



Spinal Fitness

Training on the PowerCushion™

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The two exercises performed on the
PowerCushion™ are:

- The Sit Up
- The Pelvic Tilt

The Sit Up



To perform the sit up, place the lower back snugly against the flat side of the PowerCushion™ and lean slightly back into the cushion. This will keep slight tension in the abdominal musculature.



When beginning the sit up, concentrate on breathing. By breathing in, you will find your upper trunk is naturally pulled over the cushion.

With a deep breathe in, lay your upper trunk over the cushion. Try to look backwards with the eyes to help tilt the head backwards to get the best range of motion possible.

To reverse the sit up, breathe out. You will feel this naturally work with your abdominal musculature to bring yourself back to the sitting position which was your starting position where you keep yourself slightly pressed against the cushion.

Keeping the trunk slightly pressed against the cushion keeps the exercise control in concise eccentric-concentric contractions that keep the musculature constantly tensed.

We recommend beginning with the hands in front of the body as if they were holding small weights. When breathing in, open up the arms as you extend backwards.

Using the hands in this manner help accentuate the breathing process and facilitate a better coordinated muscular exercise.

Biomechanical force analysis has demonstrated to their optimal range and direction of pull that this exercise is external oblique dominate. From performing the sit up, you will begin to observe development in your external obliques.

A common question for beginners is usually:

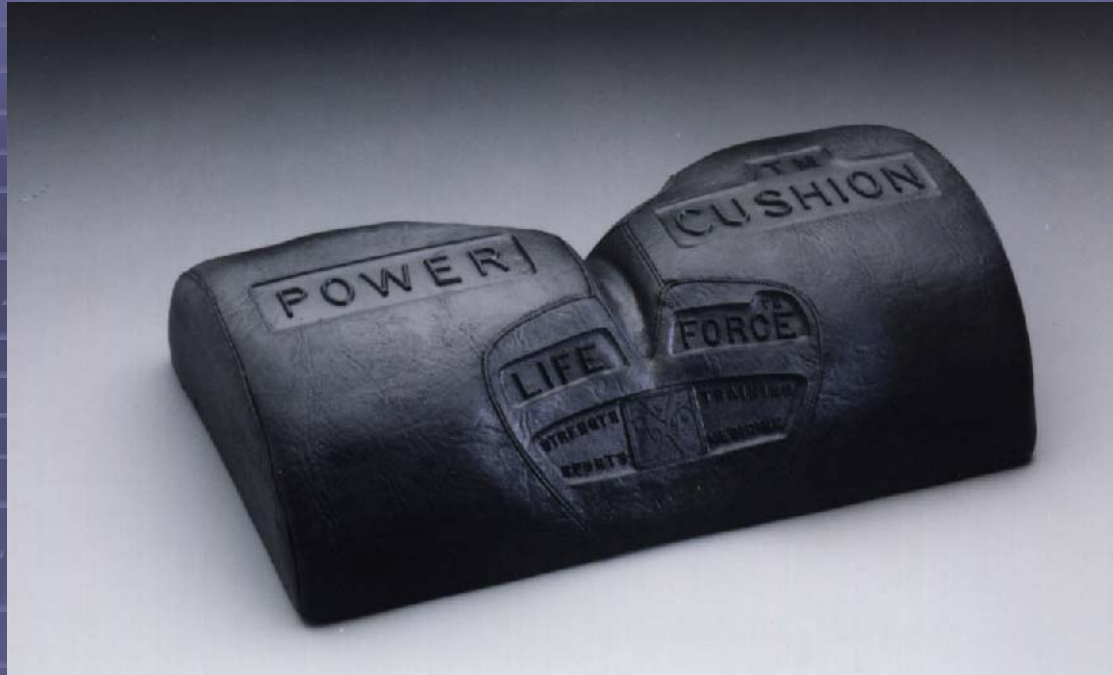
“How much do I do?”

There are some simple rules to follow to answer this question.

First of all, what is the physical state of the individual that is beginning the exercise?

A number one rule is that everyone beginning an exercise program first obtain a health evaluation from a fitness or health care professional. A physical evaluation of the individual beginning this or any exercise is an absolute must.

When you exercise on the PowerCushion™ you do so at your own risk. We can show you about the exercises but we cannot be there in person to evaluate your physical condition or train you in person. Understand that we cannot accept responsibility for your conditions or how you use the training. Always be evaluated by a health care or strength and conditioning professional before beginning and while performing this or any exercise.



The PowerCushion™ comes in three densities and is color coded to that effect.

The green PowerCushion™ is very soft and is recommended for those beginning the exercise. This is especially a must for those that are injured, elderly or beginning with stiffness and soreness.

