Super Joints

Russian Longevity Secrets for Pain-Free Movement, Maximum Mobility & Flexible Strength

Pavel Tsatsouline
Master of Sports
Praise for Pavel Tsatsouline and his Stretching Series

“I can’t say I’ve read many books on flexibility with the wit and clearheaded wisdom I found in Pavel Tsatsouline’s Relax Into Stretch. Tsatsouline delivers the how-and-why of progressive techniques for achieving suppleness, from simple yoga stretching to advance neuromuscular facilitation, without burying the reader in hocus-pocus or scientific jargon. If you’re looking to stretch your preconceptions about flexibility, Tsatsouline’s Relax Into Stretch provides an alternative: straightforward and practical techniques that don’t require a lifetime to master”.

—Fernando Pages Ruiz, Contributing Editor Yoga Journal

“You have to be careful throwing superlatives around when talking about a new idea or product least you be mistaken for a brainless, giddy cheerleader. I tell you truly that Relax Into Stretch is superb; I’d run out of superlatives and might sound like a cheerleader so I won’t go the traditional praise route.

Why is this book so important to the fitness community? Stretching has always been associated with any serious fitness effort and Tsatsouline's approach to this old discipline is fresh and unique and thought provoking. Best of all, this book combines philosophic insight with in-your-face reality as Pavel shares with the reader 'drills' that turn you into what this former Russian Spetznaz instructor calls 'a flexibility mutant'. What red-blooded American fitness devotee wouldn't aspire to mutation? This book supplies both the road map and the methodology. Don't ask to borrow my copy.”

—Marty Gallagher, Columnist, WashingtonPost.com

“Pavel Tsatsouline's Relax Into Stretch: Instant Flexibility Through Mastering Muscle Tension is a superbly illustrated, step-by-step guide through thirty-six effective techniques to achieve physical flexibility of muscle groups and sinews. Pavel shows how to master emotions and thereby adding inches to your stretch; how to wait out tension as the key to greater mobility and a better stretch; how to fool reflexes into increasing the stretch; even effective strategies for the chronically inflexible. Relax Into Stretch is very effective and very highly recommended reading for men and women of all ages and physical conditions seeking to enhance their mobility and flexibility as part of an overall exercise regimen.

—Midwest Book Review
to Jim and Linda
Who needs Super Joints?

“Pavel has already written *Relax into Stretch*—so who needs another stretching book, and why?”

The answer, my friend, is all Party members—and that includes you, Comrade! Please find your face in the survey below.

The Needs-Based Survey for Super-Healthy Joint Owners

- **Anyone who wants to decrease the odds of injuries.** Are you a person who is only flexible when a partner stretches you, or when an external force such as gravity is helping out? Do you lack the strength to lift your leg high, or otherwise stretch well on your own? Soviet studies indicate that you will be very prone to injuries. *Super Joints* will show you how to develop the right blend of strength and flexibility and improve your survival odds.

- **Any athlete who wants to perform better.** Soviet research demonstrates that the closer an athlete’s *active flexibility* matches his *passive flexibility*, the better his performance.

- **Any older person whose joints are losing their mobility due to calcium deposits and inactivity.** Exercises laid out in this book have been known to restore youthful mobility to creaky old hinges, oftentimes reversing degenerative conditions.

- **Any young athlete.** Russian specialists categorically state that kids who abuse themselves with the passive stretches so popular in the US, may weaken their joints and acquire spine deformities. The *Super Joints* active flexibility drills are the preferred mode of flexibility development for young athletes, as they strengthen their muscles, something they need a lot more than literal stretching.
• Any person who wants to improve his or her posture. The Super Joints program delivers.

• Any martial artist, dancer, rock climber, commando…anyone who has to lift their legs high. The unique Russian exercises laid out in Super Joints develop your ability to really get your feet up—way better than any other method in existence.

• Any practitioner of Relax into Stretch techniques who wants to improve his or her passive flexibility even more. Super Joints exercises complement Relax into Stretch exercises and enable you to go even beyond the great gains you have made with Relax into Stretch.

So, that means you, Comrade!

—Pavel Tsatsouline, Master of Sports
August 2001, Santa Monica, California
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Part One:

Joint Health and Mobility
There are about one hundred joints in your body. Here is how to keep them running smoothly.

How Mobility Drills can save your joints and prevent or reduce arthritis

Years and mileage pile calcium deposits on your joints and promote connective tissue growth in all the wrong places. Your youthful well-oiled hinges come to a grinding halt. Is your gig up?

Not yet, Comrade. Help is on the way. Enter Academician Amosov’s joint mobility regimen.

In Russia and his native Ukraine, Nikolay Amosov is a public figure with the stature Arnold Schwarzenegger boasts in this country. You may be surprised to find out that the #1 Russian exercise icon is not a three hundred pound weightlifter or wrestler, but an octogenarian surgeon with the wiry physique of a Bruce Lee and the ascetic fat-free face of a Jacques Ives Cousteau.

Until recently, Academician Amosov ran a schedule that would a kill a twenty-five year old yuppie, not to mention a horse. In his late seventies and early eighties he performed two open heart surgeries a day, an average of eleven hours, wearing out two support crews (a quarter to a half his age) along the way. In his spare (?) time Amosov ran the Kiev Cardiovascular Surgery Institute of the Ukrainian Academy of Sciences, managed the famous Biocybernetics Department of the Ukrainian Academy of Sciences Cybernetics Institute and religiously followed—and still follows—his exercise regimen.

Academician Amosov had not always been a human dynamo. The fitness superstar started out as a retired Red Army lieutenant colonel in his late fifties with the World War II behind him, a spare tire in the front, and an assortment of diseases. The turning point was the day when Amosov formulated and put to practice his now famous theory of limit loads, which I will cover in detail in my upcoming book on Russian natural health practices. One of the corner stones of the theory is the belief that a human organism has a great ability to regenerate itself. Use—intense use! —is the key.

I will not beat around the bush but cut to the chase:
1. While still lying in bed on your back, hold on to the headboard, raise your legs, and bring them behind your head so—hopefully—your knees touch your forehead.

If you choose to do the drill on the floor you may press down into the floor with your palms positioned by your hips or hold on to some stationary object above your head. Keep your legs reasonably straight. Try to touch the floor behind your head with your feet, as long as you do not load your neck. Keep your weight on your shoulders and upper back, not your neck.

2. Stand upright, then bend over and try to touch the floor with your fingers or even your palms. The chin tucks in as you fold over and the head tilts back as you stand up.

Exercise caution. Passively exhale on the way down and inhale into your stomach on the way up. **Sort of push off your thighs with your belly.** If you do it right, the intra-abdominal pressure when rising on inhalation will straighten out your spine like a hydraulic jack—with minimal back stress. If you are not sure how to use your diaphragm or your health condition prohibits the standing toe touch, practice the drill sitting on the floor, with your legs straight in front of you. Reach forward on a sigh of relief, sit up as you inhale.

3. Maximal amplitude arm circles. Turn your head left and right in sync with the arm and shoulder movements to get more done in less time.
4. Side bends. The palms slide along the trunk and legs. As one palm reaches down to the knee and beyond, the other palm is coming up to the armpit. Tilt your head from side to side in sync.

Make sure not to twist, move in one plane.

5. Lift your elbow and reach over your shoulder with your hand trying to touch the opposite shoulder blade. Tuck your chin in at the same time.

6. Turn your torso clockwise and counterclockwise with a max amplitude. Keep your straight arms in front of you, the palms facing forward and the fingers clasped. The arms move in sync with the torso and amplify its movement. The head rotates in sync as well. Make sure not to bounce at the limit of your rotation; your spine would not care for it.

7. Stand straight. Alternately lift your knees to your stomach. Reach as high as you can.

To make it tougher, hold a towel in front of your hips and bring your knee over it, back and forth, without bending over. As you get better, pull the slack out of the towel. Then start increasing the width of your grip on the taut towel so it gets higher off the ground and makes the drill even more challenging.

8. Pushups on the floor or with your hands resting on a piece of furniture.

Place the weight near the bases of your palms rather than closer to the fingers. If the traditional technique hurts your wrists you have a couple of options. The yuppie choice is a set of pushup handles or a pair of hex-shaped dumbbells. The manly alternative is to do your pushups the karate way, on your knuckles. If you do not plan on kicking butt in the near future you may do your pushups on the full surfaces of the fist (shame on you). But the proper martial arts knuckle pushup calls for resting your weight only on two knuckles of each fist, those of the index and the middle fingers. You will find that this technique will strengthen your wrists in a hurry.
In the Soviet Special Forces we knocked off knuckle pushups on concrete—you would be wiser to do yours on a surface that has some give, for instance linoleum. Make sure that the floor is clean; dirt particles can do a number on your baby soft skin.

The grip width is up to you.

Keep your butt tucked under; this will make your pushups look crisp and protect your back from sagging and hurting.

Do not constrict your chest, keep it wide open. The range of motion will be slightly reduced, the pecs will be pre-stretched for more power, and you are less likely to hurt your shoulders that way.

Look straight ahead rather than down. Tension in the neck extensor muscles facilitates a stronger contraction of the elbow extensors.

Synchronize your breathing with your movement. Failing to do so in an endurance event is the kiss of death. Under the circumstances it is most natural to inhale on the way down and exhale on the way up. Imagine how your breath or ‘Chi’ flows out of your stomach into your arms. Do not underestimate the power of such visualization. There is plenty of evidence that the choice of a breathing pattern has a profound effect on muscular tension.

9. **Roman chair situps.** Sit on a sturdy stool, hook your feet under a couch, and do situps. Go down as low as your physical limitations allow. Come up, reaching forward towards your feet as far as you can.

While Western specialists have been lamenting their dangers, Russians have been doing stretch situps—over a stool at home or over a pommel horse in the gym—for decades and are not about to stop.

Hyperlordosis, or an exaggerated arch of the lower back, is rampant in the United States. Short, tight hip flexors are the usual culprit. These psoas muscles originate in the small of your back and run through your stomach to insert in front of your thighs. When they shorten, they pull the lower back forward, thus increasing the arch and tilting the pelvis forward. This setup is unhealthy and unattractive.

When a person with tight hip flexors, weak abs, and, typically, a bad back, tries to do a stretch situp, especially without proper instructions, there could indeed be problems. Here is what you can do—following your doctor’s permission—to make the Roman chair situp safer.
1. Hyperlordosis, or an exaggerated arch of the lower back.

2. Good relaxed posture with the spine dictating proper hip position.

NOTE: Bringing the angle of the hips forward will align the spine.

1. Good relaxed posture with the spine dictating proper hip position.

2. Kyphosis, or an exaggerated arch of the upper back.

3. Hyperlordosis, or an exaggerated arch of the lower back.
First, carefully study the Secrets of Safer Back Bending printed below and follow them to the letter.

Second, employ paradoxical breathing: passively exhale on the way down and inhale as you fold back up, the opposite of what you would do in a yoga class. There are two reasons for this madness. A passive exhalation will deepen muscle relaxation and easily increase your range of motion (ROM); I have explained how this works in Relax into Stretch. And inhaling as you are getting bent and constricted will increase the difficulty of the situp. You will score some training effect for the midsection and the respiratory muscles in the process of getting a flexible spine.

Third, increase your depth very gradually, within a workout and as weeks go by.

Fourth, start your ascent from the lowest point by tucking your chin in. Then roll up rather than sit up.

The Roman chair situp sounds involved, doesn’t it? Well, anything worth doing is worth doing right. Done by the book and with proper attention to details, the stretch situp can deliver great benefits to your back; ignore the fine points and the naysayers’ doomsday predictions will come true.

10. Squats while holding on to the back of a chair.
   Review the squat performance tips in the mobility training exercise section. In all ten drills start with ten repetitions a day and progress as explained in the text.
Secrets of Safer Back Bending

If you literally bend back, your movement is limited to a couple of lumbar vertebrae. You distress this area and do not even get much ROM out of it.

A safer and more effective approach is to start by traction of the vertebrae, that is spine ‘elongation’. As you ‘grow taller’—it helps to inhale to maximally open up your chest—the shock absorbing discs between the vertebrae and the spiky facet joints get more room and therefore get squeezed less as the spine extends.

Once you have opened up your spine it is time to bend it back. Instead of hinging it on your lumbar vertebrae alone try to get some motion out of every segment of the spine, from top to bottom. It helps to visualize that you are ‘wrapping yourself around’ an imaginary ball.

Excessive bending is one hazard; a strong pull of the hip flexors on the spine is another. These psoas muscles originate in the small of your back and run through your stomach to insert in front of your thighs. Spine hyperextension is frequently accompanied by hip extension. This action pulls on the strong and tight hip flexors. Unfortunately, instead of stretching they usually tenaciously keep their length and pull hard on the lumbar spine to exaggerate the arch even further.

Clenching your butt cheeks is the only way to deal with the hip flexors’ potentially damaging pull during back bending. Your lower back will be supported by another set of ‘guy wires’ countering the pull of the hip flexors. Besides, flexed glutes will semi-relax the psoas and further dampen their powerful pull. According to the neurological phenomenon of reciprocal inhibition, when a muscle is contracting, its antagonist, or the opposite number, relaxes to make the movement more efficient: why press the gas and the brake pedals at the same time? The glutes are hip extensors; they oppose the hip flexors—which include the psoas. That is why it is generally advisable to flex your glutes during back bending exercises.

