

Getting into weight training



A female-friendly guide by Gubernatrix

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www.gubernatrix.co.uk
All-round strength training

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1. Why lift weights?

Women are often not encouraged to lift weights, or at least to lift heavy. But you are missing out on many benefits if you don't train with weights:

1. Developing muscle is a very effective way to drop body fat as muscle burns many more calories than fat.
2. As we get older, we lose muscle and our body fat percentage thereby increases; weight training will help to reverse this process.
3. Strengthening your muscles and joints will help prevent injury and back pain, both now and later in life.
4. Weight training improves bone density, militating against osteoporosis and weak bones which women are particularly prone to.
5. Being stronger is useful in everyday life and brings increased confidence in your own physical abilities.

Myth of bulking up

Many women are afraid that weight training will bulk them up and make them look masculine. But women can get a lot stronger *without* bulking up because they don't have the same hormones as men. You will look fit and toned, rather than big.

Female bodybuilders who actually want to look big have to resort to drugs in order to achieve the effect as it doesn't happen naturally. If you watch what you eat and train with weights, you are more likely to drop a couple of dress sizes than get any bigger.

Size zero culture

Women are often put off weight training because it isn't a mainstream activity for women. For many, the aspiration is to look thin and waif-like rather than healthy and lean, and images in the media and fashion encourage this.

But the answer is simple: it is *your* body and your health we're dealing with. Women should train to suit their bodies and lifestyles, not to suit a particular media image which is unattainable and undesirable for the vast majority of people.

The tyranny of the scales

It is common for people to judge their health according to how much they weigh on the scales, using indicators such as Body Mass Index (BMI). But BMI does not distinguish between muscle and fat. This leads to the bizarre situation where athletes who have a lot of muscle and little body fat are classed as obese because they weigh more than the average! A better measurement to use is body fat percentage.

The most effective way to reduce your body fat percentage is to build some muscle. Combined with the right diet, you can reduce your body fat percentage and thus improve your health, even if you get heavier overall. You will also look leaner and have better definition.

Leading the way

Lastly – but importantly – it is difficult to be a trailblazer. Many women don't know any other females who train seriously with weights and it can be a daunting prospect to be the first woman in your gym to pick up a heavy barbell.

That's where this guide comes in. It gives you all the information you need to start weight training, whatever kind of gym you are in. So take the plunge: you have nothing to lose, and a lot to gain!



2. Types of weight training

Most commercial gyms have a combination of free weights and resistance machines. This guide deals only with free weights, which include dumbbells, barbells and weight plates, medicine balls, kettlebells – basically anything heavy that isn't stabilised by some kind of contraption when you lift it.

There are various types of free weight training and there's no reason why you couldn't try all of them. They are all great for getting leaner, fitter and stronger.

Powerlifting

Powerlifting is a sport involving three lifts: squat, bench press and deadlift. These are performed with a barbell and weight plates. All three lifts require effort from the whole body, particularly the biggest muscle groups, the legs and back, so these lifts are very effective for developing overall strength and muscle.

Powerlifters will utilise other exercises such as pull-ups or dips to aid them in training, but these exercises are not used in competition.

Olympic weightlifting

Olympic weightlifting (sometimes just called 'weightlifting') is a sport involving two lifts: the snatch and the clean & jerk. These are also performed with a barbell and weight plates. However, these lifts are different from power lifts as they involve lifting a bar from the floor to overhead, whereas the power lifts move the bar a much shorter distance.



Olympic lifts are technically more demanding than the power lifts and are very effective for developing athletic power and strength. Like powerlifters, Olympic weightlifters use other exercises to help with training, such as overhead squats and core work, but only use two lifts in competition.

Bodyweight or Callisthenics

Bodyweight exercises, or callisthenics, are strength exercises that use the weight of the body as the resistance. Popular bodyweight exercises include push-ups, pull-ups and dips, but actually there are as many exercises as you can invent.

Bodyweight exercises are excellent training for sports/arts such as parkour, breakdancing and acrobatics as well as developing all-round fitness.

Strongman

Strongman involves a range of events using awkwardly-shaped or – weighted objects. The events test various types of strength including grip strength, explosive strength, brute force and strength endurance. Popular events include the atlas stones, keg tossing and tyre flipping. If lifting a barbell up and down in a gym doesn't appeal, get outside and start throwing barrels around!

Kettlebells, clubbells, sandbags

Many objects have been developed to aid strength training. Kettlebells are perhaps the most popular at the moment. These are smallish round weights with a handle and can be used in a similar way to dumbbells.



