

# Fat loss

The best trick I know

By Mary C. Weaver



For more tips on exercise, nutrition, goal-setting, and health for women over 40, visit Primefit.org.



Mary C. Weaver, June 2010

#### **About me**

Thank you for taking the time to read this report. I hope you'll find it helpful. I turned 54 in 2010, and it's my firm belief that getting older doesn't have to mean giving up on feeling and looking great.

My website, primefit.org, is geared toward women over 40, with information on healthy nutrition, working out, goal-setting, and the other tools we need to make the second half of our life even better than the first.

I hope you'll visit the site, comment on the articles, and let me know how I can do a better job of addressing your concerns.

Mary C. Weaver primefit.org

Disclaimer: The information in this report is intended for educational and informative purposes only. It is not medical advice, and no health claims are made. See your doctor before beginning any diet or exercise program.

#### Introduction

If you're reading this report, chances are pretty good that you'd like to shed some fat. It might be a little—that difficult last five or 10 pounds—or a lot, maybe 100 pounds or more.

The strategy I'll outline in this report works as well with two pounds as it does with 200.

It's called the zig-zag method, and it helps make fat loss a whole lot easier to endure. I didn't invent the zig-zag. I learned about it from fat-loss coach Tom Venuto, who says he learned about it from powerlifter and professor Dr. Fred Hatfield.

Tom outlines the zig-zag and much, much more in his fabulous e-book *Burn the Fat*, *Feed the Muscle*. I discovered the book years ago, and I *highly* recommend it to anyone who is truly serious about achieving her best body ever. If you could buy one book to guide your body transformation, choose Tom's—that is, until *my* book comes out!

But before I tell you exactly how to use this strategy in your own fat-loss adventure, I want to use myself as a Guinea pig and explain what not to do!

# Some people (like me) are slow learners

Like a lot of you, I've been lean, and I've been fat. In 2002, I had reached my all-time high, with a weight of 162 and a bodyfat level of 37 percent. I was wearing trousers two sizes bigger than I'd ever worn before, and it had become painfully clear that I was ready to go up another size. It had to stop.

I wanted to be the slim, athletic, energetic me I'd been most of my adult life. But as you know, once you're over 40, eating too much and exercising too little catch up really quickly.

The result? You break out in fat, all over. In fact, you often start packing it on your waistline rather than your hips. That's the lovely result of hormonal changes. Thanks a lot, Mother Nature!

At my highest weight, I was ashamed of myself. I would get dressed and carefully

avoid looking in the mirror at anything below my neck. I had to find my real self again, buried under that extra fat.

I began a low-carb diet (*not* the best choice for me) and talked a good friend into joining Curves. I was a former bodybuilder, and Curves seemed pretty wimpy. But hey, it was a workout, and at the time, that was all I could handle. My husband and I also began walking about 30 minutes each morning with four of our dogs.

In a couple of months I'd lost about 10 pounds of fat. Six months later, I had gotten bored with Curves, and I talked my girlfriend into joining a "real gym." I was getting fitter and stronger but had lost only about another five pounds. I had quit the low-carb plan because it didn't give me enough energy for my workouts. I was eating healthy food, controlling portion sizes, and exercising a lot.

After dieting for 18 months, I had *slowly* lost 24 pounds of fat and regained seven pounds of muscle. My bodyfat level had dropped to 25 percent. And there I stayed. I was frustrated as hell!

I kept thinking, Jeez, I'm eating so clean and working out so hard. How come I'm not getting leaner?

For some reason it never occurred to me to look at *how many calories* of "clean" food I was taking in. I didn't question whether my ultra-slow progress meant that—revelatory flash here—maybe I was eating exactly enough to maintain my weight.

Well, duh.

Here's something I *really* want you to understand, so you can learn from my mistakes:

Fat loss is primarily a matter of calories consumed versus calories burned, through dietary restriction and exercise.

