

## Core Training - Lower Back and Abdominals

One of the most common health problems in the world is lower back pain, apparently second only to the common cold. The area of the body least exposed to physical exercise through its fullest range of natural movement is the lower back and abdominal cavity. This is because day to day physical activity in the 21st century is minimal, with very little twisting, turning, bending and crunching of the abs and core region. The lower back is seldom ever used in a functional, direct way by most adults. Incorrect posture, poor lifting technique, and general muscle deterioration caused by non-use are the main culprits. If you don't use it, you lose it - very simple.

[core] the central or innermost part / the basic or most important part / the essence / the central portion of the earth below the mantle, beginning at a depth of about 2,900 kilometers (1,800 miles) and probably consisting of iron and nickel. It is made up of a liquid outer core and a solid inner core

## The Weak Links

Athletes committed to resistance training frequently avoid training their lower back, abs, intercostals, and obliques, and yet these minor body parts, although not particularly large, are the body's potential weakest links. When they go (especially the lower back), everything else has to wait. The lower back is very seldom targeted as a separate body part to work and condition in North American gyms, but in many European athletic circles for example, it is considered absolutely essential. Ultimately, your torso and midsection can determine success if

protected, or failure when injured. Virtually all lower back stiffness and pain could be eliminated by training the whole body, proportionately and symmetrically, and including core exercises such as hyperextensions, reverse back extensions, hanging leg raises, knee kicks & scissors, woodchops, crunches and Swiss Ball curl-ups.

Core training is perhaps the least enjoyable phase of the workout, and yet probably the most important. The core is the power center, and this is something I learned as a hammer thrower (not as a bodybuilder). In discus, shot, javelin and hammer, core strength is second only to technique. In the hammer, you must have a strong core to counter the centrifugal force generated by swinging & turning the implement. The movements of the hammer and those of the thrower may be seen as two diametrically opposed masses making a rotation around a common rotating axis. This axis is the core. The aim of the hammer thrower is to deliver the hammer at maximal velocity at an optimal angle. This is why parallel to the training of hammer-throw technique, the entire abdominal region and lower back muscles, including the iliocostalis, longissimus, serratus posterior and multifidi, must be strengthened.



Building chest, back and arms without attention to the midsection will lead to eventual disproportion and undue strain on the lumbar muscles and vertebrae. Movements such as squats, overhead presses and bent-over rowing also demand extra support and strength from the midsection. Without a strong and well developed lower back, you can forget about moving forward in the deadlift or squat. If the lower back is weak and underdeveloped, the tendency is to lean forward as you squat down from the standing position. This displaces the weight of the barbell too far forward, ultimately straining the lower back and subjecting the vertebrae of the spine to potential destructive forces.

## Abdominal Training is Paramount

Abdominal training is paramount. Contracting, rotating and bending the muscle fibers of the core throughout the entire region of the midsection causes internal compression of the stomach and intestines, forcing food and waste matter to move along more efficiently. This is why I always include twisting with a 6' wooden pole in my warm-up. Digested food is absorbed from the intestinal lumen into the body more efficiently. Waste and toxic chemicals retained in the body through overeating and inactivity cause the body to decay and degenerate. Clog the pipes and everything backs up. Every channel of elimination must remain open and clear to facilitate removal of waste, allowing the body to function with high energy and optimum health.

The bowels in particular must be evacuated twice daily or the body will become a cesspool...an inevitable feeding ground for pathogenic bacteria and harmful micro-organ-

isms. If garbage from our home is not removed routinely and efficiently, it attracts insects and vermin which infest, multiply and spread disease. In time if left unattended, the garbage itself also begins to deteriorate, becoming a source of putrefying rot and contagious pathogens which proliferate and spread.

The insects and pathogens do not cause the garbage to collect in the first place; they simply take advantage of it because they are opportunistic organisms. The same is true for the waste we generate inside our own bodies. It isn't caused by parasites, germs and bacteria, but they will thrive on it if it builds up inside of us. Health is absolutely related to the environment YOU create and manage inside your own body. Keep it clean and keep it moving and your chances of catching anything other than a big wave or a basketball are minimal.

## Keep the System Clean

The key is to keep the system clean and remove the garbage as quickly as possible. This is exactly what happens when you work out, especially when you directly target the core region, the center of our body's universe. Lower back and abdominal work can be incorporated as part of your warm-up routine using medium-high reps and light-weights or just your bodyweight. Or you can see it as a function of specialized core training before or after a major body part, using overload principles. Use a variety of exercises to train the core region from all angles. "Walk around" your core once a week. By all means work the rectus abdominus, but don't neglect other important core muscles such as the transversus, internal & external obliques, serratus, internal & external intercostals, longissimus,