



The 3 Things

Every Successful Diet

Must Do

Dr. Steve Chaney

“The Three Things Every Successful Diet Must Do”

(The Secret Behind Losing Weight and Keeping It Off)

About

I am Dr. Steve Chaney. I have a PhD in Biochemistry. I am Professor Emeritus from the University of North Carolina where I ran an active research program and taught Human Metabolism and Nutrition to medical and dental students for 40 years. I am an educator who received the Excellence in Teaching Lifetime Achievement Award from the UNC School of Medicine Academy of Educators upon my retirement from the university in 2012. I am also a scientist who has published over 100 articles in peer reviewed scientific journals. Finally, I am committed to helping people lead healthier lives, and I keep abreast of the latest scientific literature on holistic approaches to better health.

My mission is to cut through the hype and urban myths to provide you with the truth about how you can attain and maintain optimal health. I create eBooks like this one because people like you need resources they can rely on for up-to-date, scientifically accurate health information without hype or bias. My goal is to provide you with accurate health information based on the latest clinical studies and to help you avoid both the more sensational and the negative claims in the media.



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Why most diets don't work:



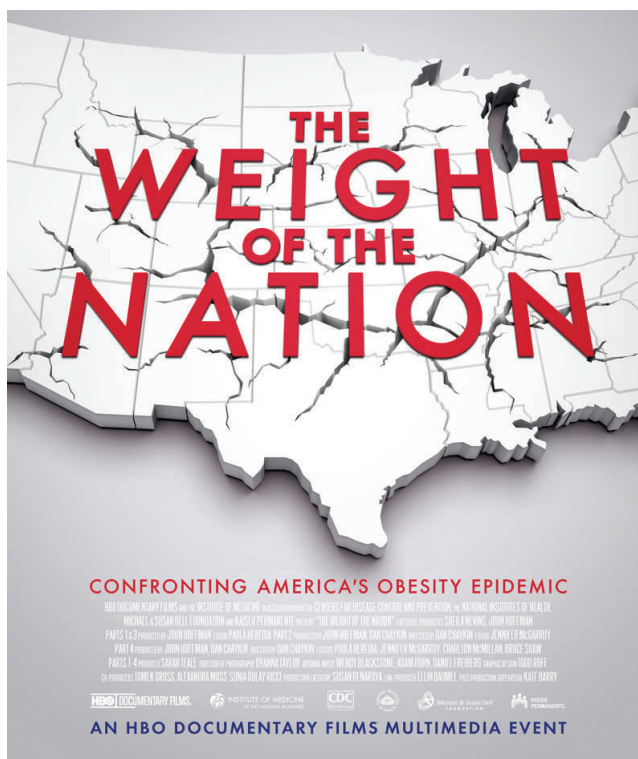
If you are like most people, you already know that the problem isn't in losing the weight; the problem is in keeping that weight off. And, if you've lost weight several times, only to gain it back again, you may feel like a failure.

But let me introduce a new idea:

It may not be that you have failed on the diets. It may be that the diets have failed you. Let's talk a bit more about why most diets don't work. I'd like to introduce you to the one diet book that I actually recommend. So many diet books just have hype and misleading information, but this

one, *The Weight of the Nation*¹ by John Hoffman and Dr. Judith Salerno, I actually do recommend. That's because it was written in collaboration with the Institute of Medicine, the Center for Disease Control, and the National Institutes of Health.

This represents a consensus of the top weight-control experts in the country. And, it was produced as a series of videos in collaboration with HBO. So you can either read the book or you can watch the videos. But it really is the only diet book that I actually recommend.



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So why do most diets fail?

Hoffman and Salerno say one thing that I’ve been saying for years, but sometimes you have to hear it from the experts before you really believe it:

“First we blamed fat, and low-fat diets didn’t work. Then we blamed carbs, eggs, red meat, dairy, white flour, sugar, juices, sodas, high-fructose corn syrup, and partially-hydrogenated fats...”

You’ve probably seen each one of these things vilified at one point or another. And you’ve read books or blogs that tell you that if you just eliminated one or two of those things from your diet, the pounds would melt away; and you’d never be overweight again.



