

CONTENTS

<i>Acknowledgments</i>	<i>ix</i>
<i>Introduction</i>	<i>1</i>
Part I	
The Brown Fat Revolution Basics	11
1. The Science Behind the Brown Fat Revolution	13
2. How You Age—And How Fat Plays Its Role: Hormone Category I	29
3. How You Age—And How Fat Plays Its Role: Hormone Category II	39
Part II	
The Brown Fat Revolution Eating Plan	49
4. How the Brown Fat Revolution Eating Plan Is Different	51
5. Four-Week Eating Plan for the Hormone Category I	91
6. Four-Week Eating Plan for the Hormone Category II	115
Part III	
The Brown Fat Revolution Exercise Plan	137
7. How the Brown Fat Revolution Exercise Plan Is Different	139
8. Exercise How-to's	159
9. Four-Week Exercise Plan for the Hormone Category I— Beginner/Intermediate	213
10. Four-Week Exercise Plan for the Hormone Category I— Intermediate/Advanced	223
11. Four-Week Exercise Plan for the Hormone Category II— Beginner/Intermediate	233
12. Four-Week Exercise Plan for the Hormone Category II— Intermediate/Advanced	245
<i>Appendix: The Brown Fat Revolution Skin Care: Yes, It's All About the Fat!</i>	<i>257</i>
<i>Index</i>	<i>271</i>

THE BROWN FAT REVOLUTION

INTRODUCTION

Let me tell you a story about fat.

“Have you ever seen such a thing?” asked my patient Lisa as she came in for an appointment one rainy day several years ago. “It’s worse than when I was pregnant. At least then I had a baby inside. But look at me now. This is just *gross!*”

Lisa was sweet, sassy—and seriously desperate. With one swift glance I immediately understood why. At the age of fifty-one, she was burdened with an absolutely enormous floppy and lumpy fold of belly fat. She patted it and grimaced as she shifted uncomfortably in her chair.

“Don’t worry, I have seen such a thing,” I told her, and she visibly relaxed in relief. “So many times before, in fact, that there’s a name for it: a panniculus. It’s caused by the kind of fat in your body that’s yellow and unhealthy. I call it McDonald’s fat.”

“I don’t care if you call it Burger King fat or Wendy’s fat!” she joked. “Just get rid of it, *please!*”

Because Lisa’s panniculus was so disproportionate to the rest of her petite frame, her only option, unlike for most of my patients, was a drastic one, and we scheduled a tummy tuck.

On the day of her surgery, after I made my initial incision, the surgical residents and the anesthesiologist watched benignly, expecting yet another routine procedure. Then they peered over at Lisa’s abdomen, and I heard them gasp aloud.

“I have *never* seen anything like that before,” the anesthesiologist told me, his eyes round with shock over his surgical mask as he looked at the mounds of bright yellow fat in Lisa’s abdomen. As I explained what it was, you could have heard a pin drop in that surgical suite.

The more I explained the difference between Lisa’s yellow fat and the good kind of brown fat that makes a body look and feel healthy and vibrant, the more I realized how many misperceptions there are about fat—even in the well-educated medical community.

Contrary to popular belief, you see, *fat* is the key to a nice flat belly. And *fat* is the key to a youthful-looking face and body, as well.

But here’s the crucial element to unlocking the power of fat. *Not all fat is the*

same. The fat that keeps you looking and feeling vibrant is not the unhealthy old, soft, and mushy yellow fat like the astonishing amount (*ten* pounds!) I plucked out of Lisa during her operation. I can tell you from my decades of surgical experience that there is a fat that is healthy and highly desirable. It is what I call brown fat. Brown fat is firm and resilient and gives our bodies a youthful shape—it keeps our cheeks round and our butts in place.

This book will prove to you that once you understand the difference between brown fat and yellow fat, you can make the changes in how you eat and how you move to get rid of the bad and replace it with the good, no matter what your age.

The Brown Fat Revolution is the first book to show you how to use your own fat to dramatically rejuvenate your face and body.

VOLUME = GOOD BROWN FAT = YOUTH

When you hear the words “plastic surgeon,” what immediately comes to mind? If you’re like many consumers, you probably think about something like face-lifts or liposuction or even a television show like *Extreme Makeover*.

As a plastic surgeon, I’ve realized that it takes a lot more than just expensive surgery for my patients to achieve the best results they’re hoping for. I’ve spent my entire professional life looking at shape and contour, coupling this knowledge with a firm understanding of science and physiology so I can do the best job possible, moving fat around to create beauty and youth in the face and body.

As a physician, I’ve studied nutrition and metabolic functions for over three decades. And as a bodybuilder for more than two decades, I’ve learned how to literally confuse my metabolism so that my muscles continue to strengthen even while fat is never deposited in my body.

I’ve also had many years of experience listening to women’s hopes and needs, learning to understand them better so I can help them look and feel the best they possibly can. What I hear, over and over again, from these patients are statements like “I’m eating the same and exercising the same way as I’ve done for the last twenty years, but my waist just keeps getting bigger,” or “I don’t look the way I feel inside. In fact, I’m starting to look like my mother.”

I tell them that all the money in the world can buy you as many medical procedures as you want, but it can never buy you a truly healthy, beautiful body.

I also tell them that, without question, the most important anti-aging concept for me is the *language of volume*. (All plastic surgery stems from this notion, as the Greek word *plastikos* means “to shape.”)

It's volume that gives faces their youthful contours and soft curves. It's volume that makes us look young and rounded.

And it's good brown fat that gives you the volume you want, in the places you want it!

Brown fat is typical of youthful curves and excellent nutrition and health. Yellow fat is typical of age and poor nutrition; it creates the characteristic face and body shapes that we associate with aging, such as a round lower abdomen, jiggly arms, and soft, enlarged breasts.

That there is such a noticeable difference between brown fat and yellow fat was highlighted in a front-page article by science reporter Gina Kolata, published in *The New York Times* on April 8, 2009, entitled "Calorie-Burning Fat? Studies Say You Have It." This article discussed the results of several different research studies, whose results were published in the *New England Journal of Medicine* (360, no. 15 [2009]: 1500–1508), that scientifically documented the role of brown fat cells. These studies concentrated on the thermogenic, or heat-burning, properties of brown fat found deep in the body. This type of brown fat was previously thought to be vestigial in adult humans; it had been thought to control temperature only in small mammals and infants. The conclusions of the studies were not only that there are different types of fat in the body, but that deep brown fat can burn more calories than yellow fat, particularly when triggered by cold temperatures.

Researchers were elated by these findings, as the hope is that eventually some completely new form of weight-loss drug may be developed—tackling excess fat *internally*, on a cellular level, by stimulating these thermogenic properties of deep brown fat, rather than by tackling caloric consumption.

And I was elated because these studies were a strictly controlled, scientific validation of three of my clinical impressions: that there are different types of fat in the body; that the more brown fat you have, the leaner you tend to be; and that different types of fat can be modulated by lifestyle, diet, and exercise so that you can convert yellow fat into brown fat.

These findings are thrilling if not revolutionary for those who study and work with fat, as they further our understanding of what fat is—that there is a spectrum of fat in the body, that different kinds of fat have different properties, and that aspects of our behavior (diet, exercise, medications) can affect our fat stores.

These studies concentrated on studying deep brown fat under the microscope at the cellular level, specifically on stimulating certain brown fat cells in the neck, upper back, and along the spine to regulate energy metabolism. These fat cells contain high concentrations of mitochondria, the energy boosters of the

cells. The mitochondria ramp up the metabolism of these fat cells, and the iron they contain gives the fat cells their brown hue.