Academician Amosov emphasizes a maximal range of motion in his exercises. This is the simple the key to the effectiveness of his youth-restoring calisthenics. Other, even more complicated routines generally do not pay attention to this vital advice (how about those idiots who tell you not to do full squats?).
Joint mobility is not the same thing as muscle flexibility. When doing mobility drills, you generally will not feel much of a stretch, which is fine. A muscle does not always have to be stretched to put a joint through its full range of motion. For example, you will achieve complete hip flexion if you stand upright and bring your knee towards your chest. Not much of a stretch, right? To stretch one of the muscles that oppose hip flexion, the hamstring, you will have to raise your leg with your knee straight or nearly straight. Unless you are a mutant, you will not succeed in touching your chest or stomach with your knee; your ham will tighten up and stop you long before that. So muscle stretching will not deliver well-oiled joints. Your hinges need a distinctly different type of workout from your muscles.

Rotating a joint through its anatomically complete range of motion—or trying to approach that ROM if the joint is damaged—smooths out the joint surfaces and lubricates them. This contributes greatly to the joint's health. A full range of motion is gained or maintained.
The Academician differentiates three states of joint health. First is a 100% healthy joint, usually found in a young person: “…a person can lift his knees to his stomach and touch his buttocks with his heels; he can flex his spine so his head ends up between his knees and make a full circle with his arms.” Superb joint ROM is easily achieved at this stage, says Amosov. Twenty reps per joint will suffice for prevention until you are thirty or so according to the Academician. I like to simply match the reps with the trainee’s age.

The second stage usually hits by the time you are forty, give or take a few years. The joints already have salt deposits and they speak up with aches and a limited ROM. Not all the time though. Sometimes symptoms disappear for years only to resurface again. When this happens, and even if it does not but you hit forty, the man says the numbers must be cranked up to 50–100 per joint. Especially for your spine.

The third stage is when the joint aches almost constantly and actively interferes with your work and life. X-rays show changes, the most common being bone spurs growing between vertebrae. Bad posture, poor body mechanics at work and in the gym, and lack of joint movement are to blame. Surgeons who have to stand for hours over a table frequently suffer from bad backs, mentions Nikolay Amosov.

The only way to prevent age related joint problems is through exercise, states Academician Amosov. If you have already hit the third stage do 200–300 full range movements per damaged joint and 100 for the ones that ‘are waiting for their turn’.

The Academician urges you to ease into joint mobility training. Start with ten movements and add ten a week. An even more gradual schedule recommended by Amosov is to add five a week for the first month and then start adding ten reps a week until the target number is reached.

The Academician’s advice regarding the tempo of the range of motion drills surely rocks the boat. He does not care for slow mo that ‘looks like a soccer goal repeat on TV’. Move fast says the man—but not at the expense of the range of motion! —and get some cardio benefits in the process. But make sure to slow down for the last ten reps and really get a stretch.

Amosov’s aggressive technique may be too radical for many comrades. A more conservative approach to mobility training is to make slow circles with your joints, starting with small amplitude and working up to the joint’s max range. That is the *Super Joints* prescription for all the exercises laid out in this book.
Mobility drills are ideally performed every morning. You will not only do your joints a favor, but will get rid of stiffness as well. *Relax into Stretch* fans, do not expect that the ability to do a split will make you forever-stiffness-free; you should watch me get off the plane! You get 'rusty' whenever your proprioceptors—the sensors that give your body information about its position in space, its speed of movement, etc.—do not get any new input for a while. When nothing happens, your nervous system is not sure what to expect from the environment and tightens up your muscles—just in case. That's why you feel like the Tin Man in the morning or after any long period of inactivity.

Movement wakes up your proprioceptors, the nervous system chills out and you limber up. Increased impulsation from the proprioceptors also ‘tunes up’ the nervous system processes for the whole day. No wonder Amosov-style morning calisthenics are very popular in Russia and go by the name of zaryadka or ‘a recharge’.

Here is another one of Amosov’s calisthenics complexes. This one offers more cardio, strength, and some other benefits in addition to joint mobility.
Academician Amosov’s ‘1000 Moves’ Morning ‘Recharge’ Complex

1. Squat –100 repetitions
2. Side bends –100 repetitions
3. Pushups on the floor –50 repetitions
4. Forward bends –100 repetitions
5. Straight arm lateral raises overhead –100 repetitions
6. Torso turns –50 repetitions
7. Roman chair situps –100 repetitions
8. One legged jumps in place –100 repetitions per leg
9. Bringing the elbows back –100 repetitions
10. ‘The birch tree’ –hold for the count of 100
11. Leg and hip raises. Lie on your back and bring your feet behind your head while keeping your legs reasonably straight. –100 repetitions
12. Sucking in the stomach –50 repetitions

The ‘birch tree’ is a Russian name for the yoga sarvangasana or the shoulder stand. This popular in Russia exercise calls for lying on your back and lifting your legs. Rest your elbows under your back, place your hands in the small of your back, and prop your body on your forearms. Your legs and toes should point straight up and your shoulders and upper back rather than your neck should be loaded.
Do the 1000 movements—the eventual goal—at a rapid clip. Make sure to push yourself enough to sweat and breathe hard although Amosov warns not to let your RPMs go above twice your resting heart rate. You should be done in 25–40 minutes.

Simple and to the point as you can see. “There are a million exercise complexes out there,” muses Academician Amosov. “Look up the literature on physical culture and you will find very complicated routines that have 40–50 exercises. These for the first week, others for the second, etc. ad nauseam. They argue that every muscle needs its own movement. Let us not pick on them, an expert’s job is inventing and complicating… Non-athletes training for health do not need complicated routines. Why cram their brains? Let the person bend and squat…”

If you agree with Amosov and want in on the action then sit around no longer and do his complex! But if you do not mind flexing your brain a little I suggest that you design your own routine from the drills I have hand-picked and laid out for you in the exercise section. They are absolutely the best and not any more time consuming than the Amosov basics.
Are your joints mobile enough?

Following is a battery of joint mobility tests developed by Soviet specialist F. L. Dolenko. If you want to be a healthy, well functioning individual you should meet these guidelines. It goes without saying that the following level will not be sufficient for select sports such as gymnastics or rock climbing.

The cervical spine

1. Tip your head forward. Your chin should touch your chest.

2. Tilt your head back without jamming your neck. If you keep your body upright you should be able to look at the ceiling at a spot slightly behind you.

3. Tilt your head to the right and then left while looking in the mirror. If you draw a vertical line through the top of the top ear, the bottom of the lower ear should come very close to that line.

4. Turn your head to the right and then to the left. You should be able to look exactly to the right or left without moving your eyes.

The thoracic and lumbar spine

1. Stand near a wall facing away from it. Reach up with your arms, bend back —review the Secrets of Safer Back Bending! —and touch the wall with both hands. The further you stand from the wall and succeed, the better your score. Consider recruiting a spotter to save you from crashing back on your head.

2. Side bends. Stand with your right side facing the wall. Lift your straight left arm and bend strictly sideways, no twisting, toward the wall. The lower you can touch the wall without losing your balance the more points you get. Repeat on the other side.
**The shoulder girdle**

All of the shoulder tests are performed standing upright with your feet almost together.

1. Draw your shoulder blades together until they touch.

2. Push both shoulders forward at least level with your breastbone.

3. Shrug your shoulders up to your chin level. Measure your results with the help of a mirror.

4. Grip a stick with a wide over grip. Keeping your arms straight lift your arms over your head and keep rotating them until the stick touches your lower back. The closer is your grip the more flexible your shoulders. Be careful; it is easy to get hurt if you are too ambitious with these shoulder dislocates! Review the fine points of shoulder dislocates in the exercise section.
The elbow joints

1. Elbow extension. Just straighten out your arm. Your mobility is ideal if your forearm forms a straight line with your upper arm. If you cannot quite straighten out your elbow, chances are you have a congenital condition that is very unlikely to be corrected. It is interesting that the powerlifting rules specify that a competitor who cannot lock out his elbows because of his bone structure is supposed to notify the officials before the meet. Otherwise the lifter will get red lighted on the bench press for failing to lock out and complete the lift. If, on the other hand, your elbows bend back beyond a straight line with the upper arms, you have a problem that can and should be fixed. Elbows that hyperextend easily are vulnerable. Strength exercises, for example pushups, various presses, and supports such handstands, will help. Russian experience shows that cross-country skiing is another aid.

2. Forearm pronation and supination. Lay your forearm flat on a table in front of you, a ninety-degree angle in your elbow. You should be able to lay your palm flat, then turn your forearm from inside out and rest the back of your palm on the surface.
The wrist joints

1. If you flex your wrist actively, that is only using muscular effort, without any pressure from the other arm or any other object, the hand should be perpendicular to the forearm.

2. To check your wrist extension, or back bending, assume the pushup position. Your forearms should remain vertical while your palm is flat on the floor and your elbows are locked.

3. Adduct your wrist, that is bend it toward the forearm on the little finger side while keeping your fingers straight. The first joint of the thumb should fall in line with the tip of the elbow.
The hip joints

1. Lie on your back and flex your hip, that is bring your knee towards you chest. You should be able to touch your chest or stomach.

2. Hip abduction. Dolenko’s original test called for standing upright and baby walking your feet out as wide as possible. I believe this test to be unacceptably dangerous and propose that you test yourself seated on the floor instead. Spread your straight legs as wide as possible, then spread your arms and note how far out are the insides of your feet relative to your fingertips. If you match your wingspan with your feet you are doing great.

3. Rotate your hip or turn your straight leg clockwise and then counterclockwise while standing in the snow or sand. Keep your knee tight and do not wrench it. Repeat with the other leg. Your tracks should form a rhomboid.
1. Knee extension. Ideally a knee should straighten out to the point where the shin and the thigh form a straight line. Congenital incomplete extension cannot be corrected.

2. Side to side movements of the shin relative to the knee and its rotation are normally very limited but still important to the health of your legs. Because the menisci and the ligaments are highly vulnerable in these planes of loading, Russian specialists such as Vladimir Petrov usually do not recommend direct mobility training. In place of specific mobility training—involving tibia rotation, adduction, and abduction—they encourage walking and jogging on uneven surfaces, especially barefoot. They also recommend games that require frequent change of direction such as soccer, squats and lunges with weights, cross-country skiing, and hiking with a backpack.

Russian scientists warn that you cannot fix bowleggedness unless it was taken care of at an early age. People who suffer from it are especially prone to injuries from various jumps. Receiving expert coaching in depth jumping from a sky diving instructor is encouraged.

Gentlemen, even though ladies generally have 20–25% percent better joint mobility than you, do not use this fact as an excuse to be stiff as an Apollo astronaut in a Moon suit. Get going!
The Drills: Joint Mobility

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Do the following exercises every morning. Work from the extremities to the center of the body. Do not bounce, especially when it concerns your spine; control your movements.

Start with ten movements and add ten a week. If this is too ambitious for you add five a week for the first month and then start adding ten reps a week until the target number is reached. All the required repetitions do not have to be done back to back; you may reach your goal in multiple sets if you need the rest.

Eventually match the number of repetitions in the following exercises to your age (your driver’s license age, ladies, not your party age!). If your joints are already damaged, work up to 200–300 for these joints and 100 for the rest—with your doctor’s approval.

Teenagers and pre-teens do not need to bother with these joint mobility drills; go straight to the Part Two exercises, *Strength-Flexibility Plus More Joint Mobility.*
1. Three plane neck movements

After these deceptively simple moves were featured in my first book *Beyond Stretching* I received many letters from grateful readers whose bad necks got a lot better.

Slowly turn your head to the left, then right. Gradually build up the range of motion.

Do not just force your neck back; ‘elongate’ your spine and look up and slightly back.

Do not roll your neck.
Tuck your chin in, then tilt your head back. Do not just force your neck back; ‘elongate’ your spine and look up and slightly back.

Tilt your head strictly to one side without twisting, then to the other side.

Whether or not you complete all the repetitions of one drill before moving on to the next, switch the exercises after ten reps and come back later for more, or arrange the three neck moves in some other fashion. You have the choice. Just remember not to combine the three into a head roll; it can be murder on your cervical spine.
2. Shoulder circles

Draw circles with your shoulders, as big as possible and in both directions. It helps to inhale and expand your ribcage as the shoulders are moving back. Exhale and shrink your chest on the way forward. Switch directions after every ten revolutions or as often as you like.
3. Fist exercise

We are working from the extremities to the core. Having finished with the neck we are going to move up the arms.

Make fists, gooseneck your wrists, and bend your elbows somewhat. Extend and hyperextend your fingers as if trying to increase their length and your wrists. As an option, you may straighten out your elbows during the extension.
4. Wrist rotations

Interlace your fingers and put your wrists through all possible motions. Nikolay Amosov, being a surgeon, does 300 repetitions of various wrist and finger movements in addition to his published routines.
5. Elbow circles

Make circles with your elbow maximally bending and straightening it out. You will find that outward circles are a lot more awkward than the inward ones. It is normal. Elbow circles work your shoulders every bit as much as your elbows.
Its name notwithstanding, this awesome shoulder loosener is popular with practitioners of the Russian Martial Art.

Start with your arms straight out and your palms facing down.

The popular Russian magazine *Physical Culture & Health* emphasizes that trainees, especially those over fifty, must make a point of getting a complete joint extension in your mobility drills and religiously stretch their flexor muscles to avoid a so-called contracture or age-related shortening.

**6. The Egyptian**

Its name notwithstanding, this awesome shoulder loosener is popular with practitioners of the Russian Martial Art.

Start with your arms straight out and your palms facing down.
Pivot and turn to one side while keeping your arms in the same spot in space. Both hands should turn up as much as possible, make a muscular effort in your shoulders. Switch sides still keeping your arms in one line.