Well, let’s hear what Hoffman and Salerno say about that:

“One by one, we replaced the evil food du jour, and watched our collective waistlines grow.”

So the answer is, it’s not that simple:

There’s no one single evil food that, if you omitted it from your diet, you’d be able to control your weight.

So, let’s look at **The Three Things That Every Successful Diet Must Do.**

And by successful, I mean a diet that helps you to not only take the weight off, but keep that weight off long-term.

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The three things every successful diet must do are:



#1 Keep metabolism high. You want to keep those metabolic fires burning. You want to keep your basal metabolic rate as high as possible.

In simplest terms, basal metabolic rate is defined as the rate at which your body burns calories 24 hours a day—even when you are at rest. So it’s easy to understand that when your basal metabolic rate is high, it’s easier to lose the weight and it’s easier to keep it off.

#2 Prevent loss of muscle mass.

When you lose muscle, you also dramatically decrease your basal metabolic rate. That’s because muscle burns off calories more rapidly than any other tissue in the body.

#3 Teach true lifestyle change.

If you think of a diet as something you have to do until you can go back to living the way you used to live, that weight is just going to come back on. You’ve got to make permanent lifestyle changes if you want to keep the weight off.



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THE SCIENTIFIC PROOF

So that’s it. Three tips, three things that every successful diet must do. Keep metabolism high, prevent loss of muscle mass, and teach true lifestyle change.

So let’s give you a little bit of the science behind these three things.

#1 Metabolism

I’m going to go back to *The Weight of the Nation*¹ and give you another quote:

“Our bodies were designed to store fat in times of plenty and retain fat in times of fasting.”

Now, I want you to remember that. Because once you truly understand this concept, it will help you understand so much of why you’ve had trouble controlling your weight in the past.

If you read the chapter, what they’re saying is that in Paleolithic times you might catch a saber-tooth tiger or a gazelle, and that would be a time of feasting. That would be a time of plenty. But then you might go days or weeks before you caught the next saber-tooth tiger. And during that period of time, you would be living on roots and berries, maybe a few nuts. You would be getting hardly enough calories to keep yourself alive.

So you needed to store as much energy as you could in times of feasting, in times of plenty, and you needed to retain those energy stores as long as possible in times of fasting.

As a biochemist well-versed in the science of human metabolism, I can tell you that your body has almost no ability to store excess energy as protein and it has a very limited ability to store excess energy as carbohydrate. But, you have an almost unlimited ability to store excess energy as fat.

Once you understand that, it becomes pretty obvious that your body is designed to store as much fat as possible in times of plenty, and to retain that fat as long as possible in times of fasting.

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That was part of the quote. Here is the rest of it:

“Our bodies were designed for one world, but we live in a totally new world today.”

Look at these first four pictures.



They represent what you’re going to find in fast food restaurants on just about every corner of every city in this country. And you’re going to find those foods in just about every food court at every mall in this country.

The picture on the right says it all with respect to exercise. We’re just not getting enough exercise.



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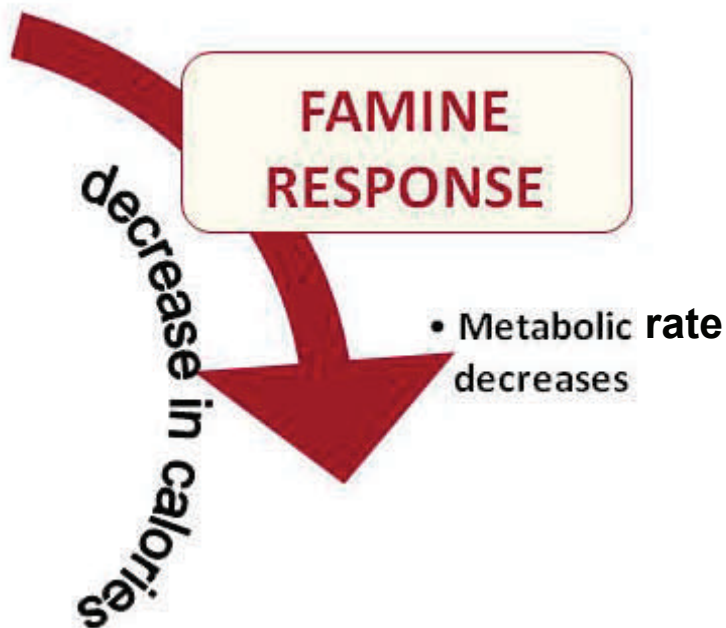
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How does your metabolism affect Your ability to lose weight?

