

INTERNATIONALL
FITNESS COLLEGE

PILATES. MAT 1

MANUAL



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CHAPTER 1. THE HISTORY AND PHILOSOPHY OF PILATES

The Pilates method as it is now known, is an exercise system focused on improving flexibility, strength, and body awareness, without necessarily building bulk. The method is a series of controlled movements performed on specially designed spring-resistant exercise apparatus (the Reformer, the Cadillac, the Spine Corrector, the Ladder Barrel, and the Wunda Chair) or on the floor (mat work), and the sessions are supervised by specially trained instructors. Pilates is resistance exercise, not aerobic (cardio), although the heart rate will certainly rise for a deconditioned individual.

Two of the key elements of Pilates are core muscle strength and spinal alignment. The core musculature is loosely defined as the spine, abdomen, pelvis, hips, and the muscles that support these structures. Some of the main core muscles are the erector spinae (located in your back along your spine), the internal and external obliques (the sides of your abdomen), the transverse abdominis (located deep in your gut, this muscle pulls your belly button in toward your spine), the rectus abdominis (the «six-pack»), and hip flexors (in your pelvis and upper leg).

During a Pilates session, whether it's on the machines or the floor, your instructor will continuously prompt you to concentrate deeply on your core muscles, as well as on your breath, the

contraction of your muscles, and the quality (not quantity) of your movements. These are also key elements of Pilates, and your instructor will emphasize them at every session. The objective is a coordination of mind, body, and spirit, something Joseph Pilates called «Contrology». In his first book published in 1945, Pilates' Return to Life Through Contrology, the 34 original exercises that Pilates taught to his students are described along with the guiding principles of contrology.

There are 1,500 Pilates studios in the United States and more than 500 in England. The first Pilates Institute was founded in Moscow in 2003.



*Joseph and
Clara
Pilates*



Brief Biography of the founder of the Pilates method Joseph Pilates

Pilates takes its name from Joseph Pilates. A German-born emigré to Britain and then America, he devised the Pilates method as a new approach to exercise and body-conditioning in the early decades of the last century.

Joseph Pilates was born near Dusseldorf in 1880. His father had been a prize winning gymnast and his mother a naturopath who believed in stimulating the body to heal itself without the use of artificial drugs. Joseph was born a small and sickly child, he was affected by rickets, asthma and rheumatic fever. This made him a target for bullies. He became determined to overcome his ailments and self educated himself in human anatomy, gymnastics, yoga and martial arts. He took up body-building, to the point where by his teens he was getting work as a model for anatomical drawings.

Pilates was perhaps the first influential figure to combine Western and Eastern ideas about health and physical fitness. He researched and practised every kind of exercise he could. This ranged from classical Roman and Greek exercise regimes to body-building and gymnastics. He set this alongside practising the Eastern disciplines of yoga, tai chi, martial arts and Zen meditation. Additionally, he studied anatomy and animal movements. Dedicated to his task, he sampled every kind of exercise that he could and carefully recorded the results.

There is a famous story about Pilates' inspiration for his unique apparatus. Before World War I he was touring England as a circus

performer and professional boxer, and even teaching self-defence to the Scotland Yard police force. But when war broke out, he found himself interned in England as an enemy alien on the Isle of Man.

The health conditions in the internment camps were not great, but Pilates insisted that everyone in his cell block participate in daily exercise routines to help maintain both their physical and mental well-being. However, some of the injured German soldiers were too weak to get out of bed. Not content to leave his comrades lying idle, Pilates took springs from the beds and attached them to the headboards and footboards of the iron bed frames, turning them into equipment that provided a type of resistance exercise for his bedridden «patients». Such were the origins of the first Pilates machines now known as the Pilates reformer. In their early incarnation the Pilates reformer was shaped like a sliding bed and used springs as resistance.

Pilates legend has it that during the great flu epidemic of 1918, not a single one of the soldiers under his care died. He credited his technique (which he called «Contrology») for the prisoners' strength and fitness – remarkable under the less than optimum living conditions of internment camps, which were hit especially hard by this deadly flu.

In 1923, Pilates moved to America. He opened his first studio in New York along with Clara, his wife and assistant, whom he had met on the Atlantic crossing.

His new method was an instant hit, particularly among dancers such as Martha

Graham and George Balanchine. Other dancers also became devotees. They found the Pilates method the best way both to recover from injuries and to prevent their recurrence. Gradually, a wider audience got to hear of it the method.

In explaining Controlology's guiding principle, he liked to quote Schiller: 'It is the mind itself which builds the body'.

The Pilates method did not return to Britain until 1970. Brought back to this country by Alan Herdman. Herdman had been asked by the London School of Contemporary Dance to visit New York and investigate the methods of Joseph Pilates. Herdman established Britain's first Pilates studio at The Place in London that year.

CHAPTER 2. THE BASIC AND ADDITIONAL PRINCIPLES OF PILATES

It is important to note that Joseph Pilates did not directly set out the Pilates principles. They are concepts distilled from Joseph Pilates' work by later instructors. Because of this, there is not always agreement in the Pilates community about the order of the principles, the specific words used for certain concepts, or the number of principles. Nevertheless, you will find some version of the Pilates principles to be part of almost any Pilates training program you pursue.

The 6 essential principles of the Integrative Mind-Body-Spirit Approach of Pilates are following:

- Centering
- Concentration
- Control
- Precision
- Breath
- Flow

Whether one is working out on a mat or using Pilates equipment, like the reformer or cadillac, these basic principles infuse each exercise with intention and fullness of expression:

1. Centering / «POWERHOUSE»

This concept is defined as physically bringing the focus to the center of the body, the powerhouse area between the lower ribs and pubic bone. Energetically, Pilates exercises are sourced from the center.

The muscles of the center are:

- pelvic floor muscles
- The muscles of the inner thigh
- Gluteus muscles
- Muscles of the lower back (outer and inner layer)
 - Abdominal muscles (rectus abdominis muscle, external oblique muscle, internal oblique muscle, transverse muscle)
 - Diaphragm.

This principle is the basis of the spine and pelvis stabilization Pilates exercises. The energy is circulating from the Powerhouse to legs and arms coordinating the body movements. That is why it is critical to pay attention to this area and to engage

all of the center muscles by an effort of the consciousness. All the exercises start with toning and strengthening the center area as if you were trying to tighten corsets. This will help you to take the load off the lower back.

In some training methods the accent is on the working on the outer abdominal muscles (as people dream about «six pack»). As a result, the abdomen moves away from the spine, the muscles are pushed outward, the lower back weakens and it becomes difficult to hold the lower back. It also happens that the developed middle part of the body supports the back with tight (pumped) muscles and the formation of the waist in this case becomes impossible.

The Pilates method is absolutely different in this concern: the accent here is on the «bringing your navel to your spine». It helps to strengthen and to stretch the lower back muscles and also to help with flattening the abdominal wall. This movement is often confused with the drawing in the abdomen, which automatically causes the breath to be held, which is contrary to the principles of the method. Therefore, it is extremely important to distinguish between these two movements and understand the difference between them.

In addition to bringing the navel closer to the spine and tension of the abdominal muscles, it is also necessary to always engage other muscles of the center to work: to strain the buttocks, inner thighs, pelvic muscles and, only having the entire center engaged, you should begin the movement.

«Abdomen is the powerhouse of our organism». (J. Pilates)

«Bring your navel to your spine». This will help you to strengthen several large muscle groups and the musculature located deep within the abdominal area. From our center we support our spine and major organs, strengthen the back and improve alignment and posture. With a properly developed center we are less vulnerable to fatigue and lower-back pain.

2. Breath – LATERAL, INTERCOASTAL

Joseph Pilates emphasized using a very full breath in his exercises. He advocated thinking of the lungs as a bellows – using them strongly to pump the air fully in and out of the body. Most Pilates exercises coordinate with the breath, and using the breath properly is an integral part of Pilates exercise.

We use the breathing technique in Pilates to improve the activation of the deep tummy muscle and pelvic floor.

As you inhale your diaphragm contracts and flattens, which pushes your internal organs further down into the abdominal cavity forcing the pelvic floor muscle and abdominal muscles to control a slight release in order to accommodate extra space for the organs.

As we exhale the diaphragm moves back up into the chest cavity and we have a natural reflex of our pelvic floor and transverse abdominus muscle contracting. Therefore we want to train our core in the same way by exhaling when we want our 'core' to be most active during movement. Exhale on the effort part of the exercise for best technique.

Try this: Take a deep breath into the base of your lungs, feel the ribs expand out to the sides. Now as you exhale imagine you are blowing 100 candles out on a cake in order to breath out all the air from your lungs.

Extending of the ribs during an inhale using lateral breathing. Stomach muscles are stabilizing the core as a corset.

3. Concentration: If you bring full attention to the exercise and do it with full commitment, you will obtain maximum value from each movement.

The Pilates principle of Concentration is about bringing full attention and commitment to each exercise in an effort to gain the most benefit from the workout. Concentration and engagement in every breath and every movement ensures that you are completely present and aware of what you are doing at that very moment. Learning to be mindful and focused on the present can be beneficial in countless ways. By concentrating only on the task at hand, our concentration improves and we perform better.

4. Control: Every Pilates exercise is done with complete muscular control. No body part is left to its own devices. It is all a conscious, deliberate movement that the mind is controlling.

In Pilates, we perform every single exercise with complete muscular control. Each muscle and body part works together to carry out the exercises. The principle of Control extends beyond our Pilates mats and Equipment classes. We learn to control our bodies and move with steadiness at all

times. Practicing control will help us decrease potentially injurious movements. Once we gain the concept of control we begin to carry ourselves in a more balanced and safe manner.

5. Precision: In Pilates, awareness is sustained throughout each movement. There is an appropriate placement, alignment relative to other body parts, and trajectory for each part of the body.

Every movement in Pilates has a purpose. It is important to be aware of correct body placement and to understand how each part of our body functions in conjunction with each other. By learning how every part of our bodies plays an important role in our movement, we can remain aware of the ways in which our muscles and ligaments work together to keep us performing and functioning efficiently.

6. Flow: Pilates exercise is done in a flowing manner. Fluidity, grace, and ease are goals applied to all exercises. The energy of an exercise connects all body parts and flows through the body in an even way.

Pilates exercises are completed in a smooth, steady and continuous manner, with each movement flowing gracefully into the other. Outside of Pilates classes, the principle of Flow teaches people to take life as it comes and move through their days with ease, continuity, grace and fluidity.

Three Additional Principles

Three additional principles are less commonly discussed, but are at the core of the Pilates method.

7. The principle of imagination.

This principle refers to the way in which the body can be triggered into physical response. During a Pilates workout, visualization can help you better execute the exercise. For example, you can visualize straps holding your legs in place or a weight strapped across your midsection to help you maintain stability.

It is in our mind that our physical movement begins, usually by an unconscious process of imagining the movement we want to make. In Pilates, we learn a kind of re-conditioning of that process, using visualizations that help us to move in ways that are more beneficial to our body's natural needs for stretching and wholeness.

