

Guide to Women's Fitness and Diet



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For Women, Lifting Weights is Essential



Weight lifting has long been the domain of men. For women, there are a lot of barriers to heavy lifting. Sure, most of your clients will be willing to pick up the five- or eight-pound weights and do some easy reps in the hopes of thinning their arms or doing a few squats to try to lose thigh inches, but not many are open to the idea of real, heavy lifting.

Lifting can seem intimidating, especially in a gym where big dudes dominate the weight section. And women often fear heavy lifting will make them look like those men.

Trainers know better, though, and it's up to us to show our female clients how beneficial weight lifting is. Bust their long-held myths, support them as they get started to ensure safety and good form, and help them feel confident in the weight section of the gym.

Major Benefits of Strength Training

As the trainer, it's your job to convince your skeptical lady clients that lifting is the next important challenge to tackle. Women, and anyone, of course, get so many benefits from regular weight lifting sessions: added strength and confidence, stronger bones, fat burn, weight loss, better athletic performance, and fewer injuries. It's a win-win-win. Here are just a few of the facts you can share with clients to get them to try it.

Get Stronger

The most obvious benefit for anyone of lifting weights is getting stronger. And, most important to building stronger muscles is to push the weights. Some women are okay with doing some light strength training, and that's great for muscle endurance, but real lifting actually builds strength. By real lifting, we mean heavy weights and compound exercises like deadlifts, rows, and squats. Getting stronger makes everyday chores and activities—picking up the kids, taking out the garbage, cleaning—easier.

Expect to Burn Fat, A Lot

A big motivator for women working out is burning fat. Cardio has long been considered the ultimate fat-burner, but there is mounting evidence that weight lifting not only burns fat but may even do it better than cardio.

In one study researchers found that adults who walked for exercise lost as much weight as those who walked and did weight training. But those who only walked lost lean mass, while those who included lifting lost fat and maintained muscle¹. Also important for most women, lifting is better than cardio for losing belly fat.

Lift to Burn Calories, Too

Again, cardio is always thought of as the holy grail of calorie burning, but strength training is important for burning them up too. In fact, you may actually burn more calories from doing heavy lifting. Yes, an hour of cardio burns more calories than an hour of lifting, but it's after the fact that the magic happens.

The secret is that lifting causes an increase in the body's resting metabolic rate—the rate at which it burns calories when you're doing nothing—for hours after the workout. A study with young women found that those who worked out by lifting weights for 100 minutes saw a 4.2 percent increase in resting metabolism for 16 hours after the fact².

Prevent Injuries

Weight lifting increases muscle strength, and that means every normal or athletic physical task becomes a little bit easier. It also becomes less risky. When you are stronger you can move in more efficient ways and that works in your favor to prevent injury. Runners for example, who also work on muscle strength, can prevent knee injuries. The stronger muscles supporting the knee joint promote good form and prevent pain and injury.

Get Better at Other Sports

Not all your female clients are athletes, but you probably have some who are really into certain activities and sports: running, cycling, soccer, or dance, for instance. It's easy to get into one particular type of activity and really focus on it. This is not a bad thing, but amateur athletes need to understand that they will get better at that sport by adding weights. A couple of days a week of lifting will help your clients become faster runners, crush their PRs, and become all-around better athletes.

Lifting Strengthens Bones, Not Just Muscles

Having muscle strength is so important, but the great thing about lifting is that it strengthens bones too. Women are especially susceptible to losing bone density and strength as they get older and doing anything to combat it can prevent fractures and breaks.

Here's how it works: just like with muscles, when your bones are impacted, they respond by breaking down and building new cells. When you do a strength training move, such as a squat, the muscle that is contracting and extending pulls on the bones in the leg. This, in turn, causes the bone to make new cells. Consistent lifting and strength training can prevent or even reverse bone loss.

Feel Good, Darn Good

The best reason of all to convince your female clients to try lifting is that they will feel good. It's a new challenge. Plus, feeling stronger and actually getting stronger are empowering experiences that build confidence and self-esteem. Then there are the physical benefits as well. Lifting improves body composition, increases muscle tone, and burns fat. Your clients will like how their bodies look after consistent weight lifting, and that will only increase confidence more.

Bust These Myths – What's Keeping Your Client from Lifting?

To get female clients into lifting you will need to address some common myths. These are untruths that keep a lot of women out of the weightlifting gym. From being afraid to look like the muscle-bound men that populate the gym to thinking that smaller weights are adequate, it's time to correct the wrong thinking too many women have about heavy lifting.