Remember, the number one thing a successful diet must do is to keep your metabolic fires burning high. When you decrease your caloric intake significantly for more than a day or two, something called **“The Famine Response”** kicks in.

Your body is saying, “Okay, we’ve got to hang on to those fat stores,” and the first thing that it does to hang onto them is to decrease your basal metabolic rate.

That’s because if you turn down the basal metabolic rate, you’re going to burn those fat calories more slowly. That helps you retain the fat. And remember, that is what your body is designed to do in times of fasting.



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The Secret to Keeping Metabolism High



How can you prevent the famine response from kicking in?

There is a very simple solution, but you may not want to hear it. Experts have told us for years that we should **limit weight loss to one or two pounds of weight per week²**.

If you can do that, you won't have decreased your caloric intake enough for that famine response to kick in, and your metabolic rate is going to stay high.

So my advice to you is:

Avoid any diet promising five to 10 pounds (or more) of weight loss per week. In fact, whenever you see diets promising rapid weight loss, you should run in the other direction.

The problem is that there are so many diets out there promising that kind of weight loss that it's become the norm. It's become the expectation. Most people think that if a diet only gives them one or two pounds of weight loss per week, that's not enough.

Well, this is the one time when you really should listen to the experts. Avoid those diets promising rapid weight loss. **Yes, the weight is going to come off quickly, but it is going to come right back on because you've decreased your metabolic rate.**

You've caused the famine response to kick in.

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2 Loss of Muscle Mass

Now, let's look at the second thing that causes most diets to fail, and that is loss of muscle mass.

Remember, your body is designed to retain fat in times of fasting *not muscle* so you lose weight from lean muscle as well as fat. That's important, because muscle burns off calories more rapidly than any other body tissue does³.

Let's put some numbers to that:

If you lose 12 pounds of weight on just about any diet out there, you're going to lose about five pounds of muscle. And that's important, because each pound of muscle burns 50 calories per day.

A bit of higher math tells you that five pounds of muscle at 50 calories per day = 250 calories per day.

12 lb. of weight lost	→	5 lb. muscle mass lost
1 lb. of muscle burns		50 calories per day
5 lb. muscle mass x 50		calories per day = 250 calories per day

The result:

When you've lost 12 pounds of weight on a typical diet, you've lost five pounds of muscle—and your metabolic rate has decreased by 250 calories per day.

That means that once you've lost 12 pounds on a typical diet, you're going to have to consume 250 calories per day less than when you started, if you want to keep losing weight at the same rate.

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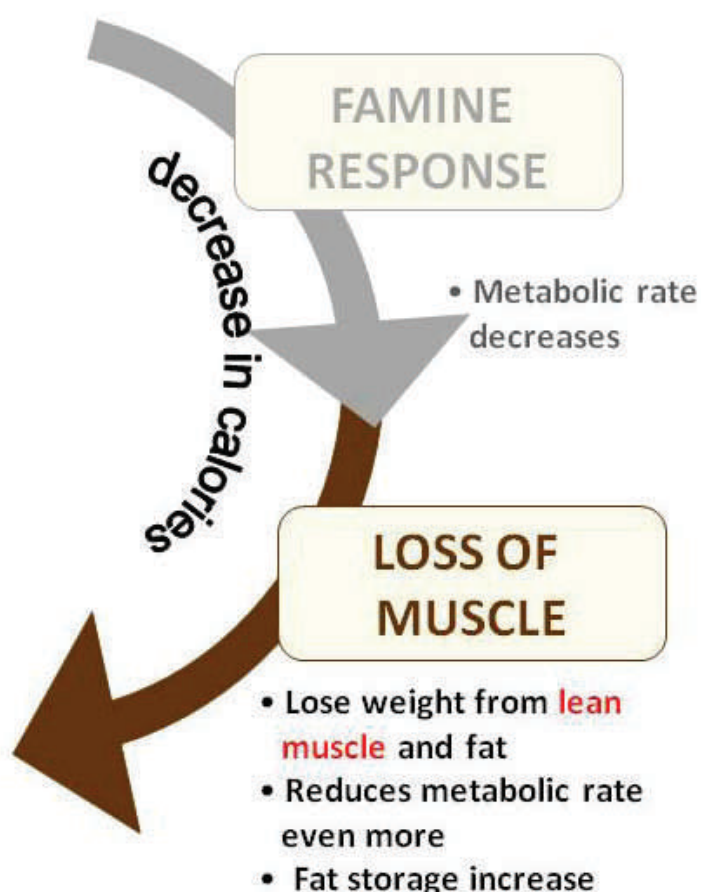
And, it doesn't stop with 12 pounds. Let's say you've lost 24 pounds. Well, that's another 250 calories. Now you're 500 calories in the hole. If you lose 36 pounds you're 750 calories in the hole.