8. Regularity.

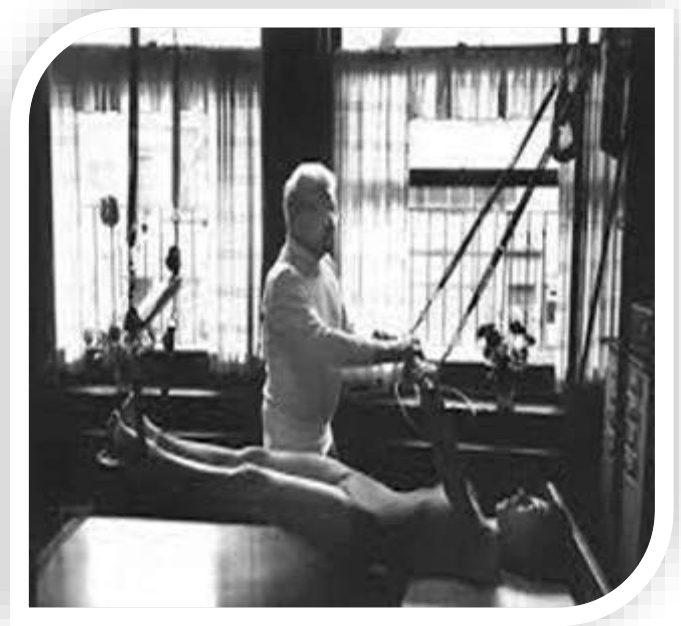
«In 10 sessions, you feel better, 20 sessions you look better, 30 sessions you have a completely new body». (Joseph Pilates)

Pilates is safe enough to do every day. Initially you may want to do it every day so you get a rhythm and become consistent; then a good goal is to do it every other day. Joseph Pilates used to say to do it three times a week.

9. «Relaxation»

This principle allows the movements to be smooth and reduces the risk of injury while allowing you to get into the correct position increasing the benefits of the exercise.

You may arrive at a session feeling stressed and holding undue tension in your body. By recognizing where your body tenses up, you can learn to relax your muscles and let go of any tension before you start each exercise. By relaxing in this way, you will be able to sustain correct positioning and perform movements more effectively.



Joseph Hubertus Pilates

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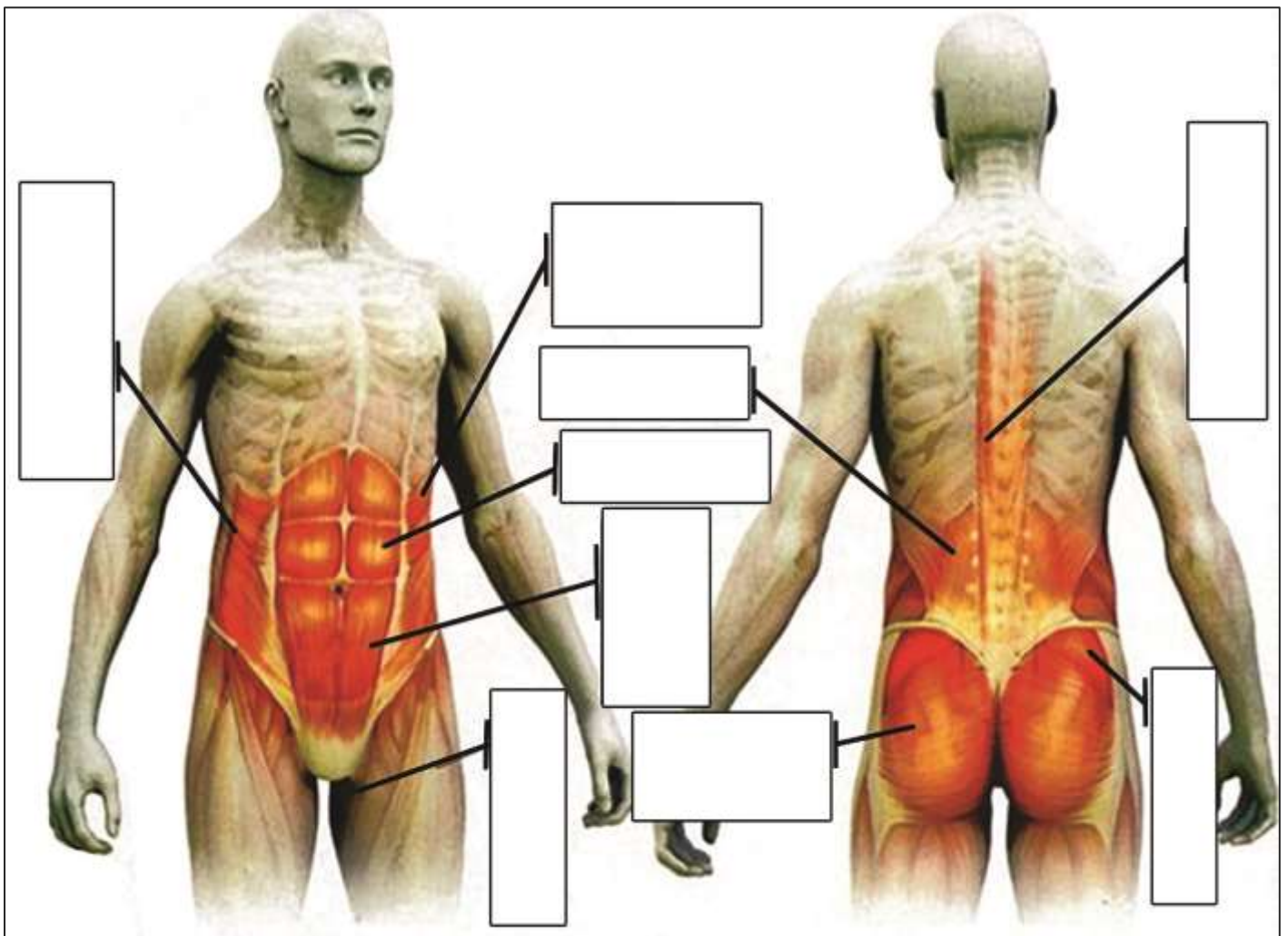
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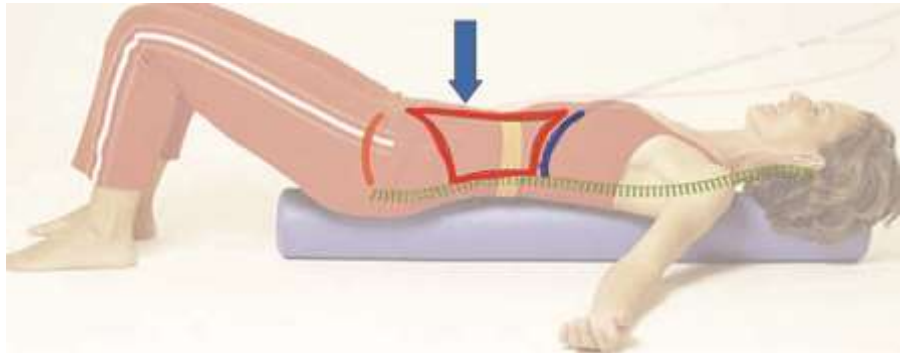
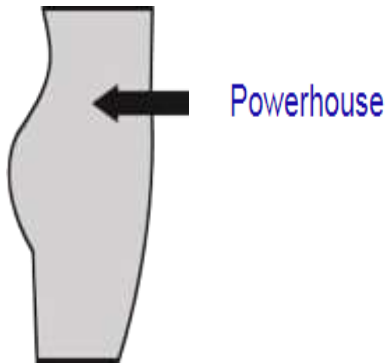
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Extending of the ribs during an inhale using lateral breathing. Stomach muscles are stabilizing the core as a corset.

Exercises for developing lateral breathing:



EXERCISE 1.

1. Sit comfortably. Place your hands on the sides of your body around the rib cage.
2. Take a deep breath through your nose into the sides and back of the body. Remember that your lungs sit inside your torso and your ribs can expand with each breath. Feel your ribs pushing your hands outward as you inhale.
3. Exhale through your mouth. Your ribs will contract and the hands will draw back towards each other.
4. Repeat this breathing pattern several times until you feel the ribs expanding and contracting. The movement should be in your ribcage only, with no movement of your shoulders. Be sure to relax your neck and jaw and keep your spine straight.

EXERCISE 2.

This alternate exercise will help you feel the lateral expansion of the ribcage with the breath:



1. Wrap about 3 feet of exercise band around the lower part of your ribcage. You can also use a length of elastic.
2. Hold the band closed in front of your chest.
3. Inhale: Let the breath travel down your spine and expand into your back and sides so you feel the band is stretched, side and back, by your breath.
4. Exhale: Actively draw the ribs towards each other as you slowly let the breath out.

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CHAPTER 3. THE IDEA OF A CORRECT POSTURE. TECHNICAL BASIS OF ALIGNMENT AND STABILIZATION OF THE BODY IN PILATES

From head to toes, the Pilates method stresses good posture and awareness of the placement of all parts of your body. During your Pilates workout, it is important to be aware of the

position of your head, neck, spine and pelvis to ensure proper breathing and technique.

If you imagine a plumb line dropping from the ceiling by the side of the body. The plumb line should intersect the ear lobe, then run to the shoulder joint, then through the greater trochanter in the hip (the bony bit on the outside of the hip), then just in front of the knee joint and finally slightly in front of the lateral malleolus in the ankle (the bony bit on the outside of the ankle) before it reaches the floor.

The five principles of body stabilization in Pilates

Ideal standing alignment is a position in which the head, torso, and pelvis are aligned above one another and above the feet so that very little muscle activity is required to maintain their position.

The stabilization of the following five blocks is critical

1. The cervical spine should hold its natural curve with the skull balancing directly above the shoulders when sitting in neutral. This position should also be maintained when lying on the back. Avoid jamming the chin into the chest during any movements that require a forward motion of the head. In most cases, the cervical spine should follow and continue the line created by the thoracic spine.

2. The scapulae should be slightly brought to the spine and their lower edges should be directed downward to the tailbone.

3. The Rib Cage, especially the lower ribs, must often be recruited to maintain both the rib cage and thoracic spine in proper alignment. Many times the rib cage will tend to lift upward extending the thoracic spine, so pay close attention when inhaling or elevating the arms. And keep in mind that engaging your obliques will also ensure that you maintain proper alignment at all times.

4. The Lumbar spine should be in a neutral position.

5. The pelvis also should be in a neutral position. The pubic symphysis and ilium are

Practically, this concept can be reflected by viewing the body from the side and noting the positioning of surface landmarks relative to a plumb line, a suspended cord with a weight attached to the bottom that provides an absolute vertical line located in the same plane perpendicular to the floor.

The features of alignment in different starting positions

It is key to emphasize stabilization of the pelvis and lumbar spine both statically and dynamically in all positions and throughout all movements. The two positions most often used are neutral and imprint.

1. **In a NEUTRAL position**, the natural anteriorly convex curve of the lumbar spine is present. In most cases, when lying supine, the triangle formed by the ASIS and the symphysis pubis should be parallel to the Mat. This is the most stable and optimal shockabsorbing position and a good place from which to promote efficient movement patterns. Neutral alignment should not be achieved by forcibly arching the back, but rather by allowing the weight of the sacrum to rest on the Mat. This position is used during the closed kinetic chain exercises. Once enough strength has been developed through the abdominal muscles to achieve stability, a neutral position can be maintained in an open kinetic chain.

