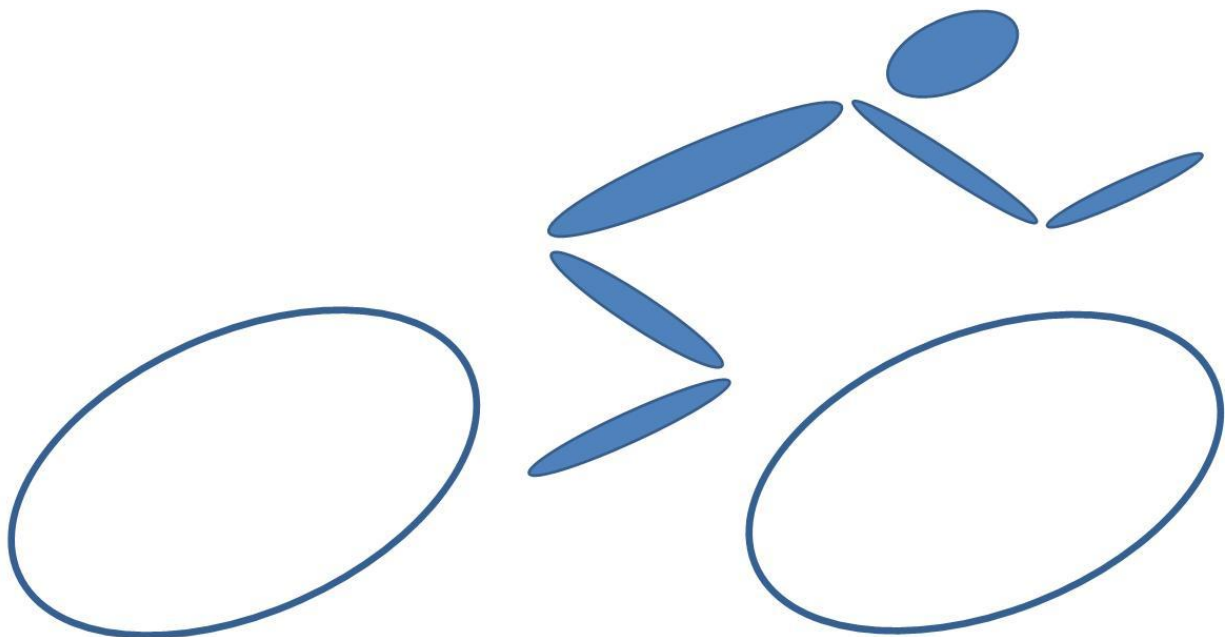


Pedal Off The Pounds

A practical approach for weight management through bicycling and good nutrition



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(Sample Pages)

Prologue

Losing weight is difficult. If you are reading this book, you probably have tried once or more likely have tried several times to lose some weight. Perhaps you have been successful but even if you have you have likely gained some of it back. As you age, you may also notice it gets more difficult to get and keep the weight off.

Losing weight through exercise alone without changing your diet will be difficult and time consuming. Cycling is an excellent form of exercise for burning a lot of calories. But even with a lot of riding, it will take a long time to lose weight. It takes anywhere from 120 to 140 miles of riding to burn off one pound of body fat. Chances are you are already riding, so to burn off additional weight, you need to add a lot more miles to your weekly riding, and this assumes you don't compensate by eating more.

Losing weight by changing your diet without increasing your exercise is equally difficult. This can lead to severe hunger and slow progress. But when you combine a reduced calorie diet with increased energy expenditure, weight loss becomes manageable and noticeable. You are fortunate to have chosen cycling as your form of exercise. What other activity can burn so many calories per hour and yet allow you to do so for several hours in a day? Running burns more calories than cycling per hour and per mile, but rarely does one run more than an hour or two at a time. A pound of fat contains about 3500 calories, so to burn off a pound of fat, you need to decrease your energy intake and/or increase your energy expenditure by this much to lose one pound of body weight. To lose a pound per week, you need to expend 500 calories per day more than you take in. If you don't change your activity, you will need to decrease your food consumption by 500 calories per day which is quite a bit. If you don't change your diet, you will need to increase your energy expenditure by 500 calories per day. This amounts to about 20 more miles of cycling per day, which is also quite a bit, especially if you are already riding a lot. But if you combine reduced caloric intake with increased cycling, you can lose a pound per week with just a 250 calorie reduced intake combined with 250 calories more riding per day (about 10 miles). This seems a lot more reasonable. Combining caloric consumption with increased cycling, you have a powerful combination.