I, on the other hand, have spent nearly thirty years working with thousands of bodies, during which time I've learned that not all skin is the same—and not all fat is, either. I see this every time I perform any surgical procedure. The brown fat that I see appears throughout the body, usually in the subcutaneous plane (immediately below the skin's surface). This subcutaneous brown fat gets its distinctive hue due to the dense network of connective tissue and blood vessels coursing through its well-proportioned fat cells, making it light brown or tan. It is tightly encased with fascia (connective tissue), dense, and it firmly adheres to the underlying muscle or bone as well as the overlying skin.

In contrast, the yellow fat I see is vivid in color, blobby and shapeless, and greasy to the touch.

Yellow fat is crummy-quality fat. Brown fat is good-quality fat. And the quality of your fat cannot be overestimated. The better your fat, the better you look and feel.

Having spent so many years working with subcutaneous brown fat to recontour the body, I instantly realized that this brown fat has several similar characteristics to the brown fat found deeper in the body as described in the recent studies. Namely, that lean people (with a lower body mass index, or BMI) have more brown fat than yellow fat, and that brown fat is directly related to control of your blood sugar.

While my goals and the goals of these scientists are the same—to use our own body's fat to reshape and revitalize—our methods of harnessing brown fat's power are different. The brown-fat researchers look forward to developing a drug to control this functionally active brown fat, which would be an incredible breakthrough for the health of millions of overweight people. But because their studies are still so new, these researchers have understandably admitted that developing any sort of drug to trigger deep brown fat's thermogenic properties is still years away—and that it might actually be impossible to create one.

The happy news is that the Brown Fat Revolution is available right now, and it works. I have spent years developing this program to help you replace your old, unhealthy yellow fat with new, healthy brown fat that is the hallmark of youthful volume.

WHY BROWN FAT IS EVEN MORE IMPORTANT AS YOU GROW OLDER

The *quality* of your body fat changes naturally with age, from young, light brown fat to old yellow fat. For women going through perimenopause and beyond, when the hormonally triggered changes they experience can be as bewildering and debilitating as puberty once was, the volume distribution or placement of their body fat will change as they age, too. This is the reason why so many of my patients over the age of forty have pointed to their bellies, telling me that they've grown a pooch seemingly overnight, and then begged me, as Lisa did, to help them.

Often, before they've come to see me, these patients have tried just about everything. First they panic. Then they start starving themselves. Then they work themselves into a frenzy in the gym.

But what happens? They feel awful and look worse. Their skin loses its luster, so their faces look gaunt and pinched. Instead of getting more energy from exercise, they're exhausted and crabby all the time. They've overexercised so much that, believe it or not, their faces are literally paying the price. Although they had good intentions and the discipline to make a strong commitment to health, they unwittingly chose the wrong strategy toward their fat, so it became impossible for them to achieve their goals.

All because they thought fat was the enemy.

When your body has the right proportions of good brown fat, you will always look youthful. The flip side, of course, is that if your body has the wrong proportions of bad yellow fat, you will always look soft, flabby, and old before your time.

Understanding the difference between brown and yellow fat is the heart of this book, because how you look as you age is *not* based on your weight. Thin does not always translate to looking young, because shape and contour define youth. Instead, your youthfulness is based on your proportions, and how your hormones determine where brown and yellow fat shifts in your body as you grow older.

In other words, when you follow the plans in *The Brown Fat Revolution*, you'll realize that what they target is your *shape*. You'll not only lose weight, but you'll regain the shapeliness that is the hallmark of youth.

When your shape is firm, lifted, and curvy, supported by the good brown fat you're soon going to have, you will always look younger. Once you start follow-

ing the unique Eating and Exercise Plans in this book, you will never need a surgeon to get rid of your unhealthy yellow fat the way Lisa needed me.

The principles you'll read about will help you maintain the best balance of fat and muscle, and keep as high a proportion of brown fat to yellow fat as possible in order to hold on to the curves of femininity and the firmness and lift of youth, no matter what your age. And because this good brown fat will firmly support your skin, making it more youthful throughout your body, you'll also see the following:

- Your face will show improved tone and contour.
- Your arms will look more toned due to the loss of yellow fat and the formation of well-toned, firm muscles. Your belly will flatten due to decreased internal yellow fat.
- Your upper back will be smoother, and the area where your arms join your back will no longer be puffing over the sides of your bra.
- If you have cellulite, it will definitely show a marked improvement once the skin there is supported with healthy, firm young fat, and not mushy, old yellow fat.
- You will literally de-age yourself, solely by the way you eat and exercise. Not only will you improve your health, you'll enhance your beauty at the same time.

WHY THIS BOOK IS UNIQUE

Most anti-age books talk about the need for exercise and good skin care. But they concentrate on either the health benefits of exercise (such as using it along with diet to help you try to lose weight), or on the beautifying aspects of your appearance (with, for example, a certain kind of skin-care regimen). Many exercise books are written by certified trainers who concentrate only on movement and some kind of diet, without understanding the entire picture of physiology and metabolism—and certainly not the difference between yellow and brown fat. Many nutritionists write books because they want to help you lose weight, but although they understand metabolic functions, they don't usually understand the crucial role of yellow and brown fat, either. Even more important, many nu-

tritionists do not design programs to specifically shape the body in addition to helping you lose weight. They design programs so that you'll lose fat and overall weight.

The reason for this is that most medical professionals don't think of fat the same way I do, as wanting to understand fat and the language of volume has shaped my entire career. I first became interested in the body's fat when I studied anatomy in medical school, and my interest progressed during my three decades of experience in shaping bodies with a scalpel and my two hands.

I'm assuming that anybody who reads my book wants to lose weight. But that's not enough for me—I want you to lose weight *and* look more youthful and more vibrant at the same time. Believe me, it can be done. Making tremendous, noticeable changes to your health and to your appearance is no longer an either/or situation.

Unlike most of my colleagues, I know what you need to do to not only feel better and lose weight—but also look incredible. The better you look, the better you're going to feel, which will keep you on the program until it's second nature.

My goal with this book is to have you completely rethink your attitude toward fat, and understand that young, healthy brown fat is a good thing.

HOW THIS BOOK WORKS

The Brown Fat Revolution will give you a concise explanation of the external and internal changes to your fat (and the rest of your body) as you age, coupled with a no-fail plan showing you how to use this knowledge to combat aging. You'll learn that what you eat has a direct effect on the *quality* of your fat, and how you exercise has a direct effect on the *quantity* of your fat. You'll get rid of bad yellow fat not by dieting or starving or spending endless, fruitless hours in the gym, but by alternating Protein Days with Carbohydrate Days, and increasing your metabolism with lean muscle.

Because hormones have the most profound effect on how our bodies age, each part of this book contains sections on two categories: Hormone Category I (ages thirty to fifty) and Hormone Category II (fifty and older). Chapters 2 and 3 will go into greater detail about hormones and the aging process. Armed with this information, you can then turn to the section of the book that is most applicable to your unique needs, and for quicker results you can target the areas of your body where the bad yellow fat has accumulated.

In part 1 you get the primer on fat, based on my thirty years of clinical experience studying the human body, as well as details of how your body ages.

Part 2 explains how the Eating Plan works, and why eating fat is good for you—as long as it’s the right kind of fat. Once you start following this plan, you’ll actually be eating a lot more while weighing less. Optimal nourishment will give you skin that glows, and a face that retains its youthful curves instead of looking haggard and aged.

Part 3 is all about replacing bad yellow fat with good brown fat through a revolutionary, time-efficient Exercise Plan that proves you can become fit and strong without spending hours each day on exercise.