Yes, other factors (stress, hormone levels, genetics) can play a supporting role. But please don't deceive yourself. Those other factors are *not* the main cause of fat gain. I know. It's sooooo tempting to blame it on our age, our genetics, our stress.

Time for the painful truth: Fat gain means, simply put, a calorie surplus. It's all about energy in (what you eat) and energy out (what you burn).

- If you gain fat, you're taking in more calories than you burn.
- If you lose fat, you're burning more calories than you consume.
- If you maintain your weight, your energy input (calories you eat) and output (calories your body burns) are in balance.

I thought I couldn't stand counting calories. I had done it while I was young and skinny but still believed I was "fat." (What can I say? Twiggy was our role model.) Name any food, and I could rattle off its calorie count without breaking a sweat. But I was fed up with not making faster progress. And I had discovered Tom's description of the zig-zag method, which requires you to count calories. I was desperate enough to give it a try. 💥

#### **Success at last!**

Immediately, my body started responding. Every week on the zig-zag, just like clockwork, I lost 1.4 pounds. That may not sound like much, but I wasn't starving. I felt good. I had energy to work out. In fact, the process was about as painless as I think fat loss can be.

In 10 weeks on the zig-zag, I burned 14 pounds and finally reached my goal weight. I had maintained my muscle mass, gotten back into my size 6 trousers, and gained a terrific skill.

If I ever let things slide (it happens to the best of us), I know exactly what to do to get back on track, with regular exercise and the zig-zag.

If I'd wanted to be a little more aggressive—cut calories a little more and worked out a little more frequently—I probably could have lost two pounds a week.

That's a trade-off you may want to make. I'll lay out the pros and cons later in this report, and you can decide what's best for you.

# Benefits of the zig-zag

Here's the zig-zag in a nutshell: For several days (you could choose two, three, or four), you eat fewer calories than you need. I call these "reduction days." Then you eat more calories for one day. That's "maintenance day." Rinse and repeat.

I'll go into detail later in this report, explaining how you determine the number of calories you need and how many calories you should eat on your reduction and maintenance days.

But first let me explain why the zig-zag is so effective and beneficial:

The zig-zag helps preserve your lean muscle tissue. You might be thinking, *I don't want to get big and bulky*, but that's not what I'm talking about. Muscle is more compact than fat: it takes up less space. So if you gained five pounds of muscle and lost five pounds of fat, you'd be smaller and firmer than before.

Muscle is a girl's best friend. It is metabolically active tissue, burning more calories per pound than fat. Preserving muscle tissue or *gaining* muscle means your body burns more calories even while you're asleep. That means you get to eat more!

And muscle gives you a shape nothing else can. That's why fitness models, who work out all the time, look so good.

The zig-zag reduces food cravings and stops feelings of deprivation dead in their tracks. Are you dying for a piece of pizza or some Reese cups or a beer? Enjoy the heck out of it on maintenance day. You are never more than three or four days away from eating a little more. Knowing that makes it so much easier to tame cravings.

The zig-zag helps prevent the starvation response that otherwise occurs whenever you cut calories for any length of time. Your body isn't dumb.

When you reduce your food intake consistently, your body wants to make sure you don't starve to death. It accomplishes this by—you guessed it—slowing down your metabolism. It also begins increasing ghrelin, a hormone that makes you feel hungrier, and decreases leptin, a hormone that helps you feel satisfied.

Jeez! What's a girl to do?

Do the zig-zag.

With it, you get the benefits of reduced-calorie dieting so you can burn fat. But you greatly minimize or eliminate the reduced metabolic rate, crazy hormonal responses, and loss of muscle tissue that are the usual result of weeks of dieting.

I know it's sometimes very difficult for people to accept that eating *more* a couple of times a week can actually help them burn fat faster. But if your present plan isn't working so well, why not give it a try?

I'm convinced that if you follow the zig-zag faithfully—counting calories accurately, weighing and measuring your food, and keeping a record of everything you eat—you *will* see results.

# Let's get started!

Ready to give it a try? Great! A few simple calculations will help you determine how many calories you'll need on reduction (low calorie) days and maintenance days.