It is possible to do powerlifting or Olympic lifting style exercises using kettlebells, sandbags or other objects. Exercises tend to be done with higher repetitions using these objects, so there is a much greater emphasis on strength endurance than there is in powerlifting. These objects also introduce greater instability into the lift in order to make the core work harder.

Links to further information

[The Basics of Powerlifting](#)

[Guide to Olympic Weightlifting \(video\)](#)

[Kettlebell Training](#)

[Bodyweight and odd-object training](#)

3. Starting Out

Most people structure their routines around some or all of the big lifts from powerlifting and Olympic weightlifting, namely:

Squat	Snatch
Deadlift	Clean
Bench press	Jerk or press

Once you have got past the beginner stage it is possible to move large amounts of weight with these lifts, making them pretty tiring. Therefore people often split them up between sessions. For example, you might focus on squats one day, and do deadlifts a couple of days later. Alternatively, you can do all the lifts in the same session but do a heavy day and a light day.

Basic equipment

Barbells

For the big lifts, barbells are used. Most gyms will have standard Olympic bars which are seven foot long and weigh 20kg. However, there are other sizes of bars, so if you are not sure check with the gym staff. A women's Olympic bar weighs slightly less at 15kg, but many gyms don't have them so you would use the 20kg bar.

It's important to count the weight of the bar when calculating how much weight you are lifting. A standard Olympic bar with a 20kg weight plate on each side weighs 60kg.



Olympic barbell with 20kg plates

Weight plates and collars

The weight plates which go on either end of the bar can range from light 2.5kg plates to hefty 20kg plates. Some gyms have the little 1.25kg plates as well. These are particularly useful for women as they allow you to make smaller increments in weight on the bar.

Remember that you have to put a plate on each side of the bar, so the smallest increment you can make with the little 1.25kg plates is 2.5kg or 5 lbs. Plates should be secured to the barbell using collars.

Bumper plates

Olympic weightlifters use 'bumper' plates, made of rubber so that when you drop them they bounce. Most gyms won't have bumper plates so if you are doing Olympic lifts you will need to lower the bar under control rather than drop it.

Dumbbells

Most gyms will have a set of dumbbells, starting at 10kg and going up to 45kg or beyond.



They will also have a set of small dumbbells starting at 1kg and going up to 10kg. Sometimes these small dumbbells are found elsewhere in the gym, so you may have to look for them.

How much weight to lift

It's always tricky to know what sort of weight to put on the bar when you first start. The general rule is to start light and build up slowly. But make sure that you *do* build up the weight. Here are some rules of thumb you can use to work out what to aim for in your first few months of lifting:

Lift	Start with	Aim for
Squat	Empty Olympic bar 20kg	100% bodyweight
Deadlift	Empty Olympic bar 20kg	100-125% bodyweight
Bench press	Empty Olympic bar 20kg	50-75% bodyweight
Snatch	Wooden stick or PVC tube	50% bodyweight
Clean & jerk	Wooden stick or PVC tube	50-75% bodyweight

Since how much you can lift is closely related to your bodyweight, people often talk about their lifts not in terms of the actual weight but what percentage of their bodyweight it is. A weight that is 100% of your bodyweight is equivalent to your bodyweight. So if I weigh 60kg and I am lifting 60kg, I am lifting 100% bodyweight. If I am lifting 120kg I am lifting 200% bodyweight, or double bodyweight.

This makes it easier to compare yourself to other lifters, whether male or female. A double bodyweight power lift is pretty good in anyone's book. A double bodyweight Olympic lift will win medals!



4. Exercise Technique

To maximise the benefits from weight training and stay injury-free, it is important to use good exercise technique. Sometimes there are minor variations in the techniques that different instructors use, but there are simple principles that can be applied across all exercises.

1. **Always keep your back flat** – never lift with a rounded lower back. This is the safest position for your spine to be in when lifting.
2. **Take a big breath before lifting something heavy**. This creates internal pressure against the spine, helping to keep it locked in place.
3. **Keep your knees in line with your toes**. Don't let your knees collapse inwards, or lean outwards.
4. **Lower the weight as carefully as you raised it**. Many injuries occur through allowing form to collapse when lowering a weight.
5. **Warm up and start lifting with a light weight**. Your body and brain both need to get into the groove for what they are about to do, before you add a big load.
6. **Use a spotter and/or set up safety bars**. Never lift heavy weights when you don't have a way out if you fail.
7. **Be aware of what others are doing around you**. You don't want to dump your bar on someone's head or get caught on the wrong end of a failed shoulder press.
8. **Allow a day or two for recovery after a heavy lifting session**. Ideally, do something light that will get you moving but don't lift heavy.