Myth #1 – Lifting Makes Ladies Bulky

This may be the biggest myth holding women back from lifting, and it needs to be busted. Anyone who has been lifting and strength training for a while knows that lifting with heavy weights doesn't bulk you up. In fact, those really big guys pushing it in the weight section have worked very hard, spending hours and hours there to get so bulky. They eat seriously restricted diets and a ton of protein to get there.

A typical person working with a trainer, doing a few weekly sessions of heavy weight lifting will not get bulky. What she will get is leaner and more defined. The real result of moderate weight training is losing fat and developing muscle tone.

Send your skeptical clients to [this ISSA blog post](#) to read more about why lifting doesn't lead to unwanted bulk.

Myth #2 – Lifting Gyms are Intimidating

This isn't technically a myth because how a gym makes you feel is subjective. But the big guys and serious ladies working out with the weights aren't trying to scare others away. They're just working hard. As with any other sport, the participants are generally warm, welcoming, and inclusive of all ability levels.

Women interested in starting weight training, but who are intimidated, really need the right guide. A good trainer to teach form and set up a reasonable starting routine that builds and develops as she gets stronger is the key

to helping her feel more confident. Lifting is for everyone and is scalable, even for beginners who are coming straight from the couch.

Myth #3 – Lifting little Weights is Enough

Some women will say they already lift, but it doesn't count unless it's heavy lifting. Of course, this is relative and different for everyone, so it is important to figure out an appropriate place to start. For your client who is not interested in serious bodybuilding but is willing to add some more intense strength training to her workouts, heavy lifting means using weights that allow her to do eight to ten reps in a row.

Myth #4 – Lifting is Not for Older Women

Older women likely have the intimidation factor to the extreme when it comes to lifting, and you're more likely to be able to convince younger female clients to give it a try. But don't make the mistake of not pushing the older ones.

Of course, the ranges of motion and the weights used are likely to be smaller for older clients, but they still can and should lift. As we get older, we lose both muscle and bone mass and lifting can slow or even reverse that. One study of postmenopausal women found that those who engaged in twice-weekly, high-intensity strength training increased bone density, muscle mass, strength, and balance³.

Lifting is for kids and teens too, but you have to know how to do it correctly and safely. Check out [this ISSA post](#) to find out how.

What About Weight Loss and Cardio?

By pushing lifting so much your female clients may mistakenly think you want them to ditch cardio and focus on weights only. Make sure you aim for a good balance, especially when starting out with weights. As trainers know, there is a place for both cardio and strength training.

For women, especially those trying to lose weight, cardio is a big draw. Their fitness monitors tell them they're losing a lot of calories doing it, and they can feel it too—cardio makes you sweat and breathe hard and feels like you're really doing something.

But as we know, cardio is not the magic bullet for weight loss. Yes, it burns calories while it's happening, but as soon as you finish the cool down and the heart rate is back to normal, so is metabolism and calorie burning. With heavy lifting, on the other hand, the body continues to burn more calories than normal for hours, up to 24 hours, after the training session.

Cardio is great for a calorie burn, for endurance and fitness, and of course for heart health. It is also an important part of an overall weight loss or maintenance plan, but it isn't everything. Women get the most health benefits, weight loss, and fat burn from doing both cardio and strength training, while of course also eating a sensible diet.

Getting Started Lifting

Another myth that could be added to the list is that you need to get into some semblance of decent shape before beginning weight lifting. This activity is highly scalable, which means that anyone at any fitness level can get started. As a trainer, you are the guide who will start clients out at their current level and help them build up to heavier weights and more technical lifts.

More than anything else, women need guidance and that push to get started in heavy lifting. To start lifting with no prior experience is overwhelming for anyone, but especially for a woman who rarely, if ever, sees someone who looks like her in the weight section.

You're ready now to answer all the questions and address the doubts your women clients have about lifting. Armed with all the benefits of heavy lifting and the information to bust the myths you can get them started on a weight lifting journey they won't regret.

Do you want to help others discover a love for fitness? Does helping them meet their health and fitness goals sounds like a great challenge? [Explore the ISSA's personal training course](#) and start changing lives!

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Women Building Muscle



Many women gravitate to the cardio machines due to a fear of getting bulky if they incorporate too much weight into their workout. However, strength training is often the solution to the aesthetic look so many women chase. As a trainer, it is important to understand the benefits of muscle and how to help your female clients build lean muscle as you help them achieve their goals.

Benefits of Strength Training and Building Lean Muscle

It's quite [challenging for most women to get bulky from lifting](#), unless they make an intentional effort to do so. Building muscle along with proper nutrition helps create a strong, toned physique that is a fat-burning machine. Here are a few benefits muscle gain can offer your clients:

Increased Metabolic Rate

Muscle burns calories, even at rest. So, the more muscle gain you have, the more calories you will burn throughout the day. This equates to a faster metabolism which can help burn fat and speeds up weight loss. Or, it can allow an individual to consume more calories.