Weight-loss plateau

It doesn't take a mathematical genius to figure out that **once you've lost significant weight on just about any diet out there**, you have lost so much muscle mass—and your metabolic rate has become so low—that **it becomes almost impossible to keep losing weight**.

So now you finally understand the dreaded **weight-loss plateau**. If you're like most people, you've probably hit that many times in the past, and you haven't understood it. Because, after all, you're still doing what you were doing before; you're being just as good, you're watching what you eat, you haven't cheated, and yet, the weight stopped coming off.

It has always seemed so inexplicable—until you understand how metabolism works, until you understand that your body is retaining fat but you're losing muscle. Because of that, your metabolic rate is decreasing, and now your metabolic rate has just gotten so low, that it is no longer possible for you to lose weight.



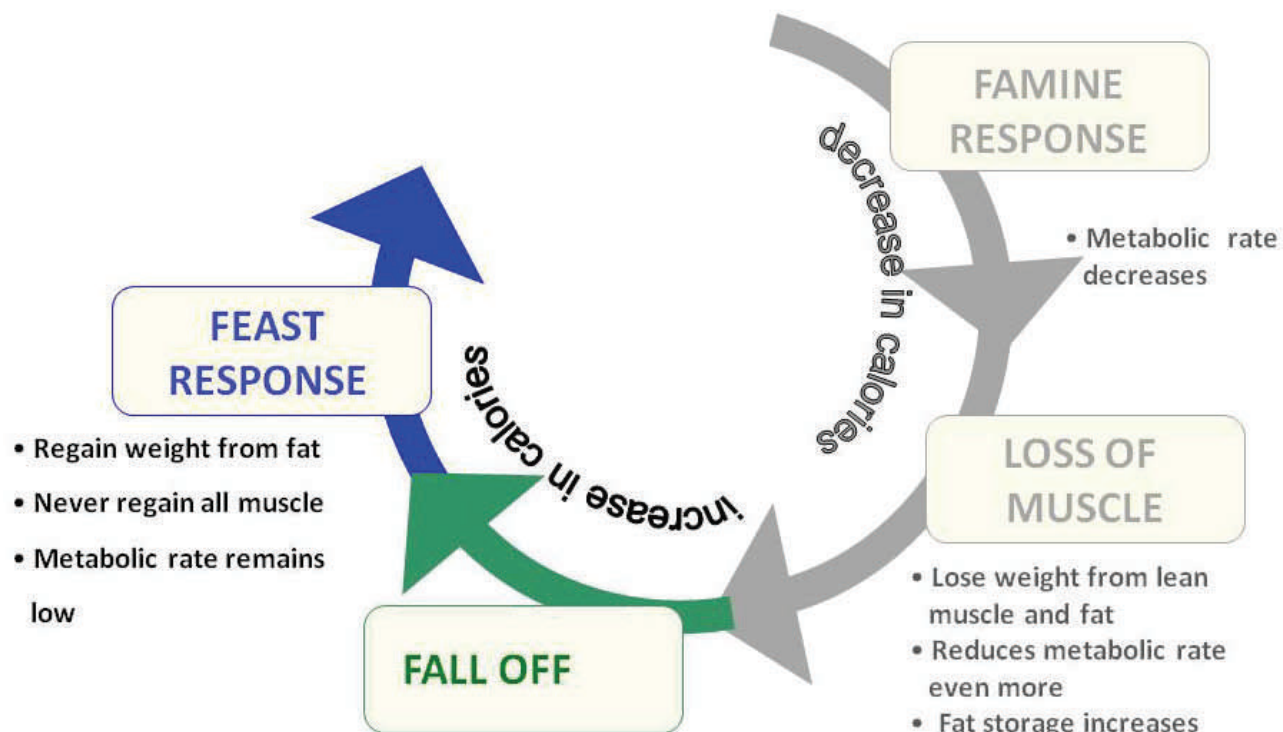
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The yo-yo diet phenomenon