Combining the Eating Plan with the Exercise Plan will provide maximum benefits. You won’t be hungry, plus you’ll raise your metabolism to a steady level so you won’t gain weight. You’ll no longer build up deposits of bad yellow fat, so you will quickly see results as a healthy underpinning of dense brown fat helps improve skin tone, decrease wrinkles, and minimize cellulite. Once you learn how to sculpt and strengthen your body without punishing your face, you’ll be able to maintain this healthy, glowing, toned, firm skin without needing expensive procedures.

THE BROWN FAT REVOLUTION IS A PLAN FOR LIFE

Let me tell you another story about fat. My *own* fat.

I had been a competitive ballroom dancer as a teenager, eventually becoming the National Junior Latin and International Champion, but once I got into medical school, I stopped dancing. For the next twenty-two years, as I finished my medical training and opened my practice, I did nothing physical.

Nor did I pay close attention to what I put in my mouth, or how much. On a typical day, I’d finish my hours of grueling surgery and I’d be *hungry*. I’d go into the hospital lounge, looking for the usual plate of cookies and other treats. But I wouldn’t eat just a cookie or two to take the edge off my hunger—I’d eat half a box while waiting for my nurse, Dede, to get me a steak sandwich and a few Hostess Sno Balls that I’d hide from my colleagues.

Or I’d hit the Mallomars. I was so addicted to them that if you’d told me back then that I’d lose my craving, I’d have looked at you as if you’d grown another head!

I was still fairly thin, but I was developing a Pillsbury Doughboy belly. I didn’t

feel great, either. My temper was short. I yelled at my staff for the most innocuous reasons. Something had to give.

That's when, at age forty, I started to work out. I found a gym some distance away so no one I knew would see me. My first day, one of the trainers—a gymnast named Rick—came in, and I asked him to work with me.

But I still wasn't really concentrating, because the only time I could schedule our sessions was in the early morning, which is when I did my surgeries, and I felt so guilty because I wasn't working.

Finally, Rick got fed up. "What the hell's up with you?" he asked. "If you can't devote one hour two or three lousy times a week to yourself, you have a *pathetic* life."

I laughed to cover up my mortification, because I knew he was right. But it still took a few more months before I truly began to change my thinking. I was done with quick fixes and quack diets. I was on a mission—to develop a program that would keep me fit, make me healthy again, and have the astonishing side benefit of completely changing the way I looked. A program that would work, that would continue to improve my health and appearance—for life.

I was also determined to make the Brown Fat Revolution foolproof. With this program no longer will you feel a sense of deprivation and obligation—you'll feel empowered and positive once you see how easy it is to reverse the effects of bad yellow fat and start replacing it with good brown fat. Because the steps are clearly listed, you won't have to think about what to eat or how to exercise. If you stick to the program, you *cannot* fail.

Good brown fat is transformative. With it, you'll be able to rebuild, replenish, restore, and recontour your body, put the bloom back on your skin, and add vitality back to your life.

My mission is not just to diminish your overall fat volume, but to help you replace it with a healthy and attractive volume of high-quality fat, a fat that looks brown due to its inherent architecture. A fat that is akin to the brown fat that is presently under scientific investigation as a means of controlling weight. This is a very promising role for those fat cells once thought to be the enemy of obesity!

PART I

**THE BROWN FAT
REVOLUTION
BASICS**

1. THE SCIENCE BEHIND THE BROWN FAT REVOLUTION

Fat is your friend.

I'm determined to help you rethink what your fat is. It might take some time to wrap your mind around that idea, but the simple truth is that everyone needs fat. Not a diet that's fat-free. Not a diet that's low-fat. Not a diet fueled by the notion of "I'll get fat if I eat fat."

You need good, nutritious, healthful fats in your food. And you need good, firm, resilient brown fat in your body—not the old yellow fat that's basically mush—for not just optimum health but optimum beauty, too. The difference between young fat and old fat is like the difference between a smooth round plum and a wrinkled prune. One is dense, smooth, and rounded, and the other is not.

Furthermore, the recently published studies on deep, functional brown fat provide clear evidence that, ironically, the answer to the obesity epidemic may be more straightforward than formerly thought. For these scientists, the answer lies in the fat cell itself!

So let's take a look at the crucial role of fat—and what you can do about getting rid of old yellow fat and replacing it with new brown fat.

WE'RE OBSESSED WITH FAT—BUT FOR ALL THE WRONG REASONS

Too many people in our country are becoming alarmingly obese. Cookbooks and health books and talk shows and magazine articles are constantly bombarding us with images and facts about the fat that causes diseases—and kills. There is, in fact, a particular mindset where it's all too easy to see fat as the enemy without understanding how and why the right kind of fat is so important. And be-

cause many people do not understand what nutrients the body needs and when to eat them, they end up eating all the wrong things, and put on more weight. Or they become alarmingly thin, somehow thinking that starving themselves of

MICHELLE OBAMA HAS GREAT FAT; MADONNA DOESN'T

Michelle Obama has an amazing body—not because it's got the most amazing shape, but because she's amazingly average, with exactly the right amount of good brown fat in her face and body.

It's interesting to take a look at her figure, as she's got broad shoulders, a small bust, and a small waist, yet wide hips, an ample butt, and long legs. She's not skinny, and she's not fat—she's firm and toned, with exceptionally well-defined upper arms. She exudes health and vitality. Her posture is perfect and she carries herself with elegance and grace. Most of all, she's a woman comfortable in her own skin.

Compare Michelle's lovely strong curves with Madonna's angular, supermusclcd and almost terrifyingly buff body. Although Madonna is only five years Michelle's senior, she looks much older, because she has almost no body fat at all. Unless she's carefully lit in photographs, she can look harsh, haggard, and tired.

In other words, Michelle Obama has got great fat. Madonna doesn't. That doesn't mean I don't admire Madonna for her singing and dancing talent, her staggering discipline, her work ethic, and her seemingly inexhaustible energy and stamina. Personally, I believe that if Madonna stopped her compulsively long workouts (a reported minimum of four hours a day) and gained about fifteen pounds, she would look so spectacular she'd knock your socks off.

all fat is the only way to achieve that superflat belly and those jutting cheekbones.

But the *right* fat in the right areas is a good thing. It's an intrinsic part of your body. If you want to feel good and look good, it's essential to have a body where all systems are functioning at optimum levels, both physically and mentally.

Just as important: understanding that eating the right kind of fat will not make you fatter.

That is, you will not get fatter if you eat the kind of fat that's good for your body; eat it at the right times during the day, along with carbohydrates, to keep your metabolism on an even keel; and don't eat so much of it that your body automatically stores it instead of burning it off.

So when did we make the switch from looking at adorable little babies with rolls of fat on their thighs, wanting to blow on their dumpling bellies to make them peal with laughter . . . to being afraid to eat properly and obsessing about every calorie we put in our mouths, even as we struggle to maintain a healthy weight or a figure with curves where we want them?

I've spent many hours trying to figure out when fat became a four-letter word. I clearly remember the day when the daughter of a family friend was over, and my wife and I were watching a Marilyn Monroe movie. This teenager had never seen Marilyn in her prime before. And

what was the girl's response? That Marilyn was sexy, or beautiful, or vulnerable? I wish! Instead, she said, "Oh my God. She's so *fat!*"

It was a disheartening moment, I have to say, as Marilyn's glorious curves are certainly not what I'd consider to be "fat." And, as someone who's devoted his life to optimum health, it pains me to look at images of seriously underweight and undernourished Hollywood stars, with their toothpick legs, pin-thin arms, and cheeks that are rounded due not to good brown fat but to the miracles of modern medicine, which has created the kind of substances that can be injected or inserted into them to plump them up. I'm left wondering how these stars can continue to function with such patently unhealthy bodies—and what kind of role models they are for the women of the world.

Frankly, I think thin is bad. You can't be a stick and be healthy. And the older you get, the more aging this gaunt thinness becomes.