Gives the Body Shape

Proper muscle building, along with good nutrition, can help shape the body. [Rounder glutes](#), broader shoulders, and more defined abdominal muscles are all realistic changes when you target those muscle groups and eat right.

Muscle Takes Up Less Space

Fat doesn't change into muscle and muscle doesn't turn into fat. But, if your client starts gaining muscle and losing fat weight, using the scale as a measure of success can be misleading. Muscle is much denser than fat and takes up less space. So, although the scale may not move, body measurements will change, and clothing will fit better.

Stronger Bones

Strong, healthy bones are essential for quality of life and healthy movement. And, weight training is one of the best things a client can do to help increase bone density. Just like muscles, the extra stress (from lifting weights) placed on the bones helps them grow and strengthen.

How to Help Female Clients Build Muscle

Once your clients are ready for more strength and resistance training, here are a few tips to help them build muscle:

Hit the Weights

Muscles respond to the demands we place on them. So, if a client's goal is muscle hypertrophy (increase the size of the muscle), they need to increase the amount of stress on the muscle.

Lift Heavy

Heavy lifting creates micro-tears in the muscle which trigger the body's repair system. Cells, hormones, and nutrients are activated and sent to muscle to help repair the tears. Over time, this process helps create bigger, stronger muscles equipped to meet the demands consistently placed on them.

Repetitions/Sets

The recommended number reps for muscle growth is typically 6-12 reps and ideally 3-4 sets. So, in alignment with lifting heavy, the weight needs to be heavy enough that your client cannot complete more than 12 reps each set.

Proper Form

It is important to ensure your client uses proper form throughout all sets. Heavy weight isn't the only goal. If the exercise cannot be done properly with heavy weights, decrease the weight. If your client is lifting improperly, they may not be engaging the proper muscles and they are much more likely to get injured.

Adequate Nutrition

For muscles to grow, they need [proper nutrition](#). Review the following key elements to get adequate nutrition for muscle growth.

Consume Enough Protein

[Protein](#) is one of the most essential macronutrients ([protein, carbs, and fat](#)) for building muscle. Protein is made up of amino acids that help repair and build the micro-tears that occur during heavy lifting. This helps rebuild the muscle bigger and stronger. For building muscle, research suggests women need 1.6-1.8 grams of protein per kilogram of body weight each day¹. And, more isn't necessarily better. Much more protein than that may not provide any value regarding muscle growth². Good sources of protein include poultry, fish, eggs, hemp seed, and red meat.

Consume Enough Calories

According to the Dietary Guidelines for Americans 2015-2020, women should typically eat between 1,600 and 2,400 calories a day. However, the actual number of calories your client needs varies based on age, height, metabolism, weight, physical activity level, etc. A client should first determine how many calories they need daily with their current level of activity.

The question then becomes: How many additional calories do they need to build muscle?

This can be a delicate balance. Too many calories can add fat weight. Not enough calories may not be sufficient for muscle growth. Many fitness professionals suggest the magic number is somewhere between 250-500 extra calories per day as it takes somewhere around 2,500 calories to build a pound of muscle.

Don't Forget Micronutrients

The body needs a variety of [vitamins and minerals](#) to function properly. Removing toxins, supplying the body with oxygen, feeding the muscles, etc., are all essential for exercise. So, although there is an emphasis on protein to help build muscle, don't forget about all the other important nutrients in your diet that make the body work!

Rest

Allowing the muscles to recover is one of the most essential parts of muscle growth. During heavy lifting, the muscle fibers tear. Rest periods are when the muscles build, heal, and grow.

There are two key elements to rest regarding supporting muscle growth:

Rest Time Between Workouts

A client can lift hard and eat well all they want. But, if they don't allow the muscles the time to recover and rebuild themselves, muscle growth will be slow or non-existent. Not only does muscle tissue need rest for building and recovery but, without it, the body may become more susceptible to injury.

Adequate Sleep

[Lack of sleep can hinder muscle growth](#). One study found a substantial difference in muscle mass when comparing subjects that slept 5.5 hours versus 8.5 hours each night³. The amount of sleep that each individual needs can vary. However, experts typically recommend 7-9 hours of [sleep](#) each night for overall health.

Stay Consistent

It will take time for the body to grow and change. Clients shouldn't expect to see changes after one workout in the weight room. Depending on your client, it may take 1-2 months to see visible signs of muscle hypertrophy.

