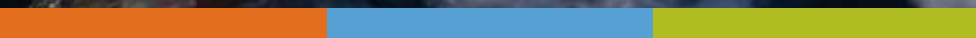


Eat well. Live well.

A Healthy Way of Life **nutrition manual**



Congratulations on making the commitment

to learn more about nutrition, supplementation, and their impact on your health. We designed this guide to offer you the latest practical information, and easy-to-use strategies, to help you in your journey toward a healthier and more satisfying lifestyle. We encourage you to learn even more through the many print and web resources available to you as a Life Time member, including the Eat Well. Live Well. companion journal designed for this guide.

We have an incredible group of fitness and nutrition professionals in our clubs who are there to help you – at any point in your health and weight loss journey. If you are reading this as a Life Time member and haven't stopped by to talk with one of them yet, don't miss the opportunity. Also, I'd like to direct you to www.lifetime-weightloss.com. This site offers an expansive collection of nutrition, metabolism, exercise and lifestyle information. You can also sign up for **Flourish**, our weekly e-newsletter, which can help you stay on top of the latest educational articles and success stories.

Finally, know that you're always welcome to contact me directly with questions. I'm happy to answer them myself or connect you with the best person to meet your needs. The journey toward a healthier way of life is a very personal one, but it doesn't have to be taken alone. Our members and staff are here to share the journey with you. The first step is yours to take. We can walk the next ones with you.

In health,

Anika Christ, RD, LD

Sr. Program Manager—Life Time Weight Loss

achrist@lifetimefitness.com





THE HEALTHY WAY OF LIFE COMPANY™

Written by:

Tom Nikkola,
*Former Sr. Director of
Nutrition & Weight Management*

Edited by:

Jennifer Zotalis

Reviewed by:

Cindi Lockhart, RD,
*Sr. Program Manager of
Health & Nutrition Coaching*

Anika Christ, RD,
*Sr. Program Manager of
Life Time Weight Loss*

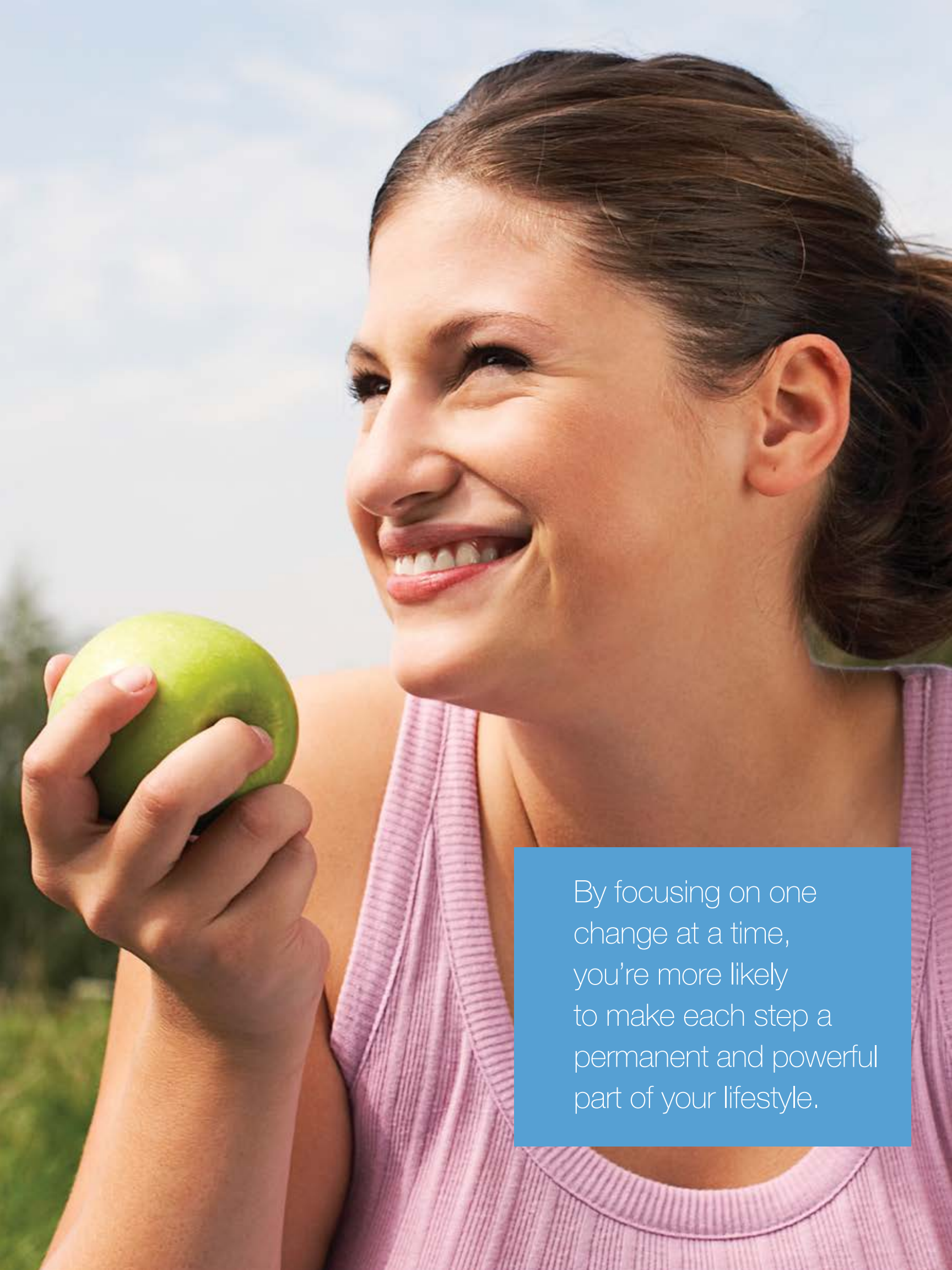
Paul Kriegler, RD,
Corporate Registered Dietician

Designed by:

3e, *The Life Time Agency*
Original version written in 2010.
Revised in 2013.

This manual is for consumer educational use only. Nothing contained in this manual should be considered, or used as a substitute for, medical advice, diagnosis or treatment. The information contained in this manual is here to educate consumers on nutrition and supplementation that may affect their daily lives. This manual does not constitute the practice of medical advice, diagnosis or treatment. Life Time Fitness advises users of this manual to always seek the advice of a physician or other qualified health care provider with any questions regarding personal health or medical conditions. Life Time Fitness recommends you consult a physician before beginning any new exercise, nutritional or supplementation program.

1	Choosing Health	3
2	A S.A.D. Story	6
3	Moderation: Key to Success or Sabotage?	13
4	Building a Better Nutrition Plan	16
5	Preparing for Success	23
6	Vegetables & Fruits: Good Nutrition from the Ground Up	28
7	Protein: Managing Hunger, Metabolism & Muscle Mass	35
8	Healthy Fats: Optimizing Flavor & Nourishment	40
9	Carbohydrates: Selecting the Best Nutritional Sources	49
10	Beyond Food & Supplements: Other Health & Lifestyle Factors	54
11	The 30-Day Healthy Way of Eating Challenge	59
12	Beyond the Challenge: Making Health a Lifelong Journey	62



By focusing on one change at a time, you're more likely to make each step a permanent and powerful part of your lifestyle.

Choosing Health

.....

You may have struggled with weight management for years — or even decades. Perhaps maintaining a certain number on the scale only recently became difficult. Maybe you've been able to manage your weight, but just don't have the energy or vitality you used to. In each case, you realize your current habits aren't serving them. You aren't living the life you ultimately want for yourself. Choosing health means being ready to embrace a greater sense of personal well-being. In making this commitment, you can begin to re-envision your life from a healthier vantage point.

If this sounds like you, you undoubtedly have questions and maybe concerns. What will the process entail? How will it — and should it — differ from other attempts you've made in the past? What new choices will you accept into your life? What will you need to let go of?

You may have overextended yourself at work. You've given too much time to television and other passive entertainment. You may have prioritized your family to the extent that you've sacrificed all investment in yourself. Alternatively, you may have prioritized health, but focused on ineffective strategies or misinformation.

Choosing health involves redirecting our attention to the food and lifestyle choices that fulfill us in more genuine

ways. It involves committing ourselves to a health model that supports both weight management and well-being throughout our lives.

Cultivating our overall health as we lose weight offers many benefits that might not seem apparent now. The reward is more than a certain number on the scale, body fat monitor or blood test. What does it feel like, for example, to live at an ideal weight for your body? What's possible when you can go through a day with emotional balance and consistent energy? When we invest in our personal health, we can bring our best selves to our goals, commitments and relationships. We get more out of life and have more to offer others.

Simple, but not easy — you've likely heard the phrase before. The path to genuine health isn't complicated, but it isn't effortless. The journey calls us to a new level of challenge and accountability: reflecting on our past dieting experiences, assessing our relationship to food, learning about healthy eating, and making better choices for ourselves. We will learn to release old habits and incorporate new routines into the busy rhythms of our lives. We will reevaluate what we understand about the science of nutrition and the principles of weight management.

In this guide you'll find all the basics for making the best nutritional choices to optimize your health and well-being. You'll also find personal reflection points that can help you create individual goals, as well as concrete action items you can use in implementing your plan. We suggest reading and applying a chapter a week. You may decide to approach each new chapter on Saturdays to allow yourself the weekend to shop and plan for the coming week with the chapter's suggestions in mind. The companion journal to this guide can offer you further reflection ideas and additional strategies for each theme.

By focusing on one change at a time, you're more likely to make each step a permanent and powerful part of your lifestyle. Above all, embrace the process as a richly personal endeavor. Let yourself enjoy the progress you'll experience at all stages of the journey. Notice the reduction of cravings. Appreciate the higher, more consistent energy levels. Savor better sleep.



a healthy way of life
journal

day | to | day

[illegible]

Choosing health is about embracing a model that supports both weight loss and well-being.

—

The process calls us to a new level of challenge and accountability that offers life-changing rewards.

—

We will release habits that don't serve our health and create new routines that do.

—

Read a chapter a week and commit to enacting its principles before moving on to the next section.

— What brings you to this journey at this point in your life? What new motivations, concerns and knowledge urge you to choose health now?

— How would you compare how you feel now to how you would like to feel?

- Keep a food journal for a week. Write down everything that you eat and drink as well as how much. Also, note how you feel throughout the day. Do you have certain times of day when you lose your energy and focus? How much do you rely on caffeine and sugar to help you get through a day?
-
- Work with a Life Time Nutrition or Weight Loss Coach to assess the nutritional quality of your current diet.

A S.A.D. Story

.....

The Standard American Diet is just as its name implies — sad, the way most Americans eat today. It often includes heavily processed foods. It's high in refined carbohydrates and added fats, while low in vegetables and fruits. It emphasizes meats that are processed in one way or another. With a changing food landscape, hectic schedules and little patience for meal preparation, our diets have become a far cry from what our ancestors or even great-grandparents ate. The results are as clear as they are discouraging. Go to the mall, airport or another crowded area, and you'll get a good picture of the condition of the average American. Based on recent trends, it's expected that by 2030, half of our population will be obese!¹ Clearly, something we're doing just isn't working.

As you step back and consider the foods we perceive as healthy today, you have to wonder how we've survived for hundreds of thousands of years on foods deemed unhealthy. Hundreds of years ago, did people eat only the white meat of the chicken? Did they choose the leanest parts of red meat and discard the rest? If they had milk, did they pasteurize, homogenize and skim it? Did they limit the amount of nuts and seeds they ate to avoid consuming too much fat? It's odd to think that highly processed, low-fat cookies are somehow considered a healthy choice, but naturally raised beef is suspect.

The next time you walk through your favorite supermarket, look at how many foods are available today that wouldn't have been just one hundred years ago. You'll quickly see that we've dramatically changed the sources of nutrients we put in our bodies every day. Those changes have led to more than an excess of calories. We've changed the basic nutritional composition of our diets as a whole, and simultaneously exposed ourselves to a myriad of chemical additives. The foods we eat — and the ways they are processed — can change the way our hormones function, which affects our cravings, sleep patterns, ability to handle stress and more.

Correspondingly, the common approach to weight management seems to be similarly inadequate. Look through most of the popular fitness magazines, websites and other weight loss programs. What are the most common recommendations for weight loss? Eat less. Eat less fat especially. Move more. Many supposed "experts" make those recommendations on a daily basis. Yet, is it always that simple? If so, what about those who say they do, in fact, eat less and exercise more but don't lose weight? What about those who struggle and make no progress with the low-fat diet they were told would be the answer to all their ailments? Why do rates of lifestyle diseases like diabetes and heart disease keep rising despite decades of public service messaging and the prevalence of low-fat products and calorie-counting diet



The types of food we eat
can be as important as,
if not more important than,
the calories they contain.

programs? It should be easier if eating a certain number of calories is all that is needed to manage weight. It should be easier if it's really just a matter of willpower.

Is it possible that the approach to weight management that has been so popular for the past half-century is counterproductive? There's more to genuine health and weight management than just calories in, calories out or eliminating fat, an essential macronutrient. The quality of foods we eat can be as important as, if not more important than, the calories they contain. We need to understand the body's metabolic system and its nutritional needs. Experts emphasize the importance of eating whole foods and even study traditional eating patterns across the globe for achieving optimum health and successful weight management. Additionally, we need to recognize that other factors in our lifestyles play important roles in our ability to manage weight.

The following story is an example of how our food and lifestyle choices can impact our well-being in addition to our weight loss efforts in a given day. Perhaps you will identify with some of the choices or experiences illustrated or recognize them in someone you know.

A Typical Day of S.A.D. Eating

Breakfast

John Rush wakes up at 6:30 a.m. and has to leave for work by 7:15 to avoid being late. He hits the snooze button four times because he stayed up too late watching TV. After a quick shower, breakfast has to be fast. He's focused on eating healthier, so he reaches for the whole grain instead of the frosted variety cereal. He pours about half a cup of cereal in his bowl with half a cup of skim milk. He also pours himself a 12-ounce glass of orange juice. He figures it's a healthy breakfast. It totals about 452 calories — not too bad. The interesting part is where those calories come from. That small breakfast contains 102 grams of carbohydrates, 47 of which come from sugar. It contains only 11 grams of protein and 1 gram of fat.

A couple hours after breakfast, John is starving. His blood sugar has likely crashed and he's desperately looking for something to give him an energy boost and satisfy his cravings. He remembers he has some 100-calorie snack packs in his desk drawer and decides that will be perfect with the large nonfat vanilla latte he picked up at the coffee shop on

his way to work. This 274-calorie snack contains 53 grams of carbohydrates, 39 grams of sugar, 13 grams of protein and 3 grams of fat.