I have an intimate knowledge of the danger of thinness, because as a plastic surgeon, I deal with it on a daily basis. From my point of view, what I do for a living is plump up thin faces, and put implants in areas of the body perceived by their owners to be too thin, whether their cheeks or their jaws, their breasts or their butts. Not that any of this is wrong, of course. But what, really, is the heart of the issue?

It's fat, of course!

FAT BASICS

Your body intrinsically knows, within the modulation of its metabolism, how much fat it needs to function. Anything beyond that will be stored for future use, to supply energy when needed.

Your body prefers to store energy as fat, as a direct result of tens of thousands of years of evolution. Early humans had trouble finding food, especially calorie-dense food. Plus they were in constant motion as they went hunting every day. As fat is calorie dense, with nine kilocalories per gram (carbohydrates and protein each have four kilocalories per gram), it became the most efficient way to provide the stored energy our ancestors needed for survival.

Fast-forward to the present, when we're no longer hunter/gatherers and have every conceivable food at our fingertips. While we've evolved enough to create art and music and send a man to the moon, the human body's technology has not evolved at the same pace. It still thinks it's going to have to hunt for its next meal, so it will always hoard all excess calories in the form of fat—if you let it.

PART II

THE BROWN FAT REVOLUTION EATING PLAN

4.

HOW THE BROWN FAT REVOLUTION EATING PLAN IS DIFFERENT

One of the hallmarks of this book is for you to rethink the way you view how and when and what you eat. I'd say that about 75 percent of how we look is determined by what we put in our mouths. So when I see women committed to a meaningful and regular exercise regimen who have not seen any noticeable changes to their bodies after years of working out, I know it's because they're not eating the right way. It's much more likely that they're either starving themselves or bouncing from one fad diet to another—with predictable (and unwanted) results—and not making any progress toward their goals.

In learning the basics behind my Eating Plan in this chapter, you'll discover why it's not a "diet" in the traditional sense. Instead, you are about to learn how to eat so that you can control your weight, and shape a wonderful new body. The longer you stick to this Eating Plan, the more it will give you the successful results you'll want to see so that you can stay on this program for a lifetime of good health, a young-looking face, and a gorgeous shape.

More than protein or even fat, the average American diet is all about carbohydrates and how we mismanage them. Sure, you can go on a low-carb diet and lose a few pounds quickly, but while you might be temporarily making your tissues thinner, you'll also be leaving them wrinkled, unhealthy, and highly unattractive.

On the other hand, replacing fat with unlimited amounts of the wrong kind of carbohydrates will still cause it to turn into bad yellow fat in your body, leading to weight gain, panic, frustration, and bingeing—the beginning of the yo-yo dieting syndrome.

It's crucial to understand that eating carbohydrates or fat the right way does *not* make you fatter—as long as you eat them at the right time, with the right kind of balance and the right kind of carbohydrates and fat. Manage your carbohydrates properly and you will *not* gain weight. Your glycogen will be perfectly calibrated. It will be depleted on Protein Days and then restored on Carbohy-

drate Days. In addition, glucose will always remain available should your body need it for quick energy. As a result, you will not deposit yellow fat because your body won't need to store any—it will always get whatever energy it needs from the balance of the foods you will already be eating. Furthermore, your basic metabolic rate, or metabolism, will be constantly elevated because you will have put on more lean muscle mass in your core, so that any fat you do eat will be used to maintain your metabolism—and burned off. Any fat that remains in your metabolically balanced body will be healthy brown fat.

The most important principles of the Eating Plan are:

- You'll eat six times a day to keep your metabolism at an even keel.
- You'll alternate Carb Days with Protein Days.
- One day a week is Choice Day, where you can eat what you want (within reason).
- You'll eat before and after every workout.
- You'll eat a wide variety of foods.
- You will no longer be hungry and tempted to binge.

Stick with the Eating Plan, and say good-bye to that quick-fix, quick-to-fail yo-yo dieting that made you heavier than ever. Instead, you won't feel deprived or rob your tissues of the vital nutrients you need for optimum functioning, mentally and physically. When you're satiated by good food, you'll have energy, you'll think more clearly, and you will not deposit yellow fat all over your body, no matter what your age. You'll be brimming with energy and look younger than you ever dreamed possible.

NUTRITION BASICS

Before you start to think about yellow fat versus brown fat, you need to understand a few simple basics about all the foods you eat.

Basic essential nutrients come in the form of carbohydrates, proteins, or fats. They're all made up of different molecules with different chemical structures.

ABOUT CARBOHYDRATES

Carbohydrates are molecules made up of carbon with attachments on them, which are commonly known as sugars.

The word “carbohydrate” itself defines these important molecules: “carbo” = carbon and “hydrate” = water. Why are they so important? Because these are the molecules that hold water in tissues; without them, tissues shrivel like a raisin. Water in tissues = volume. And volume, as you already know, is what defines a youthful face and shape.

This makes carbohydrates the key to any successful diet.

All significant dietary carbohydrates (with the exception of the lactose in milk) are from plant-based foods: vegetables, fruits, grains, and legumes. Carbohydrates should supply about 50 percent or more of your daily calories, with protein supplying 15–20 percent and fats 30–35 percent. There are different types of carbohydrates, too.

For the purpose of the Eating Plan in this book, you should think of carbohydrates as vegetables, fruit, and grains.

COMPLEX AND SIMPLE, OR GOOD AND BAD, CARBOHYDRATES In addition, there are two categories of carbohydrates: complex and simple. They are not created equal.

Complex carbohydrates are made from the starch found in plants, such as sweet potatoes, vegetables, and grains. Complex carbs are digested slowly, so the sugars they’re converted into are released slowly into the bloodstream. As a result, complex carbs supply the energy needed for brain clarity and muscle activity without causing spikes in blood sugar and fat deposits.

Simple carbohydrates are derived from the sugars found in plants and dairy products. The most common of these sugars are sucrose (white table sugar), fructose (fruit juices), lactose (milk), and glucose (corn syrup).

THINK PLUMP: WHY GOOD CARBS PLAY A ROLE IN HOW YOUR FACE AGES

Anyone who eats a good healthy diet, exercises regularly, stays out of the sun, and refrains from smoking is going to have much better skin than someone her age who doesn’t do these things. That’s pretty much a given.

But what’s been left out of the mix (until now) is that if you look *under* the skin, what you’ll find there will be in better shape, too. The fat will be dense and brown, and the muscles will be toned and strong.

When you follow my Eating Plan, all the tissues of your face will be plumper because they’ll be well hydrated, thanks to good carbohydrates. When you eat the right balance of the proper carbohydrates, you’ll maintain tissue health and plumpness.

With good brown fat supporting your facial skin, you’re going to see huge improvements in its contour and texture. You’ll regain and retain your youthful volume. Your face will regain that lovely plumpness in the cheeks that makes kids’ faces so deliciously pinchable.

Simple carbs are digested rapidly, and cause quick spikes (as well as depletion) in blood sugar. I'll discuss this at length starting on page 57, but for now all you need to know is that if there is too much glucose in the bloodstream at any one time—more than is needed for the brain and muscles to function—any excess will be stored as yellow fat.

