play/Rest
Description:	Run like Grok  All out effort once a week	Four opportunities during the week to either move slowly, play or rest. Use these days to reach your weekly low level aerobic activity goals, to incorporate work or sport specific training for a custom program, to have fun and to take recovery days when you need some rest.  Move Slowly Get 3-5 hours of 55-75% max HR each week.  Play It's not all about training. Play is what training is for.  Rest Relax and recover.	Progressive Bodyweight Strength Training Day  - or -  Workout of the Week	Four opportunities during the week to either move slowly, play or rest. Use these days to reach your weekly low level aerobic activity goals, to incorporate work or sport specific training for a custom program, to have fun and to take recovery days when you need some rest.  Move Slowly Get 3-5 hours of 55-75% max HR each week.  Play It's not all about training. Play is what training is for.  Rest Relax and recover.	Four opportunities during the week to either move slowly, play or rest. Use these days to reach your weekly low level aerobic activity goals, to incorporate work or sport specific training for a custom program, to have fun and to take recovery days when you need some rest.  Move Slowly Get 3-5 hours of 55-75% max HR each week.  Play It's not all about training. Play is what training is for.  Rest Relax and recover.	Progressive Bodyweight Strength Training Day  - or -  Workout of the Week	Four opportunities during the week to either move slowly, play or rest. Use these days to reach your weekly low level aerobic activity goals, to incorporate work or sport specific training for a custom program, to have fun and to take recovery days when you need some rest.  Move Slowly Get 3-5 hours of 55-75% max HR each week.  Play It's not all about training. Play is what training is for.  Rest Relax and recover.
Where To Find:	Sprint routines as described on p. 68 in the ebook	Move Slowly see p. 23 Play see p. 76 Rest see p. 79	See the Lift Heavy Things Protocol in the Primal Blueprint Fitness ebook (start- ing on p. 30) Visit Mark's Daily Apple each week for a new optional Workout of the Week (WOW)	Move Slowly see p. 23 Play see p. 76 Rest see p. 79	Move Slowly see p. 23 Play see p. 76 Rest see p. 79	See the Lift Heavy Things Protocol in the Primal Blueprint Fitness ebook (start- ing on p. 30) Visit Mark's Daily Apple each week for a new optional Workout of the Week (WOW)	Move Slowly see p. 23 Play see p. 76 Rest see p. 79
Time:	15–25 min.	varies	10–45 min.	varies	varies	10–45 min.	varies

Let's take a closer look at this suggested schedule.

#### **SPRINT**

One day a week is dedicated to all-out sprints (and sprinting does not necessarily mean running). It's a highly effective workout that takes only 15 to 25 minutes, including your warmup. Conduct these workouts only when you are feeling 100 percent rested and energized. Once a week is the maximum you need to sprint, while once every ten days is a good minimum to shoot for.

#### **LIFT HEAVY THINGS**

There are two strength training days each week (Day 3 and Day 6 in the above schedule). You'll finish these brief, intense sessions in anywhere from 10 to 30 minutes. Twice a week for 30 minutes (45 minutes is okay for very experienced strength trainers) is the maximum you need to Lift Heavy Things. If you aren't able to do the second recommended 30-minute session, consider conducting an abbreviated LHT session, such as a single set of the Five Essential Movements. Even a session as short as 10 minutes

can produce excellent fitness benefits. On LHT days, you will also have the option to substitute your regular LHT workout with a Workout of the Week (WOW).

#### **WORKOUT OF THE WEEK (WOW)**

Mark's Daily Apple publishes a new Workout of the Week every week. Expect High Intensity/Metabolic Conditioning routines, but really anything goes for the WOW. Generally, these sessions should be conducted in place of a Lift Heavy Things workout, but they can also substitute for a Sprint or Play session if the WOW contains those elements. This is an optional workout that you can integrate into your schedule as you see fit, just to spice things up a little and apply your fundamental PBF skills to a variety of new challenges.

**MOVE SLOWLY/PLAY/REST** – You have four days a week to:

Move Slowly – Meet your quota of 3–5 (or more) hours of low level aerobic activity. Do it all at once on a long weekend hike or cumulatively throughout the week. Walking 30 minutes to work counts just as much as a planned bike ride or a pool swim. It's about the movement—not the calories.

Play – Playing is a large part of PBF. Use these days to let loose, play a sport with friends and have fun while you move. Personally I try to paddle surf and/or play Ultimate Frisbee at least once a week. The essence here is to engage in some outdoor physical fun. If you like to play hard, you can certainly feel comfortable replacing a Sprint or Lift Heavy Things workout with a vigorous Play session. Remember, PBF is not about regimentation or exercising compulsively, so embrace the spirit of the suggested weekly schedule without feeling compelled to follow it to the letter week after week.

Rest – Proper recovery is as important to your fitness as hard workouts, yet many exercisers disrespect this fundamental truth and engage in chronic exercise. Every week should feature several days of rest or easy exercise, and you should also take a week or two off if you notice a sustained trend of sub-par energy levels or performance. A good rule of thumb is to return to your typical exercise patterns when you feel energized and motivated in a resting state.

With four days each week for Move Slowly/Play/ Rest, you have the freedom to choose what you do and when you do it without venturing too far from the core plan. Additionally this freedom allows for sport and work-specific training as needed.

That's the basic outline of what PBF is. Now let's dig into why it works, and how best to incorporate it into your life so that you can start getting the results you deserve.

### **Benefits of Primal Blueprint Fitness**

### **© GIVES YOU LIFELONG FITNESS**

PBF is a program you can follow for life. If all you want is enough strength, endurance, vitality, and agility to function effectively and actively until you're old and gray, our simple, dynamic system of bodyweight training, occasional sprinting, and frequent, slow movement will get you where you want to be. This program adapts to any age or ability level.

### MELPS YOU AVOID INJURY

Down time sucks. When you add a heavy exercise schedule to the daily stresses of modern life, you end up with a good chance at getting injured on a regular basis. The same is true if you do the Weekend Warrior thing and engage in occasional intense competition with an unfit body.

Primal Blueprint Fitness doesn't impose a rigorous schedule, nor does it force you to use heavy weights that, to the uninitiated, can result in injury. Your PBF workouts will be shorter and more intense—with less potential for overtraining and overuse.

### PREPARES YOU FOR DIVERSE CHALLENGES

Grok, my fictional hunter-gatherer healthy lifestyle role model and protagonist of The Primal Blueprint, was a well-rounded athlete. He could conjure up superhuman bursts of strength or speed to save his life when he had to on occasion, track a tired animal for hours once in a while, climb a tree, carry heavy things, and generally exhibit a wellrounded level of fitness that provided preparedness for all situations.

Today we need overall fitness, too, even though we're not hunting, killing, climbing, and gathering like we used to. Our genes still expect us to be active, lean, and strong, and these abilities are essential for truly enjoying life and staying active through old age. PBF workouts will allow you to jump into an occasional 10k endurance run, keep up with your kids at a practice scrimmage, manipulate your body composition relatively easily when combined with Primal eating, and tackle exciting new challenges (kite-surfing, anyone?) without relegating you to the couch for a week's recovery afterwards.

### **INCREASES YOUR ENJOYMENT OF LIFE**

I train so I can play. It's true that I want the actual training to be as enjoyable as possible, but I don't live to work out. I live for family outings, dinners with friends, snowboarding trips and paddle-boarding sessions with my kids. Unless you're a professional, the ultimate goal of getting fit is to be healthy, lean and strong and to enable an enjoyable, active lifestyle doing the things you love to do.

Some people honestly enjoy pushing their bodies to the limits and killing themselves in the gym, but I don't. I'd argue that if these folks saw the light and reframed their competitive fitness goals into areas that were less physically exhausting and destructive, they would gain even greater satisfaction than they do from struggling and suffering to achieve extreme goals.

#### **KEEPS YOU GUESSING!**

Life is fractal and randomized. Natural terrain is uneven and strewn with obstacles. Our bodies are basically symmetrical, but the environment we use them to navigate is not. Even a healthy human heartbeat follows a fractal pace, rather than a metronomic one. As humans, though, we're unnecessarily intent on creating symmetry, smoothing out natural terrain by laying concrete and removing obstacles. It even extends into the workouts—gym regimes full of precise numbers of sets and reps; endless miles on a flat, rubber treadmill or urban sidewalk at a painstakingly consistent pace. The tortoise and hare fable holds that slow and steady wins the race, but I'd rather be that crazy, erratic hare, switching up speeds, stopping to smell the roses, and having much more fun than the slow and steady tortoise.

PBF understands that certain elements of workout structure and periodization are important, but also that life should be fractal. Instead of treadmill runs, we go on hikes, trail runs, and hill sprints. We keep things random, with enough linear progression to ensure gains but not so much to stifle your imaginative spirit.

### MAKES STAYING IN SHAPE EASIER THAN IT'S EVER BEEN

- 80 percent of your genetic potential for body composition comes from your eating strategy.
   Primal is the key.
- 10 more percent of your genetic potential for body composition will come from your PBF program. With minimal effort and time commitment, conducting a PBF routine of bodyweight exercises, sprints, and low level movement will take you to the next level of your genetic potential, after achieving tremendous results through Primal eating.
- 5 more percent of your body composition can be further influenced by lifestyle factors, such as getting adequate sleep and effectively moderating life stress factors.
- The final five percent of your genetic potential body composition can be achieved with extreme training in pursuit of specialized athletic goals.

That's right, no matter who you are or what shape you are in, 95 percent of your ultimate genetic potential can be realized by living Primally! In contrast, if Conventional Wisdom were to take a crack at these percentages, they would be wildly disparate. We've been brainwashed to believe that a devoted exercise routine gives us a free pass with diet; that a routine of only a few hours a week, including mostly very low level movement, won't contribute much to body composition; and that the path to a six-pack or buns of steel involves struggling and suffering through extreme training.

While its obvious these percentages can't be scientifically validated, one need only glance at the absolutely mind-blowing success stories and photos at Mark's Daily Apple for proof of people who have transformed their physiques in a short time, after years of struggling and failure following Conventional Wisdom methods, simply by transitioning over to Primal eating and exercise.

Ambitious readers who aspire to bump from 95 percent of their genetic potential to 100 percent should note that pursuing a more ambitious training regimen should still fall under the Primal Blueprint Fitness parameters. Take longer hikes, but keep them at a comfortable Primal pace. Make your brief, intense PBF Five Essential Movements workouts more difficult, but not more frequent. If you start drifting toward a Chronic approach in pursuit of peak performance (higher heart rates on endurance sessions, more weekly workouts, longer duration strength sessions, etc.), you run a high risk of burnout, and consequently dropping below 95 percent of your potential. This is the moral of my personal story, where I essentially sacrificed my health to try and improve my marathon time by a few minutes. While I was temporarily rewarded with occasional peak performances, I backslid often by suffering from recurring illness, injury and fatigue.



### DOESN'T USE ISOLATION EXERCISES TO PROMOTE PUFFY MUSCLES

Isolation exercises run counter to functional fitness. If functional fitness refers to the natural interplay between corresponding joints, tendons, and muscles as they are meant to be used in everyday movements, isolation exercises ignore how the body is designed to function. You can get bodybuilder-big by doing five contrived isolation exercises for each individual muscle, but it might not transfer over effectively into real life situations. You'll look great at the beach, but you may need a lithe lifeguard to pull you out of a riptide if your overloaded musculature can't fight through the waves.

Primal Blueprint Fitness promotes functional muscles. Strength, in my opinion, is not how much you can bench press, or how many plates you can stack on the leg extension machine; real strength is revealed by real results. Can you climb a tree, or hop a fence if someone's chasing you? Powerfully stroke to shore against that rip tide? Carry your wife or husband from a burning house? You may be able to shuffle through a half-marathon. but how're your hops? How about your 40 time? Would you embarrass yourself (or pull something unmentionable) on the court or field if your number was called—even though you're logging doubledigit training hours each week?

### DOESN'T INVOLVE CHRONIC CARDIO

If there's anything I know too much about, it's long, steady state cardio. I did it competitively for about half my life, and I know how addictive it can be. The thrill of beating my time and beating the other guy was almost worth the toll it took on my body. Almost.

PBF is about stopping the obscene exaltation of the marathon, ironman triathlon, and all other Chronic Cardio endeavors as ultimate barometers of health and fitness. They aren't, and it's time to fix it. The fact that PBF will leave you fit enough to run a 10K or even a marathon on a moment's notice doesn't mean you have to run one every day!

### DOESN'T INTEREST THE AB AND BEACH-MUSCLE OBSESSED

Oh, sure, you'll get the lean, cut body you've probably always wanted in half the time, but you won't be winning any body building contests on the PBF plan. I think most people are okay with that. You'll look good naked and be strong and capable and happy—what else matters, really? So yes, if you're interested in the Bruce Lee look, PBF will get you most of the way there—but that isn't our focus. It's just an added bonus.