The blue PowerCushion™ is a medium density. This would be a cushion people progress to after they can adequately perform on the green PowerCushion™.

The Blue PowerCushion™ is a general standard for a family that will serve anyone from the elderly to the young.

The black PowerCushion™ is a firm density. This cushion is for people that want to truly better their athletic ability. It will provide a firm fulcrum that will require the exerciser's back to go through an extensive range of motion.

Typically a person is introduced to the PowerCushion™ by someone that knows how to it works and how to perform the exercises. The person exercising is shown the exercises and a trainer observes their physical condition. Depending on the trainer's findings, the person is then started out on the cushion that fits their need most appropriately.

Typically exercise begins with sets of 5 to 10 repetitions. This is a good place to start the first time. The next day the same set can be completed. Typically people are advised that progressing in duration of repetitions can increase once the current repetition amount no longer feels as if the exerciser did any work. This means that they did not feel any muscle strain and feels as if they did not even stretch out the back. This typically means that at the current level of exercise, the muscles and flexibility in their back have improved to a point that they need to increase the current level of exercise to induce greater flexibility and muscle strength.

Exercises sets can be increased 5 to 10 repetitions at a time to keep the progression well under control so the exerciser does not exceed their body's ability to function. Typically anyone from the young to the old will eventually be able to perform 25 to 50 repetitions while athletes will perform 50 to 100 repetitions.

The Pelvic Tilt



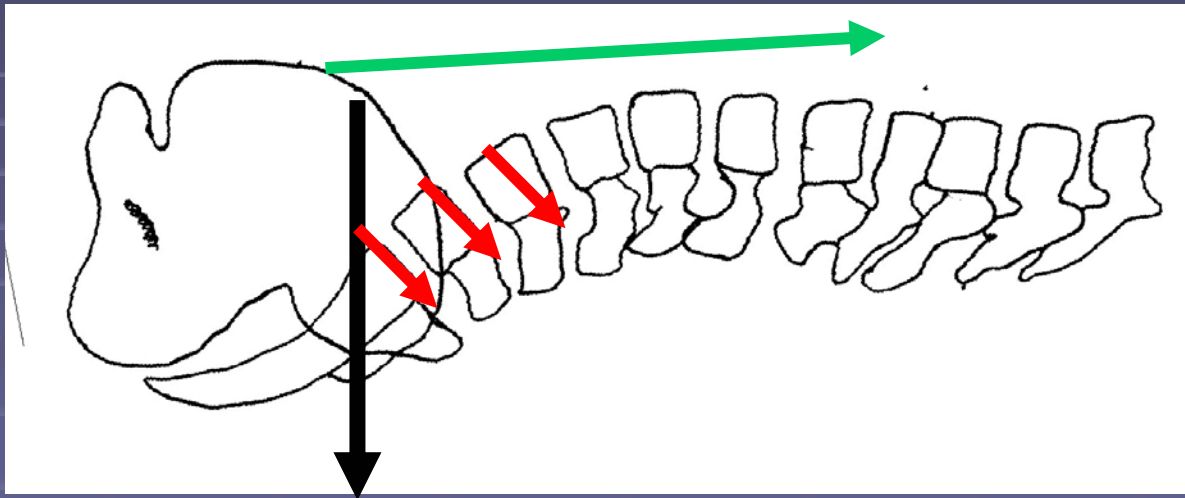
The pelvic tilt begins by laying over the cushion and placing the buttocks in the rounded out portion of the PowerCushion™ so the exerciser has adequate range of motion to move through. A weight is placed vertically on the anterior superior iliac spines of the pelvis.



This weight can easily be provided by an exercise partner. The partner must, however, never push quickly or release the pressure quickly. An actual weight may be used or another resistance found and used. The resistance by the partner is applied at the level that the exercising individual feels comfortable with or what they can easily lift.

The superior weight is essential as its direction of force combined with the direction of pull of the rectus abdominus create a posterior shearing force essential to putting the joints into orthopedic alignment.

Pull of muscle effort



Pull of weight down

The weight down plus the pull of the muscle create posterior shear forces on the joints locking them into stability.

Biomechanical analysis has determined that the rectus abdominus muscle provides the optimal range and direction of pull during this exercise. Therefore, the exercising person should see development of their rectus abdominal musculature.