2. **An IMPRINT position** combines a slight posterior pelvic tilt with slight lumbar flexion. The normal curve of the lumbar spine lengthens toward flexion by engaging the oblique abdominals

to approximate the pelvis and the rib cage anteriorly. When supine, the pubic bone may be slightly higher than the ASIS. The pelvis is not so tilted that the sacrum curls off or loses contact with the Mat. It is not necessary to press the lower back all the way into the Mat or to tuck under by overusing the rectus abdominis and gluteal muscles as this may decrease stability. The degree of contact between the lumbar spine and the Mat will differ from person to person. An imprinted position should be used to ensure stability of the pelvis and lumbar spine, if neutral alignment cannot be stabilized. When there is weakness in the obliques and other abdominals, placing them in this slightly shortened position can help maintain their engagement. This will often be useful when certain postural tendencies are present (for example, lordosis). When the lower limbs are secure on the Mat or other apparatus in a closed kinetic chain, the pelvis and lumbar spine are ideally neutral. Performing an open kinetic chain exercise with the pelvis and lumbar spine in an imprinted position will increase stabilization.

The pelvic movements and positions in different starting positions

Learning to identify a neutral pelvic position, an anterior pelvic tilt, and a posterior pelvic tilt and to achieve the positions desired in a given Pilates exercise are important goals of Pilates. Because the pelvis moves primarily as a unit, the large movements of the pelvis mostly occur at the lumbosacral joint, the junction of the lower back with the pelvis. Stand upright with your side to a mirror to observe the first set of movements of the

pelvis and related changes in the lumbar spine. Place one index finger on each ASIS to aid in seeing the desired relationships.

1. When in a neutral pelvic alignment, each ASIS (the top projections of the front of the pelvis) is aligned vertically with the pubic symphysis (the front of the lower pelvis). If a piece of poster board were held vertically from the pubic symphysis, both the right and left ASIS would touch this poster board. In this neutral position of the pelvis, the lumbar spine is also generally in a neutral position, exhibiting its natural curve, not a diminished or exaggerated curve.

2. In contrast, if you rotate the top of the pelvis forward, each ASIS will be in front of the pubic symphysis; this is logically termed an anterior pelvic tilt. This anterior movement of the pelvis will tend to increase the arch of the lumbar spine (extension or hyperextension). Check to see if you can see a change in your lower back curvature.

3. Conversely, if you rotate the top of the pelvis backward, each ASIS will be behind the pubic symphysis. This is a posterior pelvic tilt. With a posterior pelvic tilt, the curve of the lower back is decreased, flattened, or even reversed to round in the other direction, depending on the mobility of your spine.

4. Although these are the most emphasized aspects of pelvic movement, the pelvis can also move in other planes. The pelvis can tilt from side to side. It's called the lateral pelvic tilt. When the right ASIS is lower than the left ASIS, this is called a right lateral tilt of the pelvis. Conversely, when

the left ASIS is lower than the right ASIS, this is a left lateral tilt. This is observed more easily from a front view, such as facing a mirror.

5. Lastly, the pelvis can rotate. It's called the pelvic rotation. When the right ASIS is in front of the left ASIS, this is left pelvic rotation. When the left ASIS is in front of the right ASIS, this is right pelvic rotation.

Although classically these movements of the pelvis are described in a standing position, they apply to many other positions used in Pilates, such as lying on the back, lying facedown, sitting, kneeling, or being supported on the hands and feet.

Starting positions

1. Standing S.P. Stand tall. Draw the pelvic floor up, pull the abdominals in and up, and hug the inner thighs together. When you stand in Pilates stance, allow your body weight to fall evenly through your feet – it shouldn't be focused in your heels.

Allow your hips to rotate outward slightly, so your heels come together and your toes form a V-Pilates position¹. Other points of good posture are also in place. If seen from the side, you should be able to draw a straight line from the ankle to the hip, shoulder, and ear.

It's tempting to simply engage your glutes and thighs and turn your toes outward, but if your abdominals and core aren't engaged, you may be sacrificing good posture and alignment. Start the exercise by tucking your pelvis, drawing your abdominals toward your spine, and making sure your posture is tall and strong. Once you've done that, then engage your glutes and turn your toes out slightly.

ATTENTION! If you have radiculitis the turnout of hips is prohibited. In this case, allow your toes to point straight ahead and keep your feet hip-distance apart. This is a complete acceptable adaptation of the stance.

2. Seated S.P. Lift yourself up on your buttocks. Keep your lower back, your chest area and your neck in neutral position. Keep your chin parallel to the floor and gaze forward. Lengthen through the crown of your head. Bring your shoulder blades together. Close your lower ribs inside and engage your core.

3. Lying on the back S.P. Press your sacrum to the floor. Your chin is perpendicular to the floor, gaze up, lengthen your body from the crown of your head. Bring your shoulder blades to a central line, lower your shoulders down, lengthen your arms from your shoulders. Bring your pelvis to a neutral position (advanced level): your lower back is slightly flexed and your pubic bone is parallel to the floor.

¹ Pilates stance is a position of the legs used in many Pilates exercises. In Pilates stance, the legs are together, straight, and rotated outward from the top of the thigh. This brings the heels together with the toes pointing slightly out (the Pilates V), following the line of

the knee. It requires the engagement of the hips, glutes, quads, hamstrings, core, and even your feet. This slightly turned out position helps relieve over-activity of the hip flexors in some exercises.

Slightly tilt your pelvis backward. Your ilia are going backward and your lower back is pressing the floor. This position is called Imprint and is used in most cases to support the lower back (basic level).

4. Lying on stomach S.P. In this position it's important to press your pubic bone and/or iliac bones to the floor. Lengthen your legs from your hip joints to engage your core and buttocks. Pull your navel to your spine in order not to lean on your stomach. Close your lower ribs and slightly bring your shoulder blades directing them to your tailbone. Lengthen your neck. Lengthen yourself through the crown of your head.

5. Lying on the side S.P. Lie yourself down on the side. Align your legs, heel above the heel, knee above the knee and iliac bone above the iliac bone. Your feet are in a V-Pilates position. Turn your legs out from your hip joints. You should bring your lower arm closer creating some space between your side and mat in order to align your shoulders. Keep your back and core muscles engaged in this position.

The main differences between Pilates and other systems of training

1. Smart body control based on the stabilization of the spine. Pilates helps to get rid of the habit of mindlessly tense muscles, while moving away from the correct position of the body in space. Stabilization of the lumbar spine and pelvis allows you to maintain or create the correct posture without interfering with the strengthening of the main muscles and muscle groups.

2. Comprehensive and isolating effect on all the muscle groups. Each exercise from the basic Pilates course works out all muscle groups, from the main to the smallest. Pilates teaches you how to isolate the muscles targeted by the exercise, while relaxing the rest, but maintaining a natural body position.

3. Working with deep, "slow" muscles that support the skeleton and internal organs, training strength «from the inside». It would not lead to gaining of muscle mass or to the «six pack», but it would strengthen the body from the inside, helping to feel your body, to become more flexible, slimmer and to avoid many injuries and illnesses in the future.

4. Stretching. You can even grow a little in Pilates classes, because one of the main aims of all exercises is stretching the spine and muscles, which gives them elasticity, tone and helps to restore natural grace and freedom of movement.

5. The quality of the exercise is more important than the quantity. Sometimes one-sidedness is manifested in different techniques, which leads to pain in the back, neck or lower back. This happens because such techniques develop trained muscles, leaving small ones inactive. In Pilates, no exercise leads to muscle imbalance.

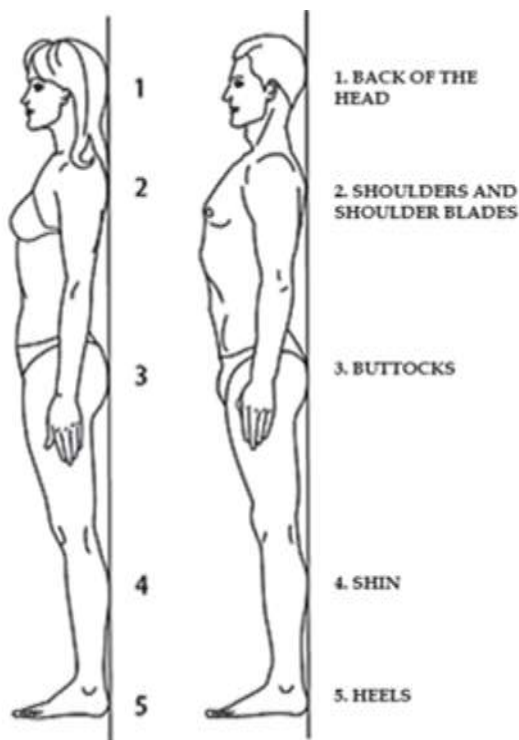
6. Approximately zero possibility of injury. Pilates is one of the safest workouts. Pilates exercises have a very gentle effect on the body while training it. That is why there are practically no age restrictions for practicing Pilates.

7. The effectiveness of Pilates for women is obvious: working with problem areas (getting rid of the «spare tyre» and fat on the thighs and

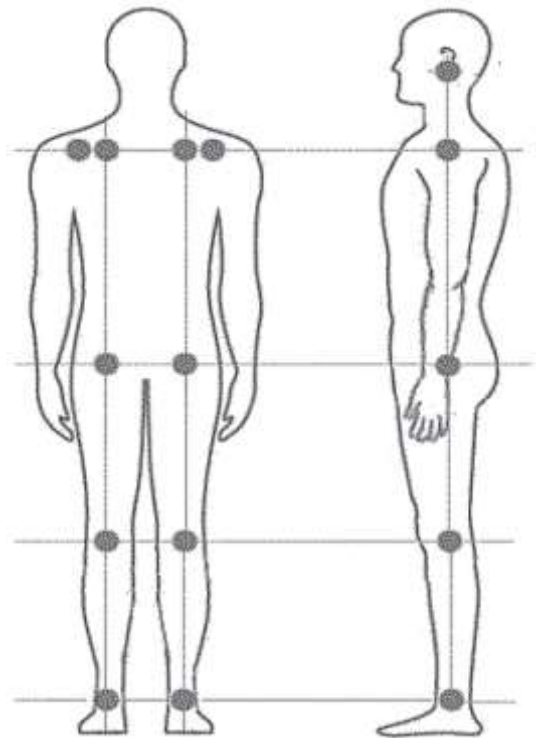
buttocks), strengthening of the pelvic muscles, the strength of which is needed during childbirth, as well as during recovery after them.

8. Pilates training:

- focused on improving the spine;
- allow to learn how to intelligently control body;
- tone and strengthen muscles, create an internal muscle corset;
- develop balance, improve posture;
- hone the lines of the body, giving the muscles a more elongated shape;
- help to get rid of back pain;
- train the respiratory system;
- develop positive thinking in dealing with stress.



Pilates is a self-control, health, grace and energy of a trained body!



From head to toes, the Pilates method stresses good posture and awareness of the placement of all parts of your body. During your Pilates workout, it is important to be aware of the position of your head, neck, spine and pelvis to ensure proper breathing and technique.