Afternoon

For lunch, John mostly sticks with sandwiches, which seem pretty healthy to him. On this particular day, he's going for a 12-inch turkey sandwich and a bag of baked chips. He's been cutting back on soda so he chooses to drink water instead. The totals for this meal are 690 calories, 120 grams of carbohydrate, 14 grams of sugar, 38 grams of protein and 8.5 grams of fat.

After three low-fat, high-carb meals in a row, John's blood sugar crashes in the middle of the afternoon. There's nothing around to eat, so he has a few cups of coffee to get through the afternoon. He drinks them black to avoid extra calories.

Evening

When he leaves the office, John can't wait to eat. He calls his wife on the way home and talks her into going out for dinner. They go to their local neighborhood restaurant where he orders the Fiesta Lime Chicken, which sounds healthy enough. If he had asked for the nutrition information, he would have seen that it has 1,108 calories, 58 grams of fat, 91 grams of carbohydrates, 3 grams of sugar and 58 grams of protein. It is about the same as the Oriental Chicken Salad his wife ate, which has 1,240 total calories.

Is it possible that the approach to weight management that has been so popular for the past half-century is counter-productive?

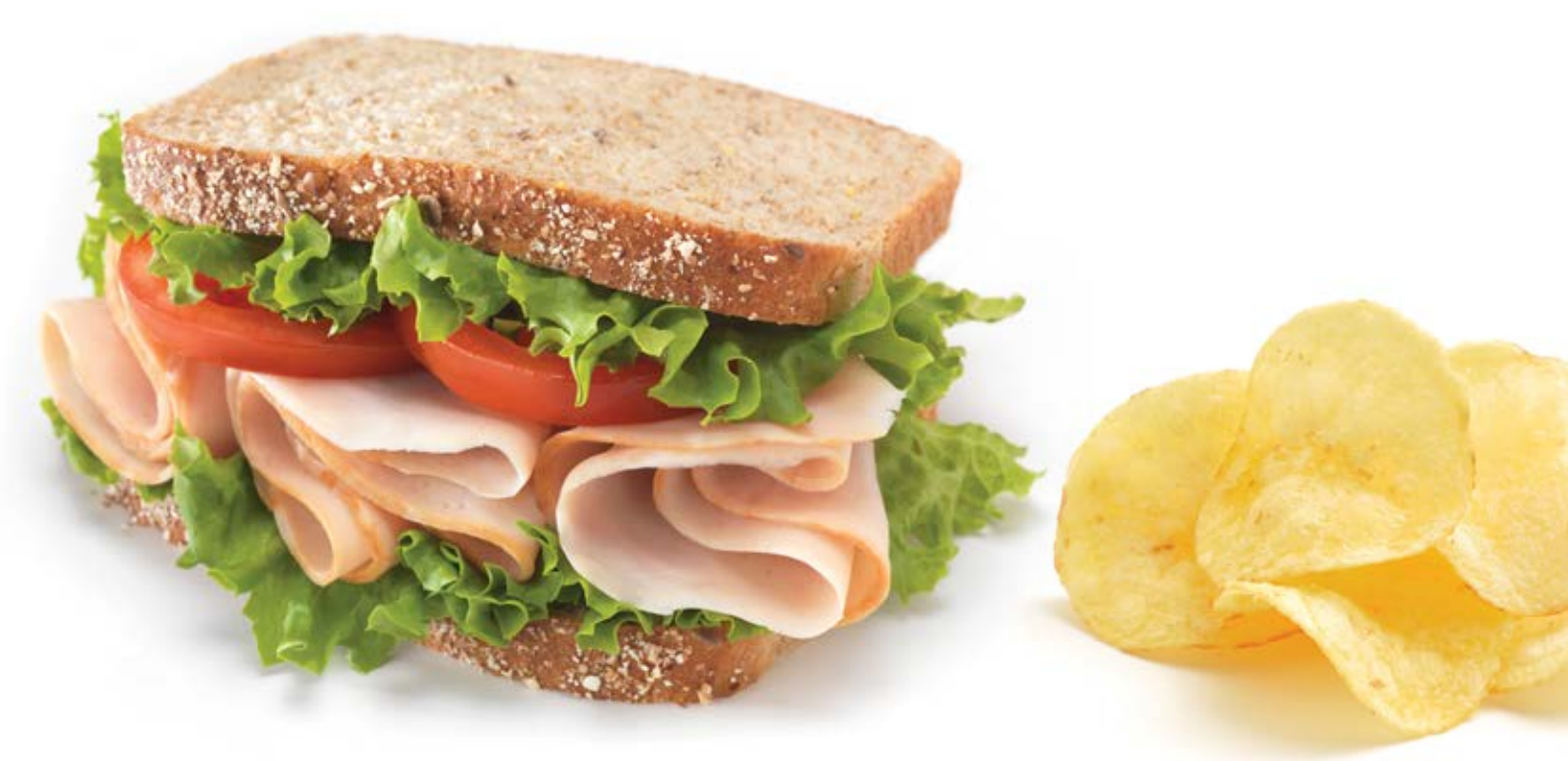
In total, John ate 2,524 calories, 366 grams of carbohydrates (103 of which came from sugar), 120 grams of protein and 71 grams of fat. From a percentage standpoint, approximately 57 percent of calories came from carbohydrates, 18 percent from protein and 25 percent from fat. Little does he know that the sluggish way he feels, his high levels of triglycerides, marginally high levels of fasting glucose and insulin, and the love handles that hang over his pants are in large part from eating just like this. If you were to look at his vitamin and mineral levels, you'd find he's deficient due to the lack of vegetables and fruits and the high carbohydrate levels in his diet, as well as the fact that

he doesn't take a high-quality multivitamin. His fluctuating insulin levels are a big part of his erratic energy levels, and they also contribute to the fat he can't seem to lose around his midsection.

Does John's diet sound familiar? Does it in some ways illustrate your past or perhaps current eating patterns? However you relate to the story, it's clear John's example isn't the model for a healthy way of life. Now let's take a look at what is.

John's Day

Breakfast:	Whole grain cereal with ½ cup skim milk, glass of orange juice 452 calories 102 grams carbohydrate 47 grams sugar 11 grams protein 1 gram fat
Snack:	Nonfat vanilla latte & 100-calorie snack pack 274 calories 53 grams carbohydrate 39 grams sugar 13 grams protein 3 grams fat
Lunch:	12-inch turkey sandwich & baked chips 690 calories 120 grams carbohydrate 14 grams sugar 38 grams protein 8.5 grams fat
Dinner:	Fiesta Lime Chicken 1,108 calories 91 grams carbohydrate 3 grams sugar 58 grams protein 58 grams fat



A Typical Day of Healthy Way of Life Eating

Morning

Let's take a walk through a day when you make healthy eating a way of life. You wake up 15 minutes before your alarm, which is fine because you've been getting between seven and eight hours of sleep every night. You make coffee, which is more convenient and less expensive than stopping at the coffee shop — saving you about \$3 and avoiding the temptation of those high-sugar coffee drinks. You crack a few eggs, pull out your chopped bell peppers and tomatoes, shave off a little goat cheese and scramble it all in a heated pan with a teaspoon of coconut oil. A few minutes later, you toss it on a plate, grab a cup of coffee and sit down to breakfast. After you're done eating, you take your multivitamins, fish oil and other supplements with a glass of water and finish getting ready to leave.

The morning flies by and you find yourself getting hungry mid-morning, so you take a handful of walnuts out of your cooler. That's plenty to hold you over until lunchtime. You packed your lunch the day before: grilled chicken thighs, chopped and thrown over a large salad. All you have to do is pull out your vinegar-and-oil dressing, drizzle it over your salad and mix it up. It's a pretty filling meal, but you decide to have a small apple, too.

Afternoon

Mid-afternoon, while everyone is getting sleepy and becoming less productive, you're as focused as ever. You prepare a quick meal replacement shake, grabbing your shaker cup filled with one serving of meal replacement from your cooler, adding water and mixing it up. This provides you with high-quality protein to keep your hunger at bay and helps power the workout you're planning to do after work. It also gives you a moderate amount of carbohydrates — not enough to cause drowsiness but enough to help keep your blood sugar levels steady — as well as some healthy fats and other nutrients.

Evening

You're feeling good, so instead of rushing home to eat, you stop by Life Time to get in a workout. When you get home, you're more energized than usual and take some time to prepare a good dinner. Tonight, it's kabobs on the grill. Dessert is a cup of berries. You're satisfied for the rest of the night and make it a point to get to bed in time to enjoy eight hours of sleep. You'd be surprised to find out you actually ate fewer calories than the other example, because you feel more satisfied. You also just feel better.

When was the last time your day mirrored the second example? When did you last have the energy to make it through the day without the typical sluggishness that can overtake you when your food and other lifestyle choices work against your health — rather than for it? What would extra energy and focus make possible in your day? Our food choices can make it happen. A healthy way of life prioritizes nourishment, energy, and satiation to achieve not only effective weight management but real vitality. What would a similar inventory of your day look like today? What do you want tomorrow to be?

With a changing food landscape, hectic schedules and little patience for meal preparation, our diets have become a far cry from what our ancestors or even great-grandparents ate.

We were genetically designed to eat nutrient dense, whole foods like vegetables, fruits, proteins, and nuts — not processed carbohydrates. ■



Work with a Life Time dietitian to assess the nutritional quality of your current diet.

..... The combination of salt, fat and sugar found in processed foods triggers our brain to crave them, much the same way one becomes addicted to drugs or alcohol.



Moderation

Key to Success or Sabotage?

.....

Today we have more knowledge than ever about the workings of nutrition and metabolism. Simultaneously, however, more consumer food choices undermine our overall health. Marketing messages make many of today's foods seem healthier than they are. We often hear that any food or drink can be "part of a well-balanced diet." It's all about moderation, ad campaigns tell us. Although this message may relieve our guilt in enjoying a particular product, the claim ultimately misleads us.

No food or beverage that is simply a vehicle for empty calories (as well as sugar and unhealthy fats) will promote a healthy diet. We may choose to eat one of these nutritionally empty items, but we need to be honest with ourselves: the choice doesn't support our health or weight loss goals. In fact, for many people it can sabotage their efforts from the outset. Sometimes when we eat, say, a piece of pie at our family's holiday dinner, it can be a consciously made exception for the special occasion. Other times, however, that choice can lead us down a slippery slope. We may, for example, be tempted to justify other indulgences throughout the entire holiday season and gradually erode any progress we've made. More significantly, however, we perpetuate the physically addictive hold these foods can have on our bodies.

The combination of salt, fat and sugar found in processed foods triggers our brain to crave them, much the same way one becomes addicted to drugs or alcohol. Processed food trips the pleasure circuits in our brain, and the association sticks with us. Especially alarming studies demonstrate that the more often we eat these foods, the larger amount we need to eat to be satisfied.² So, when people say they can't stop eating something, there's physiological truth to the statement. For many people, it can be next to impossible to exercise moderation with these foods. These foods are literally designed to keep us hooked.

David Kessler's fascinating book *The End of Overeating* provides an interesting look behind the curtain of food design. When you understand the incredible amount of thought and research that goes into creating your favorite flavor of potato chip, cookie, snack food, or meal at your favorite restaurant, you begin to see how futile the idea of eating these foods in moderation may be.

It's rare, as Kessler explains, to have strong cravings for whole foods such as plain vegetables, fruits, meats or dairy products.³ To make you crave foods, it takes the right formula of added salt, fat and sugar. These "hyperpalatable" foods are designed to go down easily, with just a few chews, so

it feels like you haven't eaten as much. John Haywood, a restaurant consultant, explains that "processing creates a sort of 'adult baby food.'" The ingredients are designed to provide pleasure and make you want to come back for more. It would be very difficult to eat 4,000 calories of lean meat, vegetables and fruits. However, it's easy to consume that many calories without realizing it when the food is processed for you.

What's more, telling yourself you'll just have a few chips or a spoonful of ice cream can backfire. Having a small amount of an addictive food causes something called priming, much like the response when an alcoholic has just one taste of alcohol. As Kessler explains: "When we're hungry, almost any food can have a priming effect... But in the absence of hunger, only highly palatable foods are likely to spark further eating." Scientists are still pinpointing the specific mechanisms at work, but some people appear to be more vulnerable to food addiction. It's likely a matter of our brain's biochemistry. Addiction to foods such as chips, crackers, sweets and coffee drinks has a lot to do with how they make us feel. Some of us experience a bigger reward, and the more we learn to rely on certain foods to create those feelings, the stronger the addiction becomes. The promise of moderation can be a trap for perpetuating addiction — and our ongoing struggle with healthy eating.

Know yourself & own your choices

At this point you're probably wondering, "Is this the end of pizza, cake, cookies and other indulgence foods?" While navigating moderation can always be risky, each of us must come up with our own personal approach to this question. Knowing what foods tend to trip us up is key. Likewise, understanding the circumstances (e.g., emotional stress, social eating) that are likely to push us past moderation into overindulgence is critical. When you do an honest assessment of your eating patterns, you will likely see where moderation can work for you and where it can't. Maybe you're able to have a piece of cake at your cousin's wedding and end the night no worse for the wear. However, hitting the vending machine after a contentious meeting at work can send you on a weeklong downward spiral.

Some of us, in fact, benefit when we choose to take a long-term break from all or nearly all indulgence food. It gives our bodies time to reset and our sense of taste the chance to resensitize itself to the pleasures of whole foods. With this extended break, physical cravings wane and

emotional associations dissipate. Sometimes, we simply need to give ourselves the chance to relearn that we can be fully satisfied with real food.

It's also key to seek out support during stressful or otherwise vulnerable times (e.g., holiday season). Acknowledging that you're prone to a cascade of emotional and physical cravings after eating certain foods shouldn't be seen as a sign of weakness. On the contrary, it reveals powerful self-knowledge and commitment.

That said, there are the holidays, get-togethers, date nights and other special occasions when we may choose to eat something we normally wouldn't in the interest of our healthy eating plan. The key is to fully own each and every food choice. There's no such thing as "cheating" when it comes to a way of life. Each decision directs our journey. When we make a conscious choice, we can put it in a big-picture perspective that encourages us to see and own all of our decisions. Think of it this way: You may eat about four meals a day. That's 28 meals per week. If a couple of those meals fall outside your ideal list of choices each week, it's not a huge deal in the greater scheme of things. A healthy diet is much like investing. The more often you can deposit money and avoid withdrawals, the faster you'll build a healthy savings. The more often you eat what you should and avoid what you shouldn't, the faster you'll attain optimal health. ■



notes

section summary

Moderation when it comes to processed foods is more complicated than it sounds.