### DOESN'T MAKE YOU SPEND HOURS IN THE

Exercise doesn't have to be torturous and drawn out; in fact, it's far more effective to work out hard as hell for half an hour using full body exercises than it is to spend two hours working every possible striation of your rear deltoids and then following up with half an hour on the treadmill.

Primal Blueprint Fitness keeps things short and to the point. Lifting sessions run no longer than 30 minutes for all but the super-fit, and the sprint workouts take only about 20 minutes, including warmup and cooldown. As for the low level Primal work you'll be doing, think walks with your loved ones, challenging hikes on weekends, bike rides with friends, and even marathon shopping at the mall—fun stuff you should already be doing. Simply put, PBF is fitness distilled to its most effective, functional essence.

### DOESN'T MAKE YOU LIFT HEAVY WEIGHTS

If your personal preference is for weight training in the gym, that's fine. Lift whatever you like. The exercises prescribed in the Primal Blueprint Fitness Lift Heavy Things progression and the Workouts of the Week can be modified (either by lowering rep count or upping the weights) to fit a heavy weight training focus, but that is not the system as prescribed: it's all about manipulating your own bodyweight to increase the load safely and effectively for all participants.

You don't need barbells or squat racks to progress and get fit. I know I'm probably going to get flack for this from the hardcore set, but I comfortably stand by that statement. Whether you load your musculoskeletal systems with heavy weight is up to you.



### DOESN'T BORE YOU

At the end of the day, Primal Blueprint Fitness elicits a Primal, guttural reaction from us. It prescribes the basic movements that got us through several hundred thousand years of toil and trouble—we're meant to be doing this stuff, and our bodies *crave* it. In time, you'll find yourself looking forward to the next workout. You'll feel the afterglow of a killer bodyweight strength routine, bask in the endorphin rush of a sprint day, and appreciate the simple beauty of an early morning hike. Satisfying the demands of our genes is never dull or boring.

### **CHAPTER 1: Defining Fitness**

Primal Blueprint Fitness is a scientifically proven, effective strategy that works for just about everyone, regardless of gender, age, ability, or starting weight. If you eat according to the Primal Blueprint, and exercise according to the simple PBF strategy, I guarantee that you can achieve at least 95 percent of your ultimate genetic fitness potential. At that point, you will be leaner, fitter, stronger, more powerful and healthier than 99.5 percent of the US population. And yet, you needn't stop there. I think of Primal Blueprint Fitness as endlessly malleable, and eternally scalable. The beginners, the ill, or the elderly can perform the more basic bodyweight movements and just walk really fast, while the hardcore can push their bodies to the limits performing the more advanced movements and running really fast, ultimately achieving the very highest levels of fitness. As long as you pay attention to the underlying principles of Primal Blueprint Fitness and follow in Grok's footsteps, you can achieve functional, lifelong fitness—at any and all levels of proficiency.

But before we get started, it will be instructive and helpful to set some goals and define what fitness means to you.

The Primal Leap: The 30-Day Step-by-Step Program with One-on-One support and all the tools you need to lose weight and get Primal for life. Click here to learn more.

### **Survival of the Fittest. Literally.**

So much of human history (and prehistory) saw men and women working for their survival—literally working with their hands, feet, arms, and all requisite muscles and energy systems to obtain food, shelter, and security. In that regard, true physical "fitness" was an absolute necessity for survival. Walking, foraging, crawling, twisting, climbing, squatting, throwing and carrying were the basic movements that helped shape human evolution for millions of years. Being unable to sprint or climb meant going hungry or getting eaten yourself and the end of the line for your genes. A typical "work" day for Grok was perhaps stalking a wild boar for an hour or two, giving chase through the brush, eventually thrusting with a spear, butchering it, then hauling it back to camp slung over his back. Translated into today's terms that would be: a little light jogging, a bit of trail running with some short sprinting, a few lunge-thrusts, some sledge-hammers, a dead-lift and a fireman's carry back to camp.

Talk about a perfect total body workout! Yet after it was all done, you can bet Grok rested. He was probably not going to waste any more precious time or energy doing superfluous "extra credit" training. In fact, hunter-gatherer societies today, as fit and lean as they are, spend a great deal more time resting or engaged in leisure play than the typical American (see page 55 of *The Primal Blueprint*). I like the way they think, so I have incorporated that concept (lots of rest and play) into PBF.

The interesting thing about Grok was that he didn't actually train by our definition. I really doubt he got up in the morning and headed out for a morning jog, or a round of circuit training at the stone pile. Of course, there were races and sporting events and hunting challenges—and plenty of warfare but it's doubtful our early ancestors viewed physical fitness the way we do today, as an elective activity to be consciously cultivated in the absence of any real survival requirements. They "just did it" because it was a part of the natural survival process. And yet the records seem to indicate that they were supremely fit and exceptionally healthy by almost all modern standards. Strong, fast, lean, powerful, with significant aerobic (endurance) capacity and low body fat. Their genes—that human DNA recipe that molded such awesome fitnessare exactly the same genes we carry in each of us today (with a few minor variations you got from your parents).

Our challenge, then, is to figure out what best prompts the kind of gene expression that will give us that supreme fitness and the lean, strong, healthy, productive body we all seek and deserve. But we also want to do it in the context of a comfortable 21st century existence, with the least amount of pain, suffering and sacrifice necessary. Better yet, why not reframe fitness in the more positive terms of joy, ease, contentment and pleasure? There's no reason achieving supreme fitness has to have any negative connotations at all.

The intent of Primal Blueprint Fitness is simply to streamline the workout process with all the short-cuts possible, so we can focus on the things that really matter—playing, relaxation, leisure, and time with family and friends. But before plotting our strategy, there are three more relevant questions we can ask before proceeding:

### **How Fit Should I Really Be?**

Interestingly, most medical or epidemiological studies will tell you that you don't need to be all that fit to maximize both your health and your longevity. There are studies that suggest that slightly overweight people who are otherwise reasonably fit, live longer on average than really thin people. Reasonably fit overweight people also tend to have a reduced risk for cancer and many other diseases as well. Conversely, those who train too hard for too long actually start to incur increased risks for illnesses of all types. I guess the good news is that it really doesn't take much effort to be "reasonably" fit. A few long walks a week, a trip or two to the gym and some attention to your diet will get you there if that's all you want. But I doubt anyone wants to be only "reasonably fit" and still overweight?

On the other hand, you probably should be fit enough to handle your daily chores, carry groceries up two flights of stairs or lug your bags through the airport without hurting your shoulders. Better yet, as legendary strongman Earle Liederman once wrote, there are five fitness benchmarks that any man (or woman, with some modifications; Liederman wrote this in the not entirely enlightened 1920s) possessing adequate fitness should be able to do:

"Every man should be able to save his own life. He should be able to swim far enough, run fast and long enough to save his life in case of emergency and necessity. He also should be able to chin himself a reasonable number of times, as well as to dip a number of times, and he should be able to jump a reasonable height and distance." (Liederman, *Endurance*)

For argument's sake, we could frame Liederman's quote in practical terms as follows:

- 1/2 mile swim
- 200 yard run, at full sprint speed
- Ability to jump over waist-high objects
- 15–20+ pullups
- 25+ dips

I would add that anyone should be fit enough to take on a new fun activity without fearing an injury. In fact, true fitness can best be defined by the acquiring of a variety of strengths and skills, a combination of speed, power, agility, endurance balance, and coordination...all the while enjoying excellent health. Fitness is no longer simply a snapshot measure of how much you can bench press or how fast you can run a marathon. True fitness is more a question of how many push-ups you can stop and do in the middle of a 5k run while carrying a child on your back...while looking fabulous in a skin tight racing suit!

### **How Fit Can I Be?**

Ah, that's a far different question and one with many nuances. World champion decathletes and NBA players can be deemed extremely fit over a fairly wide range of tests (strength, speed, jumping, agility, accuracy, endurance, etc.). It is also possible to be extremely fit as measured in very narrow tolerances like racing fast times or lifting heavy weights. We've already discussed the drawbacks of pursuing narrowly focused fitness goals that require Chronic training and compromise health. I'll admit that I took some perverse pleasure in measuring my ability to endure pain against the rest of the field. But as addictive as the actual endorphin-fueled competition was, it simply wasn't sustainable, nor was it worth the damage I was doing. I decided I wanted to be very fit across a broad range of tests. I also wanted to be sick less often and have more fun in general.

The irony is that today my simple Primal Blueprint Fitness program endows me with at least 80 percent of the endurance capacity I had when I trained ten times as long and twice as hard, but it also gives me more speed, strength, balance, agility, muscular symmetry (looking good naked, remember?), a vastly improved power-to-weight ratio, and improved immune function, mood, sleep habits, eating habits, and daily energy levels...all in a tenth of the time I used to spend training! As far as I'm concerned it's no contest.

### **How Fit Do I Want To Be?**

That's the big question. The answer here is that the sky's the limit with PBF. Follow the simple guidelines and PBF will get you very close to maximizing your unique genetic fitness potential just in terms of strength, speed, agility, aerobic capacity, power-to-weight ratio, body fat level and aesthetic goals (and 95% of your genetic body composition goals). From there you can choose to maintain that level effortlessly for life or, if you need more, you can start incorporating the more intense PBF bodyweight movements that promise to get you to within just a few degrees or your ultimate genetic fitness potential. So forget all the isolation exercises, expensive gym memberships and equipment, ultra endurance workouts, and obsessive bodybuilder nonsense. Fitness just got effortless again: conduct an average of one sprint workout a week, two brief, but intense bodyweight routines a week, move frequently at a moderate pace, play to your heart's content and rest whenever you feel like it.

OK, time to proceed to Chapter Two and explore the specifics of the program.

### **CHAPTER 2: Move Frequently at a Slow Pace**

The foundation of the PBF plan is to simply move your body through your surroundings frequently at a low-to-mid-range heart rate. That means 3–5 hours a week of low level aerobic activity (walking, hiking, cycling, swimming, puttering in the garden, playing golf, etc.). Not only is low level aerobic activity the natural evolutionary expectation of the human genome, it's flat out beneficial in its own right. It plays an integral role in maintaining weight and metabolic balance. It also builds your base and makes more strenuous workouts possible by toning all the muscles, joints and connective tissue needed for optimal strength training and high intensity anaerobic activity. Low level aerobic exercise engages your energy systems and incrementally improves their functioning and efficiency. And while it does all that, it also physiologically and hormonally counters the effects of stress.

80% percent of your genetic potential for body composition is determined by what you eat. Pick up a copy of The Primal Blueprint Cookbook today for over 100+ Primal recipes and get a FREE Poster and FREE S&H.

### It's About Movement, Not Calories

In the case of low level movement, more actually can be better—as long as your heart rate doesn't get too high. Please review Chapter 6 of *The Primal Blueprint* for detailed discussion. For now limit your low level workouts to a range of 55 to 75 percent of maximum heart rate to ensure you achieve the desired training effect and minimize risk of Chronic exercise. When you reprogram your genes to preferentially burn body fat through your eating style, then any amount of very low level activity strongly reinforces those pathways so you can become a fat burning machine around the clock.

Ironically, we seem to have forgotten our roots. The past few decades have seen an alarming increase in the amount of aerobic or "cardio" exercises that health professionals and even the US Government recommend in the name of better health and fitness. The truth is we really don't need to do much cardio to achieve a fairly high level of aerobic and cardiovascular health, provided we take advantage of certain synergies from sprints and resistance training. Too many people spend too much

time tracking that little LED screen on the treadmill or elliptical machine, watching calories mount and thinking more is better, yet research has proven that high levels of aerobic (cardio) exercise burn mostly glucose and glycogen (sugars) and burn relatively little body fat.

Research also shows that most people who attempt to lose weight by burning calories at higher heart rates will ultimately fail because they'll end up slightly overeating to compensate for the lost glycogen. Do this enough and you reach what I call "Chronic Cardio," the no man's land of aerobic exercise where systemic inflammation rises, hyperinsulinemia (overproduction of insulin) starts to occur, oxidative damage (the production of free radicals) increases by a factor of 10 or 20 times normal, joint pains increase, fatigue is ever-present, precious muscle tissue is destroyed as stress hormones mount, and you actually start to store more fat. Chronic Cardio is a path to disappointment and frustration, so make your long, easy workouts easier!

Yes, we were born to run, but I argue strongly that we were not born to run 42 miles a week year in and year out as we accumulate marathon finisher medals on the wall. Let's look at our own evolution. Our hunter-gatherer ancestors engaged in extensive low level of aerobic activity every day: walking, foraging, migrating, hunting and gathering. I guarantee you they didn't regularly ramp their heart rates up to 80 percent of max for over an hour a day like so many of us do now. Even when the concept of organized or persistence hunting came along, it was something they did as occasionally necessary for survival and certainly not on a daily basis. It would appear that our hunter-gatherer ancestors relied more on superior tracking ability (using highly evolved and exceptionally large brains) and walk/jogging (using superior fat-burning systems), rather than on actually running at race pace to chase down their prey. Evolution has driven our genes to expect a fair amount low level activity, but only infrequent high-level endurance work.