When you first start lifting, you will probably ache for a couple of days afterwards. This is perfectly normal and happens because your body is not used to the exercises. So long as you don't use bad technique or weights that are too heavy, your body will adapt and you will no longer get that muscle ache.

Exercise demonstrations online

Stumptuous

There is plenty of good information available online about how to perform exercises with free weights. One of the best resources is the

brilliant Stumptuous.com. There's a wealth of entertaining exercise instruction available on the site. I particularly recommend the series [From Dork to Diva](#) as a fun but informative introduction to both good and bad technique in some of the most popular exercises.

Gubernatrix

My own article series, [Top 10 functional strength exercises](#) illustrates the technique of some of my favourite exercises in detail. My [Links page](#) also has links to a variety of sites with exercise demos and instruction.

Exrx

For an encyclopaedic quick reference, many people use the [Exercise and Muscle Directory](#) on exrx.net, with video demos by The Man In Little White Shorts. Sometimes his form isn't spot on – for example, you'll see him rounding his back slightly on occasions. But this is a useful reference nonetheless.

Range of motion

You will get the best out of your lifts if you aim for full range of motion. You will often see people stopping short on their exercises; for example, not bringing the bar all the way down to the chest in the bench press, or only squatting a quarter of the way down. They are not getting the full benefit of the exercise and if they were in a competition, the lift would not be valid.

Generally, the greater the range of motion, the better the technique. However, on pressing movements be careful not to strain the shoulders. Range of motion can be increased if the muscles and joints are strong enough but do it carefully and only increase load gradually. If you are not flexible enough to reach full range of motion (e.g. in the squat), do as much as you can and you should gradually improve.

Squats and your knees

Many gyms advise their members not to squat "below parallel", which seems to mean not descending further than the point at which the underside of your thighs is parallel to the ground, about halfway down. The reason given is that going below this point puts too much stress on the knees.

However, this parallel position is actually more stressful to the knee joint than being in a deep squat, so it is always advisable to squat below this point. You will also be working more of the leg as your hips and hamstrings come into play much more in a full squat than in a partial squat where all the emphasis is on the quads. Olympic weightlifters and

powerlifters spend their careers squatting well below the point recommended by most commercial gyms.



'Parallel' squat



Deep squat

Checking your form

Even experienced lifters need to check their form on a regular basis as it is easy for aspects of the lift to get lazy. There are two good ways to check your form:

1. Video yourself lifting.
2. Get an experienced coach or friend to watch you.

If the above two options are not available to you, practice your form in the mirror without any weight so that you know how good form should feel. Then perform the lift without looking in the mirror, concentrating on recreating the same feeling. You shouldn't look in the mirror when lifting with weight as it will pull your body out of proper alignment and distract you from focussing on the movement itself. Serious weightlifting gyms don't have mirrors at all!

5. Training programmes

A training programme arranges exercises into individual gym sessions or routines, so that you know what you are going to do every time you go to the gym. The sessions are designed to build towards a particular goal over a few weeks or months. There are three ways to acquire a programme:

1. Use a programme from a book or website.
2. Get a coach, personal trainer or experienced friend to create one for you.
3. Create one yourself.

The last option is not as daunting as you might think. Although the internet, magazines and books are full of esoteric discussions about programming, it really doesn't have to be that complicated. Once you know a few basic principles you can apply them to your own situation.

There are four key aspects to strength training that should be accounted for in any programme:

1. Progressive resistance

This is probably the single most important concept to grasp in strength training. If you want to get stronger, you need to lift progressively heavier weights. Or, as Coach Mark Rippetoe says, "To get stronger, you must do something that requires that you *be* stronger to do it". If you lift the same weight week after week, your body will quickly adapt to lifting that weight, but will not adapt any more than it has to. In order for your body to continue adapting, you need to give it something to adapt to.

This doesn't mean that you have to add weight to your bar *every* time you train. Sometimes you will have technique issues that you need to work on. Other times you might be backing off for a week or two. However, your general aim should be to increase the weight when you can and have a goal to aim for.

Check the rules of thumb table in chapter 3, Starting out, to see what percentage of bodyweight you should be aiming for in each of the big lifts as a beginner.

2. Full body or compound exercises

The best exercises for strength are those that work as many muscle groups as possible and involve the whole body as a system. Squat,

deadlift and snatch are examples of full body exercises: they involve the whole body in executing the movement. Overhead press and pull-up are examples of compound exercises, which involve multiple muscle groups even if the entire body is not involved.