The message that any food or beverage can be “part of a balanced diet” can mislead us and sabotage our weight loss efforts.

Food addictions have physiological as well as emotional roots.

It's important to recognize that there may be foods we should simply avoid.

reflection
point

What indulgence foods are the hardest for you to eat in moderation? What typically happens when you eat these foods? How much do you eat? How do you feel? Where and when do these foods tempt you the most?

action items

Define your own sense of moderation.
Put that in the perspective of a 28-week
meal plan and a daily calorie goal.

Create your own “smart packs” for midday snacks with healthier, whole foods like nuts, hardboiled eggs, fruits and vegetables.

Formulate a strategy for events that you know will challenge you with certain foods. If you'll be attending parties, weddings, or holiday dinners, make a plan of what you will eat and what you won't.

Bring a friend or family member along when grocery shopping for motivation and accountability.

Building a Better Nutrition Plan

.....


Building a better nutrition plan doesn't center on calorie intake or serving portions. When we choose health, we resolve to improve the food that fuels our lives. As we've seen, the Standard American Diet with its high-carbohydrate, highly processed choices combines with our sedentary lifestyles to set us up for weight gain and poor health. The rates of cancer, diabetes, heart disease, autoimmune diseases and a variety of other illnesses are growing at alarming rates. We can do better.

Food has the power to influence how we feel on a given day, how likely we are to succumb to the random virus going around our community, and even how at risk we are for many serious diseases and medical conditions. Food impacts us on critical cellular levels. It influences the function of our genes themselves, which in turn determines how we age and whether certain risk factors for disease take root in our bodies.

The good news is that we can dramatically change our health, energy levels and physical conditioning simply by adopting a better nutrition plan. The Healthy Way of Eating can maintain health and manage weight throughout our lifetimes.

It's a sustainable, flexible approach to eating that does away with the need for diets or other short-term weight loss programs. The Healthy Way of Eating is based on real food, high-quality dietary supplements and nutritional balance. The plan promotes both weight management and well-being by building a nutrient-rich diet that leaves us feeling satisfied and consistently energized throughout the day. The Healthy Way of Eating encourages us to find pleasure in food while enhancing the nourishment we gain from each meal.





We can dramatically change our health, energy levels and physical conditioning simply by adopting a better nutrition plan.

Here are some highlights:

- Eat plenty of non-starchy vegetables throughout the day and two or three servings of fruits.
- Eat organic, naturally raised/grown animal protein whenever possible in place of conventionally raised, or use a protein supplement when needed.
- Include healthy fats for satiation, energy and nourishment.
- Adjust the amount of starchy vegetables and grains based on your activity level and current metabolic health.
- Limit unhealthy meals as much as possible. If you do have one, don't beat yourself up about it. Just do better next time.
- Take high-quality multivitamins and fish oil as well as additional supplements to support any missing links in your metabolism.

Live longer, not fuller. Oxford University research of almost one million people has shown that moderate obesity reduces life expectancy by about three years. Severe obesity can shorten a person's life by ten years, equal to the effects of lifelong smoking.



A More Effective Weight Management Model

The Healthy Way of Eating is an effective and sustainable plan for weight loss. Unlike many popular diet programs, it doesn't focus solely on a calories in, calories out model. Likewise, it isn't based on a low-fat philosophy. Instead, the Healthy Way of Eating emphasizes a more effective, sensible mix of proven strategies that work with your body as well as your lifestyle:

- Shape your food choices to optimize fat burning through metabolic efficiency and hormonal balance.
- Curb your overall calorie intake by promoting whole-food meals and snacks over less nourishing, calorie-heavy, nutrient-sparse food products.
- Fend off cravings by encouraging a genuinely satisfying combination of foods, including healthy fats.

Within this integrated metabolic and nutritional model, it's a helpful start to know how many calories you consume and burn in a day. A close estimate of how many calories you burn is measured through a resting metabolic rate assessment (RMR), called a Resting Metabolic Assessment at Life Time. The results can be eye-opening. Some people have found they're meeting their daily calorie allotment by the time lunch is over! Even though resting metabolic rate is a dynamic number, seeing the actual number on a given day can be a powerful motivator to help you start changing your habits.

Calorie equations, however, only illustrate part of the weight management picture. Depending on the amount someone has to lose, they may be able to follow a given calorie level for weeks or months with continued progress. But at some point, results begin to plateau as the resting metabolic rate changes. The decrease in resting metabolic rate can be, in part, due to a loss in lean body mass through dieting but is also a result of adaptations that take place to adjust to lower calorie levels. Long-term dieting can have lingering effects on the body's metabolism, which can explain why people who have dieted for an extended period of time find it difficult to increase their daily calories without experiencing weight gain.⁶

Another point to consider around "calories in, calories out" is that a calorie is not a calorie. Although foods have various levels of calories in them, the calorie amounts that actually become available to the body for energy when you eat them vary based on the type of nutrient — carbohydrate, fat or protein.

THE HEALTHY WAY OF EATING

INCLUDE IN DIET EVERY DAY

WATER HIGH-QUALITY MULTIVITAMINS OMEGA-3 FISH OIL
FILL HALF YOUR PLATE WITH A RAINBOW OF COLORS

NON-STARCHY VEGETABLES

EAT PROTEIN WITH EACH MEAL

DAIRY WHEY FISH MEAT EGGS & POULTRY

BERRIES
ARE BEST

ADD GOOD FATS NUTS SEEDS HEALTHY OILS LIMIT YOUR STARCHY VEGETABLES LEGUMES GRAINS YAMS & POTATOES

LIFETIME
THE HEALTHY WAY OF LIFE COMPANY™

The Thermic Effect of Food (TEF) is the percentage of a food's calories burned in the process of digestion. Our bodies burn a certain amount of calories just breaking down our foods and rearranging them in a way we can use for growth, repair and energy. The TEF for protein is 20 to 35 percent, meaning that up to 35 percent of the calorie value of protein will be burned just to digest that protein. Compare that with the TEF of carbohydrate at 5 to 15 percent and with fat being the same or less than carbohydrate.

Increasing the amount of protein in the diet, while keeping the total calorie value the same, means fewer calories will be available for energy or weight gain. That's part of the reason why diets higher in protein are more effective for weight management.⁷

The Healthy Way of Eating — For Life

The Healthy Way of Eating not only optimizes the thermic balance of our diet, but also the nutritional impact of the calories we consume. Giving our bodies the nutrients they need is crucial for metabolic efficiency as well as overall health. When we deprive ourselves of essential nourishment to reach a specific calorie goal, we deplete our body's ability to function on the cellular level. The eventual result is a hormonal chain of events that actually works against our weight loss efforts. When we align our diets with our body's innate nutritional expectations, however, we can maximize fat loss as well as personal energy to support our fitness endeavors and other lifestyle commitments.

Within the Healthy Way of Eating, you'll find a balance of foods that will keep you nourished and full throughout the day. Nutrient- and fiber-rich vegetables are a priority in the Healthy Way of Eating. Don't worry, though. You don't have to eat raw broccoli and carrots all day. When you look at the variety of vegetables available, you'll realize you actually have access to a tremendous number of different flavors that can be incorporated into your diet in creative ways. Because you won't be eating large amounts of processed foods, you'll also be free to use healthy fats to season your vegetables.

High-quality protein helps to preserve muscle mass, control hunger, and maintain blood glucose levels. Healthy fats will also become a regular part of your diet and provide a variety of nutritional benefits. Starchy carbohydrates, grains and other carbohydrate sources can be part of the plan if you're active enough. Finally, you can still eat foods that are not part of the plan on occasion — that is, if you still want to.

The Healthy Way of Eating is based on real food, high-quality dietary supplements and nutritional balance.

On the previous page, you saw an infographic of the Healthy Way of Eating. Use it as a visual guide for the best foods to keep in your nutrition plan. Following it can help you maintain a healthy weight, increase your energy and feel great every day. Some days you'll eat more healthy foods, and some days you may come up short. Just like saving and investing money, the results come from long-term commitment and the right choices over weeks, months and years. Once you've established a good foundation for your nutrition plan, you'll be challenged to stick with it for 30 days. The 30-Day Challenge presented in Chapter 11 of this guide is a great way to practice all the new information you've learned. Chances are, if you stick with the plan for 30 days, you won't want to go back to the old way of eating again.

Of course, the end of the 30-Day Challenge isn't the end of establishing a lifestyle supported by optimal nutrition. In fact, the better you begin feeling and the more control you gain over the food choices you make, the more you may want to learn. ■

Since fat has nine calories per gram, and carbohydrates and protein each have four calories per gram, reducing fat is sometimes seen as the answer to reducing calories. While it's true that fat has more calories by weight than carbohydrates or protein, we rarely eat a meal based on its weight. It's important to know that cutting fat calories has not been shown to help decrease overall calorie intake.



Nutritional knowledge is essential for the path ahead. Also valuable, however, will be some planning on your part.

Preparing for Success

.....

Before we explore the Healthy Way of Eating in more detail, it's helpful to consider some strategic preparation. Nutritional knowledge is essential for the path ahead. Also valuable, however, will be some planning on your part. You'll undoubtedly identify some of the following ideas as more relevant than others for your situation. The Healthy Way of Eating offers a clear but broad guide for you to fully customize in accordance with your needs. That includes everything from recipes to reflection points. Implement the full program of nutritional guidance, but choose the features that will make the most impact on your experience.

The following preparation strategies run the gamut from logistical to personal. It's one thing to absorb the concepts of a healthy eating program, but another to apply them in your daily life. So often, our best intentions get lost in the translation from learning to living. We can, however, enhance our opportunities for success by exercising some preemptive thought and action. This can include cultivating a positive attitude, anticipating common stumbling blocks, and assembling supportive relationships and resources.

Foster a Positive Attitude

Whatever your past health or weight loss experiences have been like, it's critical to keep focused on the present throughout your journey. If you've tried unsuccessfully to manage your weight or change your health before, you may need to release any sense of ambivalence or even failure from past attempts. Likewise, you should examine any lingering emotional associations you have with food and be mindful of how moods can influence your cravings. Acknowledge each positive choice you make along the way.

Likewise, continue to reinforce that positivity by tracking your successes along with other pertinent feedback. Record more than just the numbers on the scale. Make note of the added energy you had on a given day, the lighter mood, the longer distance you were motivated to go on your evening walk. Every day will offer something you can learn from, if not celebrate. Be sure to appreciate these things.

Preempt Potential Stumbling Blocks

Identify factors in your schedule, environment or lifestyle that could trip you up. If you worry about having time to prepare more of your own meals, use the weekend or a certain night of the week to prepare a stash of cut vegetables, individually bagged snacks, and healthy meals that will last you a few days. If your home or work environment will put unhealthy food choices in your daily line of sight, use logistical strategies to stay on track. Keep your food in separate cabinets and areas of the refrigerator. (If you live alone or have family members who are committed to the same goals, take the opportunity to clear out all unnecessary foods in every part of the kitchen.) Avoid temptations at work by bringing plenty of healthy meals and snacks. If you feel you'll be challenged during social occasions like a weekly lunch with friends, choose a different restaurant or meet for coffee instead. Eating something before social events and having a specific plan in mind for what and how much you'll eat while you're there will help you rein in the impulse to overdo.

In addition to staving off moments of overindulgence, work on infusing your life with opportunities for non-dietary indulgences. Even if we understand that choosing health isn't a path of deprivation, we still benefit from a little extravagance now and then. How many of our past indulgences have centered around food (e.g., desserts, eating out, etc.)? We can cultivate pleasure in other areas of our lives. Figure out what experiences bring you joy, and give yourself the opportunity to pursue them. If you're stressed, instead of indulging in a dessert, give yourself the chance to go for a bike ride, take a nap, enjoy a massage or just curl up with a favorite movie. Spend more time with a close friend, a relaxation routine or a favorite hobby. Get outdoors more often. Plan a trip.

By giving ourselves the chance to foster real balance, we sometimes find that we've been mistaking what we need for what we wanted in the moment. Focus on creating a life that's fuller and more satisfying.

Assemble Supportive Relationships & Resources

It's an unavoidable fact that not everyone in your life will be focused on eating an exemplary diet. Some will offer their support, and others won't. A misguided few may even try to undermine your intentions for reasons they believe are justified or even helpful. It's critical, however, that you feel supported in your journey.

Think about the people in your circle of friends and family who will be there to encourage you. If they're the ones who also share your household, that's ideal. Beyond your existing social group, however, with whom can you connect? While a family member's or close friend's encouragement is especially meaningful, it's also helpful to feel the support of others who you may not know as well but who are personally making the journey themselves. Sometimes they're in a position to better understand the toll of those challenging days or the excitement of small successes along the way. These can be mutually supportive relationships; you can feel good encouraging them and find inspiration in their stories just as they take interest in yours. A big part of the successes people achieve with Life Time Weight Loss is related to the group support programs we offer. Additionally, look to personal trainers, Weight Loss coaches or others who can serve as mentors throughout your journey.

In addition to surrounding ourselves with supportive people, it's important to access resources that offer motivation, practical tips, recipes and nutritional information. This guide and its companion journal are a great place to begin. Explore other Life Time resources such as the Life Time Weight Loss blog (www.lifetimeweightloss.com), myPlan, which is a members-only tool, and various books or other websites that appeal to you.

Also, be sure to make dietary choices that fit both your taste and practical needs with enough variety to cover meals and snacks for a few weeks. You'll be able to streamline your shopping and food preparation if you have menus established ahead of time.





Spend more time
with a close friend,
a relaxation routine,
or a favorite hobby.

Observe Your Starting Point

Finally, take a thoughtful approach to the beginning of your Healthy Way of Eating journey. If you're like many people, you can't wait to feel more energy, fit into smaller pants, make healthy food choices, and wake up eager for a new day. But before you start making changes, mark where you're at today.

Journals and photos are great ways to do this. By recording your starting point through your thoughts and pictures, you'll be able to look back and see the progress you've made. Just like an athletic event, the excitement and personal growth of a life-changing endeavor don't always come from crossing the finish line, but from the process it took to get you there.