The health impact of low level activity is impressive to say the least. Specific studies have found that it reduces the risk of metabolic syndrome, breast cancer, and death from cardiovascular disease. It also appears to reduce the risk of vascular dementia. But the kicker is this: low level aerobic activity, research suggests, can decrease overall systemic inflammation and the risk for the vast array of degenerative diseases that plague our modern society. Skeletal muscle fibers, researchers have found, act as "an endocrine organ." Working the muscle fibers, it appears, stimulates the production of Interleukin-6, an anti-inflammatory cytokine, which in turn signals and benefits other organs. Don't you love this? On the lighter note, low level aerobic activity also decreases the incidence of colds.

Want more? Turns out there are mental health benefits as well. Moderate exercise has been shown to improve the mood and well-being of those with chronic depression. But for all of us, low to moderate level aerobic activity can elevate our mood a good two to four hours after exercise. (And that's just after 20 minutes or so of activity.) We've all felt this one, haven't we? Letting go of the stress on a solitary hike or evening walk with a friend?

### **Heart Rate Guidelines**

Low level aerobic activity involves working most of the time at 55 to 75 percent of your maximum heart rate. You often see it referred to as "moderate exercise." This individualizes the exercise such that one man's leisurely stroll is another man's endurance workout. In fact, raw speed is immaterial when figuring out what moving slowly really means; all that matters is the cardiovascular system's reaction to the work. If you're heaving and panting and sweating, you are not moving at a slow pace—no matter what the speedometer says. Heart rate (and the aerobic activity that determines it) varies considerably based on how in shape you are.

To determine the proper exercise zone for your "Move Frequently" sessions, you must determine or estimate your maximum heart rate. This formula is fairly accurate for most of the population.

For males, 220 - age = Estimated Maximum Heart Rate For females, 226 - age = Estimated Maximum Heart Rate

If you have a wireless heart rate monitor and wish to determine a more accurate value, you can perform a self-test, with medical clearance, as follows: warm up for a few minutes, exercise at a high intensity for about two minutes, then sprint as fast as you can for the last fifteen seconds. Note your heart rate. With a max heart rate value, do some math and determine your exercise zone range of 55–75 percent to max.

For reference, the lower limit of 55 percent of max is a very, very comfortable rate that represents the minimum level required to really consider your effort a workout. Your energy source is primarily fat at this level. For a fit person, this might be a medium intensity hike, a slow bike ride on level ground, or a super easy session on a cardio machine. For an unfit or moderately fit person, this'll be a casual stroll around the block.

The upper limit of 75 percent of max is still a very comfortable intensity level. Despite your sense that the effort level might be too easy, you'll be getting an excellent aerobic workout at 75 percent, while still burning mostly fat and minimizing the stress and inflammatory impact of the session. For accomplished endurance athletes, I allow 80 percent to be used as an upper limit for "Move Frequently" workouts.

If you're not a big numbers person and don't wish to mess with heart rate monitors, there are some critical subjective guidelines you can follow. 75 percent workouts should feel extremely comfortable, especially if you are accustomed to pushing your body into the Chronic zone frequently. You should be able to conduct a conversation without getting winded, and complete such workouts feeling refreshed and energized, rather than feeling light-headed and famished.

For a fit person, a 75 percent workout amounts to a vigorous, hilly hike, a hilly bike ride, or a slow jog. Unfit/moderately fit: medium intensity hike with a few hills here and there, a slow bike ride with a few hills thrown in, a very slow jog. If you are a novice, I suggest you monitor your heart rate on several occasions (either by monitor or by checking pulse with a second hand), so you can get a

sense of what the various percentages feel like and develop a keen intuitive sense of effort level.

NOTE: Once in a while it can be beneficial to exceed your 75 percent limit for a sustained workout. This represents a peak performance effort (maybe it's a race, a time trial or an adventurous trail run) that allows you to test all the elements you've trained separately in the PBF program. Even moderately fit people can sustain 85 to 90 percent of maximum for up to an hour. These types of sessions can even stimulate fitness breakthroughs when done well rested and infrequently, because they call into play all the elements of fitness that your PBF program works on. Still, it's critical to avoid working out more than just occasionally in this "Chronic Cardio" zone.

Unfortunately, the typical jogger huffing down your block or on a stairclimber panting in the health club window is exercising in this zone too frequently. This Chronic Cardio epidemic transcends fitness levels—elite athletes suffer side-by-side with the unfit trying to do the right thing by Conventional Wisdom and simply count calories burned. If you've been pounding the pavement or slogging the treadmill this way for too long, I have two words of advice that can quite possibly benefit your fitness and health more than anything: *Slow Down!* 

### **Suggested Exercises**

#### **WALKING**

Walking is the ultimate "gateway exercise"—our preeminent mode of transportation for a couple million years. Many people aren't ready to lift heavy weights or do a bunch of pullups right away, but almost everyone can walk—even if you can only start with a trip around the block. Walking sets the stage for more advanced and more intense movements, and you should be able to walk for 30 minutes before you attempt bodyweight exercises or sprints.

#### **CYCLING**

Cycling can be tricky. It's undoubtedly a low impact movement, making it a great choice for people with joint injuries, but it can be deceptively easy to forget you've just done thirty miles on the bike, mostly uphill, with your heart rate drifting out of the Primal training zone frequently. Take it easy on lengthy outings, and also consider using your bike around town for errands.

#### HIKING

Technically an offshoot of walking, this is my personal favorite way to Move Frequently at a Slow Pace. There's nothing wrong with walking around the block with my wife at sunset (in fact, there's everything right with it), but there's just something about being out in nature, mostly alone and free to do as I please. And really, is there anything more Primal than messing around in the open wilderness? The terrain shifts, there are rocks to lift and toss, tree limbs to climb, and hills to scale. Because your foot lands differently on varied terrain, you train the small muscles in your feet more effectively. If walking around your placid suburban block gets old, strike out for the hills! A sufficiently vigorous, extended hike once a week can pretty much take care of all your "cardio" needs.

#### **ROWING**

Rowing machines in the gym offer an effective fullbody workout, but it's easy to exceed 75 percent when you get into the rhythm. Take it easy or try the rowing machine for a no impact sprint workout. Real, actual rowing in a rowboat, on a kayak or canoe is a nice relaxing workout which you can easily conduct at a moderate pace.

#### **SWIMMING**

Swimming is the ultimate joint-sparing total body workout. Explore all four strokes, or even try random leg and arm patterns to tread water. Because you are weightless and constantly temperate-cooled, it's more difficult to elevate your heart rate into Chronic Cardio zone land when swimming than it is on land. This means you can enjoy the sensation of a more vigorous workout while maintaining the proper metabolic stimulation (fat burning, minimal stress response). Check your pulse at the wall with a second hand to be sure you are at or below the 75 percent level during these sessions.

#### **CARDIO MACHINES**

Not everyone has easy daily access to wilderness, sprawling parkland, or even safe sidewalks and weather conditions for walking. If you can't make it outside, feel free to use a treadmill, elliptical machine, stairclimber or other machine to get in some comfortably-paced exercise.

Whichever method of activity you choose, try to accumulate three to five hours each week of moving frequently at a slow pace. Remember, little things add up to big lifestyle change. Take the stairs instead of the elevator, or parking at the furthest spot in the shopping center instead of cruising for the closest are examples of excellent habit patterns that increase daily movement and have a discernable impact on your overall fitness and well-being.

Of course, going over five hours is perfectly fine, and even recommended if you can manage it, but three hours is the bare minimum. If you've got a busy week ahead, try to knock all three hours out in one fell swoop. Go for a vigorous, all day hike, or get up a little early and go on a long walk. Spread it out over all seven days, or compress it into one—everything counts. What's important is that you move.

### **CHAPTER 3: Lift Heavy Things**

Clearly, our ancestors were strong across a wide spectrum of modalities: pushing, pressing, pulling, throwing, squatting, lunging, jumping, twisting, hauling and myriad other physical movements. Today Conventional Wisdom says that to be strong, one must lift heavy barbells and toss around big weights. The current interest in functional fitness has tons of beginners in gyms getting under heavy barbells without the proper training—and that's a recipe for disaster. PBF dictates that you master the basics before attempting the technical lifts.

Very few of us grew up in an intensely physically demanding world like that of our ancestors; it's more common to embark on fitness endeavors with a substantial strength and fitness deficit. Regardless of your current fitness level, you are certainly suited to Lift Heavy Things. But heavy is a relative term; all that matters is what's heavy to you. The essence of Lifting Heavy Things is to complete high intensity repetitions with good form to avoid injury.

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The distinctive feature of Primal Blueprint Fitness is the emphasis on bodyweight resistance exercises. PBF makes strength training simple, safe, cheap, time efficient and always accessible (unless you're living on the Space Shuttle I guess...). Bodyweight resistance workouts are the ultimate Primal and functional way to exercise. They are infinitely scalable—they can be as easy or as difficult as you can imagine. For hardcore folks that don't believe that bodyweight exercises can be difficult enough, try doing a set of muscle ups, one-arm handstand pushups and one-arm pullups. Not so easy, is it? Since you are not introducing any outside resistance that could overwhelm you, bodyweight is the safest way to train, easy on the sensitive joints and soft tissue that is often injured in the gym, even under expert supervision. Since by definition all bodyweight training is functional, you'll develop the esteemed physique sported by Olympic decathletes or gymnasts—lean, naturally proportioned, muscular, but without the hypertrophy or often embarrassing asymmetry often seen strutting around the gym.

### **The Five Essential Movements**

The Primal Blueprint Fitness Lift Heavy Things protocol is simple, intuitive and focuses on just "Five Essential Movements" to get the job done. Essential movements are those actions for which our bodies are designed to execute without injury and on a daily, near-constant basis. These movements were essential to our survival for two million years. Men and women couldn't go about procuring food, defending themselves, foraging, carrying heavy loads, or building domiciles without also performing these five movements:

#### **PUSHUP (VIDEO)**

Probably the single greatest muscle-building exercise of all, pushups deserve more respect than they get from the strength community. Yeah, the bench press is sexy, but it can lead to rotator cuff injuries, and it neglects the core-stabilizing aspects of the pushup. The pushup also allows for full scapular range of motion, whereas the bench press requires you to retract the scapulae for the duration in order to preserve your shoulders. If pushups get too easy, you can always increase the load or switch your hand position.

#### PULLUP (VIDEO)

Climbing a tree to escape a predator, pursue prey, or reach the heights of a particularly bountiful fruit tree; scaling a cliff to nab a nest full of fatty, nutrient-dense bird's eggs; driving a herd of bison into a ravine to their death and hauling the choicest remains up twenty feet by way of sturdy vines laced together, ropelike, using only Paleolithic elbow grease—these situations called for well-developed "pulling muscles." Grok wasn't doing strict military pullups, but he was using the corresponding muscles on a near-daily basis. Your average couch potato can barely do a single pullup, if that. That has to change, and training the pullup can be achieved almost anywhere—using a bit of ingenuity.

### **SQUAT (VIDEO)**

Watch kids at play. They squat effortlessly. It's second nature. And for many modern huntergatherers, the squat represents the default resting position. Some call it the "third world squat." Most adults in developed countries, meanwhile, bend (incorrectly I might add, compromising the spinal discs) to pick stuff up. Instead of squatting down to rest, we look for a chair. Is it any wonder why many of us have no mobility when it comes to squatting? If it's not the hips, it's the knees. If it's not the ankles, it's the back. It doesn't help when most doctors advise against the squat, especially full, lower than parallel squats, because they're "bad for the knees." A full squat, performed with proper technique, is perfectly safe and supports knee health. We have generally forgotten how to squat properly, but Primal Blueprint Fitness will develop this lost, essential skill.

You don't need to perform heavy back squats—I just want you to gain the mobility and strength necessary to perform a full bodyweight squat. Adding massive amounts of weight to a barbell squat will develop strength, power, and good amounts of muscle fiber, but it isn't necessary for PBF. You will, however, have a firm grasp of proper squat form should you decide to up the ante in the future.

### **OVERHEAD PRESS (VIDEO)**

The overhead press remains one of the best functional strength-building exercises you can do, but not everyone has access to, or wants to use, a barbell. Luckily, by progressing through a series of semi-to-fully inverted pushups, you can gain the benefits of overhead pressing without needing equipment. All you'll need is a bench and, for those that venture into advanced territory, a wall... or impeccable balance.

### PLANK (VIDEO)

The buzz word "core" refers to perhaps the most misused and misunderstood muscle group of all time. The "core" refers to the muscles that run the length of the trunk and torso. Most gym-goers "work the core" with a series of predictable movements. Sit-ups, crunches, ab machines, ab pulldowns... notice a pattern? They're all abdominal workouts, but the core is much, much more than just the abs. What about the lower back? The hip flexors? The obliques? Heck, even breaking the core up into individual parts at all completely misses the point. Everyone wants the six-pack, the beach muscles, and they completely miss the fundamental purpose of the core: to provide a stable base for the rest of the body. That's right, the core is a stabilizer; it can contract (sit-ups, knees-to-elbows, leg lifts), but its primary role is to maintain rigidity and uniformity. The best way to "work the core," then, without tons of equipment, is through plank progressions.

