

# **5 Shoulder Strengthening Principles Revealed**



**By Dr. Kareem Samhuri**

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For information contact:

Shoulder Injury Guide

86 SW Century Blvd., PMB 344

Bend, OR 97702

E-mail: [info@shoulderinjuryguide.com](mailto:info@shoulderinjuryguide.com)

Website: [www.shoulderinjuryguide.com](http://www.shoulderinjuryguide.com)

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This book is not intended for the treatment or prevention of disease, nor as a substitute for medical treatment. Programs mentioned herein should not be adopted by any purchaser without review and consent with your health professional. The authors are neither responsible, nor liable for any harm or injury resulting from these programs or the use of the exercises described herein.

## Meet Dr. Kareem Samhouri, a.k.a. ‘Dr. K’



Dr. Kareem Samhouri is the president and owner of Global Fitness LLC. Through his company people are able to realize complete wellness, as they serve nutrition, massage, physical therapy, and personal training. Dr. K is a graduate of the University of Miami Doctor of Physical Therapy program and has earned a bachelor's of science from the Pennsylvania State University in Kinesiology. Additionally, Dr. K is a licensed physical therapist and holds a Health and Fitness Instructor certification from the internationally recognized American College of Sports Medicine as well as the NSCA as a Certified Strength and Conditioning Specialist.

Dr. K has worked in some of the best hospitals, rehabilitation facilities, outpatient physical therapy services, and elite performance gyms in the United States. He has taught personal trainers and physical therapists alike in their roles as one, united front in the best interest of the patient/client. Dr. K has spent his career surrounding himself with only *the best in his field* and intends to provide you with *the best* information out there.

Dr. K has trained countless clients in the fitness industry, while mentoring and teaching other fitness professionals at the same time. He speaks regularly to corporations and individuals on improving well being at the workplace. He is a dynamic and interesting speaker. Most recently, Dr. K has realized the necessity of bridging the gap between physical therapy and personal training. He has been recognized on many occasions as *the expert* in creating this bridge.

Dr. K is also an avid supporter of many charities and associations. He regularly endorses and donates to the following organizations: American Diabetes Association (ADA), Women's Fund, Phlare Magazine (for corporate women), American College of Sports Medicine (ACSM), American Physical Therapy Association (APTA), MS Society, Philadelphia Expo to combat Childhood Obesity, Miami-Dade Children with Disabilities, the Foundation for Physical Therapy, the Special Olympics, and the Para Olympics.

# 5 THINGS YOU *MUST* KNOW IF YOU EVER WANT YOUR SHOULDER TO FEEL BETTER:

1

## Most people strengthen their rotator cuffs INCORRECTLY

There is nothing more discouraging for me than seeing someone who has the best intentions, is working hard at the gym, and is doing damage to their joints while working out. Truthfully speaking, it's just not fair. We all know that we should be working out, we realize the benefits of physical activity, we realize the consequences of inactivity, yet how do we really know if we are helping or hurting?

One traditional rotator cuff exercise that you see in the gym involves holding a light dumbbell in your hand while standing with your elbow tucked against your side, and moving your hand in and out slowly. Unfortunately, this does nothing to strengthen your rotator cuff, but it *does* put a strain on your biceps tendon. That's right, this exercise, which was designed to help you strengthen a painful joint, may actually be causing increased inflammation and stress in your shoulder. You see, while standing and holding a dumbbell in your hand gravity exerts a downward force through the dumbbell, causing the weight in your hand to be pulling directly downward (vertically.) Meanwhile, you are exercising horizontally (left to right). It makes no sense. The resistance is targeted at the wrong structure.

Instead of using this technique, you should lay on your side with your elbow bent and pressed against your side. Now you will be lifting the dumbbell up/down instead of left/right. While laying on your side you will be opposing the forces of gravity throughout the movement and allow for true strengthening of your rotator cuff muscles to occur.

## 2

### **You might not even have a shoulder problem – you could have a postural problem instead**

Did you know that faulty posture can completely change the amount of stress placed on important structures in your shoulder, such as your:

- Labrum
- Biceps tendon
- Rotator cuff tendons
- AC joint
- SC joint
- and many other muscles and ligaments?

It's true. Simply by having faulty posture, you are changing the alignment of muscles and joints, thereby forcing abnormal stress to an otherwise healthy shoulder. Your upper arm bone, the humerus, rests on your shoulder blade, the scapula, in order to allow the ball and socket joint to work properly. With proper posture there is an inclined plane between these two bones, allowing your scapula's angle (tipped upward) to support the weight of your humerus (tipped downward.) Once your shoulder moves downward or forward, this relationship is effectively changed, where the humerus is now directly in vertical alignment with the scapula, causing your rotator cuff to have to help pull the humerus back into position constantly. It becomes your rotator cuff's job to prevent your humerus from 'slipping downward' on your scapula. Well, that's not the intended job of your rotator cuff muscles. They are only supposed to perform this action from time to time to help you recover from accidentally falling out of position with movement. If contracted much more frequently throughout the day your rotator cuff tendon begins to swell, eventually leading to small amounts of breakdown and scarring. This scarring and chronic inflammation is referred to as "rotator cuff tendonitis."