Record the thoughts you're bringing to this commitment. Include personal reflection and goals. Additionally, create a log of what you eat for one week. Don't think of this as your last week of freedom and go overboard. Eat the same way you have been and simply write it down. Don't worry about calories, protein, carbohydrates or fat right now. Just record EVERYTHING — all of the foods, snacks and drinks you have — including the handful of candy that's easy to overlook. Your companion journal is a great place to track everything. This will be another great learning experience, and one more thing to look back on several months down the road.

Objective measures throughout your journey are important as well. At a minimum, we encourage people to establish their Metabolic ProfileSM, which is based on basic lab testing, an Active Metabolic Assessment and a symptom-based questionnaire. Gathering this information in the beginning of your program allows you to see some basic issues to address with your metabolism, understand how you should exercise to burn fat best, and something to look back on. You may be surprised in the future by how often you've settled for feeling lousy until now.

As for photos, consider two types. First, get some good pictures of your kitchen — inside your refrigerator, cupboards and pantry — before making any changes. This will give you a good idea of the foods you ate when you began your journey. They will likely be a stark contrast to the look of your refrigerator and cupboards in the future. The other set of photos you'll want in the future are of what you look like now. You may feel uncomfortable about this, but once you've transformed your body, you'll be glad you have the pictures to look back on.

Finally, take your time. You may be tempted to skip these steps and just get started. Please resist the temptation. Taking photos, recording thoughts and tracking your foods now will prove to be an invaluable experience in the future, especially during times when your motivation starts to wane. ■



notes

section summary

Taking time now to reflect on and record your starting point will help you stay motivated in the future.

Take photos of the inside of your refrigerator, cupboards and pantry before you change the way you shop for groceries.

Take photos of yourself that you can look back on later to see how far you've come in your weight loss journey.

Record what you're eating and how you feel this week, before you begin making changes. This will also be useful to look back on in the future.

reflection
point

What strategies, resources and supports do you think will be most helpful to you in this journey?

action items

Make a list of non-food indulgences you can infuse into your days or weekends. Consider what can fill you emotionally in healthier ways when you're feeling stressed.

Make a vision board, personal journal, Pinterest board, or other creative record in which you can collect photos and ideas that represent the healthy life for which you're striving.

Surround yourself with motivating material. Pick up an inspiring book to read. Put a favorite health-related quote on your refrigerator or in your office.

Vegetables & Fruits

Good Nutrition From the Ground Up

.....

One of the most significant ways to improve nutrition and decrease empty calories in your meals is to include more vegetables and a small amount of fruit. Vegetables and fruits provide the body with essential vitamins, minerals and phytonutrients. In addition to maximizing the nutrient density of your meals, vegetables and fruit also offer fiber, which helps add bulk to the diet, slows the digestion of food, reduces hunger, and facilitates the elimination of toxins from the body.

Vegetables are generally classified as non-starchy or starchy. Since the average person already consumes a significant amount of carbohydrates every day, it's important to emphasize non-starchy vegetables, rather than starchy vegetables, like potatoes and corn. You'll find a recommended shopping list of non-starchy vegetables and fruits at the end of this section.

Past USDA recommendations for fruit and vegetable intake suggested 9 to 11 servings based on a 2,000-calorie diet. A current calculator offered by the Center for Disease Control creates a customized serving suggestion based on age, gender and activity level.⁸ The results offer a similar recommendation — with 9 half-cup servings of fruits and

vegetables a day suggested for a moderately active woman in her thirties. In spite of these calculations, the current USDA public health campaign promotes a more watered-down “5 a day” minimum for adult fruit and vegetables intake. The idea, presumably, is to make the goal more realistic. However, the majority of the population still falls short of this reduced goal! A recent study in the United Kingdom, where dietary habits closely resemble those in America, showed that only 11 percent of the population achieves the “5 a-day” recommendation, which means the “9-to-11 a day” recommendation likely goes unmet by almost the entire population.⁹

The fact is, research across the world continues to show that a higher intake of fruits and vegetables is needed to lower the risk for many health conditions like heart disease and stroke.¹⁰ Rather than accepting a mindset that fails the minimum, adopt a perspective on health that embraces the benefits of the optimum. That's why we strongly encourage individuals to shoot for a minimum goal of 9 to 11 servings of vegetables and fruit, not just the “5 a day” recommendation often promoted.

We can dramatically change our health, energy levels and physical conditioning simply by adopting a better nutrition plan.



Shopping Guide: Best Non-Starchy Vegetables

Red:	Orange/Yellow:	Green:	Purple:	White:
Beets	Butternut Squash	Artichokes	Eggplant	Cauliflower
Red Cabbage	Carrots	Asparagus		Garlic
Red Peppers	Persimmons	Avocados		Ginger
Radishes	Pumpkin	Green Beans		Jicama
Tomatoes	Rutabagas	Broccoli		Leeks
	Yellow Summer Squash	Brussels Sprouts		Mushrooms
	Winter Squash	Green Cabbage		Onions
	Yellow Peppers	Celery*		Parsnips
	Tomatoes	Chives		Turnips
		Collard*		
		Cucumbers		
		Endive		
		Kale		
		Lettuce*		
		Green Onions		
		Peas		
		Green Peppers*		
		Spinach*		
		Swiss Chard		
		Zucchini		

NON-STARCHY
VEGETABLES
6^{to}8
SERVINGS PER DAY
FRUITS
2^{to}3
SERVINGS PER DAY

Shopping Guide: Fruits

Red:	Orange/Yellow:	Green:	Purple:	White:
Red Apples	Yellow Apples	Green Apples	Blackberries	Bananas
Cherries	Apricots	Green Grapes	Blueberries	
Cranberries	Cantaloupe	Honeydew Melon	Figs	
Pink Grapefruit	Grapefruit	Kiwi	Juneberries	
Red Grapes	Lemons	Limes	Plums	
Pomegranates	Mangoes		Prunes	
Raspberries	Nectarines		Purple Grapes	
Rhubarb	Oranges		Raisins	
Strawberries	Papayas			
Watermelon	Peaches			
	Pears			
	Pineapple			
	Tangerines			
	Yellow Watermelon			

*These foods should always be purchased as organic, as they have been found to contain the highest amounts of pesticides and herbicides

To keep dietary changes less complicated, it's easier to focus on increasing non-starchy vegetable intake along with a small amount of fruit while leaving the rest of the diet the same. You'll likely find you have less room for the extra carbohydrate foods you used to eat as you begin eating more vegetables. Eventually, vegetables and fruits will begin displacing other high-carbohydrate foods in your diet. So, focus on adding more non-starchy vegetables to your diet rather than removing other foods at this point.

Fruits and Vegetables by Color

As you can see, the daily recommendation for fruit intake is much less than that of vegetables. Fruits tend to be higher in sugar and, though they have vitamins, minerals and fiber, shouldn't play as big a role in your diet as vegetables.¹² When you do eat fruits, lower sugar options like berries are ideal. In fact, a recent study from Finland showed that daily consumption of a variety of berries significantly reduced the markers of metabolic syndrome.¹³ If your goal is weight loss, try to consume two servings or less of fruits per day.

Organic or Non-Organic?

Many people ask, "Is organic necessary?" Eating more vegetables and fruits is always a healthier choice to make — organic or not. Once vegetable and fruit consumption becomes part of your regular diet, there are certainly benefits to buying organically grown produce. Pesticides and herbicides may contribute to many health problems, including obesity itself. By choosing organic, you are avoiding these toxins in your diet. The Environmental Working Group, a health-oriented consumer watchdog organization, has identified 12 vegetables and fruits that tend to be highest in pesticides and should be purchased as organic whenever possible. They are known as the "Dirty Dozen."¹⁴

The Dirty Dozen

Apples	Peaches
Bell Peppers	Potatoes
Celery	Raspberries
Cherries	Spinach
Grapes (imported from Chile)	Strawberries
Kale	

A Rainbow of Colors and Nutrients

Vegetables and fruits come in a variety of colors. Each color group is loaded with essential vitamins and minerals, and often contains additional phytonutrients that provide additional health benefits.¹¹

Red Group

Produce in the red group contains phytonutrients called lycopene and anthocyanins. Lycopene intake has been associated with decreased risks of cancer, especially prostate cancer. Anthocyanins are powerful antioxidants associated with heart health.

Orange/Yellow Group

The orange/yellow group contains carotenoids and beta-cryptothanxin. High amounts of carotenoids in the diet may help reduce the risk of cancer and heart disease, and improve immune function.

Green Group

Green vegetables and fruits contain lutein, which may reduce the risk of macular degeneration and cataracts. They also contain folate, which helps reduce the risk of birth defects.

Blue/Purple Group

This group contains anthocyanins, powerful antioxidants similar to the red group.

White Group

The white group contains anthoxanthins, which may reduce cholesterol levels and blood pressure, and lower the risk of stomach cancer and heart disease.



Are 9 to 11 Servings Enough?

By consuming 9 to 11 servings of vegetables and fruits every day, you'll be taking in a healthier level of vitamins and minerals. However, the likelihood of achieving optimal levels through food alone isn't as easy as it once was. Research has shown a reduction in the levels of certain nutrients like vitamin C and many minerals in dozens of common fruits and vegetables since 1950.¹⁵ With the agricultural focus on high-yield crops, the industry has favored (or developed) varieties that grow quickly but may not offer as much nutritionally. Likewise, because we often receive our produce from farther away than our grandparents did, transport time requires that produce be picked before peak ripeness and nutrient potential. Finally, commercial farming has encouraged the loss of minerals in soil, which many suggest depletes the nutritional value of crops. Clearly, the more vegetables and fruits we eat, the better, but we're likely not getting the full measure of nutritional value that we might have 50 to 60 years ago.


Exercise increases the body's nutrient needs. People rarely increase their vitamin and mineral intake when they increase the amount and intensity of exercise. The results can include slower or compromised recovery, reduced performance and/or suppressed immune function. Another result of inadequate vitamin and mineral intake is continued and unexplained cravings. Your body will tell you to keep eating in hopes that its nutrient needs will be met.¹⁶ High-quality multivitamins can help you avoid issues resulting from long-term nutrient deficiencies.¹⁷ Therefore, incorporating high-quality multivitamins and optimal levels of vegetables and fruits should be the foundation of any solid nutrition plan. ■



Life Time Fitness Performance Multivitamins are best-in-class multivitamins.

An optimal formula at a reasonable cost, the unique AM/PM formulation, along with Omega-3 Fish Oil, should help build the foundation of any solid nutrition program. Our products are formulated by one of the most reputable supplement manufacturers in the United States. We consistently tweak our formula as new research suggests. The AM formulation is high in vitamins which support energy during the day, and the PM formulation is high in minerals that support rest and recovery. We've also added additional herbs that support men's/women's health.

Members receive a 10% discount when they shop with a trainer in LifeCafe.



Protein cannot be stored and needs to be replenished daily. One of its many benefits is that, during digestion, protein burns calories three to four times faster than fat and carbohydrates.

Protein

Managing Hunger, Metabolism & Muscle

.....

Research on protein in recent years has shown what many people in the fitness industry have believed for a long time: higher protein intake helps support lean bodies. From the standpoint of physical conditioning, protein helps improve satiety, increases overall calorie expenditure, and supports lean-body-mass maintenance. It has also been shown to help support recovery from exercise and improve bone density. Many studies have shown a significant difference in weight loss success when consuming a higher amount of protein during a calorie-restricted diet. In fact, as caloric intake decreases, the requirement for protein increases.^{18, 19}

Increased Satiety

Protein tends to reduce the glycemic effect of carbohydrates. That means if blood sugar levels rise at a slower rate, they will also fall at a slower rate, which can lengthen the time before hunger returns. It may also reduce cravings for more carbohydrates. This is the most likely reason higher protein intake enhances weight loss — improved satiety. Protein takes longer to digest than carbohydrates or fat. By ensuring each meal contains a reasonable serving of protein, hunger may

take longer to return. It may be that increased protein leads people to eat fewer overall calories because they are more satisfied from their meals.

Increased Thermic Effect of Food

Another possible way protein can aid in weight management is by increasing the total number of calories the body burns each day.²⁰ The digestion of protein requires more work from the body than the digestion of carbohydrates or fat. The thermic effect of food refers to the calories the body must burn to digest the food we eat. Protein digestion can cause the body to burn three to four times as many calories during digestion as carbohydrates or fat, calories being equal. One study showed that a higher protein diet can result in an extra 90 or more calories burned each day. Burning an extra 90 calories a day may not seem significant compared to an average 2,000-calorie diet, but every extra calorie may help to decrease body fat levels, all else being equal in the metabolism. Theoretically, burning an extra 90 calories a day could result in a 9-pound reduction in body fat over the span of a year. Of course, that assumes all other variables in weight management remain the same, which is rarely the case.

Maintenance of Lean Body Mass

Because protein helps us maintain our lean body mass, it's critical for enhancing our body composition — our body fat to lean body mass ratio.²¹ The importance of protein for maintaining muscle mass is particularly important as we age. Older Americans generally do not eat enough protein to keep sarcopenia (the loss of muscle mass) in check, and controversy exists on whether older men and women should consume more than the adult RDA for protein.^{22, 23} As people lose weight, they often also lose lean body mass (muscle and bone). It's not possible to prevent all losses of lean body mass for those who have high amounts of weight to lose, but additional protein intake can help individuals maintain optimal levels of lean body mass. Those who focus on calories alone and neglect sufficient protein intake can find themselves at a lower body weight but with higher body fat percentages. In the end, when people are looking to “tone up” or “get more defined,” it's critical to eat enough protein. Animal proteins such as beef, eggs, poultry, fish and dairy products provide all of the necessary amino acids, the building blocks of protein for our bodies.

Protein Amounts and Sources

Current RDA guidelines recommend consuming a daily protein intake of 0.36 gram per pound of body weight, but research has shown higher levels can be beneficial. Also, unless there's an existing condition, an increased protein intake appears to be no risk to kidney health as some propose.¹⁸ According to the International Society of Sports Nutrition, for active individuals and athletes, daily protein intakes of 0.63–0.91 gram per pound of body weight have been shown to be safe and effective for stimulating protein synthesis and bone growth.¹⁹ For overweight individuals, these protein amounts may be excessive. Someone who weighs 250 pounds but has an ideal body weight of 150 pounds should base their daily protein intake on ideal body weight rather than current body weight.