## **The Five Essential Movements Progressions**

By following a strict progression of bodyweight exercises, you can progress towards ever more difficult movements, getting all the resistance you need to achieve 95% of your genetic potential and even beyond. For example, grandma might start with wall pushups, eventually progressing to regular pushups, whereas someone who is already fit might start with regular pushups and progress to plyometric pushups while wearing a weight vest. Regardless of your fitness level, you should attempt to eventually master the Essential Movements of Pushup, Pullup, Squat, Overhead Press and Plank.

Each of the Five Essential Movements has a threeexercise progression (Levels 1–3) that will help you build strength and eventually master the Essential Movement (Level 4). There are also numerous advanced bodyweight progressions beyond essential movement mastery (Levels 5–8), and suggestions for intensifying PBF LHT with added weight (Level 9). On the following pages you will find a description of the progressions for each Essential Movement (p. 36–52). This is followed by a self-assessment (p. 53). Perform the self-assessment to learn where you should begin in each of the five progressions. It's crucial that you begin at the appropriate level and that you achieve mastery over each level before advancing in the progression. Each PBF LHT workout consists of two cycles. Each cycle puts you through a set of each of the 5 Essential Movements. To advance, manage to complete the goal reps in both of your two cycles during your workout.

# **Pushup**

	_		Re	eps	
LEVEL	MOVEMENT	DESCRIPTION	MEN	WOMEN	
Level	Wall Push	Stand facing a wall at arms length. Touch the wall with your fingertips, arms shoulder width apart and then bring your palms down to the wall. Bend your elbows, bringing your head to the wall and then press back up. (VIDEO)	50	40	
Level 2	Knee Pushup	With knees on the ground, torso straight, palms flat on the ground, hands shoulder width apart, lower your chest to the ground and then push yourself up. Be sure to get a full range of motion at the top. (VIDEO)	50	30	
Level	Incline Pushup	Stand a few feet away from a secure, hipheight object, like a table or a desk, and grab the object shoulder width apart with straight arms. Keeping your torso straight as a board, lower yourself until your chest touches the object, wait a second, then push yourself back up. (VIDEO)	50	25	
Level	The Essential Primal Movement:				
4	Pushup	You know the drill. Form a 45-degree angle at your armpit, relative to your upper arms and torso. Keep your head neutral (don't drop your forehead to the ground), and keep your core and glutes tight throughout the pushup. (VIDEO)	50	20	

# Pushup cont'd

## Advanced Bodyweight Pushup Variations

M W Level Perform a full pushup with your feet elevated. Place them on a bench, a **Decline** 30 15 basketball—anything that's 1–2 feet high. **Pushup** Treat this like a normal pushup, only stag-Level **15 10** ger the elevation of your hands. Place one Uneven hand on the ground and one on a basketeach each ball or a cinderblock-anything that will side side **Pushup** keep one hand a foot off the ground. Perform a full pushup, only this time keep Level **Alternating** your palms four to five inches outside of 15 10 shoulder width. Come up and bring your Wide/Close right hand closer to your left so that they are now only about a foot apart and **Pushup** perform another pushup. One wide and one close pushup counts as one rep. At the top of a full pushup, throw yourself Level off the ground forcibly. Explode off the 15 8 **Plyometric** ground and catch yourself, then repeat the movement. Clapping between reps is the **Pushup** popular technique on this one.

# Pushup cont'd

Advanced - Beyond Bodyweight

M W

Level

9

Weighted Pushup Strap on a weight vest and follow the progression starting at #3.





# **Pullup**

Level

1

Chair-assisted Pullup (2 legs) Place a chair underneath the pullup bar. Stand on it and grasp the bar overhead, then pull yourself up while keeping two feet on the chair for support. Gradually reduce the amount of support until you just need a single foot. (VIDEO)

20

M

20

W

Reps

Level

2

Chair-assisted Pullup (1 leg) Do the same as last time, only with a single foot for support and with the bench moved forward a foot or two in front of you. The farther the bench from the bar the more difficult the pullup becomes. (VIDEO)

15

15

Level

3

Reverse Pullup/ Chinup Pullup is with an overhand grip, chin-up is with an underhand grip. Jump up (or use a chair) and grab the pullup bar, using your momentum to carry your chin over the bar, then hold the position for two seconds. Slowly lower yourself in a controlled manner to the count of 4. Do Reverse Pullups in your first cycle and Reverse Chin-ups in your second. (VIDEO)

7 each 4 each

Level

## **The Essential Primal Movement:**

4

Pullup/ Chinup You know the drill. Just make sure to keep your shoulder blades retracted during the pull to protect your shoulders, drive your elbows toward your sides, and lead with your chest up. Keep your chin somewhat tucked to protect from cervical strain. Do Pullups in your first cycle and Chinups in your second. (VIDEO)

12 each 5 each

# Pullup cont'd

## Advanced Bodyweight Pullup Variations

Level

5

Wide Grip Pullup This is the same as a pullup only with your grip wider than shoulder width.

M

W

12

5

Level

6

Uneven Pullup Throw a towel over the bar. Grip the towel with one hand about one foot lower than the bar. Grab the bar with your other hand and perform a pullup.

6 each side 4 each side

Level

7

Plyometric Pullup/ Chin-up At the top of the pullup, throw yourself as high as you can, let go of the bar and switch your grip. Catch yourself, lower in a controlled manner and repeat.

5 each grip alternating 3
each grip
alternating

Level

8

**Muscle Up** 

This is an advanced and difficult move to master, and can't be summed up in a few short sentences. The gist is to perform a pullup variation that results in you bringing your torso completely above the bar. I'll write a detailed blog post on this at some point. For now take a look at this.

7

3

# Pullup cont'd

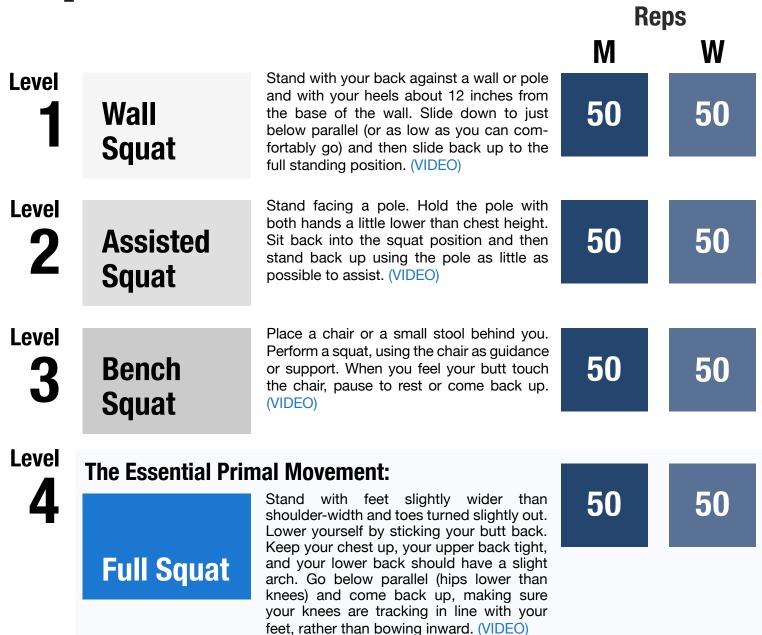
Advanced – Beyond Bodyweight

Level

Weighted
Pullup

Throw on the weight vest and do the progression starting from #3.

# Squat



# Squat cont'd

## Advanced Bodyweight Squat Variations

Level

Side-to-Side

With your feet in the standard squat position, move your hips and upper body approximately 6 inches to the right (or left) so that your weight is distributed disproportionately over one leg. Perform a squat as described above, this time focusing on allowing one leg to bear most of the weight throughout the squat.

M 30 each side

W **30** each

side

Level

Bulgarian Squat

Squat

Stand about 3 feet in front of a bench. Reach back and place one foot on the bench. Lower your body so that your front thigh at least reaches parallel or until your back knee touches the ground, and then push back up focusing on using your front leg to lift your weight.

**25** each side

**25** each side

Level

Single Leg **Box Squat** 

Stand on a bench with one leg on the bench and one leg off and to the side of the bench. Bringing your non-working leg forward as you lower yourself, squat as low as you can go and then push yourself back up. This is effectively a pistol squat without the ground getting in the way of your non-working leg. Work on raising your non-working leg as you lower into the squat. Also, you may want to perform this movement next to a wall so you can use one arm for support.

15 each side

**15** each side

Level

**Pistol Squat**  Stand on one leg with your other leg raised straight in front of you and as close to hip height as possible. Place your arms out in front of you for balance and to help keep your chest up. Slowly descend to below parallel making sure to keep your non-working leg's foot hovering above the ground throughout the course of the squat, and the push back up.

10 each side

each side

# Squat cont'd

Advanced - Beyond Bodyweight

M

W

Level

9

Weighted Squat Add a weighted vest to the mix and start the progression from #3.



X

# **Overhead Press**

Reps

M

W

Level

1

Elevated Jack Knife Press Place your palms about shoulder-width apart on a bench 2–3 feet off the ground. Take a step back, stand on your toes and bring your head down between your arms while raising your hips and straightening your back. Lower your head to the bench and then push back up with your shoulders. (VIDEO)

25

**20** 

Level

2

Jack Knife Press Keep your feet flat on the ground and place your hands shoulder width apart on the ground several feet ahead of your feet. Hinge at the hips, forming an upside down "V" with your legs and torso. It's like a pushup position only with your butt and hips sticking up and the top of your head touching the ground. Use your shoulders to lower your head toward the ground and push back up. (VIDEO)

20

15

Level

3

Dive Bomber This is a cross between the Jack Knife Press and a Pushup. Assume a shallow Jack Knife Press Position. Imagine a bar about 1 foot off the ground and directly above your hands under which you must pass your head and torso. Slide down under the bar and back up so that the bar is now above your lower-mid back. Now slide back under the bar the opposite direction to complete one rep. (VIDEO)

**15** 

10

Level

## **The Essential Primal Movement:**

4

Shoulder Press Pushup Make your torso perpendicular to the ground by placing your feet on a bench, table, or chair. Your hips should form a 90 degree angle between your upper and lower body. Keep your hands shoulder width apart on either side of your head and press up with your shoulders. Keep your head and neck aligned with your torso as you press, so top of head is pointed to the ground and you are looking backwards. (VIDEO)

**12** 

7

# **Overhead Press cont'd**

## Advanced Bodyweight Overhead Press Variations

Level

5

Handstand

Place your hands shoulder width apart approximately 12 inches from the base of a wall. With your arms straight, bring one knee up to your elbow. Simultaneously bring your straight leg up toward the wall while pushing down with your bent leg. Follow your straight leg with your bent leg to the wall and hold the position.

90 seconds

M

90

seconds

W

Level

6

Half Handstand Pushup Place your hands at shoulder width on the ground, 6 inches away from a sturdy wall. Swing yourself into a handstand with extended arms, keeping your feet against the wall for balance. Lower yourself about halfway and then press back up.

12

7

Level

7

Full Handstand Pushup Get in the handstand position, only this time lower yourself until your head touches the ground. Push up.

10

5

Level

8

Uneven Handstand Pushup Same as a Full Handstand Pushup only with one hand on a ball or box to make the handstand uneven. If you have superior balance, you can add further degree of difficulty to the handstand sequences by doing them without a wall!

5 each side

3 each side

# **Overhead Press cont'd**

Advanced - Beyond Bodyweight

M W

Level

9

Weighted Overhead Press Add some resistance and start the progression from #4.





# **Plank**

Reps

M

W

Level

1

## Hand/Knee Plank

Get in the knee pushup position, only instead of pushing and descending, keep your torso tight and firm—like a plank. Tense up your entire core and glutes. (VIDEO)

90 seconds 90 seconds

## Hand/Knee Side Plank

Now turn on your side with your knees bent and stacked on top of one another. Raise your hip so that you're body is straight from your knees to head then go a bit higher and hold.

45 seconds

45 seconds

Level

2

## Forearm/ Knee Plank

Get in the knee plank position with your elbows on the ground, instead of your hands. Make sure your shoulder lines up with your elbow. Hold it. (VIDEO)

90 seconds

90 seconds

Forearm/ Knee Side Plank Same move as the Hand/Knee Side Plank but this time on your forearm.

45 seconds

Level

3

# Hand/Feet Plank

Get in the full pushup position. Tighten up your core, squeeze your abs, and remain stiff as a plank. (VIDEO)

90 seconds

M

90 seconds

W

Hand/Feet Side Plank

Now turn on your side and place one hand on the ground and rest the other on your side. Stack your feet on top of one another. Raise your hip so that you're body is straight from your feet to head then go a bit higher and hold.