I like things to be as simple and practical as possible. Therefore I've organized the chapters in this book are set up in a specific order. Chapter 1 starts out with a discussion of **what** you should be eating to assist with weight loss and management, being healthy and having energy for cycling and life. This will prepare you for the chapters to follow. Chapter 2 talks about **how much** and **when** you should eat and some tips to eat enough to provide the energy you need for your daily activities and for your cycling, yet will allow you to shed some pounds at the same time. It will discuss hunger, something many books on weight loss tend to avoid. But we aren't going to avoid the subject. Instead we are going to tackle it head on and discuss how you can use your appetite to your advantage. Chapter 3 discusses when to be eating which foods, to balance the need for energy for cycling with the desire to lose weight. This can be tricky but you will get some guidelines to help weave your way through these seemingly contradictory objectives. It discusses the number of calories you can burn while cycling, the role of duration and intensity, and whether to ride in the fat burning zone. Chapter 4 contains some examples of cycling and diet programs which may help you visualize how to put the two together to maximize your success at weight loss. The last chapter contains a listing of tips to consider using for

Chapter 1

What To Eat

Basics of Nutrition for Healthy Weight Loss and Cycling

Depending on how much you already know about nutrition, this chapter may be entirely new to you or may serve as a review. However, please read it as you may pick up some new approaches and ideas about nutrition you may not have thought of before. This chapter will review information critical to energy for cycling and weight loss. It will also cover some topics to consider for designing a healthful diet.

Carbohydrates: Let's start with carbohydrates, which are essential to providing energy for cyclists. Carbohydrates are classified as either simple or complex. Simple carbohydrates include the sugars. Common terms for sugar include table sugar, cane sugar, glucose, sucrose, fructose, dextrins and high fructose corn syrup. Sugars are commonly defined as monosaccharides (one sugar molecule) or disaccharides (two sugar molecules). Monosaccharides include glucose, fructose and galactose.

Glucose is the lowest common denominator for sugars and starches. Your body burns carbohydrates in the body as glucose. Your muscles run very well on glucose and your brain runs exclusively on glucose. You "bonk" when you run out of glucose. Glucose is an essential form of energy to keep you alive, but as you will learn, you do not actually need to consume carbohydrates to obtain glucose. Glucose rarely occurs by itself in food but instead is present in other sugars and starches that break down to glucose in the body. When we do get it directly, it is usually found in processed foods and energy drinks, bars and gels. Starch is composed entirely and exclusively of long chains of glucose molecules. When we consume starch, the body breaks it down into individual glucose sugars. Glucose can also be obtained from maltodextrin, which are short chains of glucose, shorter than found in starch. Maltodextrins are often included in sport drinks and gels and provide a quick source of energy. The supply of glucose to your body is an important concept both for cycling and weight loss that will be discussed further in the glycemic index discussion.

Fructose is commonly called fruit sugar and as the name suggests, it is found in mainly in fruits. Like glucose, we rarely consume fructose by itself. We typically get fructose from sucrose. Sucrose is a two sugar molecule composed of one molecule each of fructose and glucose. Our bodies break sucrose down into its component sugars. However, unlike glucose, our bodies cannot burn fructose directly, but it needs to be converted to other compounds by our liver before being used by our body for energy. Therefore, it is not as 'quick energy' as glucose. This can be good if you want more slowly metered energy but not if you need instant energy during a ride. Fructose is also manufactured from starch in the form of high fructose corn syrup (HFCS). The name is somewhat misleading. HFCS is a combination of glucose and fructose and the composition of HFCS is almost identical to that of table sugar, or sucrose.