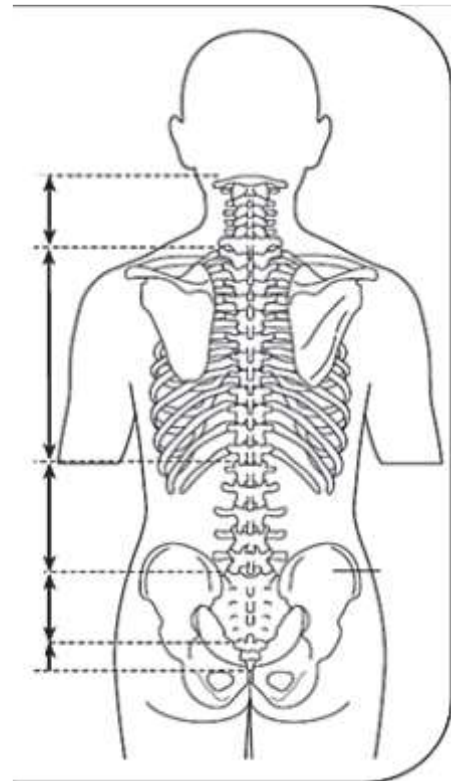
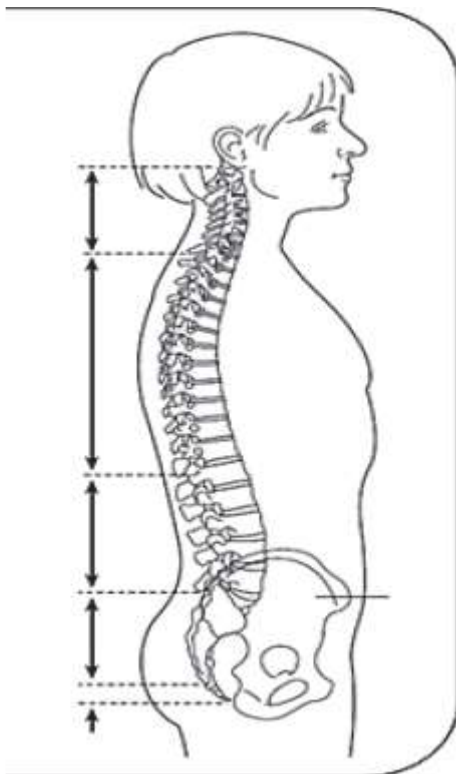
If you imagine a plumb line dropping from the ceiling by the side of the body. The plumb line should intersect the ear lobe, then run to the shoulder joint, then through the greater trochanter in the hip (the bony bit on the outside of the hip), then just in front of the knee joint and finally slightly in front of the lateral malleolus in the ankle (the bony bit on the outside of the ankle) before it reaches the floor.

Exercise for learning the correct posture and body alignment

1. Stand with the back of your head against the wall and place your heels six inches from the wall. Your shoulder blades and butt should be touching the wall.

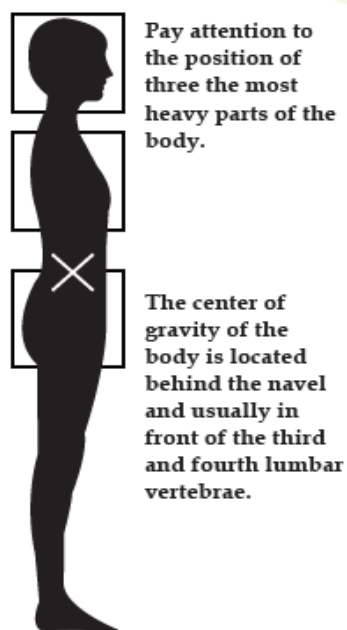
2. Measure the space between your neck and the wall, and the space between your back and the wall. There should be less than 2 inches between both spaces. A larger gap indicates weak posture and a curving spine.

The five principles of body stabilization in Pilates



Ideal standing alignment is a position in which the head, torso, and pelvis are aligned above one another and above the feet so that very little muscle activity is required to maintain their position.

Practically, this concept can be reflected by viewing the body from the side and noting the positioning of surface landmarks relative to a plumb line, a suspended cord with a weight attached to the bottom that provides an absolute vertical line.



The stabilization of the following five blocks is critical

1. The cervical spine should hold its natural curve with the skull balancing directly above the shoulders when sitting in neutral. This position should also be maintained when lying on the back. Avoid jamming the chin into the chest during any movements that require a forward motion of the head. In most cases, the cervical spine should follow and continue the line created by the thoracic spine.
2. The scapulae should be slightly brought to the spine and their lower edges should be directed downward to the tailbone.
3. The Rib Cage, especially the lower ribs, must often be recruited to maintain both the rib cage and thoracic spine in proper alignment. Many times the rib cage will tend to lift upward extending the thoracic spine, so pay close attention

when inhaling or elevating the arms. And keep in mind that engaging your obliques will also ensure that you maintain proper alignment at all times.

4. The Lumbar spine should be in a neutral position.

5. The pelvis also should be in a neutral position.

The pubic symphysis and ilium are located in the same plane perpendicular to the floor.

The features of alignment in different starting positions

It is key to emphasize stabilization of the pelvis and lumbar spine both statically and dynamically in all positions and throughout all movements. The two positions most often used are neutral and imprint.

1. In a **NEUTRAL position**, the natural anteriorly convex curve of the lumbar spine is present. In most cases, when lying supine, the triangle formed by the ASIS and the symphysis pubis should be parallel to the Mat. This is the most stable and optimal shockabsorbing position and a good place from which to promote efficient movement patterns. Neutral alignment should not be achieved by forcibly arching the back, but rather by allowing the weight of the sacrum to rest on the Mat. This position is used during the closed kinetic chain exercises. Once enough strength has been developed through the abdominal muscles to achieve stability, a neutral position can be maintained in an open kinetic chain.



2. In An **IMPRINT position** combines a slight posterior pelvic tilt with slight lumbar flexion. The normal curve of the lumbar spine lengthens toward flexion by engaging the oblique abdominals to approximate the pelvis and the rib cage anteriorly. When supine, the pubic bone may be slightly higher than the ASIS. The pelvis is not so tilted that the sacrum curls off or loses contact with the Mat. It is not necessary to press the lower back all the way into the Mat or to tuck under by overusing the rectus abdominis and gluteal muscles as this may decrease stability. The degree of contact between the lumbar spine and the Mat will differ from person to person. An imprinted position should be used to ensure stability of the pelvis and lumbar spine, if neutral alignment cannot be stabilized. When there is weakness in the obliques and other abdominals, placing them in this slightly shortened position can help maintain their engagement. This will often be useful when certain postural tendencies are present (for example, lordosis). When the lower limbs are secure on the Mat or other apparatus in a closed kinetic chain, the pelvis and lumbar spine

are ideally neutral. Performing an open kinetic chain exercise with the pelvis and lumbar spine in an imprinted position will increase stabilization.



Ideal standing alignment is a position in which the head, torso, and pelvis are aligned above one another and above the feet so that very little muscle activity is required to maintain their position.

Practically, this concept can be reflected by viewing the body from the side and noting the positioning of surface landmarks relative to a

The pelvic movements and positions in different starting positions

Learning to identify a neutral pelvic position, an anterior pelvic tilt, and a posterior pelvic tilt and to achieve the positions desired in a given Pilates exercise are important goals of Pilates. Because the pelvis moves primarily as a unit, the large movements of the pelvis mostly occur at the lumbosacral joint, the junction of the lower back with the pelvis. Stand upright with your side to a mirror to observe the first set of movements of the pelvis and related changes in the lumbar spine.

Place one index finger on each ASIS to aid in seeing the desired relationships.

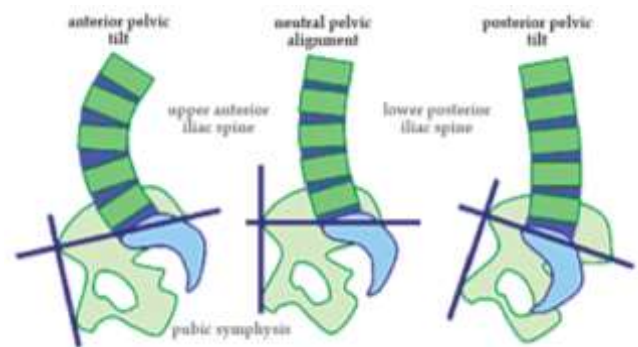
1. When in a **neutral pelvic alignment**, each ASIS (the top projections of the front of the pelvis) is aligned vertically with the pubic symphysis (the front of the lower pelvis). If a piece of poster board were held vertically from the pubic symphysis, both the right and left ASIS would touch this poster board. In this neutral position of the pelvis, the lumbar spine is also generally in a neutral position, exhibiting its natural curve, not a diminished or exaggerated curve.

2. In contrast, if you rotate the top of the pelvis forward, each ASIS will be in front of the pubic symphysis; this is logically termed an **anterior pelvic tilt**. This anterior movement of the pelvis will tend to increase the arch of the lumbar spine (extension or hyperextension). Check to see if you can see a change in your lower back curvature.

3. Conversely, if you rotate the top of the pelvis backward, each ASIS will be behind the pubic symphysis. This is a posterior pelvic tilt.

With a posterior pelvic tilt, the curve of the lower back is decreased, flattened, or even reversed to round in the other direction, depending on the mobility of your spine.

4. Although these are the most emphasized aspects of pelvic movement, the pelvis can also move in other planes. The pelvis can tilt from side to side. It's called the **lateral pelvic tilt**. When the right ASIS is lower than the left ASIS, this is called a right lateral tilt of the pelvis. Conversely, when the left ASIS is lower than the right ASIS, this is a left lateral tilt. This is observed more easily from a front view, such as facing a mirror.



5. Lastly, the pelvis can rotate. It's called the **pelvic rotation**. When the right ASIS is in front of the left ASIS, this is left pelvic rotation. When the left ASIS is in front of the right ASIS, this is right pelvic rotation.

Although classically these movements of the pelvis are described in a standing position, they apply to many other positions used in Pilates, such as lying on the back, lying facedown, sitting, kneeling, or being supported on the hands and feet.

STARTING POSITIONS

1. **Standing S.P.** Stand tall. Draw the pelvic floor up, pull the abdominals in and up, and hug the inner thighs together. When you stand in Pilates stance, allow your body weight to fall evenly through your feet—it shouldn't be focused in your heels. Allow your hips to rotate outward slightly, so your heels come together and your toes form a V-Pilates position. Other points of good posture are also in place. If seen from the side, you should be able to draw a straight line from the ankle to the

hip, shoulder, and ear. It's tempting to simply engage your glutes and thighs and turn your toes outward, but if your abdominals and core aren't engaged, you may be sacrificing good posture and alignment. Start the exercise by tucking your pelvis, drawing your abdominals toward your spine, and making sure your posture is tall and strong. Once you've done that, then engage your glutes and turn your toes out slightly.



ATTENTION! *If you have radiculitis the turnout of hips is prohibited. In this case, allow your toes to point straight ahead and keep your feet hipdistance apart. This is a complete acceptable adaptation of the stance.*

2. Seated S.P. Lift yourself up on your buttocks. Keep your lower back, your chest area and your neck in neutral position. Keep your chin parallel to the floor and gaze forward. Lengthen through the crown of your head. Bring your shoulder blades together. Close your lower ribs inside and engage your core.



3. Lying on the back S.P. Press your sacrum to the floor. Your chin is perpendicular to the floor, gaze up, lengthen your body from the crown of your head. Bring your shoulder blades to a central line, lower your shoulders down, lengthen your arms from your shoulders. Bring your pelvis to a neutral position (advanced level): your lower back is slightly flexed and your pubic bone is parallel to the floor.

Slightly tilt your pelvis backward. Your ilia are going backward and your lower back is pressing the floor. This position is called Imprint and is used in most cases to support the lower back (basic level).



4. Lying on stomach S.P. In this position it's important to press your pubic bone and/or iliac bones to the floor. Lengthen your legs from your hip joints to engage your core and buttocks. Pull your navel to your spine in order not to lean on your stomach. Close your lower ribs and slightly bring your shoulder blades directing them to your tailbone. Lengthen your neck. Lengthen yourself through the crown of your head.



4. Lying on the side S.P. Lie yourself down on the side. Align your legs, heel above the heel, knee above the knee and iliac bone above the iliac bone. Your feet are in a V-Pilates position.