You can, for instance, work every muscle group in the body with just the deadlift and the bench press. This is a different approach to that of bodybuilding, which tends to isolate individual muscles or body parts and focus on aesthetics rather than function.

3. Balance

It's important for the long term to train every part of the body and not over-emphasise one muscle group or body part. A classic mistake made by many novice male trainees is training the t-shirt muscles – the chest and arms – more than everything else. This creates strength imbalances and major weaknesses in the body. When you only train the aforementioned t-shirt muscles, you are training what you can see in the mirror. But what about all the big muscles that you can't see in the mirror, the muscles of the back, and the back of the legs, arms and shoulders? These posterior chain muscles are vital to the body's ability to function well in daily life.

Most movements involve either pushing or pulling. Most of our pulling we do with our back muscles, and our pushing with our chest muscles. It is useful to know what all the major muscle groups are and how they correspond, but one of the best ways to ensure balance is simply to use do most of your training using whole body exercises.

4. Periodisation

This just means varying the stress you put on your body over the weeks and months of training. A simple type of periodisation would be to focus on maximal strength by training with relatively heavy weights and low reps for a few weeks, then switch to strength endurance by training with lighter weights and higher reps for a few weeks. The exotically-termed 'conjugate periodisation' simply means doing both types of training in the same week.

Training periods can follow a natural pattern dictated by how you feel, what events or competitions you have coming up and what kind of progress you are making. Very few people can train the same way at the same pace all the time. If you have stopped progressing, this could be a sign that you need to switch to a different mode of training for a while.

Choose a routine

If you want to have a go at creating your own training programme, read the next chapter, Create your own programme.

A good strength training book is a wise investment. If you are interested in buying a book, check out [my recommendations](#) on my website.

There are also some good programmes available online. See *Further Information* for links.

Links to further information

[Stumptuous workouts](#)

[Stronglifts 5x5 beginner strength programme](#)

[Starting Strength – Official FAQ](#)

[From The Ground Up – Olympic weightlifting programme \(pdf\)](#)

6. Create your own programme

Creating your own programme is very do-able even if you are fairly new to weight training. It is not advisable for complete beginners who have never set foot in a gym before, but if you've already been training for a while (perhaps using the programme your gym gave you), and if you know the basic exercises and muscle groups, you are more than capable of constructing your own programme. Over time, you can experiment and learn more about how your body reacts to different training structures.

Choose your goal

A training programme must have a goal and it is best if it is as specific as possible, such as being able to squat 100% of your bodyweight for 5 reps. If your ultimate aim is not strength-related e.g. you want to lose body fat, the best way to achieve this is to focus on getting your diet right and make sure that you have a challenging, whole body, progressive strength programme. In other words, strength-related goals are still very useful as they keep your training on track while you are dieting.

Trying to drop body fat by focussing on cardio rather than strength training can be counter-productive. Instead of trying to burn off the extra calories, just don't eat them in the first place. Use your diet to control your calorie intake and use strength training to build metabolically active muscle and look more athletic.

Choose your exercises

You don't need lots of complicated exercises to get leaner, fitter and stronger. You can build a perfectly decent programme simply using the big lifts that we have already discussed and a few supplementary exercises that improve your ability to perform the big lifts.

Big lifts	Supplementary exercises
Squat	Pull up, chin up, pull down
Bench press	Romanian deadlift, stiff legged deadlift
Deadlift	Good morning
Snatch	Dip (narrow arm or wide arm)
Clean	Shrug
Jerk	Overhead squat
	Overhead press
	Core work (e.g. plank, back extension)

This list of supplementary exercises is not exhaustive but it does include some of the most popular and useful exercises. It is also worth noting that you can perform the big lifts with other equipment, as in a dumbbell bench press or a kettlebell snatch. This can provide a different training effect or can be useful as a warm up for a barbell lift.

Example exercise selection

Let's say you wanted to build strength using the power lifts. Your initial programme could include the following big lifts and supplementary exercises:

- Squat
- Deadlift
- Bench press
- Romanian deadlift (to increase hamstring strength)
- Pull-up/pulldown (to increase vertical pulling strength)
- Narrow arm dip (to increase tricep/chest strength)
- Shoulder press (to increase pressing strength in a different plane from the bench)
- Back extensions (to train spinal erectors)

Although this is only eight exercises, it is a lot to do in a single session, so it would be sensible here to split the exercises up into two full body sessions, for example:

Session A

Squat
Bench press
Pull up
Back extension

Session B

Deadlift
Romanian deadlift
Shoulder press
Dip

Each session trains the whole body and contains at least one pulling exercise, one pushing exercise and one bent-leg exercise. The routine is designed to get you stronger and improve performance in the three powerlifts.