And so you get discouraged. You fall off your diet. You start increasing your caloric intake. You start eating the way you did before.

But here’s the problem. Remember, in times of plenty, **The Feast Response** kicks in¹. Your body stores fat, it doesn’t store muscle. So, you regain your weight from fat; you don’t regain your weight from muscle. And your metabolic rate remains low.

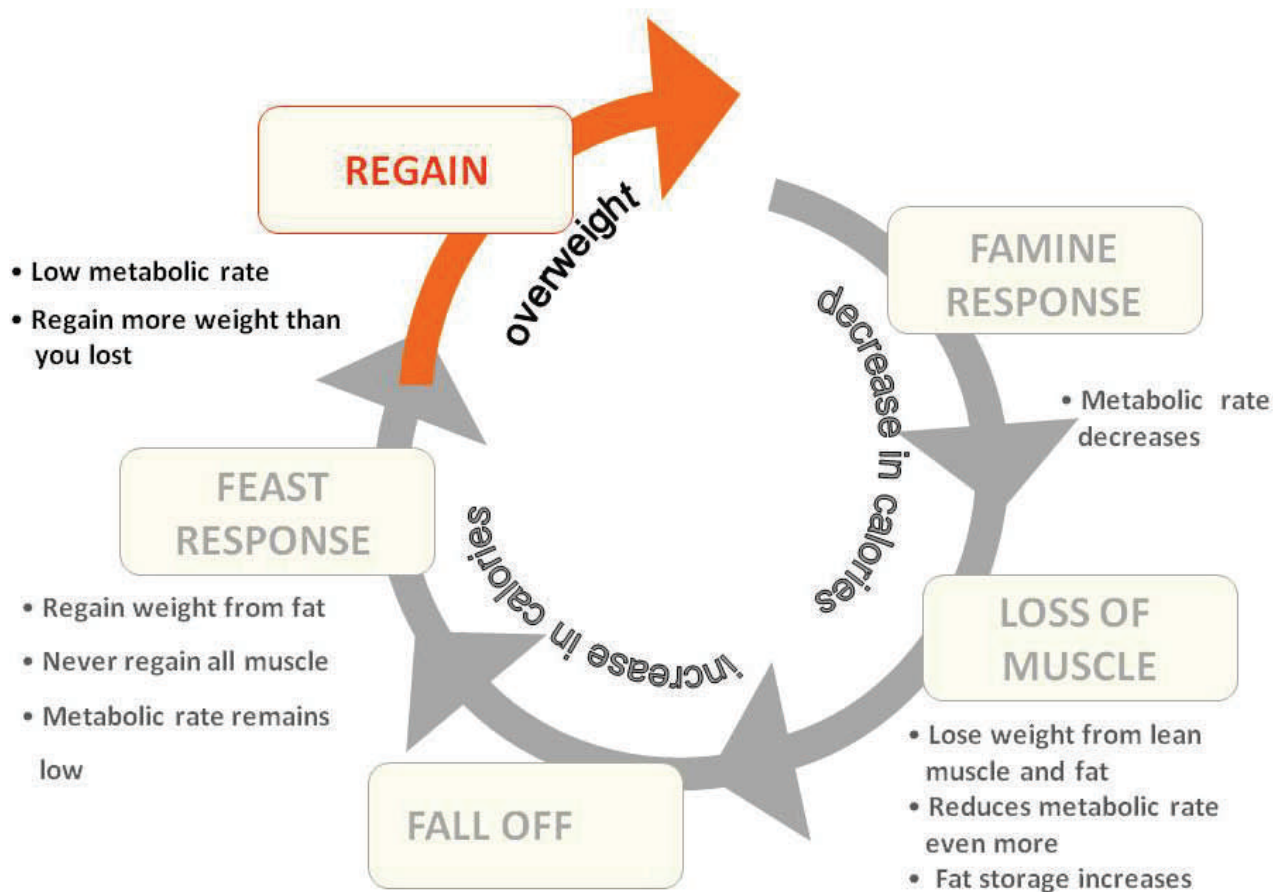


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Again, let’s look at some numbers:

Let’s say you’ve just lost 12 pounds. But you hit that plateau. You get discouraged. You don’t pig out. You just go back to eating the way you were before you started the diet.



But, now your metabolic rate is still going to be 250 calories per day less than when you started.

So even though you’re eating exactly the way you ate before you began, you’re going to gain more weight than you had originally. So now you understand the dreaded **yo-yo diet** phenomenon.

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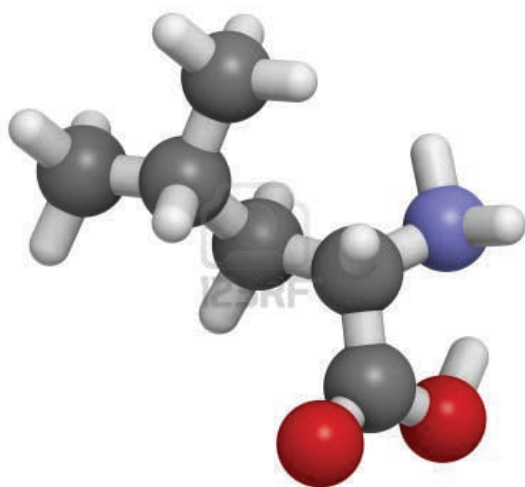
Preserve muscle mass, skip herbs and stimulants

So preserving muscle mass is absolutely key to keeping your metabolic rate high. And you want to do that without dangerous herbs or stimulants because those often cause problems. They cause side effects. In some cases they can actually kill you.



The Secret to Preserving Muscle Mass

In the past, the only recommended method for retaining muscle mass during weight loss was exercise, but it requires lots of exercise. And, most of that exercise needs to be weight-bearing exercise, not aerobic exercise. Very few people are willing to put in the amount of effort required to maintain muscle mass through exercise alone.