When it comes to staying consistent with frequency, one study found that the major muscle groups should be worked at least twice a week to maximize muscle growth⁴. And, it isn't ideal to have those two days back to back. Remember, there should be rest in between. Help clients develop a regimen that puts enough stress on the muscle to create change and enough rest time to allow it to build back up. And, encourage them to stick to it.

Education is Key

When given the right information about exercise, diet, adequate rest, and consistency, you can help your female clients can feel confident in their efforts to build muscle. Knowledge can help them push aside the apprehension to build muscle for a fear of getting muscles that are "too big". For most women, getting bulky isn't a realistic side effect of muscle gain. However, building lean muscle will help them create the strong, healthy bodies and minds that they want.

Do you love fitness and have a passion for helping people reach their goals? [Get certified with ISSA](#) and start changing lives today.

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How to Get Started in Fitness Competitions – Women's Edition



Women are getting increasingly involved in fitness, but not just working out and lifting once a week in the gym. They are also working hard to get ripped bodies and are competing in events that used to be the sole domain of men.

Are you ready to take your fitness to the next level and try a competition? Even if you are a trainer, getting ready for a fitness competition will be harder and more involved than you can truly realize until you actually do it.

To give it your all, be prepared to put a lot of time into training and eating right, to spend a decent amount of money, and to get on stage and strut your stuff in an itty, bitty bikini.

Are You Ready to Try a Fitness Competition?

Of course, with any kind of competition, there is planning, hard work, and a lot of other factors involved. But even compared to other kinds of athletic competitions, like races and triathlons, fitness competitions require a big commitment.

Fitness competitions aren't like any other athletic event, and it's hard to know what to expect if you haven't seen one. Before you make the final leap and sign up for a competition in the upcoming months, actually go to a show. See what it's all about first-hand, and then decide. In the meantime, here are some important things to consider:

What's Your Motivation?

The dark side of a fitness competition includes obsessing over body appearance, disordered eating, and even drug use. And all of this leads back to motivation. If you don't have a healthy motivating reason to do this, you run the risk of heading to the dark side:

- Positive motivation – “I want to push myself to reach a new goal and have fun doing it.”
- Negative motivation – “I'll finally look lean and muscular and have my dream body forever.”

Don't make the mistake of thinking that the body you craft for a fitness competition is one you'll keep until the end of your days. It's not healthy or realistic to be that ripped for too long. [A positive, healthier motivation](#) is the desire to simply to challenge yourself in a way that is healthy and rewarding but also realistic.

Do You Have the Time to Train for a Fitness Competition?

Ask anyone you know who does fitness competitions how much time they spend training. If you don't know anyone personally, ask around the gym and you'll quickly find someone. They will probably tell you it takes at

least two hours a day, most days a week. Also, factor in the time spent planning and preparing healthy meals, buying outfits, practicing posing, and traveling to competitions.

Can You Finance it?

There are more costs associated with fitness competitions than you ever realized until you actually do it:

- Gym membership/coaching fees
- Nutrition/posing/competition coaching fees
- Registration fees for competitions
- Food and supplements
- Tanning costs
- Expensive outfits
- Travel expenses for out-of-area competitions
- Childcare costs for when you hit the gym or go to competitions

Are You Prepared to Be on Stage?

Finally, a big hurdle for many people is the actual competition. You will be putting on a tiny bikini or fitness outfit—likely gluing it to your skin to hold it in place—rubbing down with vegetable oil, strapping on a pair of high heels, and walking and posing on stage in front of judges and an audience. Can you do it? Of course, you can, and don't feel bad about being nervous because everyone is afraid of this part, even seasoned pros.

Know the Competition Types

Now that you have a better sense of everything involved in going through with this, it's time to choose. Will you enter a bikini competition, try for fitness or figure, or go for broke and try your hand at physique or bodybuilding competitions?

Bikini

If time is likely to be an issue, or if you just don't want to get the completely ripped body of a figure or physique competitor, a bikini competition is for you. This is a good way to get your feet wet in fitness competitions. Training is less intense for this category, but still requires time, dedication, and commitment. The body you'll work toward for bikini is a little softer and more hourglass, but is still lean, fit, and muscular.

Fitness Modelling

A fitness modeling competition can include a variety of degrees of physique and muscularity, but is typically most similar to a bikini competition with a focus is on modeling. You'll wear multiple cute outfits and strike some poses

beyond those typical for fitness competitions. In addition to being fit, you have to be charming and willing to act a little.