Turn your legs out from your hip joints. You should bring your lower arm closer creating some space between your side and mat in order to align your shoulders. Keep your back and core muscles engaged in this position.



1 Pilates stance is a position of the legs used in many Pilates exercises. In Pilates stance, the legs are together, straight, and rotated outward from the top of the thigh. This brings the heels together with the toes pointing slightly out (the Pilates V), following the line of the knee. It requires the engagement of the hips, glutes, quads, hamstrings, core, and even your feet. This slightly turned out position helps relieve over-activity of the hip flexors in some exercises.

CHAPTER 4. TYPES OF PILATES WORKOUTS

There are three main types of Pilates workouts:

1. Mat Work

Mats are the foundation of Pilates mat work. They are the one prop that should never be left out. A mat designed for Pilates or yoga is essential for targeting muscle groups and actively lengthening

muscles while allowing joints extended range of motion. This type of Pilates is practiced on the floor and requires little to no equipment. Mat Pilates focuses on developing core strength, and it is typically taught in large groups. It's highly recommended for beginners.



2. Props

Here are some of the most commonly used Pilates props and how and why we use them:

The magic circle

This circular resistance prop is popular in both mat and reformer classes. You may have come across one of these if you're a regular Pilates class attendee. You may not know it by its official Pilates name the "magic circle", however, because it is also called a fitness circle, exercise ring, and a Pilates ring.

Like the rest of the Pilates equipment, this prop was designed by the inventor of Pilates, Joseph Pilates. Rumour has it that – like the Pilates barrel – the magic circle was first created out of an old beer keg.

Instead of an old beer keg, these days the Pilates magic circle is made of rubber with small pads on either side to cushion hands or ankles as they push against it.

Most circles are also padded in a way that supports hands or feet when they are inside the ring pressing outwards.

The magic circle is made from (relatively) flexible material and is designed to provide a variable amount of resistance depending on how hard it is being squeezed.



The Over ball is a soft, air-filled ball about the size of a netball. It can be used partially or fully inflated, depending on its intended use. The Over ball is a useful addition to both equipment and mat exercises. In contrast to the stability ball, the Over ball is particularly suited to targeted activation and strengthening work. For instance, partially inflated, this ball can be placed behind the sacrum on the reformer or on the mat or either support or challenge the lumbar and lower abdominal region. In the same state, this ball can be used to increase the challenge in exercises like mat or reformer footwork, or the supine spring series on the trapeze table. Placed between the shoulder blades, a fully inflated Over ball can also be used for extension movements.



Balls

The stability ball – otherwise known as a fitness, gym or Swiss ball – is made from soft elastic and filled with air. Stability balls come in a range of sizes (ranging from 45cms – 85cms in diameter) to suit people of different heights and to work for different exercises. Despite the variety of sizes, these are still the largest of all the «small» props, and because of this are usually used for big, full-body exercises.



Foam Roller

Foam rollers are long, cylindrical shaped tubes and are usually made from a type of foam called EVA.

Having said that, foam rollers can also come in a variety of shapes, lengths and textures. You'll find that some foam rollers have raised, wave-like ridges. While others are covered in a pattern of small bumps.

You can give yourself a great massage using the foam roller. A foam roller-focused exercise programme can also help you increase your range of movement, and improve your strength, coordination and control.



Elastic Band

Resistance band, fitness band, TheraBand – this prop is known by lots of different names. But, regardless of what you call it, the stretchy band has many great properties making it the perfect addition to any Pilates workout. For Pilates fans looking for a challenge, this prop can make both mat and equipment exercises more difficult. Plus, including it in a mat routine creates new and exciting exercise possibilities. Resistance bands are made from elastic. They come in multiple

resistance levels, usually light, medium or heavy. There are other variables when it comes to the design of resistance band. For instance, the standard band is just one long strip of elastic. Others have handles or are continuous loops.



As their name suggests, these bands can also be used to add resistance to an exercise and therefore increase the difficulty level of it. An example of this in action is the short box «ab series» on the reformer. This group of ab exercises can be performed with arms overhead. This action challenges balance, abdominal control and gets the upper body working.

Despite doing an excellent job of making exercises more difficult, that is not all resistance bands are good for. Instead, they can also be an assistive prop used to make exercises more achievable. For example, a light looped resistance band around the thighs during reformer footwork can act as a guide for the legs. If they are rolling inwards, for instance, a gently press outwards on the band keeps the legs tracking in good alignment.

For these reasons, this prop is particularly useful in Pilates sessions for beginners or for people with injuries.

3. Big equipment

The reformer is one of the original pieces of equipment designed by Joseph Pilates, the man who invented the Pilates method. Thanks to the growing success of reformer group classes it is also probably the most famous piece of Pilates equipment. The reformer is an incredibly versatile piece of equipment and can be used lying down, standing, kneeling or on all fours. Most exercises on the reformer involve some sort of pushing and/or pulling action. Other exercises involve keeping the carriage still whilst the tension of the springs works against you. Another useful application of the reformer – and part of why it is so effective – is that it can be either assistive or resistive. In basic terms, this means that exercises can be made more or less challenging using the machine.



The trapeze table, or cadillac as it is also known, provides lots of support for beginners and people with injuries as they get to grips with the basic Pilates movements. At the same time, it can also help clients to achieve the most challenging movements in the Pilates repertoire.

The trapeze table was the very first piece of Pilates apparatus designed by Joseph Pilates. It is the also biggest and most imposing out of all the Pilates equipment. The original version was very basic, however. In fact, it was little more than a bed with springs attached to the metal bedstead. This is because Joe made it by adapting the hospital beds of his fellow inmates while he was captive in an internment camp during WW1.

The Pilates trapeze table is an incredibly supportive piece of equipment. Unlike with the unstable carriage on a reformer bed, the bed area of the trapeze table is fixed. This creates a solid base of support for the person practising Pilates, which makes certain exercises less challenging. Exercises like roll downs, for example, that encourage the spine to move while increasing abdominal strength are often part of our client rehabilitation programmes and can be performed on both the trapeze table and reformer. They are much more attainable on the trapeze table, however, thanks to the stable bed. The metal frame design also makes it possible for springs to be sprung from various angles (including from above) and attached to the limbs of the person on the table. This allows clients to experience ease of movement, which is an important part of the process of rehabilitation.



The ladder barrel is one of the original pieces of equipment and it was designed by the inventor of Pilates, Joseph Pilates. But unlike those pieces of apparatus, which he made by adapting pieces of furniture, Joe made the Pilates barrel out of something much more surprising: an empty beer keg! The ladder barrel in Pilates studios today is a far cry from the humble beer keg. In fact, it is now quite a large and imposing piece of equipment made from wood and leather. The ladder barrel has retained its curved, barrel-like form though, and this makes it stand out against the rest of the boxy and rigid-looking studio equipment. Given the shape of the ladder barrel, it won't surprise you to learn that it supports very different types of movement to the trapeze table, reformer and chair.

As its name suggests, the ladder barrel is made up of two parts: a wooden ladder with rungs and the barrel, which is padded and leather-clad for comfort. The two component parts of the ladder barrel are attached to one another by a sliding frame base. This frame can be adjusted to make it work for different heights and builds.



The Combo chair is essentially a box (usually made of wood) with a padded seat on top and a pedal attached to one side of the box by springs. These springs allow for the tension of the pedal to be adjusted and are used to make exercises easier or more difficult. Depending on the model of chair, the pedal is either in one piece or split down the middle. A split pedal makes the equipment more versatile and supports rotation-type movements. Two detachable handles slot in either side of the box. These can be used to make the chair either a more supportive or a more challenging piece of equipment for the user.

The chair is great for standing or seated work. It can also work for exercises that are performed on both your front and back, like the spine extension movement called «swan». Because of the small surface area, chair exercises can be pretty difficult. The chair is also compact and can easily be pushed up against the trapeze table to make exercises such as “swan” more achievable. The Pilates chair allows for more creativity than some of the other machines. It can

be used from positions both in front of the pedal or from seated positions with the pedal behind you.



The spine corrector has similar properties to the barrel, with a large curved surface being its main feature. This means you can perform most of the ladder barrel exercises on it. There are obvious differences between these two pieces of kit, though. Aside from missing the «ladder» aspect of the ladder barrel, the spine corrector also has a less dramatic curve than the barrel. This reduces the possible range for the body to move in and can be viewed as a limitation of the spine corrector. At the same time, the gentle curve of the spine corrector can be a good thing when it is used on a beginner or someone with an injury.

Like the ladder barrel, the spine corrector is primarily used to assist spinal movements and for abdominal exercises. Because of the spine corrector's compact design, it can easily be placed on top of the trapeze table and reformer. This means it can be used with other pieces of equipment to increase the range of movement

(and therefore the challenge) of certain exercises. In exercises like «roll down», for instance, introducing the spine corrector to the trapeze table means that the body has to go from flexed (a rounded) spine all the way through to an extended (back bending) spine. This is a more difficult version of the original «roll down» exercise that requires you to move from a rounded spine to only a flat back.



CHAPTER 5. THE STRUCTURE OF THE PILATES WORKOUT

1. Warm up (3-5 min)

Just like in any exercise class, it's important to start gently and get your mind and body prepared for working out. Exercises in the warm-up section of class will get your body moving, release stress, wake up your core and get you in the 'Pilates zone'. To add interest and ensure an even workout, your Pilates class may have different warm-up routines from week to week.

2. The main part (40-45 min)

This is the more challenging part of the Pilates class. In a well-structured Pilates class, exercises in this section will cover all movements of the spine – flexion, extension, rotation and lateral flexion – and move all the different joints in the body. Exercises will begin from a range of starting positions and you'll flow from one exercise to the next. Over a course of lessons, you'll notice that the same (or similar) exercises are practiced again and again and you will see progression over time.

3. Cool down (3-5 min)

After the main section, it is time to cool down and prepare for the end of class. You will return to

some more gentler, less challenging exercises which leave you feeling refreshed and ready to face the day.

The relaxation position:



The relaxation position, with alignment, breathing and centring (core stability)

Aim: In this starter exercise you will learn how to position your body, breathe and activate your deep core muscles.

Starting position: Lie on a mat on your back with your knees bent, feet hip-width apart and parallel. Use a flatfolded towel beneath your head if needed. Check that your pelvis is level (neutral) and your spine retains its natural curves. Take a few breaths, wide and full into the back and sides of your ribcage.

Action 1:

1. Relax your feet and lengthen your toes.
2. Allow your thighbones to sink heavy towards your hips
3. Allow your whole spine to lengthen, allow it to feel supported by the mat.
4. Focus on 3 areas of your body -
 - Ribcage
 - Pelvis
 - Head
5. Collar bone open and wide
6. Neck lengthened
7. Face parallel to the ceiling
8. Jaw released, relax your forehead
9. Feel the natural curves in your spine 'cervical' curve 'Lumbar' curve
10. Keep breathing. Focus on each inhale and exhale.

Action 2:

1. Breathe wide into the ribcage.
2. Breathe out, and gently squeeze your back passage (anus) as if trying to prevent passing wind and bring this feeling forward to your pubic bone. Then gently draw these muscles up inside like an internal zip. Notice what happens to your lower abdominals. If you wish, you can check placing your fingers just inside your pelvic bones. You should be able to feel them engage, gently hollowing away from your fingers.
3. Breathe in and hold this 'core' zip.
4. Breathe out and release.
5. Now try again but this time try adding several breaths as you hold the gentle internal zip. Breathe wide and full into the back and sides of your ribcage, before releasing.