A sweet potato is a complex carbohydrate; white pasta is a simple carbohydrate. The sweet potato is a “good” carb and the pasta is not. From a dietary point of view, how the insulin in your body responds to a carbohydrate—in other words, how your body processes it and stores it for energy—is what determines whether the carbohydrate is good or bad. Sugars in fruits are simple, but the added fiber in a whole piece of fruit slows digestion so that the glucose is slowly released into the bloodstream, giving time for processing. Fruit juice, on the other hand, contains little fiber, so it immediately causes blood-sugar spikes. In summary:

- Good carbohydrates are vegetables and fruits.
- Bad carbohydrates are anything white, as well as any carbohydrate that leads to overeating, like pasta or white potatoes or white bread.
- In-between carbohydrates are grains and legumes. Whole grains are much better than refined grains, such as white flour or white rice.
- Veggies contain fiber, which takes a long time to digest, so there are no spikes in your blood sugar and no conversion to bad yellow fat. You become satiated more quickly and stay satiated longer. Eat foods without a lot of fiber, though, and it's much harder to stop. Which is why it's easy to eat an entire bag of potato chips or a huge bowlful of pasta and not feel full, but harder to eat an entire bunch of broccoli at one sitting.

ABOUT PROTEINS

Proteins are made of their own building blocks, called amino acids, both nonessential (the proteins the body can make on its own) and essential (the proteins the body must ingest). There are nine essential amino acids; if these are not included in the diet, the body will not be able to make protein efficiently.

Proteins are found all over the body: in muscles, in the connective tissue that holds all tissues together, in your hair, and, most important, with the enzymes that regulate all of the body's chemical reactions.

Given the composition and portion size of most American meals, I'd say we're living in the land of protein—too much protein. The USDA's food pyramid places protein near the top, while complex carbohydrates are at the bottom. Yet the average meal has this erroneously reversed.

While growing children need a lot of protein and fat in addition to carbs for healthy development, adults do not. It may come as a shock that an adult woman actually has a very small protein requirement every day: no more than 15–20 percent of your total daily caloric requirement. This is the equivalent of two palm-sized portions of chicken breast and two eggs. That's it! You certainly do not need to eat protein at every meal, every day of your life.

Eat too much protein and it is stored as—you guessed it!—yellow fat. Your body stores excess calories as fat whether they come as carbs, protein, or fat. And if your body already has enough protein to maintain your muscles, it will convert the excess to fat or excrete it in the form of amino acids. So it's a fallacy to think that you need a lot of protein every day, or that it can't make you fat.

Another problem is that protein does not contain any fiber. While it's true that protein takes a long time to digest, explaining why you might feel full after eating it, this “fullness” isn't the kind of fullness you'll get after eating complex carbohydrates.

The best way to handle protein is by combining it with a carbohydrate; by doing this, you will change the metabolism of the carbohydrate, as the slow-digesting protein will also slow down the carbohydrate's digestion. When this happens, the carb will be slowly released into the bloodstream, your insulin will not spike, and you'll stay full longer. You won't feel hungry again shortly after your meal (as you would if you'd had an insulin spike and decline).

This is why you want your meal to be primarily good carbs and a little bit of protein, which is the basis for much of the cooking in Asia (a lot of carbs, usually rice, and a tiny bit of protein) and in much of Italian cooking, too. With classic Italian recipes, a dish of pasta was not simply eaten on its own. Cooks would add fish or meatballs or a sauce flavored with a bit of meat. So although white pasta is a bad carb, the Italians understood that combining pasta with an equal amount of veggies as the primary ingredients of a dish, adding only a little bit of protein, would make the bad carb less of a bad thing. Which is why eating plain penne pasta, even if whole grain, is not as good for you as eating penne covered with broccoli and peas. You'll have a much lower level of blood sugar elevation with the broccoli-and-peas pasta, as the digestion process takes more energy. You'll burn more calories and your blood sugar won't spike.

ABOUT FATS

Why is fat considered one of the main nutrients we need, along with carbohydrates and protein? In the body, fat gives you energy and insulates you from cold. It provides the essential fatty acids needed to maintain cell membrane structure in all tissues, most crucially in the tissues of your nervous system and in the brain. It also carries the vitamins that regulate your clotting system.

Although fat has these specific functions in your body, it is not the preferred source of energy—which, as you know, is carbohydrates. But you must eat fat not only for these functions but also to support your heart. The question is which kind of fat to eat, as, physiologically, there's good fat and bad fat. (Structurally, you also have yellow fat and brown fat, which are not the same thing as dietary fat.)

Fats are ubiquitous in the foods we eat, but they are not created equal. Hydrogen-carbon bonds in fat make it saturated or unsaturated. The amount of these bonds determines whether the fat is liquid (oil) or solid at room temperature or when refrigerated. The more unsaturated components, the more liquid the fat, and the more flavor it has. Oils that are bad for you have no taste—except the faint tang of grease.

Saturated fat is bad fat, found primarily in animal products like meat and dairy. It clogs arteries, increases cholesterol, and predisposes you to heart disease and stroke. It has no nutritive value, so all it does is hike up the calorie count of any food it's in. And if it's not immediately needed for energy in your body, saturated fat is immediately stored as body fat—as bad yellow fat.

As with grains, the refining or processing of fat makes it even lower than zero on the nutritional scale. The worst kind of processed fat is transfat, which is nothing more than oil that's been hydrogenated, or made solid through a chemical process using hydrogen to increase its shelf life. (Crisco is a transfat; so is the gunk that fast-food French fries are fried in.) Transfats have absolutely no nutritional value. They can't be properly digested and will quickly form yellow fat.

Unsaturated fat is good fat. It comes in the form of monounsaturated fatty acids (MUFAs) and polyunsaturated fatty acids (PUFAs). MUFAs and PUFAs contain oleic acid, an essential fatty acid that helps supply the nutrients needed for the brain, muscles, heart, and nerves to be structurally healthy. They can also lower the bad kind of LDL (low-density lipoproteins) cholesterol while increasing the good kind of HDL (high-density lipoproteins) cholesterol.

There is clear evidence that good fats in your diet will be used well by your body—to help it function and also develop and retain its good brown fat.

PART III

THE BROWN FAT REVOLUTION EXERCISE PLAN

7. HOW THE BROWN FAT REVOLUTION EXERCISE PLAN IS DIFFERENT

Do you remember those crazy, heady days of puberty, when your hormones kicked in and all of a sudden you didn't recognize your body anymore? When you had a lovely flat belly, soft rounded curves exactly where you wanted them, and firm, shapely breasts and arms?

And then, after many years of being comfortable with this body—the body that has given you pleasure in its strength and may have borne you children—you find yourself going through a sort of puberty in reverse when perimenopause and then menopause come along. Once again, your hormones are stirring, making changes to your mood and your appearance. Changes you basically have little control over. Changes that can often make you feel as if your body is betraying you.

These changes can be especially difficult to take if you've been diligent about regular exercise over the years. I've had patients (in their late thirties and up) who've spent countless hours in the gym, who took great pride in the fact that their hard work allowed them to be wearing the same dress size at forty that they wore at twenty, tell me that it's as if they woke up one morning and found that some stranger had suddenly appeared in their belly.

A stranger that's giving them the "middle-age spread" they thought would never happen to them.

A stranger, triggered by declining hormone levels, who appears in the form of soft and old yellow fat, making them soft and spongy instead of firm and lean.

"What's happening to me?" they ask. "I can't get rid of these ten pounds, no matter what I do. And they're all in my belly and my butt! You've got to help me!"

A STRONG CORE IS THE KEY

What is the goal of an exercise program? To maintain your physical health and give you strength, of course. But another important goal is to keep your body as youthful and vibrant as possible, no matter what your age.

I know that if you can't see truly visible results when you're on an eating or exercise regimen, it's almost impossible to want to continue on it no matter how "healthy" this regimen supposedly is. You need to see benefits to all your hard work and discipline.

So it is more than okay to want to push past the accepted and appropriate goal of better health, and say out loud: "I don't just want to be healthy—I want to look great, too!" Once you can do this, and once you start seeing the results of the Brown Fat Revolution, you'll be able to not only embrace the aging process but be perfectly calm in the face of it—because every time you look in the mirror you won't see a woman who's visibly growing older (and deteriorating as she does), but a woman who is firm and trim yet curvy in the right places, buoyed by her cushion of dense and resilient young brown fat.