Figure

Figure fitness competitions take it up a notch in terms of muscle. Your body in a figure contest will be harder, leaner, and less hourglass than in a bikini event. Competitors have more of the classic triangular bodybuilding shape with broad, muscular shoulders and narrow waist, and increased definition between muscles.

Physique

For a physique competition, you will need to ramp it up further and get even leaner and more muscular. The idea is to have a balance between a feminine shape and real, serious muscle. There should be a lot of definition between muscles during this competition.

Learn the bodybuilding secret of using time under tension to maximize muscle gains in [this ISSA blog post](#).

The Training Component

There are two main types of training for a body competition:

1. Strength training and lifting
2. Cardio

[Strength training](#) is important for obvious reasons. This is what builds muscle size and definition. Plan to hit different muscle groups each day with one or two rest days built in each week. A typical week might look like this:

- Monday – legs
- Tuesday – chest and shoulders
- Wednesday – rest
- Thursday – abs and back
- Friday – legs
- Saturday – arms and abs
- Sunday – rest

Those rest days aren't lazy days, though, because you also need to fit in cardio. Most plans include 30 to 60 minutes of cardio five days a week to help you lose fat. Use your strength training rest days to do cardio. [Double up and do both weights and cardio](#) three days a week and suddenly you have no true rest days.

Even if you are a trainer yourself, it doesn't hurt to work with a coach or someone experienced in fitness competitions if this is your first time. Training for figure or physique is different from training for good fitness or athletic events. Someone with experience can help you craft the right plan for you and keep you motivated and on track.

Diet is Just as Important as Training

What and how you eat is a crucial part of getting a lean, defined, and muscular body. Again, if this is your first time through, work with someone who has done it before or at least have an initial consultation with a [nutritionist](#) to help you make a diet plan.

In general, the strategy for eating for fitness competitions means:

- Eating several (five or six) small meals spaced throughout the day.
- Focusing on protein and healthy carbs and fats.
- Drinking about a gallon of water per day.
- Eating a lot of veggies to feel full on a limited-calorie diet.

There is also an important dietary strategy involved in the week and days leading up to the actual competition. For instance, most people start carb-loading two days in advance and stop drinking water to dehydrate. Both enhance the appearance of muscles.

Fitness competitions are not for the faint of heart. This is serious business, and it requires a commitment of time, effort, and a flawless diet. But, if you're up for the challenge and have a positive attitude, training for a competition can be a fun way to take your workouts to the next level. And the experience can make you a better trainer for your clients of all types.

If you want to learn more about training in lifting and bodybuilding, [check out the ISSA's comprehensive course in Bodybuilding Specialist](#).

Intermittent Fasting: Women Vs Men



“So, what’s with this fasting thing. Should I be doing it?” Odds are good that at least one your clients asked you about fasting.

Similar to the popularity of the ketogenic diet, fasting is rising in fame:

- “Intermittent fasting improves metabolic rate” ^{1, 2, 3, 4}
- “Intermittent fasting improves growth hormone and testosterone” ^{5, 6}
- “Intermittent fasting improves will power, sleep, and even sex drive” ^{7, 8}

A quick internet search will yield 3,130,000 (at the time of this writing) hits. Most tout the amazing benefits of going without food for 8-30 hours at a time and gobbling up your meals in 1-2 large sittings.

AND many of those articles are backed by ample, sound, and positive research to boot, as cited above.

So, what’s the deal? Are you ready for the hammer?

Do a similar search of the research and the craze is leaving out an amazingly important caution.

Ladies beware. If you search online for “how does fasting affect me as a woman,” you’ll get very few answers. Let’s explore.

Differences Relating to Diet

Men benefit from skipping breakfast or the occasional day without food. Women benefit by maintaining an unchanging flow of high-quality calories during their day.

Politics, economics, and cultural arguments aside, biology has formulated men and women differently at a genetic (and thus phenotypic) level—and the differences go beyond the simple X and Y chromosomes. These differences are typically fairly basic, such as men are generally taller⁹, and women have smaller lungs¹⁰.

How Does This Relate to Intermittent Fasting?

Well, the roles dictated by biology has had a part to play in shaping male and female metabolic responses to exercise, carbohydrates, sleep deprivation, and yes—you guessed it—fasting!

You see, pre-agricultural man was a hunter-gatherer society, meaning there were times of plenty and times

of scarcity (unlike today where calories always abound) to which men and women adapted differently. For our purposes, understand “scarcity” to be “fasting”.

So, what happens in a time of fasting to the pre-agricultural man and woman?

Well, males with their generally larger physical size respond to fasting with a giant boost in metabolic rate to fuel a hunt. “Go get food for everyone,” says the genetic makeup of a male when he hasn’t had much to eat.