Both hands should turn up as much as possible. Make a muscular effort in your shoulders.
7. Russian Pool

A more extreme version of the Egyptian, this exercise, practiced for bayonet fighting in the Russian military and promoted in the US by Scott Sonnon and Derek Brigham, cranks your shoulders even more, not to mention your wrists.

Cradle the ends of a smooth stick about five feet long in your palms in front of your chest. Hold your left hand loose so the ‘cue’ can easily slide in the groove of the palm. Grip the stick tight with your right.

Push the stick across your chest to your left until your right fist is in front of you, your knuckles facing away. While keeping your hand close to your chest pivot around the stick—the right hand is still tight, the left still relaxed—until your elbow is way up and your knuckles are facing your chest. You will have an easier time making this move if you imagine that you are arm-wrestling.

Still keeping the ‘rifle’ close to your chest slide it to the right until your right elbow locks. Reverse the movement and repeat with the other hand.
8. Arm circles

This will take care of whatever ROM your shoulders may have missed in the previous drills. Draw a maximally big circle with one arm or both arms. Repeat in both directions.
9. Ankle circles

Draw circles with your toes while making a point of achieving a maximal range of motion in the ankle: pointed toes, toes towards the nose, and in and out motion. Use slight pressure against the ground to increase the ROM.

As an alternative to this exercise you may sit on the floor or a chair, cradle your calf in your elbow, and move your foot in different planes and in circles with the help of your free hand.
10. Knee circles

Place your hands above your knees—not on your kneecaps—and make small circles inside and out. Keep the circles small! The knee was designed with a minimal lateral range of motion in mind; forcing it beyond a couple of degrees is asking for trouble.

Keep the circles small.

Now make circles—again small! —with your feet close and your knees together.
11. Squat

Squats have been unjustly criticized for the damage they could cause to your knees. They could—if you do them wrong. But properly performed deep free squats are essential for the knee joints’ health and mobility.

Are Full Squats Bad for Your Knees?

Critics of full squats, with or without weights, usually refer to the study performed by Dr. Karl Klein at the University of Texas in the early sixties. Bill Starr who participated as a subject gave compelling arguments why the study’s design was flawed and conclusions were not credible in his fine book *The Strongest Shall Survive… Strength Training for Football*. Later research, e.g. Chandler, Wilson & Stone (1989), did not substantiate Dr. Klein’s claims that full squats destabilized knee ligaments.

Few comrades’ knees can handle a lot of full squats on their toes, the knee extending way in front of the toes.
But it is a totally different ball game if the shins are brought back to vertical and the weight is shifted to the heels. Note that you have to hold on to something (inside of a doorway is a good choice) or someone for balance. Otherwise you will fall flat on your butt as you are going down while trying to keep your shins upright.

Your knees should always point in the same direction as your feet and never inward.

Keep your shins vertical and your weight on your heels.
Think of sitting back, as if there is a chair behind you, rather than down, stick your butt out before going down.

If, in spite of your most sincere attempts, you cannot keep your weight on your heels and keep rolling forward on your toes, here is what to do. Stand on a thin board or a sturdy book, your heels planted but the front halves of your feet hanging in the air. Now you will get immediate feedback on improper exercise performance: if your toes dip into the ground you have deserved a punishment. Hit the deck and give me fifty!

Your knees should always point in the same direction as your feet and never inward. Your feet may point forward or slightly out. Once you have reached a full squat experiment with different foot positions until you find one that is most natural to you; you should easily sit on your haunches for minutes once you have hit this sweet spot.

Do not go rock bottom from the get go. Start with half squats and gradually, from set to set and from week to week, deepen the ROM. Unless you grew up in the Orient it has been decades since your knees have seen full flexion and they will not appreciate bending all the way without warning.

If you have a hard time knocking off all the required reps in one set because of a health condition or simply being out of shape feel free to do multiple sets of ten reps, or whatever number you fancy.
12. Hula hoop

A favorite of Russian Phys. Ed. Teachers, a medium-paced imitation of hula hoop twirling is good for your lower back and hips. Just keep your shoulders stationary and make big circles with your hips.

13. Belly dance

A more extreme mobility drill for your hip joints and lower back, belly dancing is a must for martial artists. It is hard to find a dojo in the former USSR where this drill is not practiced with the aim of improving kicks’ height and control and the hip snap for punches.

Westerners, especially macho men, can find this movement difficult, in which case it can be broken up into four discrete phases. While keeping your body upright and your knees slightly bent, tilt your pelvis forward, to the side, back, and finally to the other side. Work up to making this pelvis rotation one smooth movement. Middle Eastern music and a veil are optional.
The belly dance can be broken up into four movements.
14. The Cossack

Before you start, memorize this: at no point do the knees buckle in, they always track the feet! For your own good. If your knees insist on buckling in no matter what, you need to work on your inner thigh flexibility for a while before tackling the Cossack.

Start with your weight on the bent left leg, the right straight with its toes facing up. Pivot and shift your weight to your right. Going from left to right and back left is counted as one repetition.

The knee must be straight when the hip rolls over except when you are in a lunge and it points straight down.

I repeat: the knee must be straight. The Above photo shows the wrong way (knees buckled).
Step a little wider and repeat and mirror.

Gradually get deeper. You may keep your hands on the floor for balance or hold on to some other stationary object.
Finally roll your foot over from its heel on its inner side, the toe, and finally its outer edge by turning your hip.

Make sure to keep your hips close to the ground when you switch.

A great drill for the hip joints, the Cossack will also help you with your quest for splits.
The knee must be straight when the hip rolls over except when you are in a lunge and it points straight down. Generously add these rolls into the basic drill but do not count them toward your rep target.
15. Split switches

If you aspire to do splits, this drill will make an excellent adjunct to your Relax into Stretch split training. Consider starting your contract-relax split sessions with three sets of split switches. You will report immediate ROM gains.

If you aspire to do splits, this drill will make an excellent adjunct to your Relax into Stretch split training. If not, it is simply dandy for your hips. Sort of an extreme Cossack.

Assume the ‘martial arts split’: the front foot is pointing up and the rear foot is on its side. Your knees must remain locked for the duration of the drill! Or else. You can easily damage your knees with split switches if you relax your quads and let your knees buckle in.

‘Push the walls apart’ with your heels as you switch sides or ‘pull your hips out of the sockets’.

While shifting your weight from your legs to your fists or hands pivot on your heels and switch sides.
Most Comrades who are not near a full split should rest their hands on a piece of furniture rather than the floor.

You will find that you have to lift up slightly to avoid your hip joints ‘catching’ as you are switching sides. It is normal, but make a point of sinking deeper as you progress through your set.

‘Push the walls apart’ with your heels as you switch sides or ‘pull your hips out of the sockets’. Also, drive your hips forward with tight glutes. Repetitive gentle rocking of the hips forward at different positions throughout the drill will really loosen up your hips; ask any Russian gymnast.
Another cool hip joint mobility drill for very flexible comrades is rolling back and forth between the side split and the roadkill split.
16. Spine flexion/extension

Unlike the cobra type drills that pull on the spine with stretched hip flexors, this exercise keeps the psoas slack and can be practiced by nearly anyone.

Sit in a chair. Flex your spine. Your shoulder blades should kick out and your chin should tuck in. It helps to exhale.

Inhale, look up and arch your back. ‘Elongate’ your spine and draw your shoulder blades together. Slow and rhythmical.
Inhale and maximally open the rib cage when you extend the spine.

The drill may also be performed kneeling and on all fours. Your choice, Comrade.
A Powerful Russian Tip for Better Back Bends and Splits

V. G. Fokhtin, the author of an original system of strength and flexibility training, mentions that pressing forward with your hands against your lower back or sacrum amplifies the effect of splits, lunges, and various back bends. Try this maneuver with the appropriate Super Joints and Relax into Stretch drills.

If you are close to being able to do side splits you could try one of Bill ‘Superfoot’ Wallace’s favorite stretches that will improve your splits in addition to mobilizing your lower back. Starting with your straight legs spread as wide as possible carefully shift your weight forward while arching your back.
Do not just round your spine; the action is more like trying to touch your belly button—not your chest! —to the floor by tilting your pelvis forward. Rock gently. It helps to exhale passively as you roll forward and inhale on the way up.

But do not stop there. You will make the drill even more effective if after a while you gently lift yourself up and ‘push the walls apart’ with your heels while forcing your chest out.
You may choose to practice this exercise during your Relax into Stretch splits session rather than with your mobility drills.
Spine Decompression is Vital to Spine Health and Mobility

The authoritative Soviet Physical Culture and Sports Encyclopedic Dictionary stated that spine mobility is very dependent on the thickness of the intervertebral discs: the thicker the discs, the greater the mobility. The discs act as shock absorbers. Their spongy core does the job. When a disc absorbs liquid it can get almost twice as thick—which explains height fluctuations of a few centimeters throughout the day.

After fifty years of age discs dry up and a person shrinks and loses his flexibility. The value of traction or elongation exercises cannot be overestimated. “Just a little time will pass [since you started hanging on a pullup bar],” promises Russian coach Mark Tartakovsky, “and you will feel as if the bar has gotten lower, as if you have grown up or rather stretched out a centimeter or two…”

In a free hang Tartakovsky advises various leg and torso movements to amplify the effect: moving the legs back and forth and side to side, together and separate; non-ballistic turns of the torso with the feet held together.
17. Spine rotation

Kneel or sit in a chair with your feet and hips solidly planted and start slowly turning your trunk clockwise and counterclockwise building up the amplitude to the max. No bouncing! The head moves together with the torso.

A martial artist may choose to do the drill in a horse stance. Do not move the hips if you do.

Immobilize your hips.
You may hold a stick behind you to lock the shoulders and localize the movement to the spine cut off at hips. Do not be surprised that the ROM is drastically limited.

Strength and physique legend Eugene Sandow placed heavy emphasis on various back and neck bends and twists. So should you. Make mobility drills for all the sections of your spine your top priority. Give equal attention to flexion, extension, and rotation, and you will feel like your body has gone back in time.
Part Two:

Strength—Flexibility
Plus More Joint Mobility
There are two kinds of flexibility: passive and active. The former is your muscles’ ability to stretch with the help of some external force such as gravity or your training partner. The latter is your ability to assume a stretched position using your own strength. A split on the floor is an example of passive flexibility. Holding a split in the air while hanging on a pullup bar, as one USSR karate champion used to show off, is active flexibility.

Soviet research by Iashvili—inquisitive minds unburdened by the command of Russian can learn the details of this study in *Supertraining* by Drs. Siff and Verkhoshansky—demonstrated that the greater the difference between one’s active and passive flexibility (the *active flexibility deficit*) the greater the risk of injuries. Injury and an active flexibility deficit go together like borsch and vodka. On the other hand, a very low active flexibility deficit correlates positively with an athlete’s performance in his chosen sport.

The bottom line: work on your active flexibility, or the strength to assume stretched out positions. There are various ways to develop it, for instance slowly raising your legs or kicking as high as possible, slowly reaching for some mark, and other more sophisticated methods.

In addition to promoting active flexibility by strengthening the leading muscles, or *agonists*, active flexibility drills improve your passive flexibility as well by facilitating relaxation of the resisting muscles, or *antagonists*.

**Here is how it works.**

When you drive a car with an automatic transmission, you keep one foot on the gas and the other… For the sake of your tires and tranny, I hope you said ‘on the floor’ rather than ‘on the brake’. And if you said ‘on the clutch’, pull over and get out, you are in the wrong car.
You body works the same way. When your biceps contracts, its antagonist, the triceps, relaxes and vice versa. This is called reciprocal inhibition. Although this neurological phenomenon does not possess the nearly mythical powers attributed to it by the fans of ‘Active Isolated Stretching’, it does somewhat promote flexibility, both passive and active, by helping to relax the resisting muscle.

**Basic Active Flexibility Training**

- Slowly increase the stretch against the resistance of the gravity or your body until you cannot go any further or you have concerns about injuries.
- Hold the final position for anywhere between five and sixty seconds.
- Don’t hold your breath, breathe shallow.
- Slowly return to the starting position

**How long should I hold an active stretch?**

A British study by Roberts & Wilson (1999) compared the effects of different durations of holding an active stretch: 5 versus 15 seconds per contraction. The total time under tension was identical, 45 sec, 5 sec x 9 sets and 15 sec x 3 sets; so was the training frequency, three times a week. Knee extension and hip flexion was tested. Both groups made good gains in their flexibility, passive and active. There was no difference in passive flexibility gains, however the 15 sec group improved a lot more in active flexibility. It appears that holding the tension longer pays off.

‘Reach the Mark’

The classic Soviet text *The Theory and Methodology of Physical Education* recommends a stretching method that can be loosely translated as ‘Reach the Mark’. Basically, you aim for some object with some body part or with your eyes—for example, reach for the floor with your fingers in the toe touch.

Reach the Mark is a classic case of the *ideomotor effect* or materialization of intention. Once you want something real bad, your brain finds a way of making your goal come true. Indeed, having a specific objective beats ‘just stretching’, for the same reason that competing against a worthy opponent will always beat out the lame attitude of ‘just doing my best’. “A man’s reach should exceed his grasp, or what’s a heaven for?”
My colleague Vladimir Vasiliev, a former Soviet Special Ops instructor based in Toronto, Canada advises his students to ‘look back at their feet’ when they are in the cobra stretch. Of course, it is an impossible goal for most, but your body reflexively follows your eyes and stretches more than it would have otherwise.

The Comrades at ROSS, a Russian Martial Art organization represented in the US by World Sambo Wrestling Vice-Champion Scott Sonnon, teach how to improve one’s spine rotation by following a spot on the wall with one’s eyes. The spot is progressively moved around the trainee until it is behind his back.