Naturally, once the rotator cuff is compromised, all of the surrounding structures attempt to take over the stress normally placed on your rotator cuff, and they become inflamed as well. Simply by restoring posture, much of this problem can be eliminated and healing may occur more easily.

# 3

## **A stiff neck may be a sign of a shoulder issue in disguise**

Are you someone who knows that you hold stress in the top of your shoulders and in your neck? It certainly is possible that you have a true neck issue that is contributing to your stiffness. However, it is also possible that you have a shoulder issue in disguise. You see, the trapezius muscle, beginning at the base of the back of your skull, extending outward to the outer tip of your shoulder blade, and extending downward into the middle of your spine covers a remarkably large territory of the upper body. Because of this muscle's sheer size and strength, it is called upon during times of shoulder injury to help out smaller muscles and give them an opportunity to rest. This phenomenon is called "muscle guarding."

When the upper trapezius is active there is a direct force exerted on one or both sides of the neck. In the case of a shoulder injury, only the side of injury will be working overtime. This leads to an asymmetrical amount of force being placed on one side of your cervical spine. Relatively speaking, as the upper trapezius pulls on segments of the spine from one side, rotation is occurring. Naturally, soreness is produced as a result, similarly to the way your neck might feel if you looked left all day long.

If you are noticing that you are "carrying" more and more stress in your neck and shoulders, it would be a good idea to pause and check to see if the soreness is consistently on one side of your neck and not the other. If this is the case, you may be seeing the after effects of a compensatory movement over time. In many cases this is found months after an untreated shoulder injury occurs, after the pain has disappeared. Unfortunately, without proper rehabilitative measures, the abnormal movement pattern may still persist.

# 4

## **Bands are not enough. You need to get into a gym.**

Resistance training with exercise bands is an excellent form of exercise, but they are not sufficient for an entire rehabilitative process. This is especially true when considering the desire to permanently fix a problem, rather than just treat the symptom. Hard and vigorous exercise to all uninjured areas of the body, as well as a targeted variety of positions and exercises to the injured tissue is the key to success with shoulder rehabilitation.

Normally, people develop “mirror bodies.” Mirror bodies are bodies that are developed based upon our opinions of ourselves head-on, from the same view we see every day in the mirror. Somewhat funny to think about, but also true... Think about it, when’s the last time that you were staring at your back?

The shoulder complex is best aligned with proper support from supporting muscles in your upper back and between your shoulder blades. Through adequate flexibility of the pectoral muscles and strength of the upper back, most shoulder injuries never have a chance to occur. By strengthening our backs, through careful but intense resistance training, we can develop enough support to eliminate future shoulder problems before they occur.

Each key muscle in the back that needs to be targeted should be targeted from a variety of positions, as to simulate the demands of real life. Using the ‘lats’ as an example, a theraband seated row, lat pull, and pull up all use the same muscle, but in very different ways. While all of these positions could be possible with only a theraband, it takes a lot of creativity and still seems less intense. Results happen more quickly when we impose a variety of demands on our shoulders throughout the strengthening process.



# 5

## **A weak 'core' could be causing 90% of your problem**

"You are only as strong as your core." - I say this several times, almost every single day, to each of my clients. I really don't care how big your biceps are, or how much weight you can put on the leg extension machine, or how many push ups you can do unless you can do them with proper support from your core. It's all too often that I see people working out in the gym who are swinging the weights around in their hands, using momentum to propel the dumbbells in the direction of the exercise. Well, guess what?

That type of exercise is: a) not safe, and b) not effective. You are no longer targeting a specific muscle group when you begin using momentum with any exercise. Unless your goal is power (i.e. for an American Football lineman who needs explosiveness to beat his competition), you probably should not be using momentum with any of your exercises. Typically, when we see people use momentum with an exercise, they are extending from their low backs (or "arching"), which translates a huge amount of force into all surrounding joints.

By having a strong 'core' you will be eliminating 90% of your problem. Every time that you attempt to lift something off of a shelf and your shoulder would have been taking unnecessary stress, your 'core' muscles will help stabilize your trunk, maintaining greater scapular stability, and reducing the opportunity for re-injury. In fact, from a functional standpoint, you'll be stronger, because you'll be relying on much bigger and broader muscles to dampen forces placed through your shoulder when lifting heavy objects.

Conversely, without proper core strength, the low back and the shoulder have many opportunities throughout normal daily activity to get injured. Light objects, such as a can of soup, gallon of milk, or liter of soda place large enough forces into the shoulder to cause injury. Repeatedly, over time, especially when coupled with poor posture, this will lead to breakdown of tissue, scarring, and inflammation. Strengthen your core and avoid this unnecessary problem.