And the research bears that out. During short periods of fasting, (12-24 hours) men’s metabolisms increase up to 14% ¹³, testosterone utilization increases (depending on a number of factors) 10%-200%, growth hormone increases 100%-2000%, and blood lipids improve to support the increased hormonal production and decrease risk factors for cardiovascular disease ²⁰.

Yay manhood. Yay fasting. If you have male clients, intermittent fasting can be a great way to give them a shove toward better body composition.

But What About Women?

In a stroke of gender bias, out of 71 studies found in Harvard’s Database for intermittent fasting, only 13 include women at all and guess how many controlled studies were about the female population in general?

Zero. There were no controlled studies that allow us to draw intelligent conclusions about how intermittent fasting affects the female population¹⁵.

For example, 1 of the 13 female studies found was on pregnant women fasting for Ramadan. They found no improvement in insulin sensitivity and an increase in blood lipids which is the opposite of most articles touting the practice of fasting ¹⁶. However, every woman who has been there knows her body is completely different when pregnant vs. not pregnant. (It should be noted that even these imperfect studies didn’t get any press for their counter-current findings.)

When you sift through all of the precious little data on women in a fasted state you find something fascinating: Women don’t respond to fasting like men do¹⁷.

In fact, instead of the sunshine-and-roses of manly metabolic boosts, women might find a 50% increase in cortisol²¹ and a decrease in insulin sensitivity that could lead to obesity and diabetes¹⁸.

Women's Body Composition Suffers

You heard me. While fasting appears to be a great practice for some men to undertake, it seems that it could be a very bad idea for most women if they have any kind of body composition goals¹⁹.

And we can easily account for this by exploring biology again.

In pre-agricultural society, while the tribe was starving and men were out hunting to fix the issue (with the metabolic boost from a lack of food), what's going on with the women?

Well, they were back at the camp, growing a baby, breastfeeding, or otherwise caring for the children (who need to eat too, even if that means mom can't) and their metabolism was wired to slow down, conserve energy, store fat, and buckle down for the potential long-term famine.

What that means for your female clients is that due to inherent biological factors, intermittent fasting practices may not be right for them.

It appears that while men might benefit from skipping breakfast and/or the occasional day without food, women who want to optimize body composition, have consistent and brimming energy, and continually improve their workout performance would do best to maintain an unchanging flow of high-quality calories during their day.

The old guideline "eat 4-6 small meals per day" seems to apply more consistently to ladies than gentlemen.

Research is Lacking

As a trainer and hard-core research junkie, it fascinates me that so many of the disparities in studiable health and fitness practices (High carb vs. Low carb; Weight training vs. Cardio training; Volume vs. Intensity) could be chalked up to a failure to study different client types in a controlled way. This is one of the reasons our profession exists: One size does not always fit all.

If you aren't already, be skeptical when the next diet or exercise fad claims to be true for everyone.

Inherently, we know that men and women need different things from us as trainers (in the same way people of different ages, training experience levels, and somatotype need different things from us as trainers). Hopefully one day the science of nutrition and exercise will catch up to our intuition.

The Takeaway

Science suggests that some males can skip breakfast and receive possible benefits.

However, it seems that intermittent fasting for most females isn't currently supported by research, thus most women should eat on a consistent and frequent schedule lest the metabolic disturbances result in a decreased level of overall health for women.

Coach your clients accordingly.

Ready to learn more about the essentials of nutrition and how you can better help clients reach their goals? Check out the [ISSA's nutrition course](#).

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Women and Protein



Protein, and especially how much of it to eat, is a topic of hot debate in fitness and nutrition circles. Unfortunately, most of the discussion is geared towards men, specifically men interested in hypertrophy.

Women's nutritional and fitness needs are different. While there are indeed some tough and awesome female bodybuilders going for big muscle gains, most of your female clients will have different goals. They want to lose fat, gain muscle, and look lean.

That leaves women with a lot of questions that we trainers need to be ready to answer:

- “How much protein should I be eating?”
- “Will too much protein make me bulkier or fat?”
- “Is eating too much protein unhealthy?”
- “Should I try protein shakes?”

And so on; the questions are nearly endless. While we can't answer all of them here, let us give you some of the most important information to pass on to your female clients who are confused about protein.

Protein – What is it?

Protein is a macronutrient, one of three large molecules we get from food and need in large amounts—the others are fat and carbohydrates. We need to eat protein to support the structure of cells, hair, bones and connective tissue, for enzymes that digest food, for antibodies that keep the immune system functioning, for muscle strength and mass, and for energy. Each gram of protein you eat supplies four calories of energy.