45 seconds

45 seconds

Level

## **The Essential Primal Movement:**

4

Forearm/ Feet Plank Get in the plank position, keeping your elbows on the ground and in line with your shoulders. (VIDEO)

90 seconds

90 seconds

Forearm/
Feet
Side Plank

Same move as the Hand/Feet Side Plank but this time on your forearm.

45 seconds

## Advanced Bodyweight Plank Variations

Level

5

Ups and Downs

Assume the Forearm/Feet Plank position. From this position move to the Hand/Feet Plank position and then back to the Forearm/Feet Plank position. Repeat.

M 90 seconds

90 seconds

W

Side Ups and Downs

Assume the Hand/Feet Side Plank position. Lower your hip to the ground and then raise it as high as you can. Repeat.

45 seconds

45 seconds

Level

6

One Foot/ One Arm Plank Assume the Forearm/Feet Plank position. Now raise one arm off the ground and forward so that it is parallel with the ground and simultaneously raise the opposite foot a few inches or more off the ground. Hold the position and then switch.

90 seconds

90 seconds

Hand/Feet Side Plank w/ Raises Assume the Hand/Feet Side Plank position. Simultaneously raise your arm and leg toward the sky and then return them to the starting position.

45 seconds

Level

7

Spidermans

Assume Hand/Feet Plank position. Drive right knee forward to touch right elbow, then return leg quickly to plank position. Repeat with left knee to left elbow.

M

90 seconds

W

90 seconds

Forearm/Knee Side Plank w/ Rotation Assume the Forearm/Knee Plank position. Take your left arm off the ground and extend it to your side. Turn your right forearm left by 90 degrees so that it is pointing to the left. Now rotate your entire body 90 degrees counterclockwise and point your left hand to the ceiling. Rotate back to the starting position this time bringing your left arm under your body to your right side. During the rotation you will be on your toes in the starting position and on the side of your feet when fully rotated.

45 seconds

45 seconds

Level

8

Cross Spidermans Assume Hand/Feet Plank position. Drive right knee forward to touch left elbow, then return leg quickly to plank position. Repeat with left knee to right elbow.

90 seconds 90 seconds

Forearm/Knee Side Plank w/ Knee Up Assume the Forearm/Knee Side Plank. Raise your knee that is closer to the ground up off the ground and so that your torso and thigh form a 90 degree angle and hold.

45 seconds

Advanced - Beyond Bodyweight

M

W

Level

9

Plank Rotations Starting with #4, complete thirty seconds of each step with minimal rest.

(Alternatively, you can put on a weight vest to intensify the plank.)

30 seconds each all sides 4–8 30 seconds each all sides 4–8

## Where to Begin: A Self-Assessment

The PBF LHT self-assessment has you perform a single set of Pushups, Pullups, Full Squats, Dive Bombers, and the Forearm/Feet Plank at maximum effort. Your rep or time counts will correspond with starting exercises in each of the five progressions. See the self-assessment chart on the next page.

# **Pushup**

# **Pullup**

# **Squat**

# Overhead Press

## **Plank**

Max set of Pushups			
Men	Women	Starting Point	
0 to 10	0 to 5	Wall Push	
11 to 30	6 to 15	Knee Pushup	
31 to 50	16 to 25	Incline Pushup	
51+	26+	Pushup	

Max Set Of I	ruliups	
Men	Women	Starting Point
0 to 2	0 to 1	Chair-assisted (2 leg)
3 to 6	2 to 3	Chair-assisted (1 leg)
7 to 10	4 to 5	Reverse Pullup/Chinup
11+	6+	Pullup/Chinup

May set of Pullups

Max set of F	uli Squats (below pa	iraliel)
Men	Women	Starting Point
0 to 20	0 to 20	Wall Squat
21 to 40	21 to 40	Assisted Squat (w/ Bar)
41 to 60	41 to 60	Bench Squat
61+	61+	Full Squat (Prisoner)

Men	Women	Starting Point
0 to 5	0 to 4	Elevated Jack Knife Press
6 to 11	5 to 7	Jack Knife Press
12 to 18	8 to 11	Dive Bomber
19+	12+	Shoulder Press Pushup

<b>Max time Fore</b>	arm/Feet Plank	
Men	Women	Starting Point
0 to 45 sec	0 to 30 sec	Hand/Knee Plank + Side Knee
46 to 90 sec	31 to 60 sec	Forearm/Knee Plank + Side Knee
91 to 120 sec	61 to 90 sec	Hand/Feet Plank + Side Feet
121+ sec	91+ sec	Forearm/Feet Plank + Side Feet

## Ken Korg's Self-Assessment Example

Ken Korg (he's turning his life around!) tallies 36 Pushups, 8 Pullups, 65 Full Squats, 10 Dive Bombers, and 110 seconds on the Forearm/Feet Plank. This means he will begin PBF LHT doing Incline Pushups, Reverse Pullups/Chinups, the Jack Knife Press, Full Squats and the Hand/Feet Plank.

If you have a borderline score (e.g. a score of 32 pushups for a man) consider going lower on the progression. Starting with a movement you can handle is the surest way to get stronger and fitter, and there's really no rush. You have your entire life to master these movements. During the assessment, take sufficient breaks between sets to ensure you are able to give each set your max effort, but do not take breaks during any single set.

### KEN KORG'S SELF-ASSESSMENT SCORE

Pushups – 36

Pullups - 8

Full Squats - 65

Dive Bombers – 10

Forearm/Feet Plank – 110 seconds

According to the Self-Assessment chart, Ken Korg will begin PBF LHT with:

Incline Pushups

Reverse Pullups/Chinups

**Full Squats** 

Jack Knife Press

Hand/Feet Plank

## **How To: PBF LHT**

As you've already seen from the PBF Weekly Schedule chart you'll be doing LHT twice a week. For each LHT workout complete two cycles, back-to-back, of each of the five movement sets. For example, the first PBF LHT workout for Ken Korg is illustrated in the box to the right.

Give your max effort on each set. If you can do more than the goal values by all means do more.

### **KEN KORG'S FIRST WORKOUT**

### Cycle 1

Incline Pushups

Reverse Pullups

**Full Squats** 

Jack Knife Press

Hand/Feet Plank + Hand/Feet Side Plank

- Rest -

## Cycle 2

Incline Pushups

Reverse Pullups

Full Squats

Jack Knife Press

Hand/Feet Plank + Hand/Feet Side Plank

### **PROGRESSING**

Once you're able to perform the goal values in both sets of any movement, you can proceed to the next movement in the progression. Continuing our example, this means if Ken Korg had the following scores for his workout he would be able to proceed from the Jack Knife Press (Level 2) to Dive Bombers (Level 3) for his next workout since he scored 22 and 20 respectively in his two Jack Knife Press sets (goal value = 20), but wouldn't be able to proceed in any other category since the goal values weren't met in one or both sets.

Though you have the green light to move on once you meet your goal value, I recommend sticking with the same movement for multiple workouts even after reaching the goal value. Give it your all in these workouts, adding reps, time and strength. This will give you the best chance for success when you advance to the next movement.

### **KEN KORG'S FIRST WORKOUT SCORES**

### Cycle 1

Incline Pushups – 45

Reverse Pullups - 7 each

Full Squats – 62

### Jack Knife Press - 22

Hand/Feet Plank + Hand/Feet Side Plank – 90 seconds, 45 seconds each side

- Rest -

### Cycle 2

Incline Pushups – 38

Reverse Pullups - 4 each

Full Squats – 43

## **Jack Knife Press – 20 Reps – Time to Progress!**

Hand/Feet Plank + Hand/Feet Side Plank – 74 seconds, 35 seconds one side, 32 seconds other side

### RESTING

Take little to no breaks between reps, sets and cycles if you are training for endurance and stamina. Otherwise build your strength by following the standard rest protocol for PBF LHT:

Rest During Sets – Try to knock out all your goal reps in one go each cycle. If you can't get there in a single shot take a short break and then add to your total. Take as few breaks as needed to get you to your goal number. Never take more than about three minutes for any single set, and if you're only adding a few seconds or a single rep to your cumulative total after a short break then you've reached the end of that set. Move on to the next set in the cycle once you've either reached your goal number or have reached the max reps you are able to complete within a reasonable amount of time.

Rest Between Sets – Take as much rest between each set of exercises as you need to be able to give your next set all you've got and to give yourself a shot at reaching your goal reps. I generally recommend 30 seconds to 2 minutes rest between sets, but this depends in large part on your fitness level. Some people might only need a ten second breather while others may need a little more rest before jumping to the next movement. I wouldn't rest much longer than two minutes for two reasons: you'll cool down and the workout will become exceedingly long.

**Rest Between Cycles** – Similar to rest between sets. Take as much time as you need to recover and be able to give the second cycle your all, but not so much time that you completely cool down.

### ADDING WEIGHT

Once you have mastered all Five Essential Movements you've reached a major milestone. For most people this will be the ultimate goal. If all you did from that point on was to maintain your strength and ability to perform these Five Movements you will have a solid baseline of functional fitness for life. Put another way, if you can do two sets totaling 100 pushups, 12 chinups, 12 pullups, 24 shoulder press pushups, 100 full body squats, and a total of 6 minutes of plank variations, you're fit—period. I'd venture to say that you are a 1 in 1,000 physical specimen! Sure, you can produce tiny incremental gains in the gym, but at this point I'd recommend broadening your definition of fitness to direct more energy to sprinting, playing, and low level endurance work.

While PBF LHT bodyweight exercises can offer even the strongest guys and gals out there a challenge, there is certainly a place for lifting weights in PBF if that interests you. For one, Workouts of the Week (more on WOWs in chapter 5) periodically make use of weights. Secondly, I highly recommend tossing on a weight vest to increase the difficulty of any of the bodyweight movements listed above. Just be sure that you've mastered all advanced bodyweight exercises before adding weight.

While the PBF Five Essential Movements guidelines are specific and focused, I want to emphasize that simplicity and personal preference are keys to your strength training routine. You don't have to hit every Essential Movement at every workout, and can feel free to introduce other adaptations to your workout that still respect the basic concepts.

# **CHAPTER 4: Sprint Once in a While**

I guess you could call this section "Born to Run, Part Two." When you consider the millions of years over which our ancestors evolved to sprint upright for the purpose of ending a hunt or to evade being hunted themselves, you can appreciate how humans are designed and well-equipped to sprint anaerobically (all-out) for short distances. The problem is that many of us have become so unfit that we've lost this most elementary of skills. There is probably no more effective weapon in your modern fitness arsenal than sprinting.

Research confirms that an occasional series of short, all-out bursts of effort can have a more profound effect on fitness—especially on fat loss—than a medium-paced jog lasting many times longer. One set of sprints (also know as "interval training") per week is all you need to improve speed, muscle mass, bone density, cardiovascular strength and aerobic capacity. Sprints help stimulate a pulse of human growth hormone and testosterone (beneficial for both men and women) and it can have an immune-boosting effect. No other exercise modality gives as much bang for the buck. 15 to 20 minutes from warmup to finish and you're done. And before those of you who are out of shape, grossly overweight, older or have bad knees decide that this part of the PBF plan is not for you, you can definitely pursue low-impact sprinting options (bike, pool, elliptical and other machines) and enjoy similar physiological benefits.

Increase energy, maximize performance and speed-up recovery with Damage Control Master Formula—the most comprehensive and balanced all-in-one nutritional supplement on the planet.

Even with these low impact options, sprinting is widely neglected by all levels of exercisers. We generally are comfortable tackling the low level cardio and strength training components of PBF, but seem intimidated by the concept of sprinting. This could be due to injury risk from doing high-impact options, or the prevailing mentality that more is better—an hour of Chronic Cardio three days a week must be better than an occasional 10-minute max effort, right?

As I said in the opening of this book, I love shortcuts. My entire training regimen revolves around finding shortcuts to better fitness by maximizing efficiency in the gym, on the track, at the beach, in a hotel room, or wherever else I'm exercising. I'm not selling myself short, and I'm not losing out on any of the benefits; I'm training smarter and more effectively than ever. The sprint is the ultimate exercise hack. By definition, it's brief. It has to be, because once you start slowing down—once your power output begins to wane—you have ceased to sprint.

So how does sprinting work so well in such a short amount of time? Why is it important to maintain maximum speed by sacrificing work volume? And aren't you missing out on "aerobic endurance" by focusing on short sprints? Let's answer that by first reviewing our muscle fiber types. There are two primary muscle fiber varieties: fast twitch and slow twitch. Fast twitch fibers regulate powerful, explosive movements stuff like Lifting Heavy Things and Sprinting Once in a While—while slow twitch fibers are better for endurance training—long distance aerobic or cardio activities. Outdated Conventional Wisdom says that one must train the slow twitch fibers through endurance exercise to increase actual endurance. On the surface, this seems somewhat reasonable, right? It seems to jibe with the Primal philosophy on functional fitness (improve your ability to perform real world, natural movements by training those exact same real world, natural movements when you work out), and it doesn't sound outlandish to imagine that endurance work improves aerobic endurance, while sprint work improves sprinting. Once again, Conventional Wisdom has led us astray.