American Edwin Checkley, the author of the 1890 *A Natural Method of Physical Training*, instinctively understood this technique when he devised his reach the wall exercise a century ago.
Another example of Reach the Mark is suspending a ball or some other object on a string and either slowly raising your leg to touch it (active flexibility) or kicking it (dynamic flexibility). E. Ya. Krupnik, who teaches martial arts in one of the Moscow universities, hangs a rope angled at sixty degrees between two objects. The rope has many small flags attached to it. Krupnik’s students line up to take turns kicking one of the flags ten times each with a specified kick, for instance lead leg roundhouse. When all the fighters have paid their dues to the flag number one they start beating up on the next one up. If a kicker does not reach the target or does it in bad form he has to repeat that kick. Once he fails to get ten good kicks in, the student is out. The game goes on until there is one man or woman standing.

Be creative; variations of Reach the Mark are endless.

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**Reach the Mark**

- Slowly increase the stretch against the resistance of the gravity or/and your body while aiming for some object with the specified body part or with your eyes. The mark should be difficult but reachable.
- Hold the final position for a second or so and return to the starting position.
- Pick a slightly more ambitious mark and repeat the drill.

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**How a Famous Football Strength Coach Develops Active and Passive Flexibility**

Strength coach extraordinaire Bill Starr, one of the original York Barbell crew and a former strength coach to the Baltimore Colts, recommends another combined dynamic-static stretching technique. Using a hamstring stretch as an example, here is what you are supposed to do. “Lean forward slowly, come back upright. Go forward a bit deeper each time until you finally reach the deepest position.” Exhale passively on the way down and inhale on the way up, I might add. “Hold that position momentarily. Come back erect; now lean forward going a bit deeper yet. Do this for 10–12 repetitions until you have reached your furthest point of stretch. Then hold that position for 10, 15, 20, or 30 seconds. Try to build up the time to a minute. This static hold just after the dynamic stretches allows you to increase your range of motion considerably… Remember the importance of slow, deliberate movements.” Soviet specialist S. Y. Yurovsky offers almost identical advice.
‘The Pink Panther’

Having been force-fed too much Dostoyevsky and Tolstoy in my juvenile delinquent years, I turned to Ferris Bueller’s Day Off, It’s a Mad, Mad World, The Pink Panther, and other antidotes to classic Russian literature. Hence the next stretching technique shall be named Pink Panther in honor of my hero, Chief Inspector Clouseau, yes, yes.

You must remember the scene where Clouseau pushes against a door which is suddenly opened by someone on the other side. The great detective sails through the door, through the room, and out of the open window…

This is the same maneuver your arms performed after your summer camp friend pushed them down against your sides—they just floated up by themselves. It is the so-called *Ukhtomsky’s reflex* in action. According to this neurological phenomenon, following the intense static contraction of a muscle, this muscle will keep on exerting itself for a period, while its antagonist will achieve an unusually deep relaxation. For instance, if you raise your knee as high as you can and then push with it against your hand, and remove your hand suddenly, your knee will jump a couple of inches higher. At a seminar I gave in Washington, D.C. the Pink Panther blew away a physical therapist who added a couple of feet to her hamstring stretch in one set. We are talking about an already flexible female with extensive knowledge of Western stretching methods.
One of the pioneers of application of Ukhtomsky’s reflex to stretching, Soviet scientist S. V. Yananis recommends 30–60 sec contractions, although I have had terrific success with brief tensions of just a few seconds long. Do not hold the tension anywhere close to the point of exhaustion as this is likely to reflexively tighten up the stretched muscles.

It is a great idea to employ the Ukhtomsky’s reflex in the context of Relax into Stretch isometric stretches, although unfortunately it is not always practical without a partner. An example of a Forced Relaxation/Pink Panther combo is the familiar partner hamstring stretch.

Lie on your back and lift one leg as high as possible.

Gradually build up the tension and push with your heel against your assistant’s hand until your hamstring quivers and gives out (forced relaxation). Sigh with relief.

Your partner lets go of your heel and you immediately—but not fast! —raise your leg higher using only the muscles on the front of your thigh (reciprocal inhibition).

Your partner moves his hands around to your shin and gradually builds up the pressure as he is trying to bring your leg back to the floor. You resist with all your might and keep on trying to raise your leg. Your partner almost overwhelms you.

Suddenly, ideally without warning, your partner lets go, and your leg falls through a couple of inches of stretch in the classic Clouseau manner (Ukhtomsky’s reflex)! For greater safety make sure that the stretched body part only falls through a little at a time.

Naturally, do not pick out any bozo from the gym to be your stretching partner. If you cannot communicate effectively you can easily get hurt. Which is why generally I am not hot on partner stretches. But if you are a physical therapist or an experienced coach you will easily design a great variety of powerful partner assisted Pink Panther stretches for any body part.
The Pink Panther

- Slowly increase the stretch against the resistance of the gravity or/and your body.
- Apply additional pressure which is almost, but not quite, strong enough to reverse the stretch.
- Push steadily against the resistance for three to sixty seconds, but not to exhaustion.
- Don’t hold your breath. Breathe shallow.
- Suddenly remove the resistance. The involved body part will ‘fall through’ and stretch the target muscles. Don’t anticipate the release!
- Progress in small increments to reduce the possibility of an injury.
- The Pink Panther is especially effective when employed together with Forced Relaxation or the Clasp Knife techniques (see *Relax into Stretch*).

Is Active Isolated Stretching any good?

Better than sitting on your couch.

In a nutshell, the AIS protocol calls for moving the stretched limb as far as possible using its muscles, e.g. contracting the hip flexors on top of your thighs to stretch the hamstrings. Then you use external assistance, a training partner or your hands pulling on the rope looped around the bottom of your foot. Quickly but gently pull your hamstring a little further, to the point of mild discomfort. Hold for two seconds before backing off. Repeat for ten repetitions.

The *Whartons’Stretch Book* attempts to explain the two second hold with a far out claim that it takes three seconds before the stretch reflex fires, that is your muscle tightens up in response to stretch. Uh? Does that mean an untrained Comrade can drop in a full split and not get hurt as long as he get up in less than three seconds? Don’t try it at home.

The bottom line on AIS. You will make some gains in passive and active flexibility (especially if you opt for the stretches from this book) but there are far more superior methods, e.g. the Pink Panther. Otherwise, simpler techniques such as Bill Starr’s will deliver the same results without turning intellectual.
Demographics of stretching
(Reprinted from Relax into Stretch)

Your age and sex dictates your choice of stretching exercises even more than your sports and activities. It is unfortunate that youth coaches and other people who should know better do not appreciate this simple fact. Take girls’ gymnastics, for instance. Russian scientist V. I. Fillipovich explains in his Gymnastics Theory and Methodology textbook: “The obvious ease with which girls gymnasts master different exercises requiring maximal flexibility frequently encourage forcing the process of this quality’s development. Its negative influence may not show immediately. Excessive emphasis on flexibility in young age may negatively affect the joints’ strength, lead to a variety of spine deformities and have an unhealthy effect on postural development. Flexibility development must be gradual. One must keep in mind that girl gymnasts frequently have a so-called active insufficiency. They cannot reach a great range of motion not for the lack of elasticity of the muscles and ligaments, but because of insufficient strength of the muscles which propel the movement. In other words, the existing anatomical mobility of the joints cannot be fully taken advantage of. It becomes quite obvious that one must work on simultaneous strength and flexibility development to reach a maximal movement amplitude.”

Clearly, young girls should concentrate on Reach the Mark and Pink Panther stretches, often to the exclusion of other methods. Fillipovich goes as far as to state that children younger than ten or eleven, girls and boys, should not do any passive stretching at all; no contract-relax, no relaxed stretching, nothing of the sort! It also makes sense from the psychological point of view: youngsters just do not have the patience and body control necessary for sophisticated methods such as Forced Relaxation or tedious ones such as Waiting out the Tension (see Relax into Stretch).

I must make a point that when one decides to place a heavy emphasis on active flexibility exercises for the legs, that is various slow leg raises and kicks, serious abdominal work must be undertaken first. Get an Ab Pavelizer™ and get going!

When it comes to kids, Fillipovich and other Soviet specialists especially warn against overstretching seven to ten year olds’ shoulders—that includes pulling Junior by his arm when you are rushing him to the yellow bus—and spines which are very vulnerable at this age. In fact, until ten or eleven your gremlins should stay away from various forward and especially backward bends! On the other hand, the hip and ankle joints at this age are generally prepared for more serious stretching.
Women who are pregnant or had a child within a few months should be especially careful with stretching and seek advice of their doctor. Delivery of a child requires extraordinary flexibility and the woman’s body releases the hormone relaxin to loosen the ligaments. Relaxin is not selective, all the ligaments are affected. They will not tear easily, but will stretch beyond the norm leading to joint instability.

Adults should do it all: Relax into Stretch drills that teach their stiff muscles to yield to stretches, as well as Super Joints active stretches and mobility drills. Ditto for the older folks with more emphasis on mobility training than anything else.

Youngsters must make active flexibility drills such as Reach the Mark and the Pink Panther their first, and sometimes only, priority. Kids should be especially careful in their stretching and other athletic pursuits when undergoing the growth spurt. Adolescent hormones try their best to keep the ligaments pliable to accommodate the mushrooming bones, but the best is not always good enough.

What stretches do I need to do to straighten out my slumped shoulders?

Physical therapists have two definitions to describe a problem such as slouched shoulders: stretch weakness and tight weakness. When a muscle is habitually kept in an abnormally lengthened position, it experiences the former. The habit of having overly slack muscles of the upper back flicks a few switches in the spinal cord where muscular length and tension are regulated. The muscle starts perceiving your decidedly unmilitary bearing as the norm and becomes unwilling to contract and shorten. Hence stretch weakness.

As your torso slumps over and overstretches your back muscles, these muscles’ opposite numbers, the abs, the pecs, and the muscles between your ribs, are forced to shorten. Over a period of time they shorten and refuse to straighten out. Once you force them too, they test pathetically weak in the stretched position. Hence tight weakness.

Needless to say, neither extreme makes for a functional human being. An effective muscle has no trouble going from a near cramp to great length and can display great strength anywhere in this range.
Active flexibility drills like ‘Reach the Mark’ and ‘Pink Panther’ are your best bet at correcting your problem. They simultaneously address the weakness of the overstretched muscles and the tightness of their antagonists. Understand that these recommendations apply only to postural problems resulting from bad habits rather than a medical condition.

You should have no trouble finding the appropriate stretches to address your problem in this book. The following two popular Russian posture improving complexes will give you an idea of how to put together an effective routine of your own.

1. Hyperlordosis, or an exaggerated arch of the lower back

2. Good relaxed posture with the spine dictating proper hip position.

NOTE: Bringing the angle of the hips forward will align the spine
A Better Posture Regimen from Fizkultura i Sport, a Respected Russian Publishing House

1. Stand with your back to the wall. Simultaneously touch the wall with the back of your head, your shoulder blades, your glutes and your heels. Walk away from the wall trying to maintain the above alignment for as long as possible.

2. Put a broomstick or an empty barbell across your back and hang your arms over it. If you do it right the stick will immobilize your upper back making it impossible to slouch your shoulders. Bend forward while looking straight ahead and make 6–8 springy good mornings. Better than hanging your arms over the stick like a scarecrow, I suggest that you hold a stick, a towel, or a bungee cord in your hands and bring it behind your back. Keep your chest out and try to ‘stretch’ the stick apart, your elbows locked and your shoulders pulling hard.

3. Lie on your stomach and anchor your feet under a couch. Place your hands on the back of your head. Lift your torso off the floor and actively bring the shoulder blades together. It helps to push your head against your hands and vice versa and force your elbows back. Repeat 4–6 times. Review the rules of proper back bending covered elsewhere in this book.

4. Get down on your fours, look straight ahead, and start lifting your legs behind you, one at a time, 20–30 reps per leg. Lift as high as possible, squeeze your glute and point your toe. It is almost the same as the silly ‘fire hydrant’ from an aerobics class.

5. Make sure to get your doctor’s permission for this one and do not forget the rules of proper back bending. Kneel on the floor, expand your chest, contract your glutes, and lean back until your hands rest on your heels. Fix that position briefly and return to the upright position. Repeat 6–8 times. I like a more difficult variation: reach your left heel with your right hand and vice versa. I cannot repeat it often enough: keep your glutes tight!

6. Stand a step away from the wall, facing away from it. Expand your chest, lean back and touch the wall remembering the rules of safer back bending. Hold the position for 5-10 seconds, then bend forward. Alternate 6–8 times.

FIS emphasizes that a good posture is a skill so it should be practiced daily. A few times throughout the day is even better, I might add.
Another Popular Russian Better Posture Regimen by Yuri Kurpan

1. Walk and walk on your tip-toes with a light pillow supported on top of your head.

2. Walk on your tip-toes in a semi-squat, a broomstick held on your shoulder blades.

3. Stand with your hands interlocked behind your back, your arms straight. Raise your arms and push them back; arch. You may hold a broomstick, a ball, or dumbbells.

4. Sit in a chair, your head slightly slumped forward, and place your hands on the back of your head. Lift your head against moderate resistance from your hands.

5. Sit on the floor with your hands behind you. Lift your pelvis, tilt your head back, arch and hold the pose for 3-5 sec.

6. The same as the last drill except one leg should be raised up or moved to the side.

7. Lie on your back, your knees bent, your feet and your elbows on the floor. Lift your pelvis while pressing with the back of your head, your elbows, and your feet against the floor.