Don't be nervous: If you aren't handy with a calculator, use the one on my website:

■ primefit.org/estimate-your-calories/

This equation, the Harris-Benedict formula, will estimate your basal metabolic rate (BMR), a fancy term for how many calories your body needs just to maintain life. Your BMR indicates the amount of energy you'd need even if you were asleep all day.

Then you'll use an "activity multiplier" that takes into account how physically active you are. The more active you are, the more calories you get to eat. (That's another huge reason to make sure exercise is part of your life—you not only get a leaner, healthier, better-looking bod, but you get to eat more! Can you tell I love food?)

Doing the BMR calculations and then using the activity multiplier will indicate how many calories you burn each day, given your size and activity habits. With that number, you'll be able to figure out your maintenance level of calories—how much you should eat to maintain your current weight and size. From that number, you can figure out how many calories to cut for safe, healthy fat loss.

Most of us can use the Harris-Benedict calculator to determine BMR. It is accurate for the majority of people unless they are very muscular or very obese.

If you are at either of these extremes, you should probably choose the Katch-McArdle calculator. To use it, you will need to know your lean body mass—the pounds of non-fat weight making up your muscles, organs, skeleton, skin, and so on.

No fear: Information about figuring out your lean mass and using the Katch-McArdle calculator can be found on pages 15 and 16 of this report.

### Harris-Benedict formula

Use the worksheet below to keep track of your calculations:

**Step 1:** Convert your body weight in pounds to kilograms. Just divide your weight by 2.2.

So, for example, if Sally weighs 130 pounds, that's equal to about 59 kilograms (130 lb/2.2 = 59.09 kg).

# Worksheet Basal metabolic rate (BMR) = 655 + (9.6 x body weight in kilograms) + (1.8 x height in centimeters) – (4.7 x age in years) Weight in pounds: \_\_\_\_\_\_ Divide by 2.2 for weight in kilograms: \_\_\_\_\_ Height in inches: \_\_\_\_\_ Multiply by 2.54 for height in centimeters: \_\_\_\_\_ \*Multiply 9.6 x your weight in kilograms: \_\_\_\_\_ \*Multiply 1.8 x your height in centimeters: \_\_\_\_\_ \*Multiply 4.7 x your age: \_\_\_\_\_ Now you have all the numbers you need to calculate your BMR. \*These are the figures you'll need to plug into the formula above.

**Step 2:** Convert your height in inches to centimeters. To do so, take your height in inches and multiply by 2.54.

Sally is 5 foot 6 inches tall, or 66 inches (5 feet x 12 inches + 6 inches = 66). To get her height in centimeters, we multiply  $66 \times 2.54$ , which equals 167.64 centimeters.

**Step 3:** If you're female, use the formula below to determine your BMR. (If you're male, use the formula on page 16. And by the way—does your girlfriend or wife know you're reading her e-book?)

BMR = 655 + (9.6 x body weight in kilograms) + (1.8 x height in centimeters) - (4.7 x age in years)

Let's say Sally, our 5' 6" (167.64 centimeter) 130-pound (59 kilogram) friend, is 45 years old. (It doesn't look as though she needs to lose any weight! But we've come this far, and we'll stick with her.)

$$BMR = 655 + (9.6 \times 59) + (1.8 \times 167.64) - (4.7 \times 45)$$

Thus, BMR = 655 + 566.4 + 301.8 - 211.5

So her BMR = 1,311.7.

That's how many calories Sally needs to maintain life if all she does is lie in bed all day.

Very important note: *Never* attempt to diet at a caloric level below your BMR. You might think that's a quick way to lose weight. Well, it's a quick way to lose muscle mass as well as your energy and your temper. As we discussed earlier, eating too little is a great way to make your body think you're starving—and then to reduce your metabolism accordingly.

Notice that the formula reduces Sally's caloric need because of her age. If she were 30 years old, her BMR would be 70 calories higher. If she were as muscular at 45 as at 30, however, this difference would probably vanish.