Yes, endurance work does improve aerobic endurance, and sprinting does improve sprinting and short-term speed. At the same time, though, sprinting also improves aerobic endurance. That's killing two birds with one stone: running sprints improves the endurance capacity in all muscle fibers, not just the fast ones, while low-intensity aerobic exercise only targets the slow twitch fibers. I'll always encourage everyone to Move Frequently at a Slow Pace as a foundation for Primal Blueprint Fitness, mind you, but it's clear that any functional fitness regimen is incomplete without a sprint dynamic. There's nothing wrong, remember, with a shortcut that doesn't shortcut results. Sprinting is simply an efficient, effective way to target your fast twitch, type II muscle fibers without spending a ton of time in the gym and improve slow twitch efficiency at the same time.

## **Getting Started With Sprinting**

Sprinting is about moving as fast as possible and getting the heart rate high quickly. It's more about effort than speed. And it's not about running endless wind sprints until you fall down from exhaustion. That kind of high intensity work might have its place in some extreme sports training, but it doesn't get you all the benefits of a real sprint session. The key, then, becomes simply avoiding failure. Maintaining maximum effort is basically as simple as running (or biking, or rowing, etc) as fast as you can and then stopping when you note a drop off. I suppose you could get overly technical with it, maybe hook up a few sensors and have a doctor monitor your vital signs, but I like to keep it simple. When you feel yourself starting to slow down, stop. That's it. That's the sprint. Then you rest a bit and do it again.

For beginners, your first few sprint "work intervals" might only be ten or fifteen seconds and your rest interval two minutes. That's fine. It's better that you ease into this than go overboard and get injured or burned out in your first few sessions. In fact, if you haven't gone all-out in anything physical for years, or if you are concerned about overdoing it, just

go 80 or 85 percent those first few sessions until you are comfortable. As your fitness, speed and strength improve, you might increase that time to 20 or 30 seconds per work interval and decrease the rest interval to a minute or a minute and fifteen seconds. Then, you can add additional work intervals to your workout, so instead of only doing four this week, you do five, and then six next week. Within a few weeks, you'll improve dramatically.

Sprinting, clearly, is about quality over quantity. Even as you progress with your fitness, you don't ever have to go longer than 30 seconds for a single interval, and no more than six repetitions of this duration. Alternatively, you could max out with 8–10 repetitions of 15-second intervals. Workouts like these are plenty for most everyone to hit that 95% of genetic potential marker. Hence, you can measure your progress in sprinting by going faster during your efforts. Of course, you can play around with your speed and endurance by entering a 5k once in a while or doing a timed mile on the track for fun. Many of the WOWs at Mark's Daily Apple will offer a chance to apply your new fitness to other real-world experiences.

## **The Start**

Sprint sessions must begin with a proper warmup—five or ten minutes of light intensity exercise of the same type that you will be sprinting at. After you've warmed up sufficiently, take a minute or two to do a few "transition" sessions where you gradually ramp up the speed or effort until you hit max for just a few seconds, then ease it back down. This will prepare you for the speed and effort you'll be "digging down" for when you begin the actual sprints. As you start your first actual sprint, ease into that as well for a few seconds, rather than bursting out of the blocks as if a starter's gun went off. You want to get up to speed as soon as possible, but you'll avoid injury if you accelerate smoothly.

As I mentioned, if you have an underlying injury or weakness that prevents actual full out running, there are many other options. The important thing is moving as fast as you can; the actual movement doesn't matter so much as the moving. Let's look at a few options.

### CLASSIC SPRINTS

These are ideal, because sprint running is the most basic movement the human body is designed to do. We've got big glutes for propelling us at high speeds across terrain, and sprinting is a total body experience. All net benefits. If your joints give you problems, try running in sand, on grass, or without shoes. That's right—go barefoot. Our feet were born naked, and four million years of natural selection has crafted some pretty effective lower extremities. Going barefoot actually reduces stress on the joints, and wearing shoes may actually cause damage to knees, hips, and ankles. If those are problem areas for you—heck, even if they aren't yet—consider exercising barefoot or in the least intrusive shoe possible. Just be very careful once again to ease into your first few sessions. Even if you decide not to go the barefoot route, avoid shoes with pronounced heels and extra padding.

### **HILL SPRINTS**

Hill sprints are another option for those with joint concerns. Running uphill means less direct impact with each footfall; your feet aren't "falling" as far when you're going uphill. Plus, fighting gravity is a killer workout, making hill sprints a viable option for even healthy athletes interested in upping the ante on their sprint days. Run the ups and walk (rest) the downs.

### **BIKING**

If you can't run, hop on that bike, but instead of going for an all-day marathon trek, find a steep hill, ascend as fast as you can, and coast back down to commence another rep when your breathing has returned to normal at the bottom. Pick a gear that allows for as rapid a cadence as possible. This will alleviate joint strain and actually provide more efficient leverage than stomping a bigger gear. You can also do this workout on a stationary bike in the gym, using the different resistance levels to facilitate rest and work intervals.

### **SWIMMING**

Wind sprints in the pool are a fantastic way to get your sprint session in. I'll even sometimes skip the beach sprints and opt for the pool. The total body workout provided by a decent sized pool is pretty much unparalleled. No pool? No sweat. Any body of water will do, but finish your sprints in shallower water (otherwise you might not get all the rest you need between sets).

### **ROWING**

The sprinting row is another great total body workout, but you generally need access to a gym for this one. Still it's worth it if you can. The Concept2 Rower is the gold standard for indoor rowing equipment. For sprint rows, go for 30 seconds, rest for two to three minutes. It'll take a lot out of you—believe me, you'll need the rest. Of course, you could get truly Primal and head out to open waters with a kayak, if you were so inclined.

Most people will see all the major benefits by sprinting once a week at the most. I know some very accomplished athletes who prefer a once every ten days pattern. Be sure to ease into the speed and effort as well as gradually increasing the number of work intervals. Also give yourself enough time in between sprints to return to a normal breathing pattern and be fully prepared to deliver a maximum effort at the next interval. These are sprints, and they should be you at your fastest! Each session should run about fifteen to twenty minutes including warmups and transitions, tops, and eventually be comprised of 8–10 actual sprints.

### **TABATA SPRINTS**

Another variation on interval training was devised by a scientist named Izumi Tabata, whose landmark 1996 study on moderate and high-intensity interval training was what actually proved that highintensity intermittent training improves both anaerobic (intensity and muscle building) and aerobic (slower, oxygen consuming) body systems, while aerobic exercise only improves aerobic systems. The protocol he used in the study even spawned a specific training method: the Tabata (Ta-BAH-ta). Quite simple and effective, a Tabata session consists of twenty seconds of maximum output, followed by ten seconds of rest, repeated eight times without pause for a total of four minutes. One cycle is a good start, but I like to do three four-minute cycles with a two minute rest in between. Any exercise will work (running, cycling, burpees, jump rope, squats, etc.) Doing Tabata sprints is perhaps the most rewarding—and physically taxing—way to spend those four minutes.

You can technically perform Tabata sprints anywhere: up a hill (for extra kick), on a track, wearing a weight vest (for Primal pros), in the snow (but wear shoes, please), on a trail (watch out for roots and rocks), even on a treadmill (and since you're

timing yourself, this might actually work fairly well—keep in mind, though, that you'll be flailing and sweating like a madman, so don't do this in a crowded early-evening gym), but I prefer doing it on the beach. That way, I have the option of running in dry sand (with the bonus—or punishment, some would say—of more give and harder work) or the slightly forgiving wet sand. Whichever you choose, your joints will thank you for not pounding them on hard concrete. There's also the added bonus (again, some might say punishment) of getting an extra workout from traversing the uneven and varied surfaces on the beach (dunes, dips, inclines, sand castles...kidding).

The best thing about Tabata sprints is that they only take four minutes to complete for one cycle. While a few Tabata cycles will provide a major kick to your sprinting, one four minute cycle is enough to get a short, intense workout if that's all the time you have. There's simply no excuse (save injury) not to try them, so drop what you're doing and get out there and sprint!

## **Sprint Workout Suggestions**

## NOVICE SPRINT WORKOUT

### Workout 1

6 x 50 meter warmup runs at moderate effort, focusing on maintaining an efficient stride pattern. 20 second rest period between strides. Focus on good running form and don't worry about your speed. This is just a warmup for your sprint efforts. After your warmup strides, commence 6 x 50 meter sprints (they should take 8-15 seconds each) at 75% effort. Take a one-minute rest period between sprints or otherwise enough to be fully recovered and achieve normal respiration before beginning your next sprint. After two to three sessions over a few weeks time, increase your sprint efforts to full speed. Use a moving start (jog up to starting line and then begin sprinting) instead of a static start to minimize injury risk. Pay attention to the difference between leg fatigue and pain. If you experience any acute pain or tightness, particularly in your hamstrings, wrap up the workout immediately with an easy cool down and ice the offended area.

## **INTERMEDIATE SPRINT WORKOUTS**

### Workout 1

6 x 50 meter warmup strides followed by 6 x 50 meter sprints as described previously, building to 100% effort when appropriate.

### Workout 2 - Hill Repeats

6-8x hill sprint lasting 8-30 seconds. Recover by walking or trotting down the hill. Return to normal breathing before beginning next effort. Sprinting uphill is a great workout that stimulates slightly different muscle groups than flat running, and carries far less impact trauma. Choose a duration (e.g. 10, 20, or 30 seconds) and take note of how far you make it uphill during your timed effort. For an effective workout, you should reach the same spot at every effort, but of course require more effort for the last one than the first. You don't want to disperse too much energy in early sprints and then fall apart during the later sprints. When you repeat the workout at the same location and same effort duration in the future, you can notice how far you make it up the hill and gauge your fitness progress accordingly.

#### Workout 3 – Accelerations

6–8 x 30 second sprints with the first ten seconds at medium effort, second ten seconds at hard effort and third ten seconds at full sprint. One minute recovery between efforts. You can use a running track and do 150 meter repeats—accelerating every 50 meters (start at turn apex, accelerate at straightaway, accelerate again at middle of straightaway, finish at traditional finish line) or any other course you can mark with 1/3 distance intervals.

## **ADVANCED SPRINT WORKOUTS**

Workouts 1, 2, and 3 as described in the previous sections.

#### Workout 4

Sprint Drills:

4 x 50m strides at 75% effort. Ten second rest between efforts. One minute rest before next exercise.

2 x 50m skipping. Drive knee as high as you can (try to hit your chest), taking off and landing on opposite leg. Then launch off, and land, with opposite leg, driving other knee high into chest—like an exaggerated skip. Strive for maximum height instead of length on each of your strides. Fifteen second rest between efforts. One minute rest before next exercise.

**2 x 50m bounding.** Take as long a stride as possible, focusing on keeping your balance rather than speed. Thirty second rest between efforts. One minute rest before next exercise.

**2 x 50m hopping.** Take off on both legs and jump up and forward. Focus on achieving a good balance between height and length. Swing arms to assist effort and ensure a balanced landing. One minute rest between efforts (you'll need it, trust me!). Two minute rest before next exercise.

4 x 50m full speed sprint. One minute rest between efforts.

#### Stair Drills:

This workout mimics the Sprint Drills but is conducted on stadium or building stairs. Your flight of stairs should take between eight and thirty seconds to ascend. Take thirty seconds rest between each exercise, or more (or less) as needed to feel refreshed and get your breathing under control.

- **4 x warmup stair climbs at 75% effort.** When you reach the top, return immediately down the stairs at a comfortable pace, then ascend again.
- **2 x single stairs.** Ascend one stair at a time with rapid leg turnover. Descend comfortably and repeat effort.
- **2 x bounding stairs**. Ascend by skipping as many steps as you can with each stride. Focus on keeping your balance rather than speed. Descend comfortably and repeat effort.
- **2 x hopping stairs.** Take off and land on both legs, taking either one or two stairs at a time. Use handrail if you are concerned about slipping and proceed with caution. Descend comfortably and immediately repeat effort.

- **2** x one-legged stairs (caution: very advanced exercise). Ascend stairs by hopping on one leg, one stair at a time. Using a handrail for support is highly recommended.
- **4 x full speed stairs.** Skip desired number of stairs with each stride to get the top as fast as possible.
- Descend comfortably and recover completely between efforts.

# **CHAPTER 5: Workout of the Week**

The Workout of the Week allows you to add fun, diverse, playful, and functional fitness challenges to your routine, putting to the test the competency you develop with the Five Essential Movements, sprinting and aerobic endurance through PBF workouts. Every week, I publish a WOW on Mark's Daily Apple. We enjoy tapping into the vast resource that is our MDA community for WOW suggestions, and are confident that you will love the steady stream of creative ideas to spice up your fitness pursuits. Some friendly virtual competition takes place each week as readers detail their performances in the comment section! We also repeat WOWs periodically to give you a chance to improve your results, and every WOW is archived for free perusal.