Today the animal protein found in the average American's diet is much different than it once was. Many animal protein sources are processed into “manufactured foods” that make the meat hard to recognize. For those who do choose to eat real meat, chicken and fish, most of these foods do not provide close to the quality nutrients they once did. Most beef, poultry and fish found in grocery stores are from animals raised on feeds that are completely foreign to their natural

diet. The result is meat with a much-altered nutrient profile compared to when those animals were fed their traditional diet. Commercial meats often contain antibiotics, hormones and pesticides as well.

A recent meta-analysis of current research showed that red meat intake was not associated with any increased risk of coronary heart disease or diabetes. Processed meat (e.g., cured meats) consumption, however, was associated with a 42 percent increased risk of coronary heart disease and a 19 percent increased risk of diabetes.²⁴ Like many other processed foods, processed meat consumption may lead to long-term health problems. The exception to the concerns about processed meats would be uncured, naturally raised meats.

To get the most from animal-based proteins, look for grass-fed beef, pasture-raised poultry and pork, and wild-caught fish. When these animals are raised on diets they are meant to eat, their fat content is often less and the fat is healthier, containing more omega-3 fatty acids and less saturated fat.^{25, 26} These animals are also usually raised without the use of antibiotics or hormones. If organic or naturally raised animal proteins aren't available, or if these items aren't affordable, look for lean cuts of conventional sources. By selecting lean cuts of conventional meat, you'll be able to avoid some of the compounds found in animals that aren't raised on a natural diet or with a natural lifestyle, since the fat is where most of these unhealthy compounds are stored.

Vegetable-based protein can be used on occasion. However, the quality of the protein in plant-based sources is not as complete as in animal products.²⁷ Protein needs can be met through vegetable sources, but they often include a lot of extra carbohydrates. Chickpea or yellow-pea protein, hemp or chia protein, brown rice protein, and occasional use of soy protein are examples of acceptable sources. In the case of pea, hemp or brown rice protein, you'll need to find these as isolated protein powders to maximize protein while minimizing the extra carbohydrates that accompany these sources in whole food form. As for soy, be sure to find an organic source as most soy is genetically modified, and opt for fermented soy products only.

If obtaining the full measure of your protein requirement from meat isn't practical or desired, the challenge can be to create an efficient way to take in additional high-quality protein without relying solely on meat or dairy. This is where protein powders and meal replacement shakes can be beneficial.

Proteins (Eat Protein with Each Meal)

Beef:	Ground beef, filet mignon, round steak, sirloin steak, nitrate-free, uncured hot dogs, lunch meats
Chicken:	White or dark meat, chicken sausage
Turkey:	White or dark meat, turkey bacon
Pork:	Loins, steaks, chops, nitrate-free sausages
Fish:	Wild Alaskan salmon, tilapia, cod, halibut, orange roughy, scallops, white fish, shrimp, tuna, lobster
Other meats:	Bison, ostrich, elk, venison
Cheese:	Hard cheese, cottage cheese
Milk*:	Whole or 2%, non-homogenized, if possible
Yogurt*:	Plain, full-fat, regular or Greek-style
Whey Protein Powder:	If you have issues with dairy, choose whey isolate; if not, isolate and concentrate can be used
Dairy Alternatives:	Goat's milk, sheep's milk, cheese, yogurt
Eggs:	Whole eggs
Chickpea/Yellow Pea Protein Powder:	Vegetarian, non-allergenic complete protein powder
Soy*:	Miso, tempeh are preferred; limit use of soy milk and soy protein
Rice Protein:	Vegetarian, non-allergenic complete protein powder

*Whenever possible, choose organic, grass-fed, pasture-raised, free-range or wild-caught animal protein sources

Because protein helps us maintain our lean body mass, it's critical for enhancing our body composition — our body fat to lean body mass ratio.



Protein Powders and Meal Replacements

There are a variety of protein powders and meal replacements to choose from, including egg, whey, casein, soy, yellow pea, rice and hemp. Choosing one that's right for you is a matter of individual preference. A good choice in protein powders or meal replacements should:

- Taste good, which will encourage you to use it on a regular basis.
- Provide a complete amino acid profile.
- Not cause an allergic reaction.

Whey protein is the most popular of the protein powders. From the standpoint of health, whey protein has been shown to help support the immune system and provide the building blocks for a powerful antioxidant — glutathione. Glutathione is the major antioxidant used by the body to help remove carcinogens and free radicals. Glutathione itself is not absorbed well by the body and must be created from other amino acids. Whey protein provides a high level of the amino acids needed for glutathione production. Other immune system-related benefits are likely to emerge with additional research, as whey contains beta-lactoglobulin, alpha-lactalbumin and immunoglobulin, which help fight disease.

According to a 2004 study by the University of Minnesota, there is some evidence to suggest whey protein may help reduce blood pressure as well.²⁸ And a 2002 study of stress-vulnerable subjects showed that whey protein improved cognitive performance from its effect on brain tryptophan and serotonin levels.¹² In our high-stress lifestyles, this could be another promising reason to use whey protein on a regular basis. Whey is also digested and absorbed quickly, so it's a perfect pre-workout or post-workout protein source. You can find whey protein on its own or as part of a meal replacement powder containing other fats, carbohydrates and additional health-promoting or performance-enhancing ingredients. As beneficial as whey protein is, some individuals do have trouble digesting it. A blend of pea protein and rice protein powder provides an amino acid profile very similar to whey, so it can be a good alternative. ■

If you're looking for a high-quality, great-tasting way to increase your protein intake, check out the Life Time Fitness protein powders, including Whey Protein, VeganMax, FastFuel Complete and Dairy-free FastFuel Complete. Whey Protein and VeganMax are designed to mix with other ingredients in a blender. FastFuel Complete can be simply mixed with water for a nutritious snack.

Members receive a 10 percent discount when they shop with a trainer in our LifeCafe or in our online store.

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure or prevent any disease.



Healthy Fats

Optimizing Flavor & Nourishment

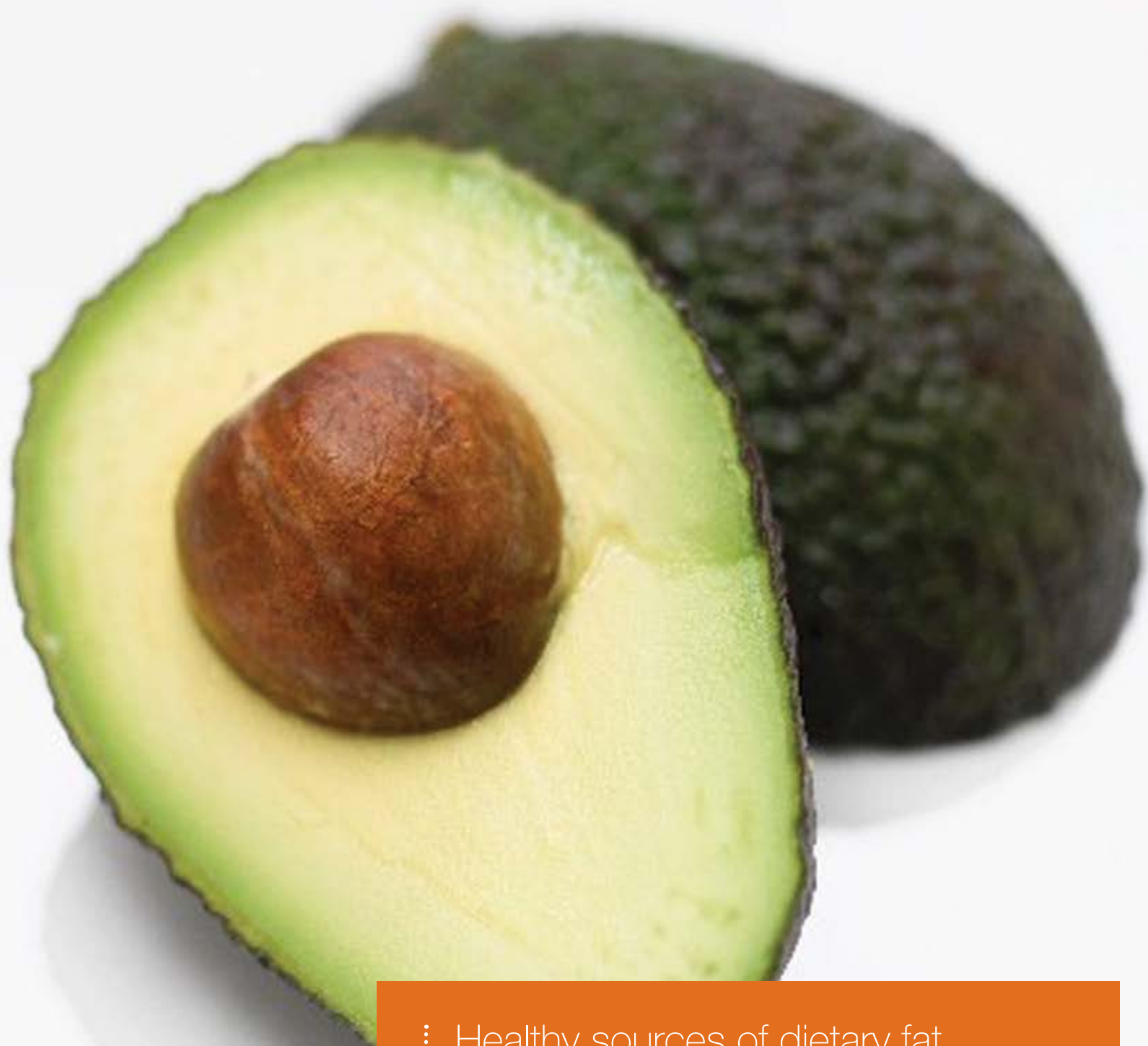
.....

Over the past 50 years, there's been much confusion about the role of fats in a healthy diet. We've heard we should limit fat intake; however, a low-fat diet hasn't been the panacea it was promoted to be. We were told to avoid animal fats. Yet, some of the world's cultures that are home to the most impressive longevity patterns include saturated fats in their diets. In more recent years, questions surrounding dietary fats have become more advanced. The answers are clearer. This section of the guide is dedicated to providing you with practical perspective on the place of fats in the Healthy Way of Eating.

Clearly, the processed foods that figure so heavily into our food supply these days are loaded with unnecessary, often unhealthy fats. Those fats, coupled with other processed ingredients (including an overabundance of carbohydrates) can lead to significant health and weight problems. To discount the necessary function of dietary fat altogether because of these misguided products is a mistake. The body requires fat — healthy, natural fat sources that are used both moderately and appropriately. Those who steer clear of dietary

fat may actually be missing out on many important nutrients. Fat is important for normal cell and brain functioning, and nervous system function. It supports satiety, is necessary for normal hormone production, and is a great, long-lasting source of energy. A very-low-fat diet can compromise our basic health as well as our ability to lose weight.

Our focus should prioritize healthy fats rather than low fat. What kinds of fats are we eating? What are their compositions and fatty acid ratios? Are they in their natural, unadulterated state, or are they oxidized through processing or inappropriate cooking methods? Healthy fats can and should round out our diets. Fats offer flavor and richness as well as essential nourishment in our food. Healthy sources of dietary fat include nuts, seeds and many unrefined oils, as well as the naturally occurring fats in meats and some vegetables. Even organic butter and other saturated fats can have a place in a healthy diet. The key is to optimize nutritional benefit while maintaining moderation.



..... Healthy sources of dietary fat can include nuts, seeds and many oils, as well as the naturally occurring fats in meats and some vegetables.

Nuts and Seeds

Nuts and seeds provide a variety of healthy fats, including omega-3 fatty acids (in some varieties) as well as fiber.

As a snack or an addition to a salad, they can make a meal healthier as well as more filling. Three major epidemiological studies (Nurses' Health Study, Iowa Women's Health Study and Adventist Study) show that consumption of nuts several times a week results in a 30 to 50 percent lower risk for heart attack or heart disease.²⁹ Dr. Jonny Bowden, author of *The 150 Healthiest Foods on Earth*, highlights the arginine content of nuts. Arginine is an amino acid that has been shown to provide protection to the arterial walls, reducing the likelihood of atherosclerosis.³⁰ Of course, we gain the optimum benefit when we eat them in their natural state. Chocolate-covered nuts or seeds mixed with dried fruit or granola add unnecessary carbohydrates and calories to the equation.

A word of caution: When something is healthy, we tend to think we can eat as much as we want. Nuts are a great example. First, total calorie consumption can quickly get out of hand. Second, many nuts and seeds contain much more omega-6 than omega-3, which can skew the dietary ratio we should maintain for optimum health. Finally, nuts (like grains and beans) contain phytic acid, a form of phosphorus stored in plants that in larger quantities can inhibit mineral absorption. According to longevity research highlighted by Dan Buettner in his best-selling book *The Blue Zones*, most of the health benefits of nut and seed consumption come with one to one and a half ounces per day.

If you're not in the habit of eating nuts and seeds on a daily basis, weigh an ounce to get a visual sense of serving size. Be mindful of the relative omega-3 and omega-6 content of the nuts you eat. Finally, you can consider lowering the phytic acid level of nuts by soaking and then roasting nuts and seeds at low temperatures.

Oils and Fats

Fats have the potential to help or harm our health. This impact is influenced by their fatty acid composition (e.g., balancing our overall omega-3 to omega-6 ratio), their processing (e.g., whether they retain their full nutritional value in any processing methods used for extraction or refinement), and their condition when we use them (e.g., whether they have oxidized). Each fat and oil also has other nutritional benefits that are optimal when a fat is in its natural, unadulterated state.

Saturated fats are the most stable, which reduces the chance that they will oxidize and become a source of free radicals for the body. Coconut oil and palm oil can play a useful and healthy role in our diets. Likewise, other animal sources, such as butter, ghee, meats, eggs and full-fat dairy, are nutritious as well — particularly when they come from pasture-raised animals who eat a healthy diet and aren't given antibiotics and hormones.

Fats to Avoid

Trans fats became popular around the same time that saturated fats were erroneously deemed unhealthy. On a label, you can pick out the trans fats as any ingredient listed as "partially hydrogenated" or "hydrogenated." Even if trans fats are listed at zero grams, it's important to note that labeling laws allow any measurement under 0.5 grams to be shown as zero. Moreover, the food industry has now developed what's known as "interesterified" fats that perform the same function in processed food items — and display the same if not worse health effects — as trans fats. Because the processing differs technically, companies aren't currently required to list these fats under trans fat labeling.