8. The same, except keep your legs straight. Arch your upper back only, do not lift your pelvis or head.

9. Lie on your back, your arms and legs straight. Press against the floor with the back of your head and your heels; arch and lift your body. You may help with your hands.

10. Lie on your stomach, your arms and legs straight. Lift your head and shoulders and hold them up for 3–5 secs.

11. The same drill but with your hands behind your back. Arch!

12. Lie on your stomach with your hands on the back of your head. Lift your head and shoulders, maximally flex your knees, and try to bring your head towards your feet.

13. Lie on your stomach with your hands on the back of your head. Lift your head and shoulders and straight legs. Hold for 3–5 secs.
14. Lie on your stomach, your arms along your sides. Press with your hands against the floor—it will help to keep your elbows slightly bent and to point your fingers towards your feet and slightly out—and lift your bent legs toward your head. Your center of gravity should shift towards yours chest as if you are about to tumble over. Keep your weight on your chest; not your neck! You may start out with a jump rope or a bungee cord helping you. Loop it around your feet and hold the ends up in your hands.

15. Sit on the floor and press the back of your head against the seat of a couch. At the same time lift your pelvis and arch your back. Hold the pose for 3–5 secs.

16. Lie on your stomach with your feet anchored, held down by a partner or a couch. Hold a ball in your straight arms in front of you. Lift your head, shoulders, and straight arms.

17. Kneel on a folded towel or something else that would spare your knees. Have your training partner hold your ankles down. Jackknife at the hips and fold forward while keeping your back straight, then come back up. If you hamstrings are dear to you try not to overbalance and fall forward!

18. Lie face down with your hips across a bench. Have someone hold your ankles. Hold a weight, a ball will do for starters, in your hands in front of you. Lift your torso, arch your back, and fix this position for 3–5 secs.

19. The same drill but throw the ball back as you are straightening out.

20. The same drill but hold your body parallel to the ground for 3–5 sec.
What is the difference between a tight and a toned muscle?

When a muscle contracts, zillions of tiny ‘ratchets’, or cross-bridges, drag across each other. The more mini-ratchets that interact, the greater the tension their muscle generates. Your muscles always display some tension; if they did not you would collapse in a Jabba the Hut like pile. Tension is not always the bad guy as it is often portrayed; what do you think makes you strong or gives your muscles their attractive hardness? Things get ugly when the tension is dysfunctional, for example when a muscle resists a stretch that you must perform.

A so-called ‘tight muscle’ has shortened for a variety of reasons such as bad posture, injury, weakness, or exhaustion. According to the Davis Law, when the ends of a muscle are brought close together—as in the above scenarios—it's tonus, or resting tension, increases. Unfortunately, it is wasted tension. Muscle tension is a means of producing force to maintain your posture or to move. When a muscle shortens excessively, it does not perform either of its functions well. Good posture is incompatible with a muscle that stays at a shorter than normal length. A muscle which refuses to lengthen will not provide for efficient movement either. You could say that a tight muscle is a worthless lazy knot.

Like a tight muscle, a toned muscle has many of its ratchets overlapping and thus it generates a good deal of tension. But—the critical difference is here!—it does it from a lengthened position. A toned muscle may be compared to a rubber band ready to snap into action.

‘Good’ muscle tonus is the result of properly performed high tension training such as isometric stretching, powerlifting, or gymnastics. ‘Bad’ tone is the consequence of weakness, bad habits, injuries, and unbalanced strength training. I can give you a recent example of the latter from my own experience. After a year of arm-wrestling I started experiencing strange pain in my elbows. Pain and arm-wrestling are a package deal and I would not have thought of seeing a doctor had I not experienced the pain in decidedly un-arm-wrestling activities: pressing movements, of all things. The Doc concluded that my pronator teres, the muscle which turns the palm down, had gotten so much stronger than its antagonist, that it literally pulled the elbow joint shut! The fact that it got so brutalized by the hits of the good ‘ole bar sport and went hypertonic did not help either. By the way, did you know that Harley Davidson’s founders’ real names were Kharlamov and Davidov and they were Russian? No joke.
The Drills: Strength–Flexibility Plus More Joint Mobility

Do these exercises following your mobility drills or later in the day two to four times a week. You may practice the active stretches before, after, or during your athletic practice but do not get in the habit of always stretching before your practice. Ideally break it up: today actively stretch before karate, tomorrow after tennis, etc.

The number of sets and reps is an individual choice. A standard approach is to start with ten repetitions total and work up to a rep per year of your age.

To minimize the fatigue and maximize the strength-flexibility gains, it is preferable that you do high sets of low reps, e.g. 10 sets x 5 reps, rather than low sets of high reps, 5x10 or 2x25. Do not skimp on rest between your sets; these are not mobility drills!

As an option you may alternate the active stretches from this chapter with sets of Relax into Stretch exercises.

You do not need to do all the drills; pick and choose. The order of the exercises is up to you.

18. Windmill
19. Pink panther straight-legged situp
20. Bridge
21. ‘Bathtub push’
22. ‘Ghost Pulling Knife’
23. Shoulder dislocate with a bungee cord
24. Shoulder blade spread
25. Side wall reachp
26. Pink Panther knee chambers and kicks
27. Pink Panther Arabesque
28. More height and power to your kicks with the scissors maneuver
18. Windmill

The windmill, a popular Russian exercise—not to be confused with the kettlebell drill of the same name!—effectively improves the spine’s rotation and can take the place of the spine rotation drill from the first section. It is also good for your hamstrings and shoulders.

First tackle the windmill seated on the floor. Your knees can be straight or slightly bent but your spine must remain straight. Reach with your right hand toward your left foot while reaching back with your left arm and hold briefly. It helps to ‘reach the mark’ slightly outside your reach. See what works better for you: looking towards your foot or back over your shoulder.

Try to ‘elongate’ your arms as much as possible and open your chest to the max. Then the other way. Experiment with different breathing patterns, for example: brief breath holding versus passive exhalation at the point of your maximum reach.

Your feet may move slightly; it is normal. If you are not flexible enough in the hams to sit straight with your legs straight in front of you, do the chair version of the windmill. It is safer if you place the chair with its back to the wall.

Try to ‘elongate’ your arms as much as possible and open your chest to the max.
Eventually, if you have a healthy back, do the standing windmill. Your knees can remain slightly bent. Your weight will naturally shift from foot to foot as you rotate.

Seated and standing windmills have a slightly different effect due to a different alignment against gravity, so it pays to alternate them from session to session.
Comrade, enter the drill that will add up to a palm’s length to your toe touch in minutes!

Sit on the floor with your straight or nearly straight legs in front of you. Make sure your feet face the ceiling rather than flap apart.

Reach forward and place your palms against your partner’s. Keep your elbows locked, both of you, to get better leverage and focus your efforts in your waist and hips.

Breathe gently—no breath holding! —and gradually, over a few seconds, build up the pressure against each other. The set will go a lot smoother and your wrists will thank you if you push with the bases of your palms rather than closer to your fingers.

Your partner may use any body parts to generate force as long as he or she is not doing anything unhealthy to his or her joints. You should push using your stomach and hip flexor power. The partner should make a point of almost overwhelming you.

After a while, anywhere between a few seconds and a minute, the partner suddenly drops back an inch or so. Like the indestructible Chief Inspector, you will fall through and increase your stretch. You might as well keep your eyes shut, an unexpected release works best.

If your partner does not fall back quickly enough you will reflexively ease off on the pressure and the stretch will fail.

19. Pink Panther straight-legged situp

This technique requires a partner. Keep your elbows locked, both of you, to get better leverage and focus your efforts in your waist and hips.
Your mind will be in the front of your body, where you are exerting, and your back side will stretch easily. Still, it is prudent for your partner to drop back only a little at a time to reduce your chances of an injury.

Relax for a few moments and repeat the sequence. If your soft underbelly starts cramping tell somebody who cares. Just remember not to make any sudden moves, slowly straighten out, lie on your back, and let your dear abbies stretch.

Keep on plugging until you think it prudent to stop or you make no further progress.

Now shake your legs loose, test your toe touch, seated or standing, and be amazed!

Once you have mastered the Pink Panther toe reach with a partner you can try it yourself. Just press your hands hard into the floor by your knees—again, use the muscles of your stomach and the front of the thighs—and load hard, as if you are planning to press your body up into a handstand. It is not necessary to keep your elbows locked as it is with a partner. Some Comrades will find that pressing straight down works best, others will press forward towards their feet, and you may figure out that somewhere in between is ideal for you. Experiment.

Let your hands suddenly pop up and dive forward—but a just a little to be on the safe side! Do not anticipate the release and do not stop pushing; if you slack off even a second too soon the stretch will not work.
It is a good idea to practice the stretch with a partner at least once before doing the Pink Panther toe reach by yourself. The partner will teach you to appreciate the importance of very strong pressure and you will not make the mistake of pushing halfheartedly and getting no results.

Push with the bases of your palms rather than closer to your fingers.

If your partner does not fall back quickly enough, you will reflexively ease off on the pressure and the stretch will fail.

Breathe gently—no breath holding!—and gradually, over a few seconds, build up the pressure against each other.

For safety reasons, the partner should drop back only a short distance, an inch or so, at a time.

If your abs, hip flexors, or both start cramping, do not to make any sudden moves, slowly straighten out, lie on your back, and let your front muscles stretch.
20. Bridge

Few exercises can compete with the old fashioned bridge’s ability to open up the chest and improve your spine extension. Make sure to clear the bridges with your doctor, especially if you have problems with your back and wrists.

A Physical Therapist Warns about Bridging

As Garrett McElfresh, a physical therapist who frequently contributes his professional insight to our www.dragondoor.com discussion site pointed out, “…I just feel compelled to stress to any Comrades out there suffering from true compression-type symptoms that the wrestler's bridge actually increases compressive forces through the posterior/lateral aspects of the intervertebral discs and facet joints. I'm sure the Bridge provides relief for some due to it's stabilizing muscle activity, but it puts you in extreme extension which may be contraindicated for someone looking for true decompression, like hanging from the bar. Sorry if this sounds like a lecture, but I wanted to maybe prevent any Comrades from writhing on the floor in agony after "going for" a bridge.”

Make sure that the weight rests on the bases of your palms rather than closer toward the fingers.

Assume the position shown. Inhale and press hard through your heels while flexing your glutes hard. In case you were wondering why I encourage you to bridge off your heels rather than your toes, this helps to recruit your glutes and unload your lumbar spine.

Make sure to clear the bridges with your doctor, especially if you have problems with your back and wrists. Heed the Rules of Safer Back Bending!
At the same time press with your hands; make sure that the weight rests on the bases of your palms rather than closer toward the fingers. It helps to start the bridge on an inhalation.

You should end up in a bridge. If you have done it right you should feel tension running up and down your backside rather than being localized in your lower back. Do not forget to ‘elongate your spine’ and refer to the Rules of Safer Back Bending in the beginning of this book. Press down hard with all four paws and try to get your belly button up in the air as high as possible.

If you are about to crash for lack of strength or flexibility watch your neck, tuck your chin at the first sign of trouble!

Keep your breath shallow and rock back and forth a few times while keeping your chest maximally open and your glutes locked. Then try to walk your feet and hands closer together, as long as you do not experience undue discomfort in your lower spine.

To get back down walk your feet and hands apart again, tuck your chin, and slowly lower yourself on your upper back—not your head!
How to Dramatically Improve Your Bridges with the Relax into Stretch Hip Flexor Stretches

Bridging is about hip extension at least as much as it is about spine extension. You will find that stretching your hip flexors with the drills from my other book, Relax into Stretch: Instant Flexibility through Mastering Muscle Tension, will have a remarkable effect on your bridges. Even if you are an elite wrestler like my friend Steve Maxwell, the Brazilian Jiu Jitsu world champion in his class. If you own a copy of Relax into Stretch try a couple of sets of one of the hip flexor stretches right before your bridges and see what happens.

A Top Scientist Recommends Unorthodox Hip Flexor Stretches

Dr. Mel Siff suggests some unusual active stretches for the hip flexors. One is a standing barbell military press, the back arched and the glutes held tight. An unexpected stretch is a bench press with your feet pulled toward you and placed on your toes! Then there is a lunge with a barbell held overhead with a wide or snatch grip. Holding a weight overhead enforces the upright bearing necessary for stretching the hip flexors—which makes for a great drill. And do not forget the Roman chair crunch.

Try these novel stretches from the co-author of Supertraining and you will not regret it. “There are many more,” says Dr. Siff, “but these are just a few for some fun and games intended to stretch-strengthen the hip flexors, abdominal muscles and other muscles running down the front of the body. Note that some of them are not for the novice or faint-hearted, because they impose large loads on these muscles. Gradually work into them following the principle of gradual progressive overload.”

Among their many other benefits, Dr. Siff’s stretches will improve your bridging ability or will enable you to work up to a bridge.
21. ‘Bathtub push’

Once practiced by American weightlifters such as David Willoughby, this drill opens up the chest nicely. Great for good posture and a must for a big bench press. Although the old timers opted for a bathtub, you may find a chair—a very sturdy chair! —a more practical although less comfortable piece of hardware.

The chosen piece of furniture should hit you below the shoulder blades. Just grab the top with your hands as shown and force your chest up and out and your elbows and shoulder blades as close together as possible. Do not hold your breath.

You may incorporate a contract-relax pec stretch into the bathtub push. All you have to do is flex your chest muscles by pushing against the chair for a few seconds, release, and continue pushing your chest out.