Sedentary people—that is, most of the population—lose muscle mass slowly but surely throughout each decade of life after 30. Much of the decline we attribute to "old age" is in fact caused by the loss of muscle mass. It's a classic example of "use it or lose it."

**Step** 4: Now you need to know which activity multiplier to use, given that you don't lie in bed all day.

Multiply your BMR by one of the following numbers, depending on your activity level:

- Sedentary—person doesn't exercise: use 1.2
- *Lightly active*—person does light activity or sports one to three times weekly: use 1.375
- *Moderately active*—person does moderate activity or sports three to five days a week: use 1.55
- Very active—person does hard exercise or sports six or seven days a week: use 1.725
- *Extremely active*—person trains intensely more than once a day or performs a job that is very physical: use 1.9

Let's say Sally is moderately active. She does 45 minutes of cardio or strength training four days a week. We can multiply her BMR (1,312) by 1.55 to find out how many calories she needs each day to lead her normal life, doing her normal activities. This gives us her maintenance level.

If she eats at this level—2,034 calories  $(1,312 \times 1.55)$ —and continues her activities, she will maintain her weight.

If she's muscular from years of weight training, though, she can eat more because the Harris-Benedict formula did not take into account that she has, for example, 15 pounds more lean tissue than the average woman her size. (See pages 15 and 16 for more information.) **\*\*** 

# How many calories should you cut to lose fat safely?

Now you know the number of calories you need to maintain your weight: your BMR times the appropriate activity factor. That's how much you should eat on *maintenance day*.

One caveat: As you lose weight, your maintenance level decreases. Why? It simply

takes more energy to maintain a 200-pound person than a 150-pound person. So if you have a lot of weight to lose, you should recalculate your calorie needs after every 20-pound loss.

If you don't adjust your calorie intake, you'll be eating more than you need on maintenance day. This is another good reason to build exercise into your lifestyle—especially exercise that builds muscle and thus increases your metabolism.

On the zig-zag, you can choose to be more moderate (cutting fewer calories) or more aggressive (cutting more calories).

To achieve a moderate deficit, you would cut your calorie intake by 15 to 20 percent on reduction days. So if you maintain at 2,000 calories a day, a moderate caloric deficit would work out to 1,600 calories (20 percent less than 2,000) to 1,700 calories (15 percent less than 2,000).

The formula is as follows:

Maintenance calories – (maintenance calories x desired percentage of calorie reduction) = reduction calories

So, for example,

$$2,000 - (2,000 \times .15) = 1,700 \text{ or}$$

$$2,000 - (2,000 \times .20) = 1,600$$

A more aggressive deficit would be 25 to 30 percent. This is a good strategy for larger people.

Let's assume that Eunice, a woman with a maintenance level of 2,400 calories a day, plans to take a 25 percent deficit. Here's her calculation:

$$2,400 - (2,400 \times .25) = 1,800$$

Eunice gets to eat more than a smaller or less active woman even though she's actually cutting more calories, proportionately, from her food plan.

Here are some of the pros and cons of moderate and aggressive deficits:

- A moderate deficit is safer for people who don't have a lot of fat to lose. Dieters who are pretty lean already are more likely than large people to lose muscle as well as fat. Play it safe and take it slow to preserve your muscle. This means you have to be patient—but taking it slow is the fast way to permanent weight control because you're less likely to regain.
- On a moderate deficit, you get to eat more on reduction days. If you're like me and really hate feeling hungry, consider this strategy.
- Fat loss on a moderate deficit is relatively rapid, and hunger is minimal. You're still taking in enough calories to feel energetic and to have decent workouts.
- An aggressive deficit is safe if you have a lot of fat to lose—as long as you don't get overly hungry or start feeling deprived. If you're quite overweight, the good news is that you'll lose weight fairly quickly, especially in the beginning. As you get smaller, though, consider switching to a moderate deficit to preserve your lean muscle tissue.