Protein molecules are made up of smaller components called amino acids. They link together to make long strands, which then fold up to make large, three-dimensional structures that do everything from creating structural underpinnings in the body to catalyze reactions and transport other molecules within and between cells.

Why Getting Enough is Essential

Everyone, from babies to seniors, men and women, needs to consume enough protein. Compared to men, though, women are more likely to be consuming a less-than-optimal amount. Make sure you and your female clients know just how important protein is in the diet. It does much more than build big muscles.

Protein Builds Lean Muscle Mass

Bodybuilders love protein but don't make the mistake of thinking eating an adequate amount of protein will bulk you up like a heavy lifter. They get those big, bulky muscles from protein and a lot of hard work.

Protein is an essential part of muscles, but the protein you eat will mostly go to work strengthening the muscle mass you already have. Protein in the diet builds lean muscle, the kind of muscle that gives women the bodies many of them crave: slender, tight, and lean.

Protein is Essential for Weight Management

Trying to lose or maintain weight are common goals for your female clients. Protein is a crucial part of the diet for so many reasons, but especially for women trying to lose weight. Protein keeps you full and satisfied for longer than carbohydrates because they take longer to digest.

High protein amounts at breakfast can be particularly useful. It helps to minimize cravings for snacks later in the day and helps you avoid the dreaded hangry mood.

Is your client struggling to lose weight? Read [this post on four big reasons weight loss can stall](#) to help your client over the plateau.

A Healthy Immune System

Being sick is no fun, and to stay healthy the immune system needs to function properly. This requires protein. Antibodies, key components of the immune system, are proteins. Avoiding the next cold going around feels great but also helps you stick with your workouts.

Supporting Bones, Hair, and Nails

Protein is structural. It provides the basic material for connective tissue, bones, hair, and nails. For women, bone health and density are important, especially as we age. Getting enough protein can keep bones strong and minimize the density loss that comes with aging. It also keeps hair and nails looking healthy and strong.

Signs You're Not Eating Enough Protein

Not all women need to count grams of protein. If your client has very specific fitness goals or struggles to balance macros or lose weight, counting can be useful. For the rest of us it may just take greater awareness to realize if we're not getting enough protein:

- Feeling unusually fatigued or weak
- Moodiness
- Brittle or damaged hair and nails, flaky skin
- Being hungry a lot of the time
- Getting sick a lot or staying sick longer than expected

- Slow healing of wounds
- Edema, swollen feet or hands

Check out [this post on the ISSA blog](#) about protein myths to learn more about this important macronutrient and why it's hard to get too much.

How Much Protein Do Women Really Need?

If you simply follow the government's Recommended Daily Allowance, or RDA, for protein intake you'll fall short. The RDA protein intake amount—just 0.8 grams per kilogram of body weight, or around 48 grams per day for a typical woman—is just 10 percent of daily calories. With this plan, most of your calories would come from carbs and fat. Technically, it's enough for anyone who is sedentary, but it's far from ideal.

Most people go over the RDA, and the average American consumes about 16 percent of daily calories in the form of protein¹. According to the Protein Summit Report, 16 percent of daily calories from protein is not too much, and in general, Americans eat too little protein². The report states that at least doubling the RDA is recommended and safe.

Women and Protein – Counting Grams

One way to make sure you are getting enough protein is to count the grams in everything you eat. Different sources have different recommendations, but generally, 0.8 grams of protein per kilogram of body weight is the minimum. For women who are active or trying to lose weight, more is better.

A good general guideline is 1.2 to 2.0 grams of protein per kilogram of body weight.

For a woman who weighs 150 pounds, this means eating between 80 and 136 grams of protein per day. The high end of this range is pretty extreme and only really necessary for any client doing a lot of strength training, preparing for fitness competitions, or who is a serious athlete. Experts recommend you don't stay in that upper level indefinitely.

Balancing Protein with Fat and Carbs

You may also want to consider counting your protein by balancing macros. Measuring protein as a percentage of your calorie intake is worthwhile. Eating the right amount of protein is about more than just protein. Macronutrients don't exist separately; they interact with each other in the body. Getting the right balance is important for health and for hitting fitness and weight loss goals.

One way to determine the right balance of macronutrients is to look at body type. The percentages given here refer to the ratio of calories coming from a particular macronutrient:

- Ectomorph. This body type is naturally thin because of a relatively high metabolic rate. Ectomorphs should aim for a ratio of 25 percent protein, 55 percent carbohydrates, and 20 percent fat.
- Endomorph. Endomorph body type is naturally heavier with a slower metabolism. These clients should eat a ratio closer to 35 percent protein, 25 percent carbohydrates, and 40 percent fat.
- Mesomorph. A mesomorph has an athletic body and builds muscle fairly easily. A ratio of 30 percent protein, 40 percent carbs, and 30 percent fat is ideal.

