

How to Avoid Injury

Weight training isn't a picnic or a walk in the park; it's sweaty, gut busting work that, if done correctly, has you treading the thin line between growth and injury. If you train intensely - the only kind of training that stimulates growth - you continually flirt with muscle damage. Rubbing up against the danger zone is where the muscular gains lie. Injury is always just ahead for the careless weight trainer. There's something inherently dangerous about pushing, tugging and straining against cold, hard iron with all your might. But how else are you going to stimulate those gains? Because the quickest way to sidetrack progress or derail a bodybuilding career is through debilitating injury, you need to be a bit clairvoyant, learning to avoid injuries before they happen. You can accomplish this by listening to your body's feedback and then making the appropriate adjustments. Here are the 10 most common causes of injury - let the bodybuilder beware.

1. Incorrect technique

The most common weight training injuries are related to poor exercise technique. Incorrect technique can pull, rip or wrench a muscle, or tear delicate connective tissue quicker than you can strike a match. An out of control barbell or stray dumbbell can wreak havoc in an instant. Each human body has very specific biomechanical pathways. Arms and legs can only move in certain ways, particularly if you're stress loading a limb with weight. Strive to become a technical perfectionist and respect the integrity of the exercise - no twisting,, turning or contorting while pushing a weight. Either make the rep using perfect technique or miss the weight. Learn how to miss a rep safely; learn how to bail out.

2. Too much weight

Using too much weight in an exercise is a high risk proposition rife with injury potential. When it's too much: if you can't control a weight as you lower it; if you can't contain a movement within its biomechanical boundaries; and if you have to jerk or heave a weight in order to lift it. An unchecked barbell or dumbbell assumes a mind of its own; the weight obeys the laws of gravity and seeks the floor. Anything in its way (or attached to it) is in danger.

3. Bad spotting

If you lift long enough, you'll eventually reach a point where you need to have a spotter for a number of exercises, including the squat and bench press. When you work as hard as you're supposed to, you occasionally miss a rep. Nothing is wrong with that - it's a sign that you're working to your limit, which is a good thing if it isn't overdone. Yet when you work this hard, you need competent spotters. A good spotter should conduct him or herself at all times as though the lifter is on the verge of total failure. Your training partner can also lend a gentle touch that allows you to complete a rep you'd normally miss. A top spotter needs to be strong, sensitive and ever alert to the possibility of failure - not looking around or joking with friends.

4. Incorrect use of cheating and forced reps

Cheating and forced reps are advanced techniques that allow the lifter to train beyond normal. Taken past the point of failure, the muscle is literally forced to grow. When incorrectly performed, a cheating or forced rep can push or pull the lifter out of the groove. The weight collapses and a spotter must come to the rescue. Cheating movements work; real world data prove this statement. Yet cheating, by definition, is dangerous. Any time you use momentum to artificially goose rep speed, thus allowing you to handle more poundage than when using strict techniques, you risk injury. To play it safe, use the bare minimum cheat to complete the rep. On forced reps, make sure your training partner is on your wave length. Don't go crazy.

5. Training too often

How does over-training relate to injury? It negatively impacts the body's overall level of strength and conditioning. Over-training saps energy, retarding progress. You can't grow when you're over-trained. It also interferes with both the muscles and the nervous system's ability to recuperate - ATP (adenosine triphosphate, an energy compound in the cells) and glycogen stores are severely depleted when an agitated metabolic status is present. In such a depleted, weakened state, is it any wonder that injury is common, particularly if the athlete insists on handling big weights? The solution is to cut back to 3-4 training sessions per week and keep session length to no more than an hour.

6. Not stretching

Stretching is different from warming up. Properly performed, a stretch helps relax and elongate a muscle after warm up and before and after weight training. As a result of warming up and stretching, the muscle is warm, loose and neurologically alert - in its most pliable and injury resistant state. In addition, stretching between sets actually helps build muscle by promoting muscular circulation and increasing the elasticity of the fascia casing surrounding the muscle. Finally, if you perform muscle specific stretches at the end of your workout, you'll virtually eliminate next day soreness.

7. Inadequate warm up

Let's define our terms. A warm up is usually a high rep, low intensity, quick paced exercise used to increase blood flow to the muscle. This quick, light movement raises the temperature of the involved muscle while decreasing blood viscosity and promoting flexibility and mobility. How? Everyone knows that a warm muscle with blood coursing through it is more elastic and pliable than a cold, stiff muscle. Riding a stationary bike, jogging, swimming, stair climbing and some high rep weight training are recommended forms of warm up. Try a 5-10 minute formalized warm up before stretching. If you choose high rep weight training, try 25 ultra-light, quick reps in the following nonstop sequence: calf raise, squat, leg curl, crunch, pull down, bench press and curl. Do one set each with no rest between sets. This can be accomplished in fewer than five minutes and warms every major muscle in the body.

8. Negatives

Negative (eccentric, or lowering) reps are one of the most difficult and dangerous of all weight training techniques - and very effective at stimulating muscle growth. What makes negatives so risky? The poundage you can handle in negative exercises is likely to be the heaviest you'll ever lift. Normally, we only lift what we're capable of moving concentrically. In negative training, we handle a lot more weight. Most bodybuilders can control approximately 130% of their concentric maximum on the eccentric phase of a lift. Someone using 200 pounds for reps in the bench press, for example, would bench roughly 260 in the negative press. Because of the increased weight used with negatives, you need strong, experienced spotters. Exercise extreme caution. If the rep gets away from you, the spotters need to grab the weight immediately.

9. Poor training

If you under-eat and continue to train hard and heavy, you're likely to get hurt. Again, it relates to your overall health: Before of heavy training when in a weakened state brought on by severe dieting or restricted eating. It's best to save the big weights, low reps, forced reps and negatives for non-diet growth periods. While dieting requires reduced poundage, this doesn't mean you can't be intense in your workout - it just means you need to use lighter weight.

10. Lack of concentration

If you're distracted, preoccupied or lackadaisical when you work out, you're inviting injury. Watch a champion bodybuilder train and one thing you'll notice is his or her intense level of concentration. This is developed over time, and the athlete systematically develops a preset mental checklist that allows him or her to focus on the task at hand. More concentration equates to more poundage. More poundage equates to more growth. More poundage can lead to getting hurt if you don't pay attention. Train smart.