Besides trans fats, are there any other unhealthy fats? Yes, and the list may surprise you. Heavily processed oils such as soybean, corn, safflower, cottonseed and canola oils are not a natural or healthy part of our diet. These vegetable oils go through extensive processing at high temperatures, as well as "caustic refining, bleaching and degumming." Canola oil, which is marketed as healthy because of its omega-3 (ALA) content, is largely hydrogenated by the time processing is complete. In fact, the University of Gainesville found that commercial canola oil had more trans fats than margarine. It's a running theme in this guide, but if you steer clear of processed foods — oils included — you'll play it much safer.

Healthy nuts, seeds, and oils (pay attention to serving size)

Nuts and Seeds:

Almonds	Hazelnuts	Pecans	Sesame Seeds
Brazil Nuts	Macadamia Nuts	Pistachios	Sunflower Seeds
Cashews	Peanuts	Pumpkin Seeds	Walnuts

Fats and oils to use:

Almond Oil	Extra Virgin Olive Oil	Macadamia Nut Oil
Butter (or Ghee)	Flax Seed Oil	Red Palm Oil
Coconut Oil	Hemp Seed Oil	Sesame Oil

Fats and oils to avoid:

Canola Oil	Hydrogenated Oil	Margarine
Soybean Oil	Corn Oil	Cottonseed Oil
Safflower Oil		

Go nuts. Highly concentrated in both their calories and their nutrients, a small handful of nuts packs a powerful punch. Eating a variety of nuts appears to be the best way to get all the different benefits each nut has to offer.



Fats to Use

The best oils for seasoning include coconut oil, extra virgin olive oil, expeller-pressed sesame and nut oils, and flax oil.³¹ Again, it's important not to expose some of these oils to high heat. It's also best to keep these oils cool and away from light. Heat, light and air can promote oxidation in these otherwise healthy oils. Also, avoid oils that are chemically extracted. Look instead for expeller-expressed or first cold-pressed, unrefined oils to ensure that the purity and integrity of the oil has been maintained. When you shop for salad dressings, be sure to check labels as many products contain oils you may not want to use. Or consider making your own dressing with a small amount of a healthy oil and vinegar.

The following is a list of healthy oils and how you can use them:

Almond Oil: High in monounsaturated fats. Use in dressings and for cooking at low temperatures, or add to foods after they're cooked to enhance the flavor. Purchase only cold-pressed almond oil.

Butter (or Ghee): Great for cooking at higher temperatures. Shop for organic butter from grass-fed cows, which will be free of pesticides, hormones and antibiotics, and will have more conjugated linoleic acid (CLA), which has been shown to help with lowering body fat and maintaining lean body mass. Ghee is butter that's had any remaining proteins removed. It's also called clarified butter. For those sensitive to dairy, ghee can be a great option.

Coconut Oil: Also good for high-temperature cooking. Coconut is antimicrobial and high in medium-chain triglycerides, which may help elevate metabolism.

Extra Virgin Olive Oil: Heart-healthy oil rich in monounsaturated fat. Use for seasoning and salad dressing, but not for cooking. Purchase only "first cold-pressed" extra virgin olive oil.

Flax Seed Oil: Nutty-flavored oil for use in salad dressings and protein shakes. Not for use in cooking. Though high in omega-3 fatty acids, the omega-3 is alpha-linolenic acid (ALA), which should not be confused with the major benefits derived from fish oil's DHA and EPA.

Macadamia Nut Oil: Even higher in monounsaturated fats than olive oil. Can be used for sautéing, as it handles higher temperatures better than extra virgin olive oil.

Other oils: Red palm oil, sesame oil, walnut oil and grapeseed oil can be used as part of a healthy diet as well.

Cooking with Oils and Fats

When cooking with oils and fats, especially at high heat, it's crucial to use stable fats that have naturally high smoke points. Polyunsaturated fats generally have lower smoke points, which means they rapidly oxidize at lower temperatures. Most media coverage has focused on trans fats intentionally used in processed foods. However, using healthy oil under high temperatures can turn it into an unhealthy trans fat as well. As mentioned, trans fats are strongly associated with increased risk of heart disease and diabetes. This means even the healthiest polyunsaturated oils can turn into an unhealthy product when improperly used. Your favorite polyunsaturated fats are best used to add flavor after cooking is done.

Again, it's important to differentiate between refined and unrefined oils. Many popular polyunsaturated oils are "refined," which means processed to withstand higher temperatures. Although this designation makes them appear safer for cooking use, and gives them a higher smoke point, the processing these oils undergo oxidizes their fats and often leaves residual chemical contaminants. It's best to avoid refined oils and choose naturally stable fats for cooking use. The most stable fats for cooking include saturated fats and — to a lesser extent — monounsaturated fats. Some examples include coconut oil, palm or palm kernel oil and butter (especially clarified butter or ghee). A coconut nonstick spray, for example, is a better option than a canola- or olive oil-based spray. Because they are stable at higher heat, other animal fats like bacon grease can also be safely used in moderation.

Finally, if you can avoid cooking at high temperatures, consider it the safest option. Low and slow, so to speak, generally preserves a food's nutrients best. Likewise, it's a good idea to avoid heating even stable fats more than necessary. If you would like to use higher heat cooking methods like grilling, try to avoid using oils and other added fats when possible. For example, opt for dry rubs instead of oil-based marinades and cooking sauces.

Some of the best oils for seasoning include extra virgin olive oil, expeller-pressed sesame and macadamia nut oils, and flax oil.



Omega-3 Essential Fatty Acids

Just as healthy fats are a necessary part of our diets, there are specific fats that are essential. Omega-3 fatty acids, in particular, have made news headlines over the past several years. Although the effects of omega-3 supplementation are not always immediate, they are quite significant. The following is a very short list of some of the health benefits associated with fish oil in research studies:^{32, 33, 34, 35, 36, 37}

- Reduced psychological distress
- Improved brain development
- Reduced symptoms of depression
- Enhanced eye health
- Reduced body weight
- Reduced age-related sight loss
- Enhanced skin health
- Reduced inflammation
- Possible reduction of infant allergies (if used during pregnancy)
- Possible reduction in chest pain (acute coronary syndrome)
- Diabetes support

Despite fish oil's dramatic health benefits, research showed that only 26 percent of Americans said they take fish oil supplements, even though 63 percent of the respondents said they felt their diet did not have enough omega-3 fatty acids.³⁸

Many products are currently being touted as “high in omega-3.” Before reaching for these products, be sure you’re looking for the right type of omega-3. Plant sources of omega-3 are usually high in an omega-3 fatty acid called alpha-linolenic acid (ALA). Some animals are good at converting ALA to the two additional omega-3 fatty acids, docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA), which provide many of the benefits omega-3 fats are known for. Unfortunately, humans are not very good at converting ALA to DHA and EPA, which means our best source of omega-3 is fish oil. Flax and other plant-based sources of ALA, however, have additional health benefits beyond omega-3 that makes them well worth including in your diet. Marine algae are the best plant-based source of omega-3 for vegetarians. Just understand that today, it’s not as good as fish oil for meeting your omega-3 needs. It’s possible that algae may be a quality source of EPA and DHA in the future, once methods are improved for extracting it.

The source of a fish oil supplement is also important. The best fish oils come from small fish such as anchovies, mackerel and

sardines in the deep, pure, cold waters of the North and South Atlantic Oceans and Pacific Ocean. Sourcing fish from these oceans ensures the oil is higher in omega-3 fatty acids and freer of pollutants compared to fish farm sources.

In terms of actual fish consumption, Wild Alaskan salmon is one of the best food sources. There’s a big difference between Wild Alaskan salmon, which eat their natural ocean diet, and farmed salmon, which are fed grains and are exposed to chemical pesticides. Typical fish farm conditions and feed significantly change the quality of salmon. In fact, farmed salmon are often fed a red dye with their food to help turn the color of their flesh to the color found in wild-caught salmon. If they have to be fed a dye to look like normal fish, it’s a telling sign the nutritional content will be inferior.

Even if you ate salmon every day, it would be difficult to get enough EPA and DHA in your diet. Eating even high-quality, wild-caught fish every day can expose you to unhealthy levels of pollutants like mercury. It’s generally safer, more practical, and more economical to meet your omega-3 needs with both food and supplementation. Recommendations for daily DHA and EPA intake range from one to four grams total. A typical salmon steak provides about 1 gram of EPA and DHA. Omega-3 softgels vary in their DHA and EPA content. Higher quality products like the Life Time Omega-3 Fish Oil have 500 to 600 mg of EPA and DHA per softgel. At 600 grams of total EPA and DHA per softgel, a dosage of 2 to 4 softgels a day is recommended. Some people have found additional benefits with more, particularly if they have inflammatory medical conditions or depression. Consult with a knowledgeable health professional for personalized guidance. ■

If you’re looking for a high-quality, lab-tested source of fish oil, check out Life Time Fitness Omega-3 Fish Oil sourced from anchovies, sardines and mackerel. Each softgel provides 600 mg of EPA and DHA and is guaranteed to be free of mercury. The added peppermint flavor is great for those who are more prone to burping.

Members receive a 10 percent discount when they shop with a trainer in our LifeCafe or in our online store.





Eating excess
carbohydrates can
keep your body from
burning fat.

Carbohydrates

Selecting the Best Nutritional Sources

.....

Managing carbohydrate intake can be the most challenging part of creating an optimum nutrition plan. Perhaps even the idea of noting carbohydrates can itself seem foreign to many of us. After all, for decades we've seen grains as the base of the food pyramid, viewed countless grain-based products with the heart-healthy symbol, and heard that most of us don't get enough whole grains in our diets. Inherent to these messages is the assumption that carbohydrates are synonymous with grains. Pay attention to those around you and what their diets look like. Do they snack on breads, cakes and cookies? Do they eat deli sandwiches made with half a loaf of bread or a tortilla the size of a serving plate? Do you?

As with dietary fats, we now have a more nuanced understanding of the role carbohydrates should play in a healthy diet. Again, the pertinent questions revolve not just around how much, but what kinds. In truth, carbohydrates aren't just found in grains but also in fruits and vegetables. It is from non-starchy vegetables, in fact, that we should get the bulk of our carbohydrate intake. These vegetables don't contain as many carbohydrates as grains do, and for their relatively modest carbohydrate count, they generally offer a higher nutrient load than grains. It's more bang for your buck, so to speak. This is the ideal proportion in the Healthy Way of Eating.

Our bodies require substantial supplies of vitamins, minerals and phytonutrients. Most of us don't get nearly enough. Vegetables are the best sources for these. Contrary to what we might believe from all the misguided messages of the last few decades, our bodies only require a moderate amount of carbohydrates — easily what a plentiful vegetable intake and some fruit can offer us. Of course, for those who are more physically active, a higher carbohydrate intake may be appropriate.

The Consequences of Excess Carbohydrates

It's very important to understand the effect of excess carbohydrates on our bodies. Eating more carbohydrates than we need can easily sabotage our weight loss efforts. It can also compromise our overall health. The process boils down to a hormonal chain of events. The next time you reach for a high-carbohydrate, low-fat, low-protein snack, remember this: carbohydrates increase blood sugar. A rise in blood sugar, in turn, raises insulin. The insulin spike then shuts down your ability to burn fat. Once you've filled your energy needs for the day, further carbohydrate intake simply undermines weight management at the biochemical level.

Furthermore, an ongoing influx of excess carbohydrates puts a constant stress on the body and the hormones that help regulate blood sugar levels. The effect is a blood sugar roller-coaster. As blood sugar levels rise, insulin rises, which makes blood sugar levels fall. When blood sugar levels fall, cravings for carbohydrates increase. By giving in to those cravings and snacking on carbohydrates, the cycle begins yet again.

Often the cycle starts with breakfast (as it did for John Rush's example in chapter 2), when a bowl of cereal and orange juice provide plenty of refined carbohydrates to start the blood sugar roller-coaster. Even if the box says "contains whole grains," the carbohydrates still operate the same. A small amount of added fiber just slows the hormonal cycle slightly. That's likely one of the reasons higher-protein breakfasts have been shown to help support weight loss and reduce the number of calories eaten later in the day. Replacing most of those carbohydrates at breakfast with more protein and healthy fat maintains blood sugar levels, which helps control cravings for those unnecessary high-carbohydrate snacks. Once you're on the roller-coaster, it's hard to get off. The best approach is to choose a breakfast that will allow you to skip the entire cycle.

What Kind and How Much?

We've been told for years that carbohydrates serve as the essential fuel for our bodies. It's true, but it's also true that most of us can easily get by on less than we think. Unless we're endurance athletes, our suggested nine servings of non-starchy vegetables and a couple lower-glycemic fruits will provide us with all the carbohydrates we need in a day. In fact, many endurance athletes today are improving their performance by significantly reducing their carbohydrate consumption and replacing their energy needs with fat, which allows their bodies to use more fat for fuel at rest and during training. Even for those athletes who still rely on a higher-carbohydrate diet, they're training for two or three hours a day, five or six days a week. That's far more time than the average person can invest in intense exercise.

For most of us, about an hour per day is all we're able to devote to exercise and moderate-intensity activity. The rest of the day may be spent behind a desk or taking care of children. Our level of activity is nowhere near what it was 100 years ago, or what it is today in many non-industrialized nations, where people walk much more and engage in continual physical labor to accomplish everyday activities.

As Americans, we're rarely at risk of burning the available carbohydrate, or glucose, stores in our bodies. And if we're not burning them, we don't need to eat more of them. As long as we're not eating too many carbohydrates, our bodies should burn mostly fat during our sedentary day. If the average person burns 2,000 calories in a day and 30 percent of those calories come from glucose (carbohydrates), that means they burn 600 calories from glucose (2,000 calories x 30% from glucose = 600 calories from glucose). To replace all of that glucose through diet, it would only take about 150 grams of carbohydrates. That's far less than the 300 grams typically recommended. To be clear, the more carbohydrate one eats, the less fat he or she can burn.

We've been led to believe that starchy carbohydrates should be the predominant source of fuel, but a diet rich in vegetables and fruits would offer more nutritional benefit. Most people can easily meet their daily carbohydrate requirements with a base of non-starchy vegetables and a modest serving or two of fruits. If your overall carb and calorie intake goals allow, you can also fit in a serving or two of starchy carbohydrates (starchy vegetables or grains). Keep one rule of thumb in mind, however. It's paramount to take in sufficient amounts of protein and healthy fat, and then meet the rest of your energy needs with carbohydrates — not the other way around.