Tweak your routines according to your own strengths and weaknesses. For example, if you are lacking in upper body strength, you might not introduce the deadlift immediately, since the deadlift does require a lot of pulling strength. You might add in some more back work, such as a barbell row, so that you could build up the necessary strength.

Load and volume

This is another way of referring to the amount of weight on the bar (load) and the number of sets and reps you do (volume). It sounds complicated but the concept is really quite simple.

The more weight you lift, the stronger you get. Your strength is measured by the amount of weight you can lift once. So if people want to get stronger, why don't they just train with single reps? Why lift



a lighter weight five times or ten times instead of a heavier weight just once? Well, very advanced trainees sometimes do train with single reps, but this is not effective for beginners and intermediates because the body doesn't have sufficient opportunity to make the adaptations it needs to lift very big weights. It is not just your muscles that need to adapt, it is your nervous system, cardio-respiratory system, technique and proprioception that need training.

Doing very heavy single reps right at the limit of your strength is very tiring for the body. At the other end of the scale, doing high repetitions with a relatively low weight might be great for your technique, but won't stress your body sufficiently to be able to lift heavy. So for strength training, we are looking for a happy medium where you can lift enough times in a session for your body to adapt and your technique to improve, but not so many times that you can't manage a heavy weight.

That happy medium is anywhere from 3 reps to 10 reps. For new trainees, the higher numbers are more effective as you get more practice in. For intermediate trainees, 3-5 reps can be good for building strength once the technique is dialled in. You can also vary your volume and intensity (load) within the training week; for example, have a heavy day where you lift 3-5 reps in a set and a moderate day where you lift 6-8 reps in a set. One of the most popular set/rep combinations around at the moment for strength training, both for beginners and intermediates is 5×5. Five sets of five repetitions is an example of the happy medium we were talking about.

Warm up sets and work sets

A warm up set is a set with a light weight designed to raise your heart rate, raise the temperature of the muscles and practice technique. A work set is with the target weight for the session, the weight that will actually cause new adaptations to take place. A big lift like the squat might require 3 or 4 warm up sets followed by a couple of work sets. A

lift later in the session like a barbell row may only need 1 or 2 warm up sets.

When you plan how many sets you are going to do, include both warm up sets and work sets in the total. Do as much warm up as you need to feel ready to lift heavy, but not so much that you fatigue yourself before your target lifts.

Put it all together

Taking the exercises we chose above for session A and applying a suitable volume we might come up with:

Session A	Absolute beginner (sets x reps)	Novice (sets x reps)
Squat	3 x 10	5 x 5
Bench press	3 x 10	5 x 5
Pull up (or pull down)	2 sets max attempts	2 or 3 sets max attempts
Back extension	2 x 10	2 x 10

For the big lifts, we have chosen either 3×10 or 5×5. If you are an absolute beginner who has never done these lifts before, you are doing more reps but with a lighter weight. If you are a novice, new to this type of training but with some experience in these exercises, you are doing slightly fewer reps but with a heavier weight. You are also doing more sets, so the routine is more challenging. For the supplementary lifts, aim for less volume than with the big lifts.

If you were to add in the deadlift so that you were doing all three powerlifts in the same session, you ought to balance it out by doing fewer sets in the bench press or the deadlift. Remember to look at your routine as a whole and think about the effect it will have on your body. You want to do a routine that allows you to do quality work whenever you train. You need to work hard, but not be constantly tired.

Recovery

In strength training, rest is as important as work. Your system needs adequate time to re-build itself after the stresses of the weights session so try to keep lifting sessions a couple of days apart. When you first start training or you do a new exercise, you will initially feel a lot of muscle ache for a couple of days afterwards. This is a normal reaction and will disappear when your body adapts to the exercise.

Common mistakes

- Doing too much in one session – go for quality over quantity.
- Overworking smaller muscles like biceps and not doing enough work on the big muscle groups like legs and back
- Not allowing your body time to recover
- Chasing too many different goals simultaneously. Keep it simple!

Summary

To summarise, when you create your own programme you need to ask yourself the following questions:

- What is my training goal(s)?
- What exercises do I need to do to achieve my goal?
- Do I have any weaknesses that need work?
- How shall I split my sessions over the week?
- How many sets and reps shall I do for each exercise?
- Am I getting adequate recovery between sessions?

Don't be afraid to experiment and tweak the programme if you find there is a problem with it (e.g. one session takes more time than you have available). The best way to learn is by trying things out for yourself, keeping track of your training and changing things around if you are not making progress.

Good luck!