You can change how conservatively or aggressively you diet at any time. Experiment to see what works for you.

You'll be keeping a food journal anyway, so at the same time, make notes about how you feel. How's your energy level? Do you feel upbeat or depressed? How's the quality of your workouts? Are you whipped when you get done, or do you still feel good?

Adjust your calories up or down as needed. And take a week off now and then. Every two to four months, it's smart to spend a week in maintenance.

This actually leads to faster weight loss overall because it discourages the starvation response. And it gives you a psychological break. Also, you maybe surprised at how great your workouts feel when you're "on food."

# Real-world zig-zag

Let's look at how the zig-zag works for our imaginary friend Eunice. Her maintenance level of calories is 2,400 a day. Let's pretend we figured that out by doing the Harris-Benedict formula, then using the appropriate activity multiplier.

Eunice has decided to alternate three reduction days with one maintenance day. She wants to take a relatively aggressive calorie deficit of 25 percent.

She starts her zig-zag diet on Tuesday, so on Tuesday, Wednesday, and Thursday, she consumes 1,800 calories a day. Friday is maintenance day, so she can eat 2,400 calories that day. That works out well because she's going to lunch with a friend, and this way she can eat more normally at the restaurant and not feel overly deprived.

Then on Saturday, Sunday, and Monday, she goes back to her 1,800-calorie plan. Tuesday is maintenance day again. And so it goes.

Note that you can shift your days around to accommodate meals in restaurants, parties, and so on.

Don't be too regimented. As long as you stick to the plan 90 percent of the time, you're going to get results. 💥

# **Common questions**

#### Q: Can I really eat that much and lose weight?

**A:** Yes! I know some of you are going to shriek at the idea of eating 1,600 calories or more a day. After all, you're constantly bombarded with diet books and magazines that propose utterly ridiculous eating plans that expect you to subsist on 1,000 or 1,200 or 1,300 calories a day. Unless you are a tiny, sedentary person, the word for this is not dieting but *starvation*.

Such drastic reductions in calories cause a terrible rebound effect. They're a sure way to lose lean body tissue—which reduces your metabolic rate and makes regain almost inevitable.

#### Q: Wouldn't I lose weight faster if I cut calories more aggressively?

**A:** You might lose *weight* faster—but the weight would likely also include muscle. There's a healthy rate at which a person can lose fat, and trying to accelerate the process typically backfires. We get so impatient with the idea of losing just one or two pounds of fat per week. But would you like to lose the pounds for good and end the loss-and-regain cycle forever? A huge body of research proves that people who lose fat

the slow and steady way are much more likely to keep it off.

#### Q: Do I really have to write down everything I eat?

**A:** I highly recommend it. Otherwise, you simply don't know how many calories you're consuming.

I strongly advise you to weigh or measure *everything* you consume and jot it down. Studies have shown that even nutritionists are not very good at accurately estimating their caloric intake, which is why weighing or measuring is so crucial. I could tell you stories about people I've coached who swear they're not overeating, yet they don't lose fat. When I manage to browbeat them into measuring their food and writing down calories consumed, they inevitably come back to tell me, "Gee—it turns out I was eating more than I thought."

#### Q: Won't it be a hassle to keep a food journal?

**A:** Not really. It'll soon become second nature. First, you'll quickly memorize the calorie counts of foods you eat frequently. Second, there are loads of excellent online services (many of them free) that make it easy to track your daily intake.

My favorite is dailyburn.com, but other options include sparkpeople.com, www.myfitnesspal.com, and Lance Armstrong's www.livestrong.com.

Or, if you don't want to join an online fat-loss community, you can track your numbers in an Excel spreadsheet or online with a free Google or Zoho spreadsheet.

Still skeptical? Read this research summary about the dramatic difference in results between dieters who kept a journal and those who didn't:

"[A] study of nearly 1,700 participants shows that keeping a food diary can double a person's weight loss. The study found that the best predictors of weight loss were how frequently food diaries were kept and how many support sessions the participants attended. Those who kept daily food records lost twice as much weight as those who kept no records." (Full article here: bit.ly/cYoXct)

Note the "support sessions" mentioned in this summary. If you can, enlist a buddy in your fat-loss journey, or join an online community. Dieters gain a lot of strength from being able to share their challenges and successes with one another.