Carbohydrate intake should be based on an individual's daily activity level, whereas fat and protein intake can be pretty standard based on an individual's body weight or lean body mass. As activity levels significantly rise, either carbohydrate or fat intake can increase. However, beginning an exercise program shouldn't be justification for overeating carbohydrates. Opt for a post-workout snack that offers protein, some fat and a modest amount of nutrient-dense carbohydrates. A Cobb or Mediterranean salad, or protein shake will serve you much better than a high-sugar smoothie or sandwich and chips, for example.

Starchy Vegetables and Other Carbohydrates (Eat based on activity level)

Gluten-free:

Basmati Rice	Beans	Black Beans	Brown Rice
Buckwheat	Chickpeas	Coconut Flower	Corn
Corn Tortillas	Fava Beans	Flax Seed	Garbanzo Beans
Gluten-Free Bread	Lentils	Millet	Oats (gluten-free)
Pinto Bean	Popcorn	Quinoa	Red Potatoes
Sweet Potatoes	Tapioca	White Potatoes	Wild Rice

Gluten-containing:

Barley	Bulgur	Couscous	Oatmeal
Spelt	Rye	Wheat	Whole Wheat Bread
Whole-Grain Cereals	Bran		

Other carbohydrate sources to avoid:

Agave Nectar	Brown Rice Syrup	Fructose	High-Fructose Corn Syrup
Honey	Sugar		

It's critical to take in sufficient amounts of protein and healthy fat, and then meet the rest of your energy needs with carbohydrates — not the other way around.



The Question of Gluten

Gluten is quickly becoming a mainstream issue. Many people understand it is a health concern, but they don't know how or why. As much as one-third of the population is thought to be sensitive to gluten.⁴⁰ Most startling is that 99 percent of those who have issues with gluten are unaware of it. With our dependence on grains as the base of the conventional food pyramid, it's easy to overlook the significance of gluten. Gluten presents another example of how the Standard American Diet doesn't serve our best nutritional interests.

Gluten sensitivity appears to be a factor in many chronic diseases, particularly inflammatory conditions. Even on the mild end of the sensitivity spectrum, people can live with consistent, low-grade inflammation that can eventually contribute to a whole host of medical conditions. The New England Journal of Medicine lists 55 health issues related to gluten.⁴¹ These include osteoporosis, irritable bowel disease, inflammatory bowel disease, anemia, cancer, fatigue, canker sores, rheumatoid arthritis, lupus, multiple sclerosis, and almost all other autoimmune disorders.

Many people live with irritations caused by gluten. Unfortunately, medications prescribed to alleviate the symptoms associated with gluten intolerance do not address or relieve the underlying cause. The best solution is simply eliminating gluten from your diet. Our dietitians are constantly sent "thank you" emails from clients who feel better than ever because they removed gluten from their diets.

Determining Gluten Sensitivities

There are a few ways to test for gluten sensitivities. More serious allergies might show up in a celiac blood panel or skin-prick test.⁴² Less acute sensitivities (which should still be taken seriously) can more readily be demonstrated through food challenge testing and an elimination diet. The easiest thing to do may be an elimination diet. To try an elimination diet, remove all gluten-containing foods for at least one month and then reintroduce them. Experts caution, however, that physical effects of gluten intake can linger for up to six months, which means a longer elimination diet could be more accurate.⁴³

Some common gluten-containing grains and grain products include wheat, barley, rye, bran, bulgur, couscous, flour, food starch, gluten peptides, grits, spelt, oats and many cereals.⁴⁴

During the elimination phase, some people feel better within a few days. Others feel worse for a few weeks but then considerably better as their bodies transition beyond the side effects of gluten proteins. Finally, some people might feel the same during the elimination but notice a negative difference once they reintroduce gluten to their diets. The elimination of many carbohydrate-containing foods during this time can also lead to other positive changes, such as weight loss, increased energy, more stable moods, decreased blood pressure and improved blood lipid profiles.⁴³

As consumers become more aware of the issues surrounding gluten consumption, food companies will look for alternatives to make the same high-carbohydrate foods in a "gluten-free" form. Eliminating gluten can enhance our health, but eating high-carbohydrate, gluten-free foods is likely to have similar effects on weight gain as gluten-filled options. A diet filled with vegetables, fruits, meat, seeds and nuts is a better way to eat for those with and without gluten issues. ■



Fifty-five health disorders are associated with gluten. This fact alone suggests gluten may not be an appropriate part of our regular diet.

How often do you reach for carbohydrate-based snacks? How do these choices play into energy dips or mood swings throughout the day?

Try eliminating gluten for a month and see how you feel. Keep a record of your physical symptoms and general sensations before you begin elimination, throughout the month, and after you try reintroducing gluten-containing items.

Beyond Food & Supplements

Other Health & Lifestyle Factors

.....

Beyond our food choices, other personal health and lifestyle factor — particularly if they're long-term issues — can seriously impact metabolism. As a result, we may have a harder time managing our weight despite thoughtful eating habits. For most people, simply eating real food and using the right basic supplements is enough to spark change. Others, however, face a greater challenge. A life of substandard nutrition, pollutant exposure, or other negative lifestyle factors can disrupt metabolic and hormone function. In these cases, it may be necessary to look beyond food alone. If you feel you've been diligent about diet but are still struggling with weight management, a logical next step might be examining other factors. If you're in the early stages of changing — or contemplating changing — your diet, you'll likely find that certain lifestyle choices like reining in stress or getting more sleep will complement your dietary efforts.

The following are brief descriptions of how alternative factors may impact weight management. For more complete details on each of these factors, as well as steps you can take to optimize overall health in other lifestyle areas, be sure to check out the articles at www.lifetimeweightloss.com.

Sleep

The truth is, we know we tend to make poorer food choices when we skimp on sleep at night. We're more susceptible to cravings. We use unhealthy foods to get beyond the continual fatigue we experience throughout the day. There's physiological reason for these tendencies. Inadequate sleep raises ghrelin, a hunger-stimulating hormone. Likewise, it decreases leptin, a hormone that helps us regulate our energy and food intake. It also decreases our insulin sensitivity, which can set us up for diabetes over time. Finally, new research also shows that insufficient sleep promotes the expression of obesity-related genes.⁴⁵ Although individuals' needs for sleep vary, try to get at least seven if not eight full hours of quality sleep each night.

Stress

Stress comes from many triggers: job, family, finances, physical injury, sickness and more. Lack of sleep can increase levels of stress, and the cycle continues. Stress also impacts the food choices we make. The most common hormone related to stress is cortisol.



..... The right kind of exercise routine and an appropriate nutrition and supplement plan can actually help reduce stress levels and may improve sleep.

If cortisol levels are high because of regular stress, we can be prone to overeating and have cravings for sugary foods. The body increases its fat storage, particularly around the organs in the abdominal area, where it puts us most at risk for health issues. Chronic stress can also lead to high blood pressure as well as elevated cholesterol and blood sugar. Understanding where stress is coming from and then dealing with it in a constructive manner is critical to health and weight management. You can read more about stress at www.lifetimeweightloss.com. You'll learn about additional dietary changes you can make, lab work you can register for, and dietary supplements that may benefit you.

Digestive Health

A healthy digestive tract does more than simply break down foods. When your digestive tract is working correctly, enzymes are released to absorb vitamins and minerals. The digestive tract also provides a major line of defense against disease, as it can keep bad bacteria from entering the bloodstream. When the digestive tract is irritated through allergenic foods, excessive sugars, regular or high-potency antibiotic use, certain prescription medications or other factors, it can affect the body's nutrient status and immune functioning. It can also impact our ability to manage weight.

Toxins

Environmental toxins, including those we're exposed to within our food supply, may play more of a role in the obesity epidemic than we have ever realized. Government, health and consumer agencies have begun investigating environmental pollutants and their effect on our health. Chemicals we're exposed to every day-like flame retardants, BPA, and other endocrine-disrupting toxins, have been shown to increase our risk for obesity and even cancer.^{46, 47} Pollutants may disrupt our hormones, alter our metabolism, and block the absorption of important nutrients. Exposure to toxins in our food, water and environments should be minimized, although it's difficult to completely avoid them. Understanding where you come in contact with these pollutants can allow you to make informed choices. A well structured detox program may be beneficial as well. If this is of interest, talk to a Health and Fitness Professional about the Life Time D.Tox program.

Extreme Nutrient Deficiency


Years or even decades of a poor diet can result in extreme nutrient deficiencies that may require more customized supplementation and close monitoring by a physician. If you have a history of serious medical conditions, disordered eating, or even long-term medication use, consider testing for nutritional deficiencies. Nutrients don't operate independently in our bodies, but interact systemically to influence all of our major health functions.

Hormonal Balance

Testosterone, estrogen, progesterone, thyroid and other hormones all play important roles in our ability to achieve optimal health and maintain weight. If an individual's hormone levels are out of balance, certain diet and exercise recommendations can help promote more normalized hormone levels. In many instances, however, diet and exercise may not be enough. It's important to consult an experienced medical professional. He or she will request and monitor the appropriate tests as well as prescribe any additional treatment options that might be necessary. Oftentimes, women are more likely to seek support for hormone balance, but men should not dismiss it. In fact, a recent study showed that as many as 25 percent of men over 30 have low levels of testosterone.⁴⁸ Because hormone levels play such an important role in maintaining health, it's recommended that you have levels checked on an annual basis.

In the past, the only way to access comprehensive lab testing was through a doctor. Today, it's easy to access testing and pay prices far lower than when it's billed through insurance. Our Health and Fitness Professionals can help point you toward the lab test that's best for you, or you can order labs from www.lifetimelabtesting.com. When you order lab tests through Life Time, one of our expert dietitians will review the results and discuss lifestyle, nutrition and exercise modifications you can make to optimize your health. Of all the great things offered through Life Time, lab testing may be the best investment you can make in your health.

Many of these factors work in cycles. One element feeds into another. You might need time and assistance in deciphering additional considerations related to your weight management. Choosing health, however, means taking care of your whole self. As we understand and respond to our bodies' needs, we maximize our personal well-being and our weight management success. ■



Make it a habit. On average, it takes 30 to 40 repetitions to form a habit. The 30-Day Challenge is the perfect way to form a new, healthy eating habit that you can continue the rest of your life.

The 30-Day Healthy Way of Eating Challenge

.....

You now have the tools and knowledge to fully implement a nutrition plan that will support your health, weight and daily vitality. If you've been adopting one habit or concept each week, you're now about 10 weeks into the process. The next four weeks, or 30 days, is your chance to really speed up the results you get from your improved nutrition and feel better than ever. Other than quitting smoking, there's probably nothing better you could do for long-term health and longevity than improving what you eat every day.

Your challenge for the next 30 days is to stick to this way of eating. That doesn't mean you should go back to your old ways on day 31. This is about committing to a small period of time — short enough that you can see the end, yet long enough that you will feel different, look different and be different. You've probably already lost some weight. You may feel better than you have in a long time. The next 30 days are about putting it all together. You'll enjoy the full measure of a healthy diet and all the benefits it can bring to your life. Are you ready? The Challenge can be as powerful and impactful an experience as you let it be. Resolve to focus on your health for these 30 days. Commit to your well-being and self-care by fully implementing the Healthy Way of Eating. You'll be amazed what a month can do.

Support and Accountability

The good news is that you don't have to do it alone. Connect with others who are doing the 30-Day Challenge by going to Life Time Weight Loss Facebook page or check out the success stories at www.lifetimeweightloss.com. Share your story. Read the stories of others. Find inspiration. Ask for advice. If you're looking for more than online support, consider one of our Life Time Weight Loss programs for nutrition and fitness guidance to help you stay on track.

Friends and family members can also provide support, but be careful. Friends and family are key to our well-being, but they might not be in a position to provide the full support or understanding for this challenge that others who have similar goals and interests can. That's why joining a community like Life Time Weight Loss may be the best way to find the support and accountability you need.

Be Prepared

As the saying goes, failing to plan is planning to fail. Over the next 30 days, you'll be faced with what to eat three to six times a day. The more often you make healthy food choices, the better you'll feel, the more energy you'll have, and the faster you'll see improvements in your body and your performance. Use the ideas mentioned throughout the guide as well as the following list to help you be prepared and maximize your success each of the 30 days.

Steps to success:

1. Pick one day each week to do your shopping and make your meals. If you live by your calendar, schedule it in your agenda. Ideally, eat before you go shopping. Excessive hunger can lead to bad decisions at the store. You'll find it doesn't take as long as you thought to prepare two to four days of food in advance. Your meals can be as simple as baking several chicken breasts and having one with salsa and avocado one day and another chopped up over salad with oil-and-vinegar dressing the next day.

2. Make weekday meals easy to prepare. If you go overboard trying to make something different every day, you'll quickly get frustrated. Eat the same lunch for a few days so you don't have to think about it, and then switch it up when you run out. You may also find it easier to pack leftovers from dinner for your lunch the next day. Keep a list on your refrigerator of healthy snacks and meals that you can consult when you're planning for the week or just need something quick.

3. When dining out, don't be afraid to ask for a meal prepared the way you want it. If all of the protein options come with a sauce over them, ask to have it left off. Or request your burger with a salad instead of a high-carbohydrate, processed bun. A simple salad with oil-and-vinegar dressing should be available at just about any restaurant.

4. Stay hydrated — the smart way. Dehydration can lead to unnecessary feelings of hunger. Keep a reusable, BPA-free water bottle by your side and have a sip whenever you need to. If you're weaning yourself off of soda and other sugary drinks, choose flavored waters or teas that contain no sugar.

5. When cravings strike, go for a walk. If you're at home relaxing and start craving junk food, head for the outdoors instead of the refrigerator door. Even 15 minutes of brisk walking can help you overcome the cravings and reenergize.

6. If you're hungry, eat. There's a difference between hunger and cravings. If you're really hungry, don't worry if your last meal was an hour ago or four hours ago. Have a protein shake. Eat half an apple with some almonds and a few slices of organic cheese. Have two squares of dark chocolate (at least 70 percent dark, ideally 85 percent). When your diet consists of quality protein, vegetables, fruits and healthy fats, you're a lot less likely to overeat compared to when your diet is loaded with high-carbohydrate, low-fat, low-protein snacks.