Fortunately, recent research has shown that there is a nutritional approach that can completely preserve muscle mass during weight loss. It is an all-natural approach that keeps your metabolic rate high without the use of dangerous herbs and stimulants. And, best of all, if you add in exercise, you actually get an increase in muscle mass and an increase in metabolic rate.

This nutrition approach is based on exciting new research performed by Dr. Donald K. Layman and his colleagues at the University of Illinois⁴. They have shown that a high-protein diet containing 10-12 grams of the **essential amino acid leucine** is uniquely effective at retaining muscle mass and decreasing fat mass in people who are dieting.

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Leucine is a branched-chain amino acid. If you have been involved in sports nutrition, you probably already know that branched-chain amino acids in general are thought to help maximize gains in muscle mass following weight-bearing exercise⁵.

However, I like to refer to leucine as the one branched-chain amino acid that actually does the heavy lifting. That’s because it’s the only amino acid that specifically stimulates muscle cells to lay down new protein⁶, and it’s that new protein that gives muscle its strength and its bulk.

This dietary approach is the real deal. Clinical studies⁴ have consistently shown that a high-protein diet designed to provide 10-12 grams of leucine per day:

- * Promotes retention of muscle mass and preferential loss of fat mass when used as part of a reduced-calorie, weight-loss diet.
- * Improves **insulin sensitivity**, reduces **triglyceride levels** and reduces the triglyceride/HDL ratio.
- * Promotes satiety, which results in better long-term weight control.
- * Enhances the increase of muscle mass and loss of fat mass associated with exercise.