What makes a woman's body look youthful is a strong core, or the center of your body from your shoulders down to your buttocks and thighs. Most of all, you want good brown fat in specifically targeted areas that define that youthfulness: your upper arms, hips, belly, buttocks, and, of course, your face.

This is what the Core Curriculum of my Exercise Plan will accomplish. The science behind it is based on the basic principle that you burn more fat if you increase your lean muscle—more than if you do long cardiovascular workouts. Cardio exercise increases your metabolism only *during* the workout, but building your lean muscle mass will raise your metabolic rate *around the clock*. And even though cardio exercise enlarges certain muscles, especially in your legs, don't forget you have dozens of muscles attached to the hips, pelvis, lower back, abdomen, ribs, and shoulders, too—your body's core.

Strengthening these core muscles is your most effective tool for raising your metabolism, and the best way to get rid of bad yellow fat.

Building lean muscle through the Core Curriculum increases your metabolism continuously for at least twenty-four hours after a workout; an intense cardio program only increases metabolism for several hours. And the benefits of the Core Curriculum go beyond weight control. You'll soon see changes in your body *shape*. The Core Curriculum will make your body lean, strong, more coordinated, and more shapely.

If you want real, long-term results, it's counterproductive to work out in the

same way at fifty as you did when you were thirty-five. Since your female hormones (primarily estrogen and progesterone) define how, when, and where your body's fat distribution changes as you grow older, the Exercise Plan changes according to your age group. As with the Eating Plan, you'll be in either Hormone Category I (thirty to fifty) or Hormone Category II (fifty or older). In the following four chapters, you'll be given specific routines to do that will take the guesswork out of what areas to target and how to target them with maximum efficiency in minimal time.

In addition, the Exercise Plans for Hormone Category II are less intense and gentler to save your joints from potential stress and injury. They also emphasize exercises for specific areas of the body where changes are inevitable due to fat distribution, such as the lower abdomen and upper arms—areas that tend to be overlooked and underexercised.

Although spot reduction is not possible, with this Exercise Plan, contour changes in different parts of the body—especially in the problem areas associated with gender, age, and genetics—are managed by decreased overall yellow fat. This yellow fat, as you know, is loose and hanging since it's not firmly encased with connective tissue, leading to bulges and pooches. By diminishing the quantity of this fat in *all* areas of your body, your problem areas will improve and firm up, too.

And by focusing your workout in areas where yellow fat tends to be deposited, your muscles can be used to maintain firmness *below* the fat, such as in the lower abdomen. If you don't exercise and you do have a lot of yellow fat, picture your lower abdomen as having lax muscles and bulging internal organs, all topped with a thick layer of yellow fat. But once you start to flatten this layer with specific exercises, you'll see a real improvement. Couple this overall reduction in body fat with proper nutrition as well as a speedier metabolism thanks to increased lean muscle mass and a layer of firm, healthy brown fat, and your shape will change completely.

Having a trim, tight core is amazing—it's the "tummy tuck" of exercise. For this reason the exercises you'll be doing are specifically structured to strengthen the center of the body in three dimensions: top to bottom, side to side, and front to back. They add flexibility, stability, and balance; your core will support your spine so it's less prone to muscle strain, while also improving posture. Your overall strength will increase, too. These are all the essential elements of what you're looking for most—a *youthful* body.

THE GENESIS OF THE EXERCISE PLAN

I went from being a competitive ballroom dancer to an unfit and unhealthy Mal-lomar Man. I didn't exercise for twenty-two years. After finally admitting that if I didn't do something, I would be ruining my health (and potentially my career, because surgeons need to have stamina), I learned how to transform my body from flabby to lean, strong, shapely, and powerful. I became not just a body-builder, but a body sculptor. I literally transformed the entire shape of my body solely by using weights. I couldn't believe it. What I was capable of doing was fantastically empowering, on every possible level.

What I also realized, as I developed my program, was that any person who uses weights can feel the same way. Anyone can master the basic skills, no matter what their age, strength, or weight is when they start. It's not like an English speaker trying to learn a tonal-based language like Chinese at the age of forty-five, when acquiring that very specific set of mental and linguistic skills is difficult. Doing weight work is the great equalizer, done purely to improve your shape—and your health.

Think of this Exercise Plan as the physical complement to what you're already doing with the Eating Plan. The two together create a synergistic whole. While the Eating Plan will gradually change your body on the *inside*—transforming bad yellow fat into the kind of good brown fat that gives you firm curves—these exercises will reinforce the plan by keeping the surrounding muscles strong and toned, which will clearly be evident on the *outside*.

ABOUT THE CORE CURRICULUM

Most people erroneously believe that the core deals only with the muscles of the abdomen (or abs). Say “core” to them and they're going to immediately click into unpleasant thoughts of the endless crunches they've done over the years—crunches that probably never gave them the flat belly of their dreams.

THE CORE DEFINED

What is the core? It's actually the entire pillar, or center, of your body, starting from your shoulders down to your hips, the gluteus muscles of your buttocks (or glutes), and your thighs. It's a lot more than just your abdominal muscles.

All body strength comes from your core. The hunter/gatherers that we've evolved from used their cores every day, as they needed to be able to jump, twist, and crouch to be successful hunters and survive. Professional athletes use their core in order to be at the top of their game; take a look at how Venus and Serena Williams have transformed women's tennis because they understood the value of good weight training that centered around developing a strong and supple core, not just strong arms and shoulders and lightning-quick reflexes.

But most people are inactive, so they don't use their core muscles very much or very often. They sit down during work. They sit down while driving. They stay seated while eating and watching TV. And so their cores become soft and prone to injury and aches and pains, particularly their backs (which need support from core muscles).

Restoring and strengthening all the muscles of your core will give your body central stability and strength. A strong core is the foundation for a long, lean, and supple figure, with gorgeous straight posture and the shape of your youth.

The Core Curriculum works so well because it builds lean muscle mass, which increases your metabolism. Aerobic exercise has little effect on any bad yellow fat you may have surrounding your intestines, but a strong muscle wall can buttress the abdomen, leaving it taut and trim.

If you regularly do a sport or exercise that is dependent on a strong core—such as dancing, golf, or tennis—for the cardio component of your Exercise Plan, you'll not only automatically engage your core and reinforce your weight training, but have a lot of fun, too.

Since volume is all about fat, you also need to think of your core as being three-dimensional—more like a tube. It's not just about how you look from the front. You need to consider how you look in profile, and from the back, too. Which is why three-way mirrors in department-store changing rooms can be such an unpleasant shock.

If you were able to check your “tube” regularly, you'd be hyperaware that, thinking three-dimensionally, a weak core is extremely aging. It's the area of a woman's body that ages more quickly than anything else, especially if the woman has had children. But now you can set the clock back—once you embark on a dedicated program to firm up your core.

CORE WORK: ABDOMINALS

I've seen countless patients who tell me, “I do a thousand crunches, but look, I've still got a pooch. It's driving me crazy!”

Crunches alone aren't going to work on your pooch because they target only a

few of the core muscles, not all the muscles that affect your three-dimensionality. As a very important part of the core, especially in women, all the abdominal muscles need to be toned and tightened—and they will be since the Core Curriculum targets all the muscles in the area.

Plus, as you lose your bad yellow fat thanks to the Eating Plan, the new strength you'll be developing in this area will become even more apparent.

Remember, in no other area of the body is the necessity to focus on diet and exercise more apparent than in the abdomen.