Milk is usually thought of as a protein source but it contains considerable sugar, in the form of lactose, which is a two-sugar molecule composed of lactose and glucose. The body breaks down lactose into its components by the enzyme lactase. Some ethnic populations do not produce much lactase and therefore have trouble digesting galactose. People with Northern

Chapter 2

When and How Much To Eat

How to use hunger to your advantage

I have read many of the popular diet and nutrition books that have come out over the past 20 years. A couple of things come through as constants with all of these various diets. First, most of them prescribe diets that have a lot of satisfying and filling foods to keep you feeling as full as possible while losing weight. Secondly, they all come up with ways to trick you into not feeling hungry yet eating few enough calories to lose weight. Think about a few of them. Low fat diets (e.g. Ornish, McDougall) reduce fat to a very low level so what results is a diet made up of lower calorie foods, carbohydrates and protein. Calorie for calorie, we need to eat more of these foods to get the same number of calories compared to those containing fat so we can eat more volume. As a matter of fact, one of Ornish's books is titled "Eat More, Weigh Less". Then there are the low carb diets such as the Atkins Diet, which allows and even encourages us to eat any and all foods that do not contain carbohydrates. The idea behind these low carbohydrate diets is that protein and fats are satiating and they digest slowly so they remain in your stomach a long time and you don't feel hungry as quickly. Supposedly as a result, you don't eat as much or as often. These low carb diets also result in a low, steady blood sugar level and reduced swings in insulin. Then there are diets that emphasize low calorie dense foods such as the Pritikin Principle and Joel Fuhrman's Eat To Live diet which encourage eating of foods with high volume and low calorie density, diets that include lots of watery fruits and vegetables with a lot of fiber. But all popular diets have plans to get you to eat fewer calories while limiting the amount of hunger. No one will get a New York Times Best Selling book by telling you to go around being hungry all day.

A third feature of all these diets is that for the most part they recommend eating whole foods and avoid eating processed foods. Although there are diets that avoid meat and fat (Ornish, Pritikin) and others that avoid carbohydrates (Atkins, South Beach), I have never seen a diet that eliminates vegetables. In other words, your mother was right, eat your vegetables! Just be careful with the starchy ones.

So why do we get hungry? Simple, so we don't starve! It is our built-in system to tell us our bodies are deficient in calories. Imagine if you did not have the sensation of hunger. You would have to consciously think about having to eat exactly the correct amount food. Can you imagine how difficult it would be? Some of us would be literally skin and bones and others would be overweight. Very few people now are skin and bones unless they have some illness or disorder, because our hunger is very powerful and would make life uncomfortable to be chronically deficient in calories.

You may not realize it but you have a very accurate built-in fuel gauge – your appetite. Your appetite is actually very accurate although you may not think so when you see all the overweight people in our society. But consider this. If your appetite was a little off and you ate just 10 calories more than you need each day, you would gain one pound per year (3500 calories = 1 pound of fat). Many people gain a pound per year, but it probably isn't because their appetite is off but because they eat when they aren't hungry! But let's assume for a moment that our appetite is off by 10 calories per day. If you eat about 2000 calories per day then these 10 calories extra is only a half a percent. That means your appetite is pretty darned accurate. Ten calories is about the amount in one saltine cracker. But I argue that our appetite

Chapter 3

Eating for Weight Loss and Cycling Performance

Cycling is a great exercise for weight loss because it can burn a substantial number of calories per day. But because it does burn a lot of calories, it requires that you eat a considerable number of calories to support your riding to lose weight. There is an apparent paradox here. We have to eat enough to lose weight through riding? The truth is that it takes energy to burn energy, but this requires careful consideration which is the purpose of this chapter. By carefully combining the amounts and types of food energy along with the type of riding you do, you can chip away at body fat while still having the energy to ride and to lose weight. It is much more difficult to attempt to lose weight and gain cycling performance at the same time because you need to eat more to support your more intense training. It is possible to do so, but you can expect your weight loss to be slower. It takes a slightly different approach to do so. Therefore, these two approaches will be dealt with separately. Before we look at these two approaches, there are some general concepts that apply to both situations.