And if you do not have a Roman bathtub lying around, just clasp your hands behind your back and push back while pushing your chest forward.
Better yet, push off the floor.

Force your chest up and out and your elbows and shoulder blades as close together as possible.
Develop an Actively Flexible Spine with Minimal Disc Loading: Three Tips from Russian Experts

Mark Tartakovsky recommends this excellent drill for developing active flexibility of the spine extensors, with minimal disc loading: tilt your head back, force your chest open, and arch your back while hanging on a pullup bar. An extreme version for real hombres is to do a pullup with the head back and the spine arched until your stomach touches the bar!

If you cannot support all of your weight in a free hang, or your pullup bar is set too low to enable you to hang without picking up your feet, do the following drill by Orlov instead. Hold on to the bar, your arms straight, and lean forward while keeping the balls of your feet grounded. Your body will form an arc. Now exaggerate this arc by pretending to do a bridge: force your chest out, squeeze your glutes, and ‘elongate’ your body with tension.

As an option, comrades with good backs may add alternate straight leg or knee raises from this position.
22. ‘Ghost Pulling Knife’

I learned this ancient Shaolin Kung Fu drill from our designer extraordinaire Derek Brigham. Let Derek himself walk you through the moves:

“This is my favorite of the Yi Jin Jing exercises, having had shoulder injuries in the past. This is especially good for large breasted women or people who spend a long time bent over a computer and need to get upright. The reason it is called Ghost Pulling Knife is because it looks as if the ghost or spirit is reaching in his quiver to pull a knife or arrow to shoot.

…it is especially important to contract all the muscles to achieve proper balance. Stand with the legs locked out and pigeon toed with the heels out as lateral as possible. This will help the hamstrings, IT tract, lateral ankle tendons, gastrocnemius and soleus.

Place one hand on the spine as high as you can with the posterior aspect of the hand touching the back. Tighten the biceps, pull the shoulder forward, contract the rhomboids and teres.

Position the palm of the opposite hand on the occipital base. Pull forward with the forearm and hand while pushing backward with the neck muscles. Lock the muscles up, hold it for three minutes and switch arms. You may want to do this routine twice.”

It is especially important to contract all the muscles to achieve proper balance.
23. Shoulder dislocate with a bungee cord

Try to tear the cord apart, your elbows locked and your shoulders pulling hard. If you do not you will aggravate your shoulders.

As you make progress strive to move your hands closer and closer.

Olympic weightlifters are known for their mutant shoulder flexibility. Shoulder dislocates with a towel, a stick, or, better yet, a bungee cord, is how they do it.

Grab a rubber cord—a pricey ‘fitness’ one or a cheap and sturdy automotive one—in front of you with a wide, palms-down grip.

Try to tear the cord apart, your elbows locked and your shoulders pulling hard. If you do not you will aggravate your shoulders.

Now get ready to bring the cord behind your back in a circle…but first learn how to do it without hurting your shoulders.
Inhale and force your chest out. You must try to tear the cord apart, your elbows locked and your shoulders pulling hard. If you do it right your shoulder blades will get pinched together and the chest will get so prominent that you should be able to set a glass on top of it. The cord will easily work its way around your body without pinching off your shoulders.

If you get lazy and fail to pull hard as described you will just tweak your shoulders with no gains in mobility.

Exhale, relax. Reverse the movement, then grab the cord a little closer together—if you feel up to it—and head back again. As you make progress strive to move your hands closer and closer.

Once you take up shoulder dislocates you can say good-bye to the shoulder and arm circles from the mobility drill section.
24. **Shoulder blade spread**

Round your upper back slightly, sink your chest on an exhalation, and kick your shoulder blades out.

Most Comrades do not need much flexibility between their shoulder blades, in fact overly loose scapulae retractors will make you slump. However, overly tight muscles in your mid back are no picnic either. This stretch which was popular among old time strong men — they called such exercises ‘muscle control’ — will help.

Clasp your hands overhead, palms up.
Chances are, you will not have the coordination to do the overhead spread right off the bat. Start by pushing your arms with tension in front of you, your hands clasped and your palms facing forward, while humping your back over and kicking the blades out. Then progress to the overhead spread with your hands just above your head, and finally to the original drill.

Round your upper back slightly, sink your chest on an exhalation, and kick your shoulder blades out.
It is a good idea to alternate the forward push with the reversed movement.

I have had greatest success loosening up my scapulae retractors, the muscles between the shoulder blades, with an active toe touch. You will love it, especially if your occupation calls for wearing body armor.

Slowly—no bouncing whatsoever!—try to ‘press’ the floor with the bases of your interlaced palms, specifically the protrusions straight down from the little fingers. You should feel some stretch in your hamstrings and lower back, plenty of stretch between your blades and in your armpits, and a lot of tension, almost a cramp, in your abs and other muscles in front of your torso.

Push against the invisible wall for a few seconds while breathing shallow. Relax for a few seconds and repeat, trying to go deeper.

Bend your knees into a semi-squat before standing up.
25. **Side wall reach**

Stand sideways a few feet from a wall, your knees locked and your arm on the wall side held parallel to the ground. Look towards the wall and reach for it. Imagine that your arm is an extending telescopic antenna. Displace your hips away from the wall to preserve your balance but stay squared off, do not twist. Experiment with different breathing patterns: holding your breath or exhaling passively ‘through your fingertips’.

Return to the initial position. If you have succeeded in reaching the wall, side step a little and carry on.
This drill cannot be beat if you are a martial artist whose style involves high kicks, a rock climber, or a dancer. I always teach it to the S.W.A.T. teams that I train.

Lift your knee as high as possible—you may lean against a wall—and place your hands atop your knee. Push your hands down and your knee up hard against each other. Suddenly let your hands slip once you have built up good tension after a few seconds and your knee will pop right up!

**26. Pink Panther knee chambers and kicks**

Practice the Pink Panther knee chamber followed by a slow knee extension and hold and you will dramatically improve the height and precision of your kicks.
Repeat as many times as necessary until your knee refuses to go any higher. Either after each upward jump or just in the end, once your knee has gone as high as it is going to go, slowly extend your knee and hold that position for a few seconds. Consider resting between each rep, switching sides, or supporting your leg with your hands clasped under your knee to minimize hip flexor fatigue.

Practice the Pink Panther knee chamber followed by a slow knee extension and hold and you will dramatically improve the height and precision of your kicks. Kickboxing legend Bill Wallace swears by slow kick imitations and leg raises; the Pink Panther element multiplies their already powerful effect.

You may want to practice your slow kicks over a chair or another piece of furniture of appropriate height. The chair forces you to chamber close to your body which teaches good defensive habits and forces you to keep your kicks up.

Naturally, you can and should practice other kicks in the same fashion: the side chamber followed by the side kick and the roundhouse kick. Do not forget the outside and inside crescent kicks and feel free to use a wall or a chair to assist with balance. The reverse roundhouse kick is great.

Pink Panther partner drills work like a charm.

Observe the basic kicking knee mechanics when practicing these drills. First, never lock the knee of the support leg and do not let it buckle in; the knee should point in the same direction as the foot. When practicing side, roundhouse, and back kicks the heel of the base leg generally should point at the target for
Observe the basic kicking knee mechanics when practicing these drills.

Front, reverse roundhouse, and crescent kicks are usually best when the foot and the knee of the supporting leg point slightly out.

When practicing side, roundhouse, and back kicks, the heel of the base leg generally should point at the target for maximum balance and power and to avoid wrenching the knee, hips, and back.

Never lock the knee of the support leg and do not let it buckle in; the knee should point in the same direction as the foot.
First, grip the ground with the toes of the foundation leg; you will get greater ankle sensitivity and control.

Second, squeeze your butt if you are about to lose your balance; your center of gravity will get rearranged in your favor.

Two tips will radically help your balance.
Pink Panther partner drills work like a charm.

Observe the basic kicking knee mechanics when practicing these drills. First, never lock the knee of the support leg and do not let it buckle in; the knee should point in the same direction as the foot. When practicing side, roundhouse, and back kicks the heel of the base leg generally should point at the target for maximum balance and power and to avoid wrenching the knee, hips, and back. Front, reverse roundhouse, and crescent kicks are usually best when the foot and the knee of the supporting leg point slightly out.

Two tips will radically help your balance. First, grip the ground with the toes of the foundation leg; you will get greater ankle sensitivity and control. Second, squeeze your butt if you are about to lose your balance; your center of gravity will get rearranged in your favor.
Alexander Medvedev, the hand-to-hand instructor of elite Frunze Post-graduate Army Academy and the chief consultant to Spetsnaz magazine, describes an unusual combination of active stretching and ‘waiting out the tension’, the passive flexibility technique explained in Relax into Stretch. To improve your kicks or splits raise your leg as high as possible in the chosen direction and rest it atop a table or another piece of furniture that is barely within your reach. Relax for a minute or as long as necessary, then lift your leg a little higher using only its muscles, no help from your hands or your partner. Have your training partner quickly slide a book between your ankle and the table. Repeat the sequence while it works. Alexander Medvedev—not to be confused the weightlifting champion and expert Alexey Medvedev—promises that although this drill is quite painful and unpleasant in the beginning, it becomes quite enjoyable once you get the hang of it.
27. Pink Panther arabesque

It is hard to improve your arabesque your missing word if you practice by yourself because there is no practical way you can load your leg for the Pink Panther maneuver. But it does work like a charm with a partner.

Start practicing on the floor; it is stricter this way. Lie on your belly and raise one leg as high as possible. Point your toes and more: try to elongate your spine from your neck, down your back, and all the way through your toes.
Push hard against your partner. Breathe shallow and ramp up to max tension in a few seconds. As a more effective option, your partner may sit on your lower back and hips facing your feet. This will not allow excessive back arching and will focus on the more difficult leg raise.

Then your partner suddenly—I repeat, suddenly!—lets go and your paw jumps up like never before.

Let your partner support your leg slightly above your knee so you can relax for the next rep.

Exaggeratedly ‘grow’ your leg once or twice, relax again, and then tackle the next rep.
Let your partner support your leg slightly above your knee so you can relax for the next rep. Exaggeratedly ‘grow’ your leg once or twice, relax again, and then tackle the next rep.

Soviet research from the 1950s demonstrated that contraction of a muscle facilitates a greater contraction of its counterpart in the other limb. For instance, tensing of the right hip flexors will stimulate the left hip extensors to contract harder. This ‘scissors’ phenomenon has many neat sports training applications. One example is cramping your left triceps during the last, hard, rep of a set of right arm biceps curls. You will get an extra rep or two more than you have hoped for. More appropriate to Super Joints, you can easily make this neurological phenomenon work to improve your arabesque stretch. Just push down hard into the ground with your ‘free’ leg as you are lifting the stretched leg; open the ‘scissors’.

When you start practicing the standard arabesque—not instead of but in addition to the floor stretch—remember to push off the floor in the same fashion.
Comrade, do you want youthful joints?

Do you want your body to feel better than you can remember?

Do you want to build the perfect blend of strength and flexibility and say good-bye to athletic injuries?

Do you want to aim your kicks high?

Then join the Super-Joints!
Introducing the Ab Pavelizer—the fastest, safest way to a ripped powerhouse of six-pack muscle

In his groundbreaking book *Bullet-Proof Abs*—and in the new companion video—Russian Special Forces conditioning coach Pavel Tsatsouline reveals the Janda situp, the world’s safest and most effective situp. Leading back and muscle function expert, Professor Janda discovered the secret to true ab strength—how to scientifically isolate the abs by “taking out” the hip flexors.

The result: an awesome exercise that scorches the abs, while avoiding the spine-wrecking, neck-jerking antics of traditional (read: outmoded) situps.

Until now, the Janda situp required a partner, for correct form. But with the introduction of the Ab Pavelizer, you can quickly develop world-class abs without having to rely on a friend. Now it’s strictly between you and your abs. In just a few minutes a day, you can own the world— ABSOLUTELY.

The Rolls Royce of Ab Machines, you say? Well, more like the unholy union of a Humvee and a Rolls. Scary thought! Perhaps there should be a law against it. You get brutally rugged, all-terrain durability that’ll stand a lifetime pounding from the most berserk of fitness freaks. Then there’s the smooth-as-smoke, gloss powder coat finish that makes you just wanna stroke and caress the goddamn beauty of the thing. Strong abs are the core, the very foundation of your power—why risk your success and future health with some flimsy, cheapo abs-toy? You deserve better. You deserve the best—get it today! And say goodbye forever to flabby abbies.

To Take Possession of Your New Abs
Call This Number Immediately: 1-800-899-5111
"It Has Never Been So Easy to Have UNGODLY ABS"

Item # P9  The Ab Pavelizer
$170.00

1. The Ab Pavelizer easily fits under a door, allowing you to perform a partner-free Janda sit up.

2. Slide on a simple attachment (included), when you want to stabilize your Ab Pavelizer with a thirty-to-fifty pound Olympic plate. (You will need to supply your own plate)

3. The Ab Pavelizer, ready to use with an Olympic plate. Note the accompanying bungee cord, for those who need the extra help initially.

NOTE: Each Ab Pavelizer comes with “under door” attachability, Olympic plate adapter, bungee cord and handles.

Testimonial Comments

"I have seen many abdominal routines in the last 25 years and the Beyond Crunches program is the best yet."—Steve Maxwell, M.Sc., Senior World Brazilian Jujitsu Champion

"I learned a lot from Pavel's books and video, and plan to use many of his ideas in my own workouts, especially the nontraditional ab exercises described in Beyond Crunches—Clarence Bass, author of Ripped 1, 2 & 3.