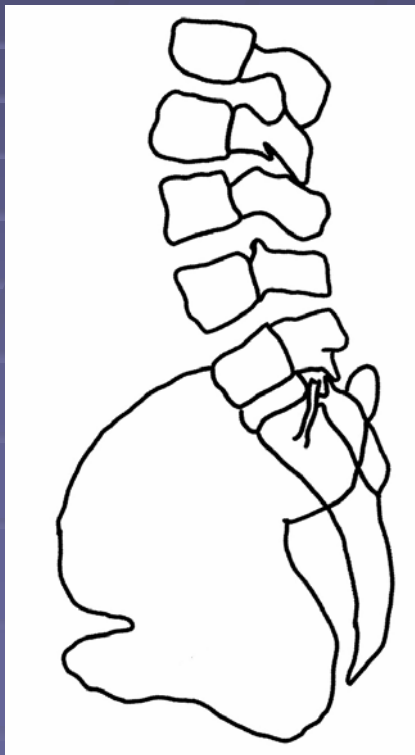
It does not matter on this exercise if the exerciser breathes in or out because the breathing apparatus is not working with the exercise as it is in the sit up.

The rectus abdominal muscles should, upon contraction, lift and tilt the pelvis toward the upper trunk. Hence the name, the pelvic tilt.

In this exercise the origin of the rectus abdominus is the xiphoid process and the insertion on the symphysis pubis. Since the upper trunk is the origin, the upper trunk must be stabilized and not allowed to move as the lower trunk and pelvis moves toward the upper trunk.

Typically 5 to 10 repetitions is a good place to start. The appropriate PowerCushion™ that first created a comfortable position for the exerciser should be the one used. As the lower back improves in strength, then more repetitions and a firmer cushion can be implemented similarly to the sit up.

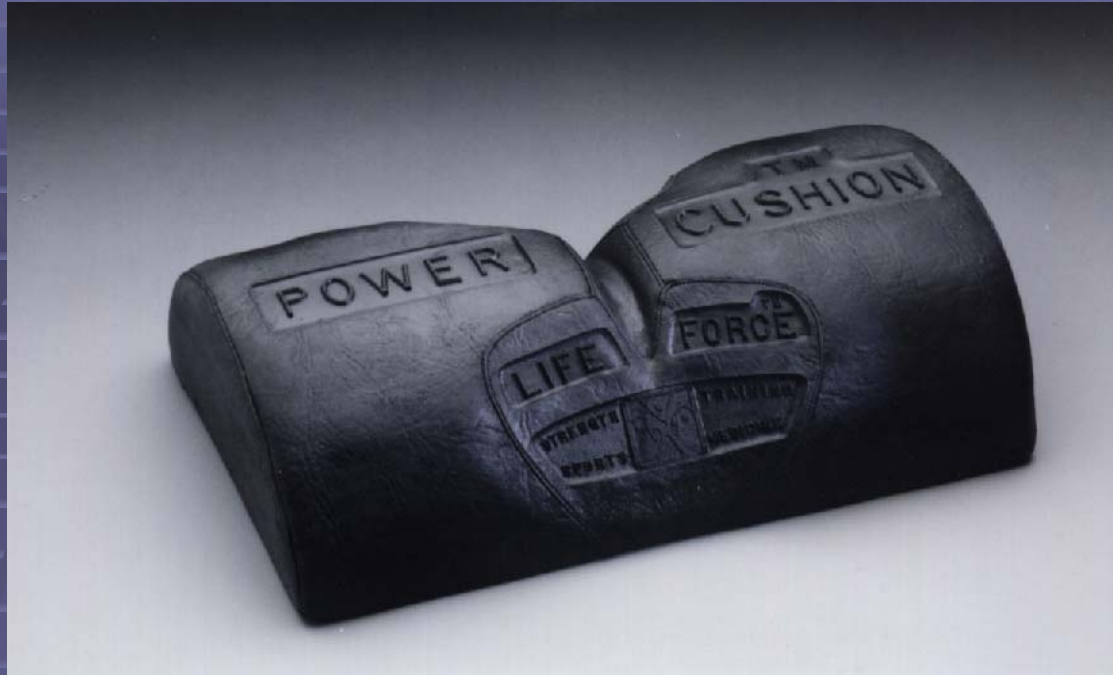
If you are injured, to have resolution of injury (to be as good as new), restoration of proper structure and function is a must. That means that to heal properly, you need to get the proper abdominal musculoskeletal structure and function.



This means you need treatment that will give you this structure with the joints orthopedically correct.

If you want to be your best physically, possessing the proper abdominal musculoskeletal structure is a must.

That means training that will give you the proper musculoskeletal. Structure with joints that are orthopedically correct.



The PowerCushion™ and its simple training and treatment exercises are designed to provide you with strengthening, conditioning and treatment modalities for producing the proper strong, healthy abdominal musculoskeletal complex.