CHAPTER 6. BENEFITS AND CONTRAINDICATIONS OF PILATES

Before starting any new fitness activity it's necessary to consult with the therapist. In any case of painful feeling during the workout you should stop doing an exercise. Pilates has very few contraindications, it's suitable for people of different ages, health conditions and level of activity. But there are several contraindications:

- ✓ If you feel ill or exhausted;
- ✓ Immediately after having meal;
- ✓ After drinking alcohol;
- ✓ In case of painful feelings from injury;
- ✓ After consuming painkillers;
- ✓ During the period of healing any disease or consuming any medicine (including periods of any catarrhal or virus sicknesses accompanied with increased temperature);
- ✓ In case of 1-2 degree scoliosis, 3 degree flat feet, different spine injuries and illness;
- ✓ In case of mental illnesses.

Benefits of Pilates:

- ✓ This technique can relieve migraines, lingering headaches;
- ✓ Delicately improves blood circulation;
- ✓ Removes clamps, including in the neck;
- ✓ This is the ideal form of fitness for those who are too overweight, which imposes a taboo on active aerobic activity;

- ✓ Posture improves, now you do not need to spend energy to maintain it;
- ✓ Stoop and stiffness go away, shoulders straighten. The gait becomes light and relaxed;
- ✓ Chronic fatigue disappears;
- ✓ Lymphatic system activity improves.
- ✓ Cardio-vascular and immune systems improve;
- ✓ All muscles, especially problematic female areas (buttocks, abdomen, arms, hips) are tightened;
- ✓ Increased mobility;
- ✓ The elasticity of the cartilage tissue increases. Its age-related changes are prevented;
- ✓ Decreasing level of injuries among sportsmen and dancers.

Also, gradually from class to class, clients increase muscle endurance. This is achieved by gradually increasing the intensity of your training. When clients gain some experience and their muscles begin to work as directed by nature, you will find that their endurance has increased. Energy ceases to be wasted on unnecessary stress and useless movements.

Many people complain about the fatigue they experience after spending the whole day on their feet. This is due to the fact that they cannot stand correctly. They compress the ribcage, and therefore the lungs. When clients are able to «open» and straighten their bodies, their breathing becomes more efficient. All of Pilates exercises are aimed to increase the efficiency of the respiratory, lymphatic and cardiovascular systems. A car with

a good engine and balanced wheels drives much better. The same is true for the body.

The only thing that Pilates cannot offer is a full-fledged training for the cardiovascular system. Although consistently performed exercises of the «Magic Five» increase the heart rate, in general it is not enough, so it is recommended to supplement the Pilates program with aerobic or functional training.

And another important point is that the Pilates method extends far beyond the gym. By retraining your body to walk, sit, stand and move properly, Pilates turns every movement into a mini fitness workout. The Pilates Method makes you feel better no matter what you do, and it also makes you taller. As the Pilates Method adapts to any level of fitness, it will lead you to progressively increase your body's strength, flexibility and endurance at your own pace.

As the body undergoes changes, the Pilates program would change to meet the new needs of the body. The Pilates method brings the body and health to a single whole, and the person begins to feel what he or she really needs and what should be avoided.

CHAPTER 7. MAIN RECOMMENDATIONS FOR THE TRAINING

Endurance and frequency. It is recommended to practice 3 times a week with the duration of each session from 30 minutes to an

hour, while strictly observing the exercise technique.

Joseph Pilates himself recommended taking 15-30 minutes of classes a day 4 times a week.

The best time to exercise is in the afternoon or evening, when the muscles have already warmed up during the day. You can also do it in the morning, but it will take more time for a thorough warm-up.

The use of musical accompaniment is not a prerequisite for training. It should not be too slow and too relaxing so that the practitioners do not want to fall asleep.

Equipment for classes:

- a fitness mat or two mats folded together, thick and tight enough to support and protect the spine;
- a small thick pillow or rolled towel to put under your head;
- a long thin scarf (it can be used to train lateral intercostal breathing);
- a tennis ball or a small massage ball (for practicing and understanding some of the nuances of technique in exercises);
- weights. There is a whole series of exercises in the framework of the Pilates strength direction using dumbbells (0.5-1 kg) and weight pads for the legs.

It is recommended to wear body-hugging clothes for Pilates classes. This way, the instructor can see movements of the client better and the clothes do not get caught in springs or other equipment.

There are many exercises in Pilates where clients are lying down and their legs are moving above them so they do not want the shorts to ride up. Instead, it is better to wear capris or leggings with a tank top or fitted long-sleeved shirt.

As for footwear, you can either be barefoot or wear socks for your session. Most studios have their own suggested protocol.

If you are going to go for socks, find yourself a pair with rubber detailing on the soles so you do not slip on the mat or machine. A barefoot or socks-only approach will also help you navigate in and out of the straps on a standard reformer with ease.

CHAPTER 8. TEACHING CLIENTS. BASIC TRAINER'S SKILLS

The Pilates trainer does not only show the same exercises each lesson but teaches how to perform them. It seems impossible to learn the movement just by watching the trainer performing it. Different trainers find their methods of teaching intuitively but there are several common principles suitable both for experienced and starter level teachers.

The common model of teaching includes 4 stages:

1. The explanation and demonstration of performing an exercise.
2. The observation of client's actions.

2.1. The trainer evaluates the client's actions according to the standard.

2.2. Identifies shortcomings.

2.3. Chooses one or several elements of an exercise which mistakes are the most necessary to get rid of.

3. Assessment of the correctness of his actions and recommendations for eliminating mistakes.

3.1. Making recommendations trainer tells the client about the aim of an element and possible mistakes of performing.

3.2. Explains how to get rid of them and/or demonstrates how to perform it correctly.

3.3. Helps the client to perform the movement correctly by conducting them or using manual stimulation.

3.4. Advice the client to perform an exercise again on his own.

4. The performance of an exercise again.

MAIN RECOMMENDATIONS FOR RUNNING PILATES CLASSES

The time during which the coach has the opportunity to observe the client's actions is limited. In this relatively short time, the coach must grasp the specifics of the client's performance and the way to correct the deficiencies. The effectiveness of training depends on how exhaustively the coach can do so.

When teaching, the coach is guided by the standard. At the same time, each client has a unique combination of the ability to understand

the explanation, personal experience, skills and natural capabilities.

For example, some people are quick to accept theoretical explanations but are not able to master motor skills quickly. And those who have experience in physical exercises sometimes have to face the need to overcome the already learned incorrect stereotypes of their implementation. A clear idea of the ideal to strive for is necessary, this makes the coach's job easier.

It is important not only to learn what mistakes does the client make, but also to understand why does he make them. This is the only way to identify those disorders of function, incorrect habitual positions, etc., to eliminate which it is necessary to direct efforts first. For example, you can see that a client has difficulty with flexing and extending the spine at certain intervertebral joints. Among possible causes there could be defects in posture, weakness, overstretching, or insufficient tension in the abdominal muscles. Identifying and eliminating the cause would increase the mobility of the spine.

The client is usually not able to focus on fixing all of his mistakes at once. If you immediately point out to him the mistakes made when performing all the components of the exercise, he could be confused, and sometimes offended. The coach should try to focus the client's attention on those mistakes that lead to incorrect performance of the entire exercise.

Drawing his attention to many small details, based on the same defect, the coach would not help him much. For example, the neck tension during laying on the back position exercises is

associated with the client's inability to relax the muscles of the neck and upper back.

In this case, attempts to relieve tension by giving the neck a more comfortable position are ineffective, while developing the relaxation skill will help eliminate several defects at once.

It is important to help your clients make their efforts more effective. Consider which elements of which exercises should be discussed in order to maximize the effect of the effort, and what are the most important points for the performance of the exercise as a whole. If the trainer cannot answer these questions himself, then he needs to turn to the basic principles of the Pilates system. Doing so could often help to resolve many doubts.

For basic level clients, it is enough to focus on improving awareness of body position and coordination of movements, breathing control, involvement of the pelvic floor and abdominal wall muscles in maintaining the stability of the spine and pelvis, improving the mobility of the spine and the musculoskeletal system as a whole.

When choosing the pace of the session, keep in mind that some elements take longer to explain and demonstrate than others.

With regular sessions, the trainer would have to give the client recommendations at each session, based on their specific situation, in order to cover all the problems that need to be resolved in a given period of time. As you discuss the same points over several sessions, you need to add something new each time or explain the same thing in a different way. Additional opportunities are created by the use of simple devices, small equipment (roller, small ball, etc.).

When giving individual recommendations in the context of group lessons, it should be borne in mind that they are heard and absorbed not only by the person to whom they are addressed, but also by everyone present in the class. For example, if there are clients with the same mistakes in a group, the recommendations should be formulated in such a way that they are useful to everyone. When starting to explain, the trainer must have a good idea of how the client should perform the movement and formulate recommendations as accurately as possible.

Choosing an exercise element to practice is an essential part of the learning process. Consequently, its effectiveness depends on the trainer's ability to notice and analyze the peculiarities of mastering a particular exercise by clients. In practice, especially gifted coaches are distinguished by virtuoso mastery of this skill.

RECOMMENDATIONS:

1. The trainer shows to the client the shortcomings of performing an exercise and explains how to overcome them.

Explanations should be given accurately and clearly, so that the client understands what he needs to do.

2. The trainer chooses the description and the way of explanation, demonstration the correct performing of the movement for each client.

With a creative approach to teaching, over time, methods of verbal description and demonstration of exercises and effective formulations of recommendations are developed.

3. The trainer is using the verbal stimulation.

In the course of the exercise, short verbal instructions are useful to precede an action.

4. The trainer is using different pace and intonation of speech.

The trainer regularly practices is using different voice modules, selects the correct accents of speech for different speech instructions and tests their effectiveness on clients of group sessions.

5. The trainer is using visual imagers.

Verbal descriptions that evoke visual representations of space, length, support, smoothness of movement, etc., contribute to an improvement of the regulation of movements, enhance perception and mastery of skills.

6. Discussion.

The trainer discusses with the client the process of doing the exercises and the associated sensations, mainly in individual work.

7. Demonstration of exercises.

The demonstration should be appropriate for the client's level. Its purpose is to show him what movements he can perform more correctly, and NOT HOW WELL DOES THE TRAINER PERFORM THE EXERCISE!

8. Using the manual stimulation.

To correct the movement, use firm but gentle pressure in the desired direction.

9. Encourage not over praising.

In the teaching process, attention should be paid not only to the client's mistakes, but also to his achievements, only true ones.

10. You are an exemplar of what you're going to teach.

The coach's behavior must comply with the principles of what he teaches, which means that his postures and movements during classes must be impeccable.

PRACTICAL APPLICATION 1.

PRE-PILATES EXERCISES

1. BREATHING

AIM: to learn the lateral intercostal breathing, the stabilization and alignment of the body.

According to Joseph Pilates the correct breathing is the basis of all the other movements. The correct breathing has to be integrated in the performance of all the exercises of the system afterwards and to help in performance:

- INHALE (through nose) is using for the preparation to an exercise and for concentration on its performance;
- The movement itself has to be performed with the deep EXHALE (through mouth).

1a



PERFORMANCE:

1. S.P. standing (1a)/laying on back (1b) – put your hands on your lower ribs under your chest, breathe lateral breathing (LB) to your hands, let your ribs spread sideward and backward with an inhale and to return with an exhale. Engage your center, bring your lower abdomen to your spine and hold the position during inhaling, making your stomach flatter with an exhale.