Cycling may be the most perfect exercise for weight loss. You can do it every day, you can ride for hours at a time, and by varying the intensity you can vary the number of calories based on the amount of time you have to ride. There is an acronym 'FIT' which stands for Frequency, Intensity and Time. By varying these three variables, you can adjust the amount and type of energy you burn through cycling. We will address each of these in turn.

Frequency: Ideally for weight loss, you should ride every day. Because cycling is a forgiving form of exercise, you can do it every day. Other activities such as running or kick boxing classes are harder on your body and doing them day after day may lead to injury. The more frequently you ride, the more often you raise your metabolism. As you raise your metabolism, you burn more calories, on and off the bike. There is a phenomenon called 'EPOC', or Excess Post-exercise Oxygen Consumption. When exercising you raise your metabolism as your body burns energy for your exercise. Just as your heart rate increases, so does your metabolism. Your metabolism slowly returns to normal after you finish your ride as your body works to recover from the effort and repair damage done by the exertion. You may have noticed that you are still sweating after a hard ride, even after you have taken a shower. Your body is still at work. This is a good thing for weight loss. Your elevated metabolism is spending energy to repair your body. While the energy burned through EPOC is nothing like the energy you burn while exercising, it adds a few percent to your metabolism for a few hours after a ride and can be considered free energy burn. This is why exercising often will help. The more often you exercise, the more often you rev up your metabolism and get this free energy burn. Of course, the more frequently you ride, the more frequently you will be burning additional calories.

To add frequency to your riding, attempt to ride as many days per week as is possible. It's possible to ride every day. Even if you can only ride for 20 minutes, do it. It all counts and adds up. And don't forget about the EPOC effect you get every time you ride. You may also consider riding twice a day. If you were to ride 20 minutes every morning, five days a week, that's 100 minutes more of riding, that's almost a half pound of fat burned each week right there. Or, take part in two or three spin classes each week. Another great way to increase your frequency of

Chapter 4

Example Training and Eating Plans to Maximize Weight Loss and Performance

In the previous chapters we covered the concepts around eating to maximize weight loss and combining that with cycling to increase your rate of weight loss. We also discussed modifying this to allow you to train hard while losing weight. This chapter is going to give some examples to provide a more clear illustration to put these concepts into practice. We will start with some examples of how to eat when focusing on weight loss as well as how to balance weight loss with hard training. These are simply examples to provide a good idea of how you might want to set up your eating and training plans. However you don't have to use these plans as is but rather design your own using these principles.

Maximizing weight loss, using cycling to assist in weight loss

The main thing to keep in mind in this situation is to eat a low calorie-dense diet primarily based on Chapter 1 guidelines. Eat mostly a low glycemic carbohydrate meal of vegetables and fruit with some lean protein and a small amount of healthy oils and lay off of the starchy carbohydrates (potatoes, beans, breads). You really don't need to eat additional food unless you are doing rides two hours or longer. If you do longer rides, you will need some additional calories so eat some more complex carbohydrates and you can also consume some higher glycemic starchy carbohydrates to support these longer rides. As long as you don't overdo it, you will still burn more calories on a 2+ hour ride than you eat. In the plan below, "Low calorie-dense" refers to meals that contain primarily low glycemic carbohydrates (e.g. fruits and non-starchy vegetables). "Moderate calorie dense" refers to meals that include some higher calorie-dense and higher glycemic foods, such as breads, beans and potatoes. You will see that moderate calorie meals are included in the meal prior to longer rides. In the case of an early morning ride, that would mean eating a larger meal the evening before if the ride is more than two hours. You will not be eating high calorie-dense meals if your primary goal is to lose weight. You won't need to as long as you eat a balance of low and moderate glycemic carbs. Even if you choose to ride a century ride, you can do so with a moderate amount of carbohydrate eaten frequently.

Let's look at a sample week with a variety of times and duration of rides. The key deviations from your low calorie-dense eating pattern are underlined>.

Monday:

Low calorie-dense breakfast
Mid-morning snack
Low calorie-dense lunch
Afternoon snack
Evening ride – 1 hour
Low calorie-dense dinner
No eating after 7PM

Tuesday:

Low calorie-dense breakfast