Once you've mastered the Five Essential Movements, you can substitute WOW workouts for basic LHT workouts to keep you refreshed and help stimulate further fitness breakthroughs. Taking on a challenging new WOW each week will leverage Grok's legacy of facing highly unpredictable physical challenges throughout his life. There are a few samples on the following pages.

Primal Blueprint Fitness is just one component of a healthy Primal lifestyle. Pick up a copy of The Primal Blueprint to learn the rest and get a FREE Poster and FREE S&H.

## ₩OW #1: GROK VERSUS BOAR

The wild boar is a formidable foe. You have to creep up on the beast, staying low and holding your weapon aloft (weighted lunges), then climb a ledge (pullups and dips) to get a good vantage point from which to launch your attack. Then, shatter its skull with a well-placed rock throw (weight toss)!

#### Four sets each of:

- 20 lunges (push with your heels)
- 10 pullups (chest-to-bar, or as close as you can manage)
- 10 weighted throws (hold the weight between your leg, as if doing a kettlebell swing; generate power by explosively extending your hips to launch the weight out; chase it down where it lands)
- 15 dips (add weight if desired)

## **⋈** WOW #2: BUTCHER THE BOAR

The beast is fallen, and the meat must be prepared and taken to camp. Butcher its remains (sledge-hammer swings), pick up the large pieces (rows), and heave them up to your shoulders (sandbag squat clean, followed by an overhead press).

#### Four sets each of:

- 15 sledgehammer swings
- 10 rows (weight vest optional)
- 10 sandbag/kettlebell squat cleans and presses

## **◯** WOW #3: WEIGHTED CARRY MEDLEY

Pick a weight, or two. Dumbbells, kettlebells, sandbags, heavy rocks—anything works.

Two sets of:

- 50 yards farmer walks (carrying two weights at your side)
- 50 yards one sided walk (carry a weight slung over either shoulder; repeat with other side)
- 50 yards overhead carry, one handed (carry a weight overhead with one hand; repeat with other hand)
- 50 yards overhead carry, two handed

You'll make a total of 12 50-yard walks. It's brutal, and it works your "long strength," but it's over before you know it.

As you can see, these workouts test your agility, balance, conditioning, power, physical strength, and coordination—sometimes all at once! You'll notice that WOWs occasionally call for specialized equipment such as kettlebells, medicine balls, ropes, sledgehammers, tires, slosh tubes, and other creative implements or venue particulars. We'll offer alternative suggestions so that you can complete the WOWs with some modifications. Remember, it's all about fun and creativity so feel free to adapt WOWs to your own imagination and surroundings.

#### WHEN SHOULD I DO A WOW?

As the Weekly Schedule shows, Workouts of the Week are intended as optional replacements for regular LHT days. Note that I don't recommend doing WOWs in addition to two LHT days and a Sprint day each week. At this point I'm sure you understand why. More is not better.

Replacing both LHT days with WOWs is fine, too. Though I do recommend you periodically hone your proficiency at the Essential Movements.

#### WHO SHOULD DO WOWS?

I highly recommend that you master the Five Essential Movements (Level 4) before replacing an LHT day with a WOW. WOWs will often make use of added weight and incorporate slightly more advanced movements. This means that mastery of the basics is critical to ensure injury avoidance.

# **CHAPTER 6: Play**

I have learned to focus my training on one major goal: so I can play—hard! I hope you can get into that same mindset. Why else do we want to be strong and fit and able to run and jump? In order to enjoy our existence. Being unable to walk up those stairs or lift that box of books equals just another thing to worry about and stress over. When you don't have to worry about the physical stuff anymore, or the aches and pains, you can start enjoying life again. Stress dissipates, melts away. Life is good when you're able to play.

The way I see it, the ability to play (Primal Blueprint Lifestyle Law # 7)—to engage in unscripted, random bouts of youthful exuberance with loved ones, friends, and family—is the ultimate goal of Primal Blueprint Fitness. I've already stated that enjoyment of life is what being fit is all about. I maintain my fitness in order to enjoy life, rather than hobble around from waiting room to waiting room. What better way to muster some real happiness than to play like a kid again? This is an absolutely integral aspect of the Primal Blueprint Fitness program. When playing, you're often getting exercise without even knowing it. Plus, play has been a vital part of our lives for many thousands of years, used as a way to unwind, connect with community, or—quite simply—enjoy life.

The Primal Leap: The 30-Day Step-by-Step Program with One-on-One support and all the tools you need to lose weight and get Primal for life. Click here to learn more.

Leisure has the effect of building community cohesion, strengthening social bonds, and fostering the enjoyment of life—the keys to a happy, healthy society. These are perfect examples of play, of recreation, and I'd argue that such play time was integral to human development. It's our primal instinct to respond well to free leisure time; the problem is that too many of us no longer get free time. Or if we do, we feel guilty about enjoying it. It's no less important to us city dwellers, perhaps even more so because of the constant, chronic stress heaped upon us, but we don't realize that.

Play becomes a flitting, unreachable fantasy. People speak about play wistfully, as if it's long gone, never to return—for kids only. It rarely, if ever, enters an adult's mind to just drop everything, head out to the nearest grassy hill, and roll down. Try getting a game of adult tag going; you'll be laughed out of the room.

Look at the word itself. Play. What do you think of when hear it? Childhood, free time, carelessness. Freedom and happiness. These are virtues, real badges of pride, but they seem unattainable. Oh, people pay lip service to leisure, they'll spout off about some study they read that shows people

with more vacation time lead happier, more stress-free lives—but then they never act on this knowledge! They'll see the "slackers" fooling around at the park with a Frisbee and be secretly envious, but then think, "Oh, I could never do that." Why the hell not? They speak as if play is strictly the realm of children, as if adults are physically incapable of engaging in frivolous physical activity. As if "kids' stuff" carries the weight of a cosmic proclamation.

Even kids rarely play anymore. Instead, they go on play dates and follow strictly regimented schedules. Every hour of every day is accounted for in advance. Games like tag or dodgeball are banned by school districts for being too dangerous or promoting competitiveness. No child left behind winds up leaving every child behind!

I say we should embrace kids' stuff. It's not about being childish. It's about uncovering an essential aspect of our humanity that work, stress, and responsibility enshroud. Our sense of play is hidden, even from us, but it's definitely ready to go. The answer, quite simply, is to get out there and play. Play with your kids. Round up some buddies for a game of football, Ultimate Frisbee (my personal favorite), or basketball. Learn to surf, skate, or rock climb. Play with your dog. Heck, lift some weights or go for a run if that's truly your idea of a good time. The PBF WOWs offer all kinds of creative playful routines from members of the Mark's Daily Apple community. Just tap into that childhood exuberance residing within. It's still there, believe me. You just have to give it a chance. If you want to get others involved, all it usually takes is someone getting off their butt to start a game or toss a Frisbee or propose a hike. Be the one to initiate!

As you improve your fitness, you'll find that physical play becomes more and more attractive and natural. Play, ultimately, is about unwinding from stress and enjoying life. It's anything and everything that takes the edge off. And by streamlining your workouts and making the most of your time spent training, you get to make the most of your life outside the gym, too. Don't let PBF turn into a hardcore, grueling, torturous regimen; instead, let it enable your overall enjoyment of life.

Train to play.

# **CHAPTER 7: Rest**

Modern studies reveal a stunning disparity between the amount of free time enjoyed by contemporary hunter-gatherers and by folks in industrialized nations (that's us). By and large, hunter-gatherers have far more leisure time, and they tend to get far more (and better) sleep. It's a completely different ballgame when you can live off the land and its bounty, share your "earnings" with a small band of family members and kinsmen while avoiding rush-hour traffic and the steady accumulation of consumer electronics. I wouldn't give the creature comforts or technological advances of our modern world up for anything, but that doesn't mean we can't learn certain invaluable lessons from traditional or ancestral peoples about rest and leisure.

People aren't machines, after all. We need down time. We need to rest, and we need to relax and enjoy ourselves. And if you're Lifting Heavy Things twice a week, sprinting once a week, and Moving Frequently at a Slow Pace on your off days, your body needs more rest than ever, especially if you want to make any sort of progress. Whether you're trying to pack on muscle or just get fit, you need to do three (equally important) things: exercise, eat, and rest.

80% percent of your genetic potential for body composition is determined by what you eat. Pick up a copy of The Primal Blueprint Cookbook today for over 100+ Primal recipes and get a FREE Poster and FREE S&H.

Your muscles certainly aren't growing—aren't synthesizing more protein—when they're under duress. Lifting Heavy Things breaks down your muscle fibers as intended, but you need plenty of rest to recover and get stronger from that effort. Real growth happens when your muscles aren't doing anything at all, like when you're in deep sleep. Yes, sleep. Sleep is your best friend, the deeper and darker the better. Get eight hours of deep sleep every night for the best results. Turn off the lights and sleep in pitch blackness, if you can manage it, to maximize the sleep quality.

It can be said that maintaining good health and making steady progress on your physical fitness boils down to effective management of your hormones. Lifting Heavy Things and Sprinting Once in a While spur the secretion of testosterone, which is our primary anabolic, muscle-building hormone, as well as growth hormone, which helps maintain muscle while burning fat. On the other end of the spectrum is cortisol, the "fight or flight" stress hormone, a catabolic hormone that breaks muscle (and other systems) down. Both testosterone and cortisol are essential for proper function, but most people these days have too little testosterone and too much cortisol coursing through their veins.

You've got to have a balance. And you've got to get your sleep, because that's when serum growth hormone levels are at their highest.

Understanding your body's stress response mechanisms and the pivotal role cortisol plays in your health can be life-altering, particularly if you have engaged in chronic exercise in the past. I strongly recommend that you review Chapter 6 of *The Primal Blueprint* for an extensive discussion about the importance of rest and the impact of chronic exercise, and excessive life stress, on your health.

PBF is designed to counteract any potential cortisol problems. You'll be working your butt off, but you'll do it for short bursts. No two hour gym sessions here. You'll be Lifting Heavy Things (your twice weekly bodyweight routine) to stimulate testosterone and growth hormone, both of which combat cortisol's muscle-wasting, fat-storing proclivities; you'll be avoiding Chronic Cardio style endurance training, which eats away at muscle, stimulates cortisol, and reverses the testosteronecortisol ratio, in favor of Moving Frequently at a Slow Pace, which is neutral, and Sprinting Once in a While, which promotes testosterone and minimizes cortisol. Taken as a whole, PBF will have you exercising smartly and efficiently, getting plenty of rest and relaxation for recovery, promoting positive levels of anabolic hormones, and playing like a kid again.

PBF gives you four optional days each week. You can use these to move slowly, play, try the Workout of the Week, or take a load off and rest and recover.

# **Frequently Asked Questions and Concerns**

### Are warmups and stretching really necessary?

Pre-workout static stretches can actually be undesirable, believe it or not. Especially for strength work and sprint training, "passive muscle stretching" is found to "negatively impact the performance of high-power short-term exercise." Much of our strength derives from tension, from that snap in the hips. If you're spending ten minutes doing static stretches that leave your limbs flaccid, you're setting yourself up for failure or a disappointing sprint. Save your static stretches for a few minutes post-workout, or even on off days. Touch your toes when you get up in the morning, not when you're about to run hills.

Dynamic stretches—leg swings, shoulder dislocates, and any other joint mobility work—are the way to go. They'll get your muscles prepped for the workout, and you'll help prime your central nervous system for the work that's about to come. And there are always the old standards, the Grok Hang and the Grok Squat (see *The Primal Blueprint*, page 186)—safe, functional, full-body stretches that help you transition from active to inactive and vice versa without weakening muscles or risking overstretching injuries.

The 3 foundational supplements everyone should be taking: Primal Flora, Vital Omegas, Vitamin D. Grab your Primal Essentials Kit today and save 25% off the full retail price.

## What should I eat while doing PBF, and when should I eat it?

If you haven't read my book or visited my blog, now's the time. Primal Blueprint Fitness doesn't work without a Primal eating strategy—that means lots of plants and animals. It's relatively low carb, high fat, and moderate protein. You should be eating meat, fish, plenty of saturated and monounsaturated fats, some fish oil if you don't eat enough fish, colorful veggies with an emphasis on leafy green ones, and the occasional starchy root vegetable post-workout. Eat the stuff Grok was eating to fuel optimum performance of the movements Grok was making. Pretty straight forward, right?