2. S.P. seated, without using strap, repeat the step 1. Using the strap – wrap yourself from the back at the lower shoulder blades line, bring both ends forward and grab them crosswise. Slightly tighten the strap, direct your elbows sideward, lower your shoulders, align your spine. Your ribs are trying to stretch the strap with an inhale. Exhale and try to tighten the strap a bit tighter.

3. Make 5-7 breathing cycles in chosen S.P.

1b





1c

ATTENTION:

- Don't let your lower ribs stick out forward with an inhale, keep lengthen yourself through the crown of your head, increasing the distance from your lower ribs to your iliac bones.
- In laying on back S.P. press the back of your head, shoulders, shoulder blades, lower back, sacrum and tailbone tightly to the floor.
- Lengthen your spine from your neck to your tailbone or the whole body from the crown of your head to the heels if you perform the exercise with your legs being outstretched.

Pic. 1a – lateral intercostal breathing

(later LB) standing S.P.;

Pic. 1b – LB with the strap;

Pic. 1c – LB laying on back S.P

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2. PELVIC CLOCK

AIM: stabilization of the body, center control and the development of the lower spine mobility in each plane.



2a



2b

Pic. 2a – tilting pelvis backward.;

Pic. 2b – tilting pelvis forward.

PERFORMANCE:

1. Lower yourself down on a mat, bend your knees, lower your feet together, knees are pressing to each other.

Your lower back is in Neutral position. Press your shoulders and shoulder blades to the mat. Keep 90

degree angle in your elbow joints. Gaze upward.
INHALE.

EXHALE – start to tilt your pelvis backward flattening your lower back.

2. INHALE – tilt your pelvis forward to create an arch.

3. Perform this movement 6-8 times, imagining that your pelvic area is a compass with the center in your navel and moving the compass needle from north to south, keeping LB in your own pace.

4. Change the direction of pelvic movement from west to east. Perform 6-8 times

ATTENTION:

- Avoid the lifting of your pelvis from the mat, press it to the floor tightly;
- Don't allow your knees to move sideward, they must be directed strictly upward;
- Your face, shoulders and chest are relaxed;
- Press your shoulders, shoulder blades and arms firmly to the floor;
- Don't stop breathing.

MISTAKES:

- The excessive stress of the upper body and legs;
- The loss of leg alignment during the performing due to limited mobility of pelvis and the lower back.

HW: Visual image/Options for working on the correction of mistakes:

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2. SHOULDER DROPS

AIM: stabilization of the whole body, control of the center, development of shoulder blades sensibility and stabilization, engaging of shoulder joints.

PERFORMANCE:

1. S.P. laying on your back (Imprint) – bend your knees, press them to each other. Press your feet, lower ribs and sacrum firmly to the floor, raise your hands vertically to your chest level and rotate your palms facing each other.

Press your shoulders and shoulder blades to the mat.

Gaze upward. INHALE and EXHALE, activating your center.

2. INHALE – stretch your hands up. Let your shoulder blades extend from your spine sideward (3a).

- Extending/returning of outstretched arms (3b);
- Lifting the outstretched arms upward (3c);
- The mill with outstretched arms (3d).

- Keep pressing your sacrum and chest to the floor;
- Lengthen your shoulder blades lower edges to your tailbone and keep lengthening yourself through the crown of your head;
- Don't allow your shoulders to move too close to your ears, keep your neck long.

- Bent elbows;
- Incorrect arms' position in S.P.: not vertically but too close to your head;
- Your shoulder blades are not pressing to the floor.



HW: Visual image/Options for working on the correction of mistakes:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

4. CHEST LIFT

AIM: to provide a great core workout, to tone and sculpt abdominal muscles and strengthen the supportive muscles of your chest and upper back, to keep neck muscles strong.

PERFORMANCE:

1. S.P. Imprint. Lie on your back with your knees bent and feet flat on the floor. Make sure your legs are parallel—lined up so that your hip, knee, and ankle are aligned—and the toes are pointing directly away from you. Keep your shoulders down and bring your hands behind your head with the fingertips touching. Keep your elbows open and allow your hands to support the base of your skull. Take a deep INHALE activating the center of your body.

2. As you EXHALE, slowly pull your belly button down back toward your spine. Let your spine lengthen out as your lower back comes down to the mat. As you lengthen your spine, tilt your chin slightly down. Keeping your neck long, slowly lift your upper spine off the mat, leading with the front of your chest (breast bone). Keep your neck and shoulders relaxed. Don't let your legs tense up. Leave the lower edges of your shoulder blades on the floor. Gaze on your lower abdomen (4a).

3. When you reach the top of the move, INHALE, drawing the abdominal muscles in deeper.

4. EXHALE as you slowly lower back to the mat. Start with your shoulders, keeping your abdominals drawn in, then your neck. The back of your head should reach the mat last.

5. Repeat the movement for 10 times.

6. Modifications:

- Using mat or towel to provide support and a deeper stretch (4b);

- Lifting chest with your arms outstretched (4c);
- Lifting chest engaging arms movements in shoulder joints (4c).

ATTENTION:

- Each time you breathe out, check in and make sure your core is fully engaged;
- Lengthen your shoulders and shoulder drops down. Your elbows are directed widely sideward;
- Move vertebra by vertebra;
- Roll yourself up with your maximal amplitude;
- Bring your spine to the C-shape position.

MISTAKES:

- Your shoulders are lifting up to your ears due to lack of control of your center muscles;
- Your rectus abdominis is sticking out forward.

4a



4b



4c



4d



Pic. 4a – lifting up thoracic spine;

Pic. 4b – lifting up thoracic spine using towel/mat;

Pic. 4c – lifting up thoracic spine with outstretched arms;

Pic. 4d – lifting up thoracic spine and arms' movements in shoulder joints.

HW: Visual image/Options for working on the correction of mistakes:

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5. DEAD BUG

AIM: to work all the muscle groups, to strengthen core muscles, to promote coordinated movement.



5a



5b

Pic. 5a – switching legs;

Pic. 5b – arms and legs.

PERFORMANCE:

1. S.P. Imprint. Lie on the mat and bend your hips and knees 90-degrees, lifting your feet from the ground to the Table Top position. Your torso and thighs should form a right angle, as should your thighs and shins. Lengthen your arms along your body, your palms are pressing the floor. Gaze

2. INHALE - keep your left leg exactly where it is, then slowly extend your right knee and hip, reaching your right heel toward the floor. Move slowly and steadily, breathing in as you perform the extensions, avoiding any twisting or movement of your hips and abs. Stop the movement just before your leg touch the ground. Bring your leg to the starting position with an EXHALE. Then switch legs (5a).

4. Extend your arms straight over your chest so they form a perpendicular angle with your torso. INHALE and slowly reach your left arm backward, over your head and toward the floor as you simultaneously extend your right knee and hip, reaching your right heel toward the floor. EXHALE and perform the same movements to the opposite sides, this time keeping your left arm and right leg steady as you extend your right arm and left leg.

ATTENTION:

- Engage the front surface of your hip while lifting up your leg to keep 90 degree angle between your hip and calve and not to let your calve to lower down under its weight.

- Overuse of the hip flexors;
- Your rectus abdominis is sticking out forward making an arch in your lower back;
- Lack of axial extension in your spine;
- Lack of stabilization in movement.

[illegible]

6. SIDE TO SIDE

AIM: to control the center, to coordinate the whole body, to work oblique abdominal muscles.

6a



6b



3. INHALE – rotate the middle and the lower part of your body to the side so your pelvis and knees are moving as a single whole (6b).

4. EXHALE – return to S.P.

5. INHALE – switch the side.

6. EXHALE – return to S.P. Repeat for 10 times (5 times to each side).

Pic. 6a – initial position;

Pic. 6b – legs are lowered down to the right.

ATTENTION:

- Tighten the transverse abdominal muscles and use your oblique abdominals for tilting so your shoulders are not moving during an exercise;
- Press your knees to each other firmly;
- Keep lengthening your toes;
- Keep 90 degree angle between your hip and your calve.

PERFORMANCE:

1. S.P. Imprint – bring your legs to Table Top position. Shoulders are laying down. Lengthen your toes away from you. Lengthen your arms along your body or to the sides on your shoulder joints level for added balance (6a). INHALE.

2. ENHALE – engage your core muscles. Engage the inner surface of your hips. Press your knees to each other.

MISTAKES:

- Lifting shoulders up from the floor;
- Excessive deflection in the lower back whole rotation so the emphasis from the oblique muscles is shifted to the spine erector muscles;
- The lack of axial extension.

[illegible]

3. INHALE – lift the hips as high as you can and at the same time, push your shoulders into the mat. Make sure to keep your knees parallel. Keep the inner thighs engaged (7b).



AIM: butt, hamstring and low back muscles mobilization, shoulder blades stabilization.

1. S.P. Neutral lying down position with bent knees. Your hands are laying along your body . press your palms to the mat. Bring your feet closer to your buttocks. They are firmly pressing the mat. Engage your buttocks (7a). INHALE.

7b



4. EXHALE and start lowering the spine vertebrae by vertebrae as if your spine is a string of pearls and one by one you place them on the mat. Keep your pelvic tilt until the very last moment and then put your pelvis back into neutral, creating a gap again between the lumbar spine and the mat.

6. Modification: add the arms' upward movement at the highest point with an INHALE and to S.P. with an EXHALE (7c). Perform 1-3 movements with your arms and then return the body to S.P. as in stage 4.

Pic. 7c – adding arms' movements.

- Shoulders and shoulderblades are pressing the mat firmly;
 - Pay attention on your lower ribs. They must be closed inside;
 - Don't bring your chest too close to your chin;
 - Try to increase the distance between your lower ribs and iliac bones while doing this exercise.
- Stretch your abdomen, back and the front side of your body;

8. ASSISTED ROLL UP/ROLL DOWN

AIM: to build the strength, spinal movement, and body awareness that is required to successfully progress to the Roll-up.

8a



8b



8c



8d



PERFORMANCE:

1. S.P. laying starting position Imprint. Lower your shoulders down. Lengthen yourself through the crown of your head. Pull in your navel to your spine. Engage your buttocks. Lengthen your hands from your shoulder joints. Lift your legs up to the Table Top position. Grab the back surface of your hips where it's comfortable (8a). INHALE.

2. Exhale and raise your body up rounding your cervical and thoracic spine using your hands for support (8b). Don't increase the angle between your hips and calves. Lower your feet.

3. Keep C-shape of your spine from your cervical to your lumbar spine. Gaze on your lower abdomen in this position (8c).

4. Inhale and keep the position. Exhale and roll yourself down engaging each vertebra. Lower yourself on a mat. Your neck and your head last (8d). Repeat for 3-5 times.

5. If it's too difficult to roll up you should do the half of an exercise – roll down from the sitting position with an assistance of your arms.

Pic. 8a – initial position;

Pic. 8b – legs are pulling arms in order to roll up the spine;.

Pic. 8c – the top seated position;

Pic. 8d – rolling down.

- The movement must be smooth;
- Bring your stomach to your spine;
- Keep your shoulder blades stabilized.

- Lifting shoulders up from the floor;
- Excessive deflection in the lower back whole rotation so the emphasis from the oblique muscles is shifted to the spine erector muscles;
- The lack of axial extension.

[illegible]

AIM: to improve thoracic spine (and upper body) and shoulder mobility, to improve posture, spinal rotation and to stretch the lower back.