"As a world record holding powerlifter, I know the importance of strong abs on maximum power performance. Beyond Crunches is THE text and authority on ab/trunk stability"—Dr. Fred Clary, National Powerlifting Champion and World Record Holder.
Possess a maximum impact training tool for the world's most effective abs, no question. Includes detailed follow-along instructions on how to perform most of the exercises described in the companion book, *Bullet-Proof Abs*. Demonstrates advanced techniques for optimizing results with the *Ab Pavelizer*.

As a former Soviet Union Special Forces conditioning coach, Pavel Tsatsouline already knew a thing or two about how to create bullet-stopping abs. Since then, he has combed the world to pry out this select group of primevaly powerful ab exercises—guaranteed to yield the fastest, most effective results known to man.

• Fry your abs without the spine-wrecking, neck-jerking stress of traditional crunches.
• No one—but no one—has ever matched Bruce Lee's ripped-beyond-belief abs. What was his favorite exercise? Here it is. Now you can rip your own abs to eye-popping shreds and reclassify yourself as superhuman.
• Russian fighters used this drill, *The Full-Contact Twist*, to increase their striking power and toughen their midsections against blows. An awesome exercise for iron-clad obliques.
• Rapidly download extreme intensity into your situps—with explosive breathing secrets from Asian martial arts.
• Employ a little-known secret from East German research to radically strengthen your situp.
• Do the right thing with "the evil wheel", hit the afterburners and rocket from half-baked to fully-fried abs.
• "Mercy Me!" your obliques will scream when you torture them with the *Saxon Side Bend*.
• How and why to never, never be nice to your abs—and why they'll love you for it.
• A complete workout plan for optimizing your results from the Janda situp and other techniques.

(Right) Pavel's Ab-strengthening breath techniques will give you the power to explode a water bottle but don't try this trick at home if the extreme air-pressure whacks back into your lungs, instead of exploding the water bottle you can end up very dead, which is a bummer for everyone.

(Left) Pavel demonstrates the Power Breathing technique *Bending the Fire* to develop an extra edge in your abs training.
Employ These Little-Known Tips from Elite Athletes and Possess Your Own Set of Awesome Abs

- Protect your back and develop exceptional abdominal muscle tone, with a landmark exercise designed for the special needs of Russian ballet dancers and gymnasts.
- Employ the secret ab weapon of an old time strongman—famous for his exceptional strength and sinewy, wiry physique.
- This insider's secret from East German research radically empowers the traditional situp.
- Russian full contact fighters used this drill to pound their opponents with organ-rupturing power, while turning their own midsections into concrete. Unlike anything seen in the US!
- This simple Yoga asana tightens the internal muscles of the abdominal wall and makes your waist smaller—even if you have not lost a pound!

“Thank you for the tremendous job you did at this year’s seminar for the Arnold Schwarzenegger Fitness Weekend. Your experience and great knowledge in the field of stretching fitness made the seminar an outstanding success. In our opinion your training program is the best of its kind and can be enjoyed by persons of all ages.”

Doug Grant, Schwarzenegger Fitness Weekend Martial Arts Chairman

“As a chiropractic physician, I see the deleterious effects of a weak torso on the lower back. Weak abs lead to years of back pain and dysfunction. As a world record holding powerlifter, I know the importance of strong abs on maximum power performance. Beyond Crunches is THE text and authority on ab/trunk stability.”

—Dr. Fred Clary, National Powerlifting Champion and World Record Holder
Yes, I Want My Fried Abs NOW!—I'm Done Wasting My Time with Slow Burns and Half-Baked Results

As a former Soviet Union Special Forces conditioning coach, Pavel Tsatsouline already knew a thing or two about how to create bullet-stopping abs. Since then, he has combed the world to pry out this select group of primevaly powerful ab exercises—guaranteed to yield the fastest, most effective results known to man.

According to Pavel, “Crunches belong on the junk pile of history, next to Communism. ‘Feeling the burn’ with high reps is a waste of time!” Save yourself countless hours of unrewarding, if not useless—if not damaging—toil. Get with the program. Make fast gains and achieve blistering, rock-hard abs now.

Fry your abs without the spine-wrecking, neck-jerking stress of traditional crunches—using this radical situp designed by the world’s leading back and muscle function expert, Professor Janda, from Czechoslovakia.

When it came to wanting titanium abs yesterday, the Soviet Special Forces didn’t believe in delayed gratification. Pavel gave them what they wanted. If you want abs that’ll put you in the world’s top 1 percent, this cruel and unusual drill does the trick.

“I have seen many abdominal routines in the last 25 years and the Beyond Crunches program is the best yet.”

—Steve Maxwell, M.Sc., Senior World Brazilian Jujitsu Champion

No one—but no one—has ever matched Bruce Lee’s ripped-beyond-belief abs. What was his favorite exercise? Here it is. Now you can rip your own abs to eye-popping shreds and reclassify yourself as superhuman.

Russian full contact fighters used this drill to pound their opponents with organ-rupturing power, while turning their own midsections into concrete.

1-800-899-5111
24 HOURS A DAY
FAX YOUR ORDER (970) 872-3862
"Power to the People! is absolute dynamite. If there was only one book I could recommend to help you reach your ultimate physical potential, this would be it."

—Jim Wright, Ph.D., Science Editor, Flex Magazine, Weider Group

POWER TO THE PEOPLE!
RUSSIAN STRENGTH TRAINING SECRETS FOR EVERY AMERICAN

By Pavel Tsatsouline
8½" x 11" 124 pages, over 100 photographs and illustrations—$34.95 #B10

How would you like to own a world class body—whatever your present condition—by doing only two exercises, for twenty minutes a day? A body so lean, ripped and powerful looking, you won’t believe your own reflection when you catch yourself in the mirror.

And what if you could do it without a single supplement, without having to waste your time at a gym and with only a 150 bucks of simple equipment?

And how about not only being stronger than you’ve ever been in your life, but having higher energy and better performance in whatever you do?

How would you like to have an instant download of the world’s absolutely most effective strength secrets? To possess exactly the same knowledge that created world-champion athletes—and the strongest bodies of their generation?

Pavel Tsatsouline’s Power to the People!—Russian Strength Training Secrets for Every American delivers all of this and more.

As Senior Science Editor for Joe Weider’s Flex magazine, Jim Wright is recognized as one of the world’s premier authorities on strength training. Here’s more of what he had to say:

"Whether you’re young or old, a beginner or an elite athlete, training in your room or in the most high tech facility, if there was only one book I could recommend to help you reach your ultimate physical potential, this would be it.

Simple, concise and truly reader friendly, this amazing book contains it all—everything you need to know—what exercises (only two!), how to do them (unique detailed information you’ll find nowhere else), and why.

Follow its advice and, believe it or not, you’ll be stronger and more injury-resistant immediately. I guarantee it. I only wish I’d had a book like this when I first began training.

Follow this program for three months and you’ll not only be amazed but hooked. It is the ultimate program for “Everyman” AND Woman! I thought I knew a lot with a Ph.D. and 40 years of training experience…but I learned a lot and it’s improved my training significantly."

And how about this from World Masters Powerlifting champion and Parrillo Performance Press editor, Marty Gallagher:

"Pavel Tsatsouline has burst onto the American health and fitness scene like a Russian cyclone. He razes the sacred temples of fitness complacency and smugness with his revolutionary concepts and ideas. If you want a new and innovative approach to the age old dilemma of physical transformation, you’ve struck the mother-lode."
Here’s just some of what you’ll discover, when you possess your own copy of Pavel Tsatsouline’s *Power to the People!:

- How to get super strong without training to muscle failure or exhaustion
- How to hack into your ‘muscle software’ and magnify your power and muscle definition
- How to get super strong without putting on an ounce of weight
- Or how to build massive muscles with a classified Soviet Special Forces workout
- Why high rep training to the ‘burn’ is like a form of rigor mortis—and what it really takes to develop spectacular muscle tone
- How to mold your whole body into an off-planet rock with only two exercises
- How to increase your bench press by ten pounds overnight
- How to get a tremendous workout on the road without any equipment
- How to design a world class body in your basement—with $150 worth of basic weights and in twenty minutes a day
- How futuristic techniques can squeeze more horsepower out of your body-engine
- How to maximize muscular tension for traffic-stopping muscular definition
- How to minimize fatigue and get the most out of your strength training
- How to ensure high energy after your workout
- How to get stronger and harder without getting bigger
- Why it’s safer to use free weights than machines
- How to achieve massive muscles and awesome strength—if that’s what you want
- What, how and when to eat for maximum gains
- How to master the magic of effective exercise variation
- The ultimate formula for strength
- How to gain beyond your wildest dreams—with less chance of injury
- A high intensity, immediate gratification technique for massive strength gains
- The eight most effective breathing habits for lifting weights
- The secret that separates elite athletes from ‘also-rans’
- How to become super strong and live to tell about it

Russians have always made do with simple solutions without compromising the results. NASA aerospace types say that while America sends men to the moon in a Cadillac, Russia manages to launch them into space in a tin can. Enter the tin can approach to designing a world class body—in your basement with $150 worth of equipment. After all, US gyms are stuffed with hi-tech gear, yet it is the Russians with their metal junkyard training facilities who have dominated the Olympics for decades.

“You are not training if you are not training with Pavel!”

—Dr. Fred Clary
National Powerlifting Champion and World Record Holder.
You may, or may not, want to startle your friends, excite your lovers, scare your enemies and paralyzed your neighbors with envy, but believe me, it's gonna happen when you easily absorb Pavel's breakthrough strength secrets.

Of course, what's most important is how you're gonna feel about yourself. Get real! Toss out your lame rationalizations and pathetic excuses. Stop behaving like a spoilt brat about your infantile levels of strength. Stop hating yourself for banging your head against phony training plateaus. Now you can smash through the glass ceiling of your ignorance and burst into the higher reaches of maximum performance.

Let's face it—it's a delicious feeling to be as strong as a panther—confident, sure-of-yourself, genuinely attractive, a SPECIMEN, THE GENUINE ARTICLE, stalking the streets with evident power and natural grace.

I don't care who you are or what you are, I promise you: grab Pavel's Power to the People! video IMMEDIATELY, plug yourself in—and I MEAN, PLUG YOURSELF IN—do what it says, and you won't believe the new you.

Whatever your current workout program, just download Pavel's strength techniques for an immediate improvement in your results.

• Achieve super-strength without training to muscle failure or exhaustion
• Know the secret of hacking into your 'muscle software' to magnify power and muscle
• Get super strong without putting on an ounce of weight
• Discover what it really takes to develop spectacular muscle tone
• Discover how to mold your whole body into an off-planet rock with only two exercises
• Now you can design a world class body in your basement—with $150 worth of basic weights and in twenty minutes a day
• Discover futuristic techniques to squeeze more horsepower out of your body-engine
• Discover how to maximize muscular tension and get traffic-stopping muscular definition
• Learn why it's safer to use free weights than machines
• How to achieve massive muscles and awesome strength—if that's what you want
• How to master the magic of effective exercise variation
• Know how to gain beyond your wildest dreams—with less chance of injury
• Discover a high intensity, immediate gratification technique for massive strength gains
• Discover the eight most effective breathing habits for lifting weights
• Learn the secret that separates elite athletes from 'also-rans'
Brash and insightful, *Power to the People* is a valuable compilation of how-to strength training information. Pavel Tsatsouline offers a fresh and provocative perspective on resistance training, and charts a path to self-improvement that is both practical and elegantly simple. If building strength is your top priority, then *Power to the People* belongs at the top of your reading list. —Rob Fugin, author of Natural Hormonal Enhancement

“I learned a lot from Pavel’s books and plan to use many of his ideas in my own workouts. *Power to the People* is an eye-opener. It will give you —and valuable —perspectives on strength training. You will find plenty of ideas here to make your training more productive.” —Clarence Bass, author of Ripped 1, 2 & 3.

“A good book for the athlete looking for a routine that will increase strength without building muscle mass. Good source of variation for anyone who’s tired of doing standard exercises.” —Jonathan Lawson, IronMan Magazine

“I have been a training athlete for over 30 years. I played NCAA basketball in college, kick boxed as a pro for two years, made it to the NFL as a free agent in 1982, powerlifted through my 20’s and do Olympic lifting now at 42. I have also coached swimming and strength athletes for over 20 years. I have never read a book more useful than *Power to the People!* I have seen my strength explode like I was in my 20’s again—and my joints are no longer hurting.” —Carter Stamm, New Orleans, LA

“I have been following a regimen I got from *Power to the People!* for about seven weeks now. I have lost about 17lbs and have lost three inches in my waist. My deadlift has gone from a meager 180lbs to 255 lbs in that short time as well.” —Lawrence J. Kochert

“Like *Beyond Stretching and Beyond Crunches*, his other books, this is great. I think that it is the best book on effective strength training that I have ever read. This is not a book just about theory and principles. But Tsatsouline provides a detailed and complete outline of an exact program to do and how to customize it for yourself. It is very different from anything you have probably every read about strength training. The things he teaches in the book though won’t just get you strong, if you want more than that, but can make you look really good—lean, ripped, and/or real big muscled if you want it. It’s a very good book; the best available English-language print matter on the topic of strength training.” —Dan Palzik

“The great thing about the book *Power to the People!* is that it tells the readers what not to do when training for strength and why not. As you read the book, you will keep saying to yourself: ‘so that’s why I’m not getting stronger!’ Pavel points out all the things that are wrong with conventional weight training (and there is lots of it) and shows the readers what they need to do to get stronger, but not necesssarily bigger.” —Sang Kim, Rome, GA

“Using Pavel Tsatsouline’s weight training methods from his book *Power to the People* gives you the feeling that you can take on the world after only a 20-30 minute workout! Tsatsouline’s book is written with such cleverness, clarity, and detail that I couldn’t put it down. I am thoroughly enthusiastic about weight training where my past indoor training consisted only of Yoga postures. I would recommend this book to anyone interested in enhancing their performance on the job, in weight training, and in other athletic pursuits.