In short, this is a simple, healthy and all-natural approach that you can use to retain your muscle mass, and keep your metabolic rate high, while you are dieting. It will work even if you don’t exercise, but it works even better if you do exercise. This is the ultimate solution to losing weight and keeping it off -

- thus, breaking the yo-yo diet cycle forever.



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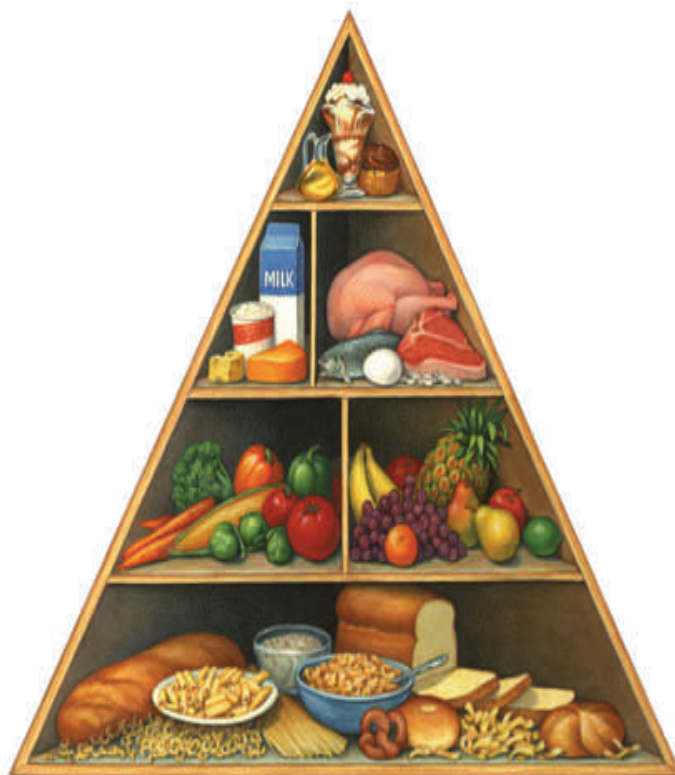
#3 Lifestyle Change:

Finally, let’s talk about the lifestyle change—the science behind lifestyle change.

A study was published several years ago by Hill and Wing⁷. They looked at 3,000 people in what’s called the National Weight Control Registry — people who not only lost weight successfully, but also kept it off for five years or more.

These people lost their weight on almost every diet in the book. But, when Hill and Wing asked them what they did to keep the weight off, their answers were pretty consistent:

- 1) They consumed low-calorie diets with moderate fat intake and very seldom consumed fast foods
- 2) They internalized their eating patterns
- 3) They monitored their weight regularly; 75% weighed themselves at least once a week.
- 4) They ate breakfast on a regular basis; 78% ate breakfast every day
- 5) They got lots of exercise; 90% of them exercised on average about one hour per day



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1) Ate Low-calorie, moderate-fat diet with little or no fast foods:

Moderating your fat intake just makes sense. There are fewer calories in a gram of carbohydrate or protein than there are in a gram of fat. So it's easier to maintain your weight if you're not eating a lot of fat. And, I probably don't need to tell you that fast foods are not your friend if you are trying to keep your weight under control.

Of course, it would also be irresponsible for me not to add that those moderate-fat diets should emphasize low-fat protein sources and non-starchy vegetables, fruits and nuts as the major carbohydrate sources.

2) Internalized Their Eating Patterns:

Internalizing their eating patterns simply means that their new eating pattern was no longer a “diet” to them. It had become their lifestyle. It had become their new norm. They ate in a healthy, calorie-appropriate way without even thinking about it. That's what I mean by true lifestyle change.

3) Monitored Their Weight Regularly:

Monitoring their weight regularly doesn't mean they were obsessive about it. It means that maybe once a week, or every other week, they got on the scales. If they had gained a pound or two, they made minor adjustments.

They had learned a healthy lifestyle; they had learned the adjustments that they needed to make to keep their weight under control; and they had developed the confidence that they could do it. This is also part of what I mean by true lifestyle change.