In my book, there's no magic to pre- and post-workout meals. None of these workouts deplete so much glycogen that you need to top off stores immediately before or after workouts. I don't subscribe to any hard and fast meal timing rules besides the most basic one of all: Eat when hungry. If you simply pay attention to your body's natural hormonal hunger cues, you'll do fine. Most people never have to worry about timing their protein intake or micromanaging their nutrition. A few select athletes the elite of the elite—can squeeze out a couple extra degrees of performance by timing their pre and post workout nutrition, but that's so far beyond what most of us have to worry about. Still, some people truly enjoy optimizing their nutrition. For a happy medium between my KISS method and the

micromanagement method, try to get a nice chunk of protein within the hour immediately following a workout. If you want to eat a sweet potato or another type of starch, post workout is the time to do it. Your muscles will be particularly insulin sensitive and glycogen starved, and any carbs you take in will be converted to glycogen.

You could also forgo eating entirely and go into your workouts in a fasted state. Grok often did: the hunt wasn't always successful, and early humans rarely at three square meals a day. Some people—including me—find that ending a fast with a vigorous strength training session is invigorating and incredibly stimulating. The proven benefits of intermittent fasting-improved lipid numbers, insulin sensitivity, adipose tissue mobilization (that's fat burning), and growth hormone secretion—are heightened, and you may find yourself tapping into a truly Primal source of energy. It's a strange kind of energy, because according to Conventional Wisdom, skipping a single meal (let alone three!) results in drastically lowered energy, cannibalized muscle tissue, and your metabolism grinding to a halt. The reality is that once you have reprogrammed your genes to preferentially derive most of your energy from stored body fat, intermittent fasting becomes a healthy, novel addition to any Primal trainee's schedule, one that has evolutionary precedent and proven clinical benefits.

#### How do I deal with soreness?

Delayed onset muscle soreness, also known as DOMS, gets everyone, especially if you're doing an exercise for the first time. Some people hate it, while others take a sick sort of pleasure in it. Any time you pursue fitness improvements, you can expect occasional soreness to be part of the picture. One positive element you can hope for is that it "takes more to get you sore."

DOMS isn't necessarily an indication of a workout's effectiveness. More than anything, it's a sign that you've done something new. It could be an entirely new movement that induces soreness, or it could reflect a small shift in your lifting technique. Either way, an absence of soreness does not indicate a bad or ineffective workout. This is key, because while intense DOMS can have the effect of dissuading beginners from sticking with the workout, more experienced lifters often attribute the lack of DOMS to a lack of progress.

Experiencing soreness is a great message from your body that it's time to rest from anything close to a maximum effort until the soreness completely dissipates. While some studies suggest that there are no magic techniques to speed the healing of sore muscles, a combination of rest, ice, massage, or even a light workout can be the best approach to getting back to peak condition.

## What are some common mistakes I should watch out for?

There's a ton of misinformation out there, and I've tried to dispel a good chunk of it throughout the previous ten chapters, but I'll sum things up as best I can. Top mistakes:

- 1. Too much exercise. Stick to the program. I've designed PBF based on the science, my experience as top athlete and trainer, and evolutionary biology; it all adds up to some compelling info, so I recommend you pay attention and let Primal Blueprint Fitness work for you. Don't fall into the "more is better" trap, especially with exercise. More is quite often worse. Much, much worse.
- Too specialized a fitness regimen. This
  works for athletes with very specific goals,
  but for the average person a well-balanced,
  Primal fitness program is most desirable.
  Besides, PBF provides a stable foundation
  for any future athletic pursuits.

- 3. Too heavy, too hard, too fast. Take things gradually. There's no reason to launch into heavy barbell squats. You're better off learning the movement before adding resistance. Remember, PBF is about avoiding injury through mastery of bodyweight exercises. Paired with a good Primal eating strategy, bodyweight exercises will get you 90 percent of the way there.
- 4. Too easy. Now that you've read all the cautionary messages about Chronic exercise, the importance of rest, and how PBF emphasizes brevity over duration, you still have to challenge your body if you want to progress with your fitness. It's short and intense that promotes optimal gene expression, not short and moderate!

#### Should I join the gym?

Sure, but I think working out at home, if you have sufficient motivation, is best. No rules, no managers coming over to talk to you about your loud guttural noises and the sweat flying from your brow, no lopsided meatheads using the squat rack for bicep curls. You can work out on your own time, at your own pace. You can drop weights. You can throw sandbags. You can work out with no shirt and no shoes. Simply put, you can get as Primal as you want.

Can you tell I prefer home workouts?

## What does the perfect Primal Blueprint Fitness center look like?

My ideal "gym" would be a heavily wooded area with tons of low hanging branches for climbing and pullups, some vines for swinging and climbing, a few massive logs, some heavy rocks (both for lifting, throwing, and clambering), a fifty-yard 15–20 degree angled hill for sprints, and maybe a wild animal to wrestle. Sort of like this or this.

But the beauty of PBF is that it works everywhere and anywhere. Whether you're on the road, stuck in a hotel room, in the gym, or on a camping trip, you can always do bodyweight exercises, sprints, and go for long walks. If there's a tree or an overhead ledge, you've got yourself a pullup bar. If you've got a heavy rock, you've got yourself a nice weight.

## What about sport or work-specific training?

You get four optional days every week. Feel free to use any or all of them for sport-specific training. Consider it play! Just don't over train.

#### What about ab workouts?

Planks are just about the most complete ab workout anyone can do. Otherwise, learn to engage your abs in virtually every other movement you perform. Pushups require fully engaged abs, as do pullups and presses. Learn to engage (tighten) the entire abdominal area when you are sitting at your desk, driving, walking or just standing still. Eventually, everything in life contributes to washboard abs. Of course, we need to see them, so you'll have to burn off the fat by eating Primally, too.

#### Can I work out when I'm sick?

This article covers the topic in detail. In summary, I strongly recommend erring on the very easy side when you have any symptom of less than optimal immune function. Remember, PBF is about functional fitness for a lifetime, not filling in every blank in your workout log.

If you feel up to a very light workout when you are fighting off a mild cold, and you tend to feel better after such activity, you can go ahead and try it cautiously. If you pride yourself on being sensitive to biofeedback and in-tune with your mind, body and spirit, you may notice that you don't feel like

doing much of anything while your highly functioning immune system is working double-time to rid your body of illness.

Many experts speculate that highly active people have superior immune function to sedentary people, unless they over-exercise, in which case they have inferior immune function to sedentary people. Remember that story about me and my college buddies who seemed to have more energy and more fun than I when I was pounding out the miles?

Use common sense and your intuition when you aren't feeling 100%, and take care to align your workout choices with your energy level, motivation level, and health. If you don't feel confident in your abilities in this area, I recommend using the PBF Logbook (found at the end of this book) with daily free-form notes about your health and workouts. Rate on a scale of 1-10 your daily energy level, motivation level and the degree of difficulty of your workouts, along with the state of your health. If you notice time periods where you drag along with a bunch of "3's" for energy, motivation, and health, you certainly shouldn't have many workout scores above that number. When you can write down 8-10 in the daily scores, that's when you should tackle 10-scale workouts!

### Should I try working around my injuries?

Avoid pain—that's my motto. If you can do a movement without pain, feel free to do it. But if pain flares up, that's your body telling you something's wrong. When I'm injured, I just focus on all the other movements I can do that don't exacerbate the injury, and keep training that way until the injured area can rejoin the fun.

When I say, "pain", I'm referring to injuries to your ligament, tendon, joints, or inflammation resulting from acute trauma, such as a fall or sprained ankle. Introducing further pain to an injury should always be avoided. You can certainly exercise through routine muscle soreness, and should experience some loosening of stiff muscles as you warm up into your workout. However, you should refrain from asking sore muscles to produce peak work efforts, which can cause additional discomfort and muscle damage. Remember the prevailing philosophy of Primal Blueprint Fitness is about fun, balance, and freedom from the struggle and suffer approach advocated by Conventional Wisdom.

# Do I have to do the workouts on the days specified?

The PBF schedule is merely a guideline to provide adequate recovery and progress, and it doesn't have to be followed to a T. Use personal experience and track your success trying different methods. Among the ranks of elite athletes, some prefer a pattern of two hard days in a row, following by a series of easy days, as opposed to the traditional spacing out of hard days. The suggested weekly schedule is an attempt to provide some practical application to the Primal Blueprint Fitness philosophy. Following the philosophy is non-negotiable (brief, intense strength sessions; 75% of less max heart rate for "Moving Frequently"; aligning workout difficulty with energy level, motivation level, and health, etc.), but there is plenty of flexibility in discovering your own ideal weekly, monthly and annual schedule for you.

#### How long should I do PBF?

This isn't a 90-day extreme boot camp fad regimen that you'll guit halfway through and never go again. This isn't some ab ripping monster workout program being hawked on an infomercial. Primal Blueprint Fitness is a sustainable, lifelong fitness program. You do it for life. And because the movements contained within are so basic, fundamental, and timeless—because they are the essential movements our bodies are meant to perform—you will always be able to progress simply by increasing the intensity (go from presses to handstand pushups to one-armed handstand pushups) or by adding a weight vest. You'll always be able to maintain mobility, strength, and day-to-day function safely. Six-pack abs are just a fringe benefit. Besides, once you master the basic LHT movements, you can experiment with the Workouts of the Week to keep things fresh and new indefinitely.

#### How quickly will I see results?

You'll see—or perhaps "feel" is a better word to use-results immediately. Particularly if you are coming from Conventional Wisdom's Chronic Cardio approach, you will experience higher and more consistent daily energy levels right away when exercising according to PBF guidelines. Especially if you tandem your PBF efforts with Primal eating, excess body fat will disappear virtually before your eyes, to the tune of 4-8 pounds per month (range depends mostly on your size and other personal attributes). This is a huge and highly noticeable number when we are talking body fat instead of the typical muscle/water/and a little bit of fat crash diet approach. Get ready for muscles to firm up, pants to sag, and compliments to accumulate!

### How does PBF compare to CrossFit?

I have great respect for CrossFit founder Greg Glassman's approach to fitness. A ton of my regular readers follow the CrossFit protocol, and I've been known to bang out a WOD every now and again. That said, CrossFit's intensity and degree of difficulty can be inappropriate for beginners, and bring a high risk of injury from overuse or using less than perfect form. Your average couch potato trying to make a real difference by eating and exercising right for the first time in his life may not be a great fit for CrossFit.

I'm here to change as many lives as possible. I want to make fitness approachable without dumbing it down, and I think I've succeeded. Both PBF and CrossFit teach functional fitness and real world application of strength, speed, and power, but I believe my program is more sustainable for more people. You might say it's CrossFit for the rest of us.

# How does PBF compare to Mark Rippetoe's Starting Strength or the StrongLifts 5x5 program?

I view Starting Strength and StrongLifts as primarily designed for young, skinny athletes looking to get big and strong. They are excellent strengthfocused protocols that revolve around the most basic human movements—squatting, pulling, lifting, pressing—the very same essential actions I describe. Rippetoe's book in particular provides excellent, incredibly detailed instructions for each of the major lifts. The guy has a knack for describing the motor functions of the human body with cold efficiency, similar to a master mechanic describing the inner workings of the engine. SS and SL are great for their intended audiences, and they'll certainly get you strong. In fact, if you're interested in building a raw-strength-based foundation before anything else fitness-related, going with either program would suit you.

I guess it all comes down to how heavily you weigh raw strength on the scale of physical fitness. A huge aspect of our program is the bodyweight portion of Lifting Heavy Things, but it's also sprinting, playing, hiking, climbing, jumping, and throwing. It's a panoply of Primal movements, whereas the SS and SL protocols revolve around getting the trainee physically strong and little else— perhaps to the detriment of other skills and strengths. PBF appeals to those who may be more interested in keeping up with the pre-teens at soccer practice than in squatting five hundred pounds.

## How does PBF compare to Body by Science/ Super slow stuff?

I'm a big fan of Doug McGuff's work. It gets cited frequently as a sort of refutation of the Primal, evolutionary-based fitness models, but I don't see it that way. What I see is two different protocols relying on very similar physical truths: lift hard and lift intensely just enough to get strong and fit. That's it. Body by Science tends to recommend slower lifts to failure using complex weight machines; I prefer more powerful movements, sometimes to failure, using bodyweight. The tie that binds the two, though, is intensity of effort and a de-emphasis on volume. BBS recommends once a week, while PBF recommends twice a week of Heavy Lifting. Efficiency of effort is the name of the game.

Where BBS and PBF diverge, I think, is on the definition of strength itself. What is strength? Is it muscular hypertrophy? BBS is based on maximizing structural adaptation of the musculature in the shortest, safest way possible. I'm about maximizing function—and not just of the muscles, but of the body as a whole. Training on expensive machines will get you strong; there's no question. But I believe that you can develop agility, speed, and coordination better with real-life movements in the PBF program—and have more fun while you're at it!

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
	Sprint	Move Slowly Play/Rest	Lift Heavy Things (or WOW)	Move Slowly/ Play/Rest	Move Slowly/ Play/Rest	Lift Heavy Things (or WOW)	Move Slowly/ Play/Rest
Date:							
Workout Name/ Description:							
Weight Used:							
Time:							
Reps:							
State of Health:							
Energy Level (1-10):							
Motivation Level (1-10):							
Degree of Difficulty (1-10):							