Keep in mind that not everyone fits neatly into one body type category. But this is a good place to start for your client who wants to consider all her macros. She can start with the guidelines for the body type she is closest to and adjust as needed for weight loss or maintenance or for muscle building.

Protein Before and After a Workout

Another important consideration is how to eat before and after exercise. A quick search of this topic will bring up a lot of conflicting answers as to what, how much, and when you should eat before and after working out. Generally, it's a good idea to have a good mix of protein and carbs a couple of hours before exercise so that you have the energy to do it.

After a workout, many experts suggest you should consume protein within a certain window of time. Again, there is debate and conflicting evidence as to how long the window is and how important it is to get some protein during it.

A good rule of thumb is to consume between 0.4 and 0.5 grams of protein per kilogram of body weight within a couple of hours of a training session.

Because the evidence from research is mixed, don't get too bent out of shape trying to figure out specifics of eating protein after a workout. What is clear is that the overall protein you consume in a day is more important to muscle and fitness gains than timing protein consumption.

How Much Protein is Dangerous?

Yes, it is possible to eat too much protein. There is a dangerous level. The liver and the kidneys will suffer if you eat more than they can handle. The liver breaks down and makes new proteins. The kidneys process proteins as part of waste disposal and urine production.

The most protein that these organs can handle is about 3.5 to 4.5 grams per kilogram of weight. This translates to 238 to 306 grams of protein in a day for a 150-pound woman. While the kidneys and liver can technically process this much, it stresses the organs and can cause harm and damage. Eating this much is strongly discouraged.

Some signs of eating too much protein include constipation or diarrhea, dehydration, bad breath, and weight gain. Potential risks to health include kidney and liver damage, and even loss of calcium, which can negatively affect bone strength.

It's always important to talk to your clients about existing health issues before recommending diet plans. Anyone with kidney problems, past or present, may need to eat less protein than healthy individuals, and be sure they've checked in with their doctor.

How to Choose Foods with Protein

When choosing foods for protein, it is important to consider amino acids. There are eight essential amino acids that we need to eat because our bodies cannot make them from other molecules. All animal sources of protein provide these essential components. Plant proteins are mostly not complete, but they can be combined to include all eight.

For women looking to eat a healthy diet and to consume adequate protein, variety is important. If you get protein from a lot of different types of food, you'll hit all the bases and get all the essential amino acids. Some foods that are particularly high in protein, with all essential amino acids, include³:

- Three ounces of skinless chicken – 28 grams
- Three ounces of steak – 26 grams
- Three ounces of turkey – 25 grams
- Three ounces of tuna or salmon – 22 grams
- Three ounces of shrimp – 20 grams
- Six ounces of Greek yogurt – 18 grams
- Four ounces of one percent fat cottage cheese – 14 grams
- One ounce of soy nuts – 12 grams

These are high-protein foods, but nearly all foods have protein. Just one fist-sized serving of broccoli, for instance, has three grams of protein. A one-ounce serving of nuts or seeds has between four and seven grams of protein. Include a variety of meat, poultry, fish, dairy, and plant-based foods to meet your protein needs.

For Vegans and Vegetarians

Vegetarians can get all the essential amino acids from dairy and eggs, but vegans must meet protein needs entirely from plants. This is possible but requires a little more thought. A good general rule for getting all the essential amino acids is to balance the intake of legumes, like beans, lentils, and peas, with whole grains. Together, these plant-based foods provide complete proteins. Variety is especially important for plant-based eaters.

What About Protein Powders and Supplements?

Another way to get protein is through supplements, although whole foods should always be the main source of nutrients in a healthy diet. Supplements are just that, meant to supplement a diet. Your client may benefit from supplements if she struggles to get enough protein for various reasons: limited time to cook, not motivated to cook, or a vegan diet.

Some protein supplements you can recommend include whey or casein powders or pea, hemp, or rice protein powders for vegans. There are also more specialized supplements, like branched-chain amino acids for clients trying to restrict calories or meet very specific training goals.

Educating Your Clients

Protein can be a confusing topic for your clients, especially women because most research and discussions focus on men. Help your female clients by providing this important information about how, when, what, and how much protein to eat for health, weight maintenance, and strength and fitness. What they eat is just as important as how they train.

Interested in offering your clients expert nutrition advice? [Look into the ISSA's Sports Nutrition Certification course](#) and take your personal training to the next level!

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