# **Appendix**

How to estimate your lean body mass

The gold standard for estimating lean body mass is underwater weighing, but it's difficult to find an opportunity to be measured in this way. Many health clubs now use a device called a Bod Pod, which is supposed to give a very accurate estimation of leanness.

Of course, there's also the caliper method—in which someone uses calipers to pinch your fat at certain sites on the body. Health clubs usually have personnel trained in using calipers.

But if you want a pretty accurate estimate without leaving your home or spending a dime, try the U.S. Navy method. All you'll need is a measuring tape and an online calculator such as the one on my website:

■ primefit.org/estimate-your-bodyfat/

To use the Navy method, women need their hip, waist, and neck measurements as well as their height. Men need only height and measurements of their abdomen and neck. Plug the numbers into the calculator, and in an instant you'll get a bodyfat estimate that's accurate within a few percentage points.

Now that you have your lean body mass, you can, if you wish, estimate BMR with the Katch-McArdle formula. Once you've determined your BMR, multiply by the appropriate activity level, as explained on page 10.

Katch-McArdle formula

If you are very muscular or very obese, this formula will yield a more accurate indication of your calorie needs. To use it, you need to know your lean body mass (LBM) in kilograms. To convert to kilograms, simply divide your lean mass in pounds by 2.2.

Basal metabolic rate (BMR) = 370 + (21.6 x lean mass in kilograms)

Remember Sally, from page 8? Let's say she has gotten an estimate of her bodyfat and learned that her LBM is 100 pounds. That means she's carrying 30 pounds of fat and

that her bodyfat percentage is 23.

I got that percentage by dividing 30 pounds (fat weight) by 130 pounds (total body weight). Let's convert her 100 pounds LBM to kilograms: 100 pounds/2.2 = 45.5 kilograms, more or less. Let's see what her BMR will be with the Katch-McArdle formula.

 $BMR = 370 + (21.6 \times 45.5)$ 

BMR = 370 + 982.8

So her BMR is 1,352.8.

As you can see, this is very close to the result we got from the Harris-Benedict equation.

But if Sally were more muscular, Harris-Benedict would underestimate her caloric need.

Now let's pretend she still weighs 130 pounds but has 115 pounds of lean body mass. She'd be an extremely muscular, super-lean gal, with a bodyfat of 11.5 percent. Her LBM in kilograms would be 52.3.

Let's check her BMR now with Katch-McArdle:

 $BMR = 370 + (21.6 \times 52.3)$ 

BMR = 370 + 1,130

So her BMR = 1,500

See the result of having 15 pounds more muscle? She needs almost 150 more calories a day just to survive. *Coooool*.

Harris-Benedict formula for men

Basal metabolic rate =  $66 + (13.75 \text{ x weight in kilograms}) + (5 \text{ x height in centimeters}) - (6.8 \text{ x age in years}) <math>\mathbf{x}$ 

#### Resources\*

Burn the Fat, Feed the Muscle, an e-book by Tom Venuto. Tom's book includes much, much more information on nutrition and exercise for fat loss. Tom is the best there is, and I've used and recommended his products since 2002. Link: bit.ly/atLanX

*Burnthefatinnercircle.com*. Tom Venuto offers members a steady diet of research-based articles on fat loss, working out, and goal-setting. The site also offers a lively user forum where you can find support from others on the fitness journey. Oh, and some really fine recipes. Link: bit.ly/9bFBqz

The Volumetrics Weight-Control Plan: Feel Full on Fewer Calories by Barbara Rolls. This book teaches real-world portion control and how to make healthful, filling choices to prevent hunger. Dr. Rolls is a renowned researcher and offers you facts, not fads. Link: amzn.to/b9T78xr3 

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