CORE WORK: BACK

Your lower back is part of your core, so whenever you work these muscles you'll automatically strengthen this area, which should lessen any back pain caused by muscle weakness. A strong back will also greatly improve your posture.

CORE WORK: BUTTOCKS/THIGHS—GLUTES, HAMSTRINGS, AND QUADS

When most trainers or exercise books talk about legs, they mean the entire leg from thighs on down to calves and ankles.

For this book, though, I want you to think of your legs in two parts, as we do medically when approaching surgical procedures. The area at the top part of your legs—the thighs (which includes the quadriceps, or quads, in the front and the hamstrings in the back) as well as the gluteus (glutes) group that makes up your buttocks—are considered as a whole when you do the exercises of the Core Curriculum. These are the biggest muscle groups that define core strength and tone.

CORE WORK: SHOULDERS

Once you have well-developed shoulder muscles, it's as if you have built-in designer shoulder pads. The shape and shadows of a rounded deltoid not only look beautiful, but the strong muscle group pulls the shoulder back in proper alignment with the pelvis, so that you no longer slouch and your breasts and arms look youthful.

Ideally, the shoulders and the abdomen should work together to create the posture of youth. Sure, you can exercise like crazy and have toned and defined muscles, but without proper alignment and good posture, they won't pop.

EXTREMITIES: ARMS AND CALVES

Your arms and your calves are worked out secondarily to your core.

As triceps start to sag, particularly with the Hormone Category II group, it's especially important to concentrate on strengthening the arm.

The leg workout will prime and develop your calves, giving you a beautiful diamond-shaped pair of muscles (the gastrocnemius and soleus) that balances your thigh muscles (and also makes you look great in high heels!).

TAILORING THE CORE CURRICULUM

HORMONE CATEGORY I

In your thirties, your fat is starting to shift to your hips and thighs. These exercises will build a strong core, increase lean muscle, and include sprints for cardiac health, respiratory reserve, and maximal efficiency of exercise.

Because this is the decade when many women have children, exercises will also focus on restoring muscle tone to the abdomen after pregnancy.

In your forties, your fat is starting to move slightly toward the upper arms, but you're more likely to be seeing changes in your buttocks, hips, and thighs. You can also continue the sprint cardio exercises to increase metabolism and burn fat, and add intermittent circuit training.

HORMONE CATEGORY II

As you approach menopause and beyond, hormonal diminishment means that fat redistribution is inevitable, especially to your abdomen, buttocks, breasts, arms, and in other areas, too. Your overall body shape will tend to thicken, giving you less of an hourglass figure.

These are the decades where regular exercise is the *most* important. You'll continue with your Core Curriculum to maintain a flexible, slender waist, improved posture and balance, and increased stamina.

CORE CURRICULUM BASICS

DIFFERENT CORE ROUTINES

There are several core routines, but you perform only a few per day, and not every day. These routines are covered in chapters 9–12.

For those at the Beginner/Intermediate level as well as the Intermediate/Advanced level, the exercise routines should take no more than thirty minutes.

Depending on whether you're in Hormone Category I or Hormone Category II, the routines will alternate in different patterns of Core Days (I, II, and III), Extremities Day, Cardio Day, and Off Day.

On different Core Days, you'll be given exercises from these categories: Abdomen and Shoulders, Glutes and Hamstrings, and Quads and Lower Back.

On Extremities Day, you'll work your arms (biceps and triceps) and calves (gastrocnemius and soleus).

Hormone Category II will have an additional Abdomen/Triceps Day, targeting the areas of the body that need extra work as you grow older.

On Cardio Days, you can do whatever physical activity you like—dancing, swimming, tennis, racquetball, a brisk walk, etc.—but if you choose to get on a machine (such as a treadmill, elliptical, rower, or stair-stepper) at the gym (what is usually thought of as “cardio”), do *no more* than thirty minutes total, and try to do sprinting because it's extremely efficient. (I never do more than twenty minutes of sprinting-type cardio, ever! See page 148 for more on the Sprinting Method.)

Obviously, there's no question that cardiovascular exercise is good for your heart, lungs, and circulation. But as you know, I want you to move away from the concept of cardio as the primary way to control your weight or to develop your core muscles. It just can't do that for you.

And Off Day means don't work out! Your muscles truly need the rest in order to replenish themselves.

WORK ALL YOUR CORE MUSCLES

No one has a perfectly symmetric body, where all areas react the same way to exercise. Some women see their arms become beautifully buff in only a few weeks while their butts don't seem to change at all in the same time period. Or vice versa.

What I see in the gym every time I go is that people have favorite parts of their bodies and they keep working on them because it makes them feel good. And then they'll feel good that they exercised, but they haven't really exercised *properly*. Or they'll get tired and forget to do the rest of their exercises so they have a balanced routine that helps all muscle groups.

For instance, I used to see a guy in my gym with the biggest arms I've ever seen. They were humongous. Every day he did his arms—and nothing else. He just loved their shape so much he forgot about the rest of his body.

Don't fall into the same trap he did. You need to find the determination to attack the weakest area of your body, too. (You might even want to work it first, to get it out of the way.)

THESE EXERCISES ARE EASY TO DO

These exercises are all simple enough to do on your own, with *only* a bungee cord as your primary piece of equipment, so you don't need a trainer. Nor do you need to do any of these exercises in a gym—you can do them all at home, or on the road in your hotel room, or at a friend's when you're traveling. If you want to hire a trainer to jump-start your workout program and help you learn the routines, that's fine. But I do hope that eventually you'll be self-motivated enough and enjoy the routines so much that you'll be able to work out on your own.

THESE EXERCISE ROUTINES ARE QUICK

Your routines should take no longer than thirty minutes, no matter what your level. As you already know, more time spent doing hard-core cardio can be counterproductive, not only to the body but especially to the face. But if you want to ramp it up, cardio should be done at the end of the workout and for no more than fifteen minutes (bringing your total time to forty-five minutes).

As for when you do your Core Curriculum exercises, the morning is optimal—morning exercise will charge your metabolism and clear your mind for the day—but many people prefer evening workouts. The most important thing is that you make time for exercise.

CUT DOWN ON CARDIO—THE OVEREXERCISING PARADOX

One of the biggest differences between my exercise philosophy and that of most other exercise plans is that I consider aerobic exercise as secondary to the Core Curriculum, *not* the primary exercise. But you might be surprised at how short and how moderate these cardio workouts can be, and still be good for you. Also, while cardio is great for your heart and lungs, it can't build you the shape and contour of a youthful body, or replace your yellow fat with brown fat, either.

Lots of my patients suffer from Overexercise Syndrome—they've come to believe that cardio is almost infinitely beneficial and can't be overdone. But it can.

The skinny overexerciser doesn't eat before or after exercise, depleting her stores of glycogen and fat, so her starved body starts to digest muscle for energy. As a result, she might be thin, but her muscles are slack and her skin is wrinkled; still, her mind keeps encouraging her to continue working out for fear of gaining weight (which is precisely what she *needs* to do).

ABOUT THE SPRINTING METHOD

The best cardio for maximum benefits in minimal time is an activity that works out several muscle groups at once. If you choose to work out in a gym, my recommendations would be to use the stationary bike, stair-stepper, treadmill, or elliptical machine, or to go swimming.

Whatever cardio you choose, be sure it's an activity you truly enjoy: a bike ride, a stint on the stair-stepper, or something as simple as a brisk walk. It could be boxing with a sparring partner, senior swim with friends, or ballroom dancing, which worked for me. Or tennis or golf, which are often as much fun socially as they are good for your body. You can even join an adult team at your local YMCA or school, as much for the camaraderie as for the sport.