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4) Ate Breakfast Regularly:

They ate breakfast on a regular basis. That’s because breakfast revs up your body. It causes your metabolic rate to increase first thing in the morning. That means you burn off more calories during the course of the day. Plus, studies show that people who eat a good breakfast consume fewer calories during the rest of the day.



5) Got lots of exercise:

Exercise is like a one, two punch when you are trying to keep your weight under control. First, you burn calories while you exercise. Secondly, you increase your muscle mass, which means that you burn off more calories 24 hours a day.



When I first started teaching medical students 40 years ago, I told them that they could make a lot of money by writing a diet book promising the secret to burning off more calories while you sleep. The “secret,” of course, was to increase your muscle mass. Somebody did eventually write that book, and, alas, it was not one of my students.

Now, this is just one study, but there are literally hundreds of studies out there showing that lifestyle change is what you really need to keep the weight off.

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Glossary:

Amino Acid: Amino acids are chemically defined as molecules with an amino group, a carboxylic acid group and a side chain that is unique to each amino acid. However, it is only important for you to know that amino acids are naturally occurring molecules that the body uses as building blocks to make proteins.

Basal Metabolic Rate: Basal metabolic rate is the rate of metabolism or the amount of energy expended in a given period by an individual in a resting state.

Branched-Chain Amino Acid: Branched-chain amino acids are amino acids with a branched side chain. The branched chain-amino acids are leucine, isoleucine and valine. Athletes sometimes use branched-chain amino acids to support an increase in lean muscle mass following exercise.

Calorie: A calorie, also called a kilocalorie, is a unit of energy. A calorie is the amount of energy needed to raise the temperature of one gram of water by one degree Celsius. The number of calories in a food is simply a measure of the stored energy in that food.

Essential Amino Acid: Essential amino acids are amino acids that cannot be made by the body. They must be obtained from the diet. The essential amino acids are histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan and valine.

Famine Response: The famine response is how the body of a human or animal responds to malnutrition, specifically reduced calorie intake such as might be expected to occur during a famine.

Insulin: Insulin is a naturally-occurring polypeptide hormone secreted by the pancreas in response to increased levels of glucose in the blood. Insulin lowers the blood glucose level and promotes transport of glucose into the muscle cells and other tissues.

Insulin Sensitivity: Insulin sensitivity is the ability of muscle cells and other tissues to respond to glucose. Those cells often become resistant to the effects of insulin in overweight individuals, a condition known as **insulin resistance** or **Metabolic Syndrome**.

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Leucine: Leucine is an essential, branched-chain amino acid. In addition to being a building block for cellular proteins, it is the only amino acid that specifically stimulates muscle cells to make new protein.

Metabolism: Metabolism is the chemical processes occurring within a living cell or organism that are necessary for the maintenance of life. In metabolism, some substances are broken down to yield energy for vital processes while other substances, necessary for life, are synthesized.

Muscle Mass: Muscle mass is the total weight or mass of muscle tissue in the body.

National Weight Control Registry: The National Weight Control Registry is a research study that includes people (18 years or older) who have lost at least 30 pounds of weight and kept it off for at least one year. There are currently over 10,000 members enrolled in the study, making it perhaps the largest study of weight loss ever conducted. Members complete annual questionnaires about their current weight, diet and exercise habits, and behavioral strategies for weight loss maintenance.

Paleolithic: The Paleolithic era is defined as the cultural period of the Stone Age beginning about 750,000 years ago.

Triglycerides: Triglycerides are the major form of fat stored by the body. If your triglyceride level is high that simply means that you have lots of fat in your bloodstream. High triglyceride levels are associated with obesity and insulin resistance.

Triglyceride/HDL Ratio: A high triglyceride level combined with low HDL cholesterol, the “good” form of cholesterol, is associated with obesity and appears to speed up atherosclerosis (the buildup of fatty deposits in artery walls). And, atherosclerosis increases the risk for heart attack and stroke.

Weight-Loss Plateau: While most dieters initially lose weight easily, at some point on most diets weight appears to stabilize or “get stuck” at a certain weight. That is often referred to as the weight-loss plateau.

Yo-Yo Dieting: Yo-yo dieting is defined as the practice of repeatedly losing weight by dieting and subsequently regaining it—and often regaining more weight than was lost in the first place.

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