7. Take care of yourself. Although the 30-Day Challenge focuses on nutrition, all your health-related efforts (e.g., getting sufficient sleep, lowering stress and getting exercise) will support your success. ■



Beyond the Challenge

Making Health a Lifelong Journey

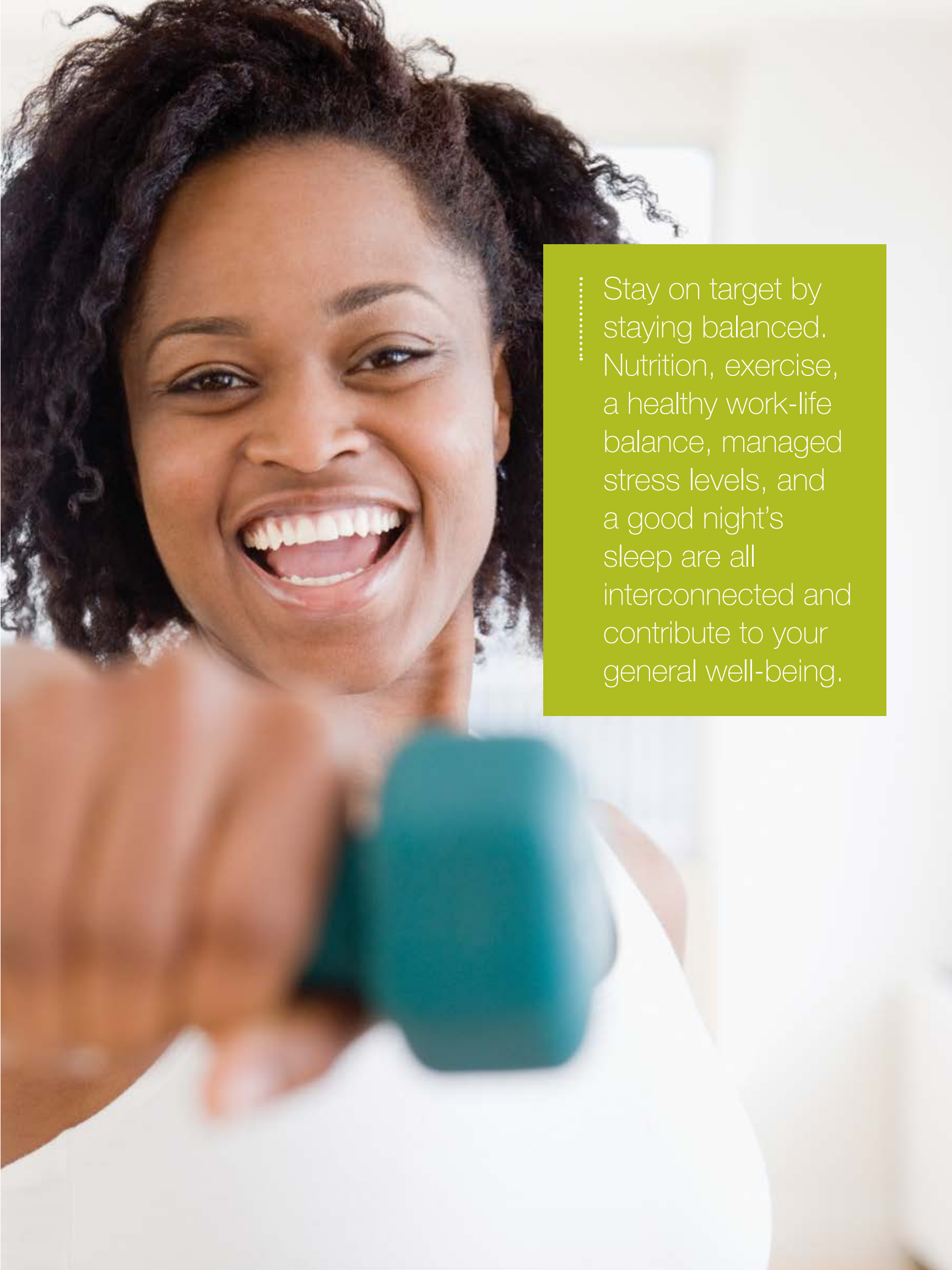
.....

Congratulations on completing the 30-Day Challenge! At this point, you may have several weeks or even months under your belt with the Healthy Way of Eating. You've absorbed the span of nutritional knowledge to make critical changes in your diet. You've adapted those basic principles for your individual lifestyle. Finally, you've put it all together in the scope of the 30-Day Challenge experience.

Look back to the photos or journal entries you did when reading Chapter 5 of this guide. What has changed in terms of how you feel, how you look, how you live? What has this transition meant for you? The Healthy Way of Eating truly is the foundation for a healthy way of life, but it's a lifelong endeavor. What goals do you have going forward? With what aspects of the Healthy Way of Eating are you most comfortable and feel were most successful during the challenge? What aspects do you still need to work on the most? When you step back and appreciate the progress you've made in a short time, think of all that is possible as you continue on this path of healthy living.

Choosing health obliges us to continually recommit to our well-being. Every day we have the chance to prioritize the food, movement, sleep, activities and personal reflections that can cultivate our health — perhaps far beyond what we may have believed when starting this process. With time, we discover new layers of wellness — of energy and vitality — that have the power to transform our lives as well as our health.

We hope working with this guide has helped you engage healthy eating in a new and meaningful way. Likewise, we hope the experience has set you on a path for continuing success. As you look to the future, we encourage you to use Life Time's many website and club resources to support your continuing efforts toward a healthy and active lifestyle. The next chapter is yours to create. We're here to help you make it all it can be. Eat well and live well. ■



..... Stay on target by staying balanced. Nutrition, exercise, a healthy work-life balance, managed stress levels, and a good night's sleep are all interconnected and contribute to your general well-being.

References

1. Wang, Claire Y., et. al. "Health and economic burden of the projected obesity trends in the USA and the UK." *The Lancet*, 2011; 378 (9793): 815.
2. Kessler D. *The End of Overeating*. New York: Rodale, Inc., 2009.
3. Parker-Pope, Tara. "Craving an Ice-Cream Fix." *New York Times*. 20 Sept. 2012. <http://well.blogs.nytimes.com/2012/09/20/craving-an-ice-cream-fix/?ref=health>
4. Rabin, Roni Caryn. "Can You Be Addicted to Foods?" *New York Times*. 5 Jan. 2011. <http://well.blogs.nytimes.com/2011/01/05/can-you-be-addicted-to-foods/>
5. Davis W. "Wheat Belly." *The Heart Scan Blog*. 23 July 2007.
6. Heshka S, Yang MU, Wang J, Burt P, Pi-Sunyer F. "Weight loss and change in resting metabolic rate." *Am J Clin Nutr*. 1990;52:981-6.
7. Halton T, Hu F. "The Effects of High Protein Diets on Thermogenesis, Satiety and Weight Loss: A Critical Review." *Jour Amer Coll Nutr*. 23;5:373-385.
8. "How Many Fruits and Vegetables Do You Need?" Centers for Disease Control and Prevention. <http://www.cdc.gov/nutrition/everyone/fruitsvegetables/howmany.html>
9. "Only 1 in 10 Get Their 5 A Day!" UK. *Medical News Today*. (<http://www.medicalnewstoday.com/articles/182669.php>)
10. "The Nutrition Source. Vegetables and Fruits: Get Plenty Every Day." Harvard School of Public Health. <http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/vegetables-full-story/index.html>
11. Garden-Robinson J. "What color is your food?" NDSU Extension Service. North Dakota State University. February, 2009.
12. LaValle J. *Cracking the Metabolic Code*. Laguna Beach, CA: Basic Health Publications, Inc., 2004.
13. Lehtonen HM, Soumela JP, Tahvonen, Vaarno J, Venojarvi M, Viikari J, Kallio H. "Berry meals and risk factors associated with metabolic syndrome." *Eur J Clin Nutr*. 3 Mar. 2010.
14. Environmental Working Group. "Shopper's Guide to Pesticides." Environmental Working Group. 2010. (<http://www.foodnews.org/walletguide.php>)
15. "Dirt Poor: Have Fruits and Vegetables Become Less Nutritious?" *Scientific American*. 27 April 2011. <http://www.scientificamerican.com/article.cfm?id=soil-depletion-and-nutrition-loss>
16. Garcia O, Long K, Rosado J. "Impact of micronutrient deficiencies on obesity." *Nutrition Reviews* 67;10:559-572.
17. Kreider RB, et al. "ISSN exercise & sports nutrition review: research & recommendations." *Jour Int Spor Nut*. 2010;7:7.
18. Westerterp-Planenga MS, Nieuwenhuizen A, Tome D, Soenen S, Westerterp KR. "Dietary Protein, Weight Loss, and Weight Maintenance." *Annu Rev Nutr*. 2009;29:21-41.
19. Campbell B, Kreider RB, Ziegenfuss T, La Bounty P, Roberts M, Burke D, Landis J, Lope H, Antonio J. "International Society of Sports Nutrition Position Stand: Protein and Exercise." *Jour Int Soc Spor Nutr*. 2007;4:8.
20. Westerterp-Planenga MS, Rolland V, Wilson A, Westerterp KR. "Satiety related to 24 h diet-induced thermogenesis during high protein/ carbohydrate vs high fat diets measured in a respiration chamber." *Eur J Clin Nutr*. 1999;53:495-50.
21. Micha R, Wallace SK, Mozaffarian D. "Red and Processed Meat Consumption and Risk of Incident Coronary Heart Disease, Stroke, and Diabetes Mellitus." *Circulation*. 2010;121:2271-2283.
22. "Seniors Need More Protein Rich Food to Decrease Muscle Loss, Improve Quality of Life." *Medical News Today*. 11 Aug. 2007. <http://www.medicalnewstoday.com/releases/79223.php>
23. Campbell, Wayne W., et. al. "Dietary protein adequacy and lower body versus whole body resistive training in older humans." *The Journal of Physiology*. 542. (15 July 2002), 631-642.
24. "Eating Processed Meats, but Not Unprocessed Red Meats, May Raise Risk of Heart Disease and Diabetes." *Harvard School of Medicine*. 17 May 2010. <http://www.hsph.harvard.edu/news/press-releases/2010-releases/processed-meats-unprocessed-heart-disease-diabetes.html>
25. Layman DK, Evans EM, Erickson D, Seyler J, Weber J, Bagshaw D, Griel A, Psota T, Kris-Etherton P. A moderate-protein diet produces sustained weight loss and long-term changes in body composition and blood lipids in obese adults. *J Nutr*. 2009;139:514-21.

26. Daley C, Abbott A, Doyle P, Nader G, Larson S. "A review of fatty acid profiles and antioxidant content in grass-fed and grain-fed beef." *Nut Jour*. 2010;9:10.
27. "Health Benefits of Grass-Fed Products." *Eat Wild* online. <http://www.eatwild.com/healthbenefits.htm>
28. Pins, Joel J., Keenan, Joseph. "Effects of Whey Peptides on Cardiovascular Disease Risk Factors." *The Journal of Clinical Hypertension*. 8:11 (Nov 2006), 775-82.
29. Siri-Tarino P, Sun Q, Hu F, Krauss R. "Meta-analysis of prospective cohort studies evaluating the association of saturated fat with cardiovascular disease." *Am J Clin Nutr*. 2010;91:525-546.
30. Bowden J. *The 150 Healthiest Foods on Earth*. Beverly, MA: Fair Winds Press, 2007.
31. Micallef M, Munro I, Garg M. "An inverse relationship between plasma n-3 fatty acids and C-reactive protein in healthy individuals." *E J Clin Nutr*. 2009;63:1154-1156.
32. Furuholm C, Warstedt K, Larsson J, Fredriksson M, Fageras Bottcher M, Faith-Magnusson K, Duchon K. "Fish oil supplementation in pregnancy and lactation may decrease the risk of infant allergy." *Acta Paediatrica*. 2009.
33. Micallef M, Munro I, Phang M, Garg M. "Plasma n-3 polyunsaturated fatty acids are negatively associated with obesity." *Br J Nutr*. 102, pp 1370-1374
34. SanGiovanni J, Agron E, Meleth AD, Reed G, Sperduto D, Clemons T, Chew E. w-3 "Long-chain polyunsaturated fatty acid intake and 12-y incidence of neovascular age-related macular degeneration and central geographic atrophy: a prospective cohort study from the Age-Related Eye Disease Study." *Am J Clin Nutr*. October 7, 2009.
35. Joensen A, Schmidt E, Dethlefsen C, Johnsen S, Tjonneland A, Rasmussen L, Overvad K. Dietary intake of total marine n-3 polyunsaturated fatty acids, eicosapentaenoic acid, docosahexaenoic acid and docosapentaenoic acid and the risk of acute coronary syndrome - a cohort study. *Br J Nutr*. 2009 Oct 14:1-6.
36. Davis W. "Why does fish oil reduce triglycerides?" *The Heart Scan Blog*. November 1, 2009.
37. Whalen J. "Probing Health Benefits from Eating Omega-3s." *The Wall Street Journal*. Sept 14, 2009.
38. "Omega-3 awareness not backed by supplement choices: Survey." *Nutraingredients.com*. 25 Sept 2009.
40. Hyman M. Gluten: "What You Don't Know Might Kill You." *The Huffington Post*. 2 January 2010.
41. Farrell R. J., Kelly C. P. "Celiac Sprue." *New England Journal of Medicine* 17: 346 (3), (2002), 180-8.
42. Nordqvist C. "What is Wheat Allergy? What Causes A Wheat Allergy?" *Medical News Today*. 18 Dec 2009. <http://www.medicalnewstoday.com/articles/174405.php>
43. Davis, W. "Wheat Belly." New York: Rodale, 2011.
44. Celiac Spruce Association. Grains and Flours Glossary. Celiac Spruce Association Web site. (http://www.csaceliacs.org/gluten_grains.php)
45. Shlisky, Julie D., et al. "Partial Sleep Deprivation and Energy Balance in Adults: An Emerging Issue for Consideration by Dietetics Practitioners." *Journal of the Academy of Nutrition and Dietetics*. 112:11. (Nov. 2012), 1785-97.
46. Eloheid, Mai A., Allison, David B. "Putative Environmental-Endocrine Disruptors and Obesity: A Review." *Curr Opin Endocrinol Diabetes Obes*. 15(5) (Oct. 2008), 403-08.
47. Soto AM, Sonnenschein C. "Environmental causes of cancer: endocrine disruptors as carcinogens." *Nature Reviews Endocrinology*. 20 May 2010.
48. Vann M. "1 in 4 Men Over 30 Has Low Testosterone." *ABC News*. 13 Sept 2009. (<http://abcnews.go.com/Health/Healthday/story?id=4508669&page=1>)