Still, it's not so much what you do for cardio, but *how* you do it. In my opinion, the Sprinting Method is the most efficient form of cardio if you want to have a great-looking body, maintain healthy brown fat, and get a superior heart-thumping exercise. (This is not sprinting, as in running a fast race, but my version of interval training.)

With the Sprinting Method, you do a movement as fast and hard as you can physically do it until you just can't continue any longer, at which point you slow back down while doing the same movement, lowering your heart rate. As soon as you feel the urge and ability, you then pump it up again as fast and hard as you can. You'll repeat this sequence as much as possible; obviously, how well you can sprint at first is based on how fit and how used to doing this kind of exercise you are.

Doing twenty minutes of Sprinting Method cardio is more than enough to burn yellow fat, get your heart going and your lungs working, and stimulate lean muscle development. Innumerable studies have shown that high intensity/short duration exercise like sprinting burns many more calories than long, low intensity exercise like jogging or walking. In addition, sprinting increases growth hormone, which enhances the immune system, promotes fat redistribution (away from the abdomen!), and increases lean muscle mass in addition to signaling fast-twitch fibers in muscle. (These are the fibers that grow in response to exercise.)

In my opinion, sprinting is the most efficient form of cardio as well as the best way to lose fat and gain muscle. If you're interested in getting a great-looking body, maintaining healthy brown fat, and getting a superior heart-thumping exercise, you might want to consider it.

I also find sprinting to be much more invigorating and much less boring than long sessions of lower-intensity cardio. It might work for you, too.

The overweight overexerciser does lose fat once she depletes her glycogen stores, but she will tend to overeat in response to overexercising, and the excess calories will automatically be stored as fat.

These overexercisers need to understand that too much exercise will lead you to a plateau where you stop improving. The reason is that cardio breaks every-

thing down, so that even though you're increasing your metabolism during your workout and for several hours afterward, as well as getting rid of some fat and burning some calories, you're also stressing your muscles. Your body goes into complete starvation mode, holding on to every pound for survival.

The Brown Fat Revolution is designed to optimize muscle function, prevent joint strain, and build volume in areas that define beauty and youth. In order for muscles to properly grow, they must have a recovery period after every workout. It is the repair and replenishment of the muscle and the new growth that follows that adds a noticeable difference in muscle volume.

Science has shown that the optimal period for muscle repair, when they need nutrients, water, and carbohydrates, is forty-eight hours for small muscles (like biceps and calves) and seventy-two hours for larger muscles (like glutes, hamstrings, and back).

If you don't give your muscles time to replenish themselves, eventually you'll go from productive exercise to *destructive* exercise. Sure, doing too much cardio might get rid of your yellow fat, but then it will get rid of all your brown fat and healthy muscle tissue, too. You'll think you're getting stronger while you're actually putting your body under attack. Your muscles will be unable to grow if they don't get any rest. You'll look gaunt, particularly in your face. You'll have less energy. Your breasts and arms will shrink. Your core might appear thin, but it won't be defined and firm (because there's no dense brown fat in it). You'll also be much more prone to injuries, and will take longer than usual to heal because your muscles and fat stores have been so depleted; then you'll obsess about not exercising and starve yourself so you won't gain weight, which will further send your body into starvation mode, and the vicious cycle of yo-yo dieting will begin.

As soon as overexercisers cut down on cardio and concentrate on their core instead—as well as change their eating habits to eat carbs before and after their workouts—their bodies will be transformed. Ideally, you should use the cardio

WHAT ABOUT MY CARDIO ENDORPHIN RUSH?

Using your muscles often triggers a release of endorphins, which are compounds produced by the hypothalamus and the pituitary gland in your brain during excitement, exercise, orgasm, and pain; they give a sense of well-being during pleasurable activities. As endorphins flood your body, they can help you keep moving, thrilled to the potent power of your own wonderful body—which is why they're commonly referred to as a "runner's high."

But it's a fallacy to believe that doing a cardio workout is the only way to get an endorphin release. Anyone who does some form of regular exercise, such as that in the Brown Fat Revolution plan, or yoga, or Pilates, for example, can be flooded with endorphins, too—often much more easily and quickly than they would be during their old cardio routines.

element of your workout to keep your heart and lungs strong and your circulation flowing. But don't do what many women do, which is get upset after putting on a few pounds, run off to the gym, do an hour and a half of cardio, overdo it, and feel awful and too sore to keep on exercising. If these women had only done ten minutes of cardio and twenty minutes of weight training, they would not have felt so crummy.

Please don't think of cardio as the controller of your fat—because it isn't! Use it for fun, health benefits, or stress reduction, but only in moderation.

EQUIPMENT YOU'LL NEED

The equipment you'll need is minimal. See page 159 in chapter 8.

STICKING TO THE SCHEDULE

The workout schedule of Core Days, Extremities Day, Abdomen/Triceps Day for Hormone Category II, Cardio Day, and Off Days has been designed for optimal results, giving your muscles the proper balance of getting worked with time off.

While you need to stick to the program and do all the exercises in each section, you can certainly change the *order* you do them in. Feel free to mix it all up, although I have already worked this “mix-up” into your monthly workout schedule.

One of the signs of a poor exercise trainer is that he or she has the client do the same thing every time. That's counterproductive, because your body quickly accommodates itself to exercise, and then it can't improve unless you challenge it. Muscles respond to work—and they're not really getting worked unless you feel it. That's the classic “burn”—which should never be painful, but which should make you aware that the muscle is doing what you want it to. You won't feel this burn unless you challenge it and mix it up.

Even though I've been bodybuilding for decades, I still vary my routine every single time I work out—whether with the exercises themselves, the order of exercises, the repetitions, the amount of the weights, you name it, as you'll see in the next chapter.

WHAT ABOUT STRETCHING?

Although the many studies I've read have salient points about whether or not stretching pre- or postexercise helps your muscles work most efficiently, I believe in stretching *before* a workout. With the Core Curriculum, you will stretch the muscles of the day, bringing blood supply to those muscles and lubricating your joints before you start.

By stretching the muscle before working it out, you're doing what I call cognitive prep for the workout—you're sending a signal to your brain that you're about to get going on your circuit. As a result, your workout will be much more focused and effective.

That said, there are plenty of days when I'm not really in the mood to push it. On those days, I do a light workout. I listen to my body and what it's telling me it needs. But even if I'm tired or stressed or crabby, I still do my workout.

Whatever your mood or energy level, the most important thing is to try not to miss a session. As soon as you start, the endorphins should kick in and your stress should melt away, making you feel a whole lot better as your muscles get stronger.

You might not believe you're capable of any of this when you first start. But your growth will be exponential. You might take a bit of time to get going as you master the basics, but then suddenly you'll *get it*—and you'll start to fly.

MOVING ON TO THE NEXT LEVEL

As you'll see in chapters 10 and 12, there are detailed workouts for those who have mastered the Beginner/Intermediate level and are ready for a more intense session.

But instead of making you confused with an entirely different set of exercises, I'm going to combine the basics in unique ways—so you'll be able to master them more quickly and see faster results. Who can remember how to do twenty different biceps exercises? Not me! But you can easily remember four or five exercises per muscle group, and then be able to add some variations. And once you're more confident with your form, and using weights or the bungee cord has become second nature to you (which happens *very* quickly, believe it or not), you can really have fun during your workout.

This deliberate mix-up is not only fun, but the more muscle “confusion” you can introduce in a short span of time, the more your muscles need to work. That's because muscles quickly adapt to how they're used. If you do the same exercise over and over again, your muscle will not be stimulated and you'll have unproductive workouts. So one of the basic principles of body contouring is to change routines frequently so that muscles do not accommodate and get lazy. Modifying the type of exercise, number of reps, and sequence of reps should give you optimal results in extremely efficient workouts.