Pavel’s genius is that he can take a complex subject like weight training and design a program that is enjoyable, efficient and gets fast results. He has done the same thing for abdominal development and stretching.” —Dill D.V., Honolulu, Hawaii

“I have experienced Pavel Tsatsouline’s methods up close and in person, and his scientific approach lays waste to the musclehead garbage that we’ve been conditioned to follow. Pavel will show you how to achieve a full body workout with just two core exercises and $150 worth of barbell equipment. You won’t get injured and you won’t get stiff. You’ll just get what you were looking for in the first place - a program that works and one that you’ll stick with.” —David M Ganes, Bellevue, WA

“It isn’t growth hormone... it’s Pavel!” This is THE definitive text on the art and science of strength training... and that’s what it’s all about, power! Page after page of the world’s most useful and productive strength-training practices are explained in this book. A lot of experienced lifters, who think that they know how to train, will be humbled when they find out how much better Pavel’s system is than anything the western iron-game community has ever done. I have surpassed all my previous bests...and I no longer need or use lifting belts. I learned how to up-regulate tension through his “feed-forward” technique, how to immediately add AT LEAST ten pounds to every lift via “hyperradiation”, and to do it in my best form ever, and how to gain on every lift WEEKLY through the Russian system of periodization without any plateau! Seriously, I gain every week! You only need TWO exercises! Pavel explains which ones, how to do them and how often. Also, you’ll learn how to train to SUCCESS, not to “failure”, how to immediately turn any lift into a “hyper lift”, teach your nervous system how not to ever “miss” a lift, and simultaneously make your body far less injury-prone! Pavel illustrates the two types of muscle growth and which one you REALLY need, and the all-important power breathing. Pavel’s training is the most valuable resource made available for strength athletes since the barbell. The breathing techniques alone are worth the asking price. This book is my personal favorite out of all his works, and in my opinion, they should be owned as a set. This book is superior to all the muscle maps and books that dwell on a content of essential details of today’s “fitness culture” and yet never fully explain the context of training for strength. Pavel cuts right to the heart of the “mystery of the muscle mystery”, by explaining the all-important context of the Russian system: quick, efficient, permanent strength gains, without spending a small fortune on “me-too” bodybuilding supplements and without unnecessary, time consuming overtraining. Now I only hope he writes a book on full-contact training...” —Sean Williams, Long Beach, NY

“This is a real source of no-holds-barred information on how to build strength without adding bulk. I learned some new things which one can’t find in books like ‘Beyond Brains’ or ‘Dinosaur Training’. Perhaps an advanced powerlifter, who reads Milo, already knows all that stuff, but I would definitely recommend this book to everyone from beginners to intermediates who are interested in increasing their strength.” —Nikola Pastourenko, Tallahassee, Florida

“Forget all of the fancy rhetoric. If you are serious about improving your strength and your health buy this book and pay attention to what’s provided. I started in January 2000 doing deadlifts with 200 lbs. Three months later I was at 365 lbs. Pavel knows what he is talking about and knows how to explain it simply. That’s it.” —Alan, Indiana
The Russian Kettlebell Challenge
Xtreme Fitness for Hard Living Comrades
with Pavel Tsatsouline, Master of Sports

Item # V103     $39.95
Video Running Time: 32 minutes

If you are looking for a supreme edge in your chosen sport—seek no more!

Both the Soviet Special Forces and numerous world-champion Soviet Olympic athletes used the ancient Russian Kettlebell as their secret weapon for xtreme fitness. Thanks to the kettlebells’s astonishing ability to turbocharge physical performance, these Soviet supermen creamed their opponents time-and-time-again, with inhuman displays of raw power and explosive strength.

Now, former Spetznaz trainer, international fitness author and nationally ranked kettlebell lifter, Pavel Tsatsouline, delivers this secret Soviet weapon into your own hands.

You NEVER have to be second best again! Here is the first-ever complete kettlebell training program—for Western shock-attack athletes who refuse to be denied—and who’d rather be dead than number two.

• Get really, really nasty—with a commando’s wiry strength, the explosive agility of a tiger and the stamina of a world-class ironman.
• Own the single best conditioning tool for killer sports like kickboxing, wrestling, and football.
• Watch in amazement as high-rep kettlebells let you hack the fat off your meat—without the dishonor of aerobics and dieting.
• Kick your fighting system into warp speed—with high-rep snatches and clean- and-jerks
• Develop steel tendons and ligaments—and a whiplash power to match
• Effortlessly absorb ballistic shocks—and laugh as you shrug off the hardest hits your opponent can muster
• Go ape on your enemies—with gorilla shoulders and tree-swinging traps

An ancient Russian exercise device, the kettlebell has long been a favorite in that country for those seeking a special edge in strength and endurance.

It was the key in forging the mighty power of dinosaurs like Ivan “the Champion of Champions”, Poddubny. Poddubny, one of the strongest men of his time, trained with kettlebells in preparation for his undefeated wrestling career and six world champion belts.

Many famous Soviet weightlifters, such as Vorobyev, Vlasov, Alexeyev, and Stogov, started their Olympic careers with old-fashioned kettlebells.

Kettlebells come in “poods”. A pood is an old Russian measure of weight, which equals 16kg, or 36 pounds. There are one, one and a half, and two pood K-bells, 16, 24, and 32kg respectively.

To earn his national ranking, Pavel Tsatsouline had to power snatch a 32kg kettlebell forty times with one arm, and forty with the other back to back and power clean and jerk two such bells forty-five times.

Soviet science discovered that repetition kettlebell lifting is one of the best tools for all around physical development. (Voropayev, 1983) observed two groups of college students over a period of a few years. A standard battery of the armed forces FT tests was used: pullups, a standing broad jump, a 100m sprint, and a 1k run. The control group followed the typical university physical training program which was military oriented and emphasized the above exercises. The experimental group just lifted kettlebells. In spite of the lack of practice on the tested drills, the KB group showed better scores in every one of them.

The Red Army, too pragmatic to waste their troopers’ time on pushups and situps, quickly caught on. Every Russian military unit’s gym was equipped with K-bells. Spetznaz, Soviet Special Operations, personnel owe much of their wiry strength, explosive agility, and never quitting stamina to kettlebells. High rep C&Js and snatches with K-bells kick the fighting man’s system into warp drive.

In addition to their many mentioned benefits, the official kettlebell lifts also develop the ability to absorb ballistic shocks. If you want to develop your ability to take impact try the official K-bell lifts. The repetitive ballistic shock builds extremely strong tendons and ligaments.

The ballistic blasts of kettlebell lifting become an excellent conditioning tool for athletes from rough sports like kickboxing, wrestling, and football. And the extreme metabolic cost of high rep KB workouts will put your unwanted fat on a fire sale.
The Russian Kettlebells are only available to customers resident in the U.S. mainland. Normal shipping charges do not apply. No rush orders on kettlebells. See chart below for shipping charges.

Each authentic Russian Kettlebell is manufactured exclusively by Dragon Door Publications in traditional weight sizes. The kettlebells are made out of solid cast iron and are coated in the highest quality scratch and rust resistant cathodic epoxy gloss. These kettlebells are designed to last a lifetime—and beyond.

Special warning: the Russian Kettlebell is an Xtreme Edge Fitness Tool for serious workout fiends. It is not a Barbie toy! Treat your kettlebell lifting with the utmost care, precision and respect. Watch Pavel’s kettlebell video many, many times for perfect form and correct execution. If possible, sign up for one of Pavel’s upcoming Kettlebell Training Bootcamp/Certification programs. Lift at your own discretion! We are not responsible for you boinking yourself on the head, dropping it on your feet or any other politically-incorrect action. Stick to the Party line, Comrade!
Both the Soviet Special Forces and numerous world-champion Soviet Olympic athletes used the ancient Russian Kettlebells as their secret weapon for extreme fitness. Thanks to the kettlebell's astonishing ability to turbocharge physical performance, these Soviet supermen creamed their opponents time-and-time-again, with inhuman displays of raw power and explosive strength.

Now, former Spetznaz trainer, international fitness author and nationally ranked kettlebell lifter, Pavel Tsatsouline, delivers this secret Soviet weapon into your own hands.

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The Russian Kettlebell Challenge—Xtreme Fitness for Hard Living Comrades

By Pavel Tsatsouline
Paperback 170 pages $34.95

Section One
The History of the Russian Kettlebell—How and Why a Low-Tech Ball of Iron Became the National Choice for Super-Tech Results

Vodka, pickle juice, kettlebell lifting, and other Russian pastimes

'The working class sport'

Finally: Xtreme all around fitness!

Why Soviet science considers kettlebells to be one of the best tools for all around physical development...

Kettlebells in the Red Army

The perfect physical conditioning for military personnel—the vital combination of strength and endurance....

Girevoy sport delivers unparalleled cardio benefits.... why Spetsnaz personnel owe much of their wiry strength, explosive agility, and stamina to kettlebells....

Section Two
Special Applications—How the Russian Kettlebell Can Dramatically Enhance Your Chosen Endeavor

Kettlebells for combat sports

Russian wrestlers do lion’s share of conditioning with kettlebells.... Why KB one arm snatches work better than Hindu squats.... KB’s strengthen respiratory muscles.... boxers appreciate newfound ability to keep on punching.... KB’s reduce shoulder injuries....

Why Russian lifters train with kettlebells

Famous Soviet weightlifters start Olympic careers with KB’s.... Olympic weightlifters add KB’s for spectacular gains in shoulder and hip flexibility.... for developing quickness.... overhead kettlebell squats unmatchable in promoting hip and lower back flexibility for powerlifters....

Get huge with kettlebells—If you wish

Why the girevoy is superior to the dumbbell or barbell, for arm and chest training.... how to gain muscle size doing KB J&J’s.... repetition one arm snatches for bulking up your back, shoulders, and biceps.... incorporating KB’s into drop sets—for greater mass and vascularity.

Kettlebells for arm-wrestlers

World champion arm wrestler gives KB’s two thumbs up.... why the kettlebell is one of the best grip and forearm developers in existence....

Getting younger and healthier with kettlebells

The amazing health benefits of KB training.... Doctor Krayevskyi’s 20-year age-reversal.... successful rehabilitation of hopeless back injuries with kettlebells....

How kettlebells melt fat and build a powerful heart—without the dishonor of dieting and aerobics

Spectacular fat loss.... enhanced metabolism.... increased growth hormone.... a remarkable decrease in heart rates....

Section Three
Doing It—Kettlebell Techniques and Programs for Xtreme Fitness

Why Kettlebells?

The many reasons to choose K-bells over mainstream equipment and methods.... KBs suitable for men and women young and old.... perfect for military, law enforcement and athletic teams....

Girevoy sport—a ‘working class’ answer to weightlifting and plyometrics.... promoting shoulder and hip flexibility.... best bet for building best-at-show muscles.... highly effective for strengthening the connective tissues.... fixing bad backs.... cheap and virtually indestructible.... promotes genuine ‘all-around fitness’—strength, explosiveness, flexibility, endurance, and fat loss.

The program minimum

The Russian Kettlebell Challenge workout: the program—maximum

Pavel’s own free style program.... the top ten Russian Kettlebell Challenge training guidelines.... how often and how long to train....

The kettlebell drills: Explode!

Swing/snatch pull

Clean

The key to efficient and painless shock absorption.... making the clean tougher.... the pure evil of the two K-bells clean.... seated hang cleans, for gorilla traps and shoulders....

Snatch

The one-arm snatch—Tsar of kettlebell lifts

Under the leg pass

A favorite of the Russian military—great for the midsection.

Jerk, Clean & Jerk

Jump shrug

The kettlebell drills: Grind!

Military press

How to add and maximize tension for greater power.... One hundred ways to cook the military press.... The negative press.... the ‘powerlifter’s secret weapon for maximal results in your lifts.... why to lift what you can’t lift....

Floor pullover and press

Good morning stretch

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I can’t say I’ve read many books on flexibility with the wit and clearheaded wisdom I found in Pavel’s Relax Into Stretch. Tsatsouline delivers the how-and-why of progressive techniques for achieving suppleness, from simple yoga stretching to advanced neuromuscular facilitation, without burying the reader in hocus-pocus or scientific jargon. Tsatsouline’s Relax Into Stretch provides an alternative: straightforward and practical techniques that don’t require a lifetime to master.

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• How to fool your reflexes into giving you all the stretch you want
• Why contract-relax stretching is 267% more effective than conventional relaxed stretching
• How to breathe your way to greater flexibility
• Using the Russian technique of Forced Relaxation as your ultimate stretching weapon
• How to stretch when injured—faster, safer ways to heal
• Young, old, male, female—learn what stretches are best for you and what stretches to avoid
• Why excessive flexibility can be detrimental to athletic performance—and how to determine your real flexibility needs
• Plateau-busting strategies for the chronically inflexible.

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Pavel Tsatsouline, Master of Sports is a former Soviet Special Forces physical training instructor who currently trains the US Marines and S.W.A.T. teams. Pavel was nationally ranked in the Russian ethnic strength sport of kettlebell lifting and holds a Soviet Physical Culture Institute degree in physiology and coaching. He is a contributing editor for Muscle Media magazine and the author of five books including Relax into Stretch.