A woman is shown lying on her back on a white surface, performing a backbend. Her arms are extended upwards, and her legs are also extended upwards, with her feet pointing towards the ceiling. She is wearing a pink long-sleeved shirt and black leggings. Her head is tilted back, and her eyes are looking towards the ceiling.

Pic. 9b – arm and body are rotating to the left and upward.

1. S.P. laying on your right side. Your legs are laying like in a Table Top position. Make 90 degree angle in your hip and knee joints like you did it while laying on your back. Your knees are pressing to each other. The aim is not to move

10. SCARECROW

AIM: to strengthen the back of the shoulder for postural benefit of the thoracic spine.

10a



10b



10c



Pic. 10a – initial position;

Pic. 10b – body position with an *INHALE*;

Pic. 10c – *EXHALE* at the top point of the movement.

PERFORMANCE:

1. S.P. laying down on your stomach. Stretch your legs from the hip joints lengthening them. Keep V-Pilates position of your feet.

Your heels are pressing each other. Your buttocks are engaged. Pull in your navel to your spine in order to stretch your lumbar spine and protect your lower back from the inside by your core muscles. Your thoracic spine is also stabilized. Your shoulder blades are stretching downward to the tailbone. Lower your shoulders from your ears. There are 90 degree angle in your elbow and shoulder joints. Lengthen your body through the crown of your head. Don't lower your forehead to the mat (10a).

2. Inhale and slightly raise your body and hands up (10b).

3. Lengthen your hands from the shoulder joints and lower your shoulderblades continuing an inhale (10c).

4. Exhale and bring your hands to your body.

5. Continuing an EXHALE lower yourself down. Repeat for 3-5 times.

ATTENTION:

- Your shoulder blades are stretching downward to the tailbone;
- Lower your shoulders from your ears;
- Stabilize your shoulder blades;
- Keep your wrists and fingers outstretched.

- Lack of control and stabilization of the body;
- Lack of spine lengthening and overextension of the chest.

AIM: to elongate the spine and stabilize the torso. To strengthen all of the back extension muscles in both the upper and lower back. To protect lower back and support a long spine.

Pic. 11d – the final arms position.

12. QUADRUPTED

AIM: to increase the contralateral (diagonal) connections in the body.

12a



12b



12c



12d



Pic. 12a – initial position;

Pic. 12b – lifting up and lengthening of the right hand;

Pic. 12c – lifting up and lengthening of the right leg;

Pic. 12d – diagonal lengthening – right leg, left arm.

PERFORMANCE:

1. S.P. support on your palms and knees. Align yourself stretching from the crown of your head to your tailbone. Your wrist, your elbow and your shoulder are creating one line. Your shoulder blades are slightly brought together. Your lower ribs are closed inside. Pull in your navel to your spine. Your lower back is stretched. Don't lock your elbows. Control your hand muscles. Make one LB cycle.

2. INHALE - lift your hand up balancing yourself on three points. Stretch your hand forward to your shoulder joint level (12b).

3. Exhale and bring it back and switch hands. Stretch your hand forward.

4. INHALE and perform absolutely the same movement with your leg. One leg is stretching to the parallel to the floor (12c).

5. EXHALE – bring your leg to S.P. and repeat with another leg. Perform the whole set for 3-4 times.

6. Modification: link your hands and legs. Raise them diagonally. Start with left hand and right leg. Inhale. Lengthen yourself from your fingertip to your foot diagonally. Exhale and bring leg and arm to S.P. INHALE and switch the diagonal. Repeat for 4-6 times to each diagonal.

ATTENTION:

- Keep pushing down into the ground so that you stay away from the floor;
- Try not to sag in the middle as you are moving;
- Watch the thigh which stays still to see if you are swaying side to side;
- Once you have checked your form, lift the back of your head up again to meet gravity;
- Keep your center muscles engaged;
- Don't change an angle in your hip or knee joints.

MISTAKES:

- The neck is not in neutral position;
- The body is not aligned from head to foot;
- Lack of coordination and control due to decrease in number of supporting points;
- Lower back overextension due to the weakness of the abdominal muscles.

HW: Visual image/Options for working on the correction of mistakes:

PRACTICAL ATTACHMENT 2.

THE BEGINNER SERIES

1. HUNDRED

AIM: It's a basic breathing exercise for a warm-up which engages your core muscles.



1a



1b

PERFORMANCE:

1. S.P. Imprint – laying on your back bend your knees. Feet are pressing the mat close to your buttocks. Press your knees to each other. Arms are overstretched, palms are directed to the floor. Make one cycle of LB, INHALE (1a).
2. Exhale. Bring your head up with your chin down and, using your abdominal muscles, curl your upper spine up off the floor to the base of your shoulder blades. Stretch your legs to the 45 degree angle at the same time. Bring your feet to V-Pilates position. Gaze down into the scoop of the abs (1b).
3. Start patting movements from your shoulder joints. Five movements with an inhale and five with an exhale. Ten breathing cycles to make a hundred. Inhale through your nose and exhale through your mouth. Keep your shoulderblades and pelvis stabilized. Keep flattening your stomach while breathing. Keep your legs strong.
4. After the last breathing cycle make an Inhale. Exhale and roll yourself down to the mat to S.P.

ATTENTION:

- Keep your shoulder blades and pelvis stabilized;
- Keep flattening your stomach while breathing;
- Continue to stretch through the crown of your head;
- Don't lower your head and thoracic spine down to the floor;
- Gaze on your lower abdomen;
- Make patting movements from your shoulder joints as if you were patting on the water;
- Try not to engage your hands, don't bend your elbows. Lengthen your arms from your shoulder joints forward;
- Your transverse abdominal muscle is being used for stabilization here and helps with flattening your stomach;
- Don't stop breathing.



1d



1e



REGRESSION:

- Start with 20-30 patting movements (2-3 breathing cycles), gradually increasing the number to 100;
- Having any neck problems don't lift your head up from the floor (use a small ball or a flat pillow);
- The starting level clients can perform this exercise with their knees bent or from the Table Top position (1c and 1d). It's necessary to engage buttocks. Gradually try to outstretch legs vertically up (V-Pilates position). The lower you bring your legs to the floor the more challenging this exercise become for your core muscles. But your clients should bring their legs as low as their lumbar spine and core muscles allow. If they are able to keep stretched legs quite high than you can use the option appropriate for them.

PROGRESSION:

- The most challenging option is when your legs are lower than 45 degree angle from the floor. The lower back must be pressing the floor in this position.
- Increase INHALES and EXHALES so the number of petting movements will increase as well.

2. ROLL UP

AIM: breathing exercise to mobilize spine and to strengthen abdominal muscles, putting them through a wide range of motion.



2a



2b



2c



2d

PERFORMANCE:

1. S.P. Imprint. Lie on your back on the floor with your legs straight in V-Pilates position (2b) or hip-width apart in case of difficulties with rolling yourself up (2c). Toes are directed to you. Arms are outstretched, palms are facing the floor. Gaze upward (2a). Make one cycle of LB.
2. INHALE - bring your arms straight up over your head and back so that your fingertips are pointing to the wall behind you (2d).
3. EXHALE - stabilize your shoulderblades lowering your shoulders down. Slightly bring your shoulderblades to the central line. Close your lower ribs inside if they've opened.
4. Inhale and lift your hands up to the level of your chest.
5. Exhale and roll yourself up bringing your chin to your chest. Then your thoracic spine. Flatten your stomach. It should be pulled in under your ribs. Continuing an EXHALE roll yourself up and continue stretching after your hands in one direction while pulling yourself backward in the opposite direction by your core muscles (2d). Bring your spine to the C-shaped position.
6. Inhale at the top point.



2e



2f



2g

7. Exhale and lower yourself down engaging each vertebra and flattening your stomach continually. Roll down your lumbar spine on a mat. Lower your shoulders down and bring your hands backward behind your head with an exhale.

ATTENTION:

- Stabilize your shoulder blades and lower them down;
- Stretch your heels to the one direction and roll your spine to the other;
- Flatten your stomach continually;
- Your pelvis must be in a neutral position when you're sitting on your buttocks;
- Don't lift your legs up from the floor while rolling up/down.

REGRESSION:

- To do a half Roll Up – to lift only head, shoulders and shoulder blades up;
- To bend your knees;
- To do Roll Down (2g) – to lower the sacrum on the floor holding your legs with your arms;
- To do Assisted Roll Up/Roll Down.

3. SINGLE LEG CIRCLE

AIM: to strengthen the quadriceps and hamstrings, to promote balance and improved overall function in hips.

PERFORMANCE:

1. S.P. Neutral. Start on your back with your legs extended on the floor, arms by your sides. Gaze upward. Engage your core. Pull your abdominal muscles in, anchoring the pelvis and shoulders. Draw one knee in towards the chest and then extend it straight toward the ceiling. Both feet are in V-Pilates position (3a and 3b).
2. Inhale and cross the extended leg up and over the body. It angles up toward the opposite shoulder and over the outstretched leg (3c).
3. Exhale and lower the leg actively down towards the center line in a circling motion. Use control as you carry the open the leg out to the side and then sweep it around back to center at your starting position (3d). Pause for 1 second. Repeat for 5 times the inward motion.
4. INHALE and reverse, starting your circle by exhaling and then reaching your extended leg out to the side and then circling back toward and over the body.

5. INHALE. Stretch, before switching legs, by climbing the hands up the outstretched leg to hold the ankle. Hold the position with an EXHALE, gently pulling the leg closer and closer to you. Then repeat steps 1 to 4 on the opposite leg and finish with another stretch.

ATTENTION:

- Be sure to keep your shoulders and pelvis level during your single leg circles. This is more important than extending the leg fully or making big circles;
- It is in keeping the pelvis stable that your abdominal muscles get their workout. No rocking or rolling allowed;
- Finesse the circle: Relax the butt muscles & do not lock the knee;
- Try not to rotate your hip joint. Keep it in starting position and constantly stretch your leg from your hip joint upward;
- Imagine that you draw small circles on the ceiling with your big toe;
- Switch your legs like scissors;
- Keep 90 degree angle in your hip joint.

REGRESSION:

- For clients with pelvis stabilization difficulties use lower amplitude. You can bend supporting leg and bring it closer to your buttock. Your knee should be directed strictly upward. When you start performing this exercise the aim is to engage your core muscles to prevent your knee from tilting to the side. So you need a stable support (3e);
- If it's difficult to keep your leg stretched because of the hamstrings contraction you can use the following option. Keep the supporting leg stretched and bring it to V-Pilates position. Lift the other leg up and don't fully stretch it. Keep it a little bent. It's important to move only in the hip joint. So you don't change the angle in your knee joint while drawing circles (3f);
- If your hip joint muscles are contracted or your pelvis is too strained you can use abduction and adduction in this exercise from the S.P. 3a or 3e. So stretch your supporting leg forward and lift the other leg up. And you can start from this starting position or from the position when your supporting leg is bent. It depends on your pelvis stabilization level. INHALE – adduction, EXHALE – abduction.

PROGRESSION:

- Increase an amplitude;
- Increase the pace of the motion (with INHALE and EXHALE make a whole round).

3a



3b



3c



3d



3e



3f



4. ROLLING LIKE A BALL/ROLLING BACK

AIM: to massage the erector spinae muscles and to engage core muscles.

PERFORMANCE:

1. Take a sitting starting position. Place your hands on your lower legs under knees. Don't cross your arms or fingers.

Lift your heels up from the mat bringing them to your buttocks as close as possible. Bring your back to the C-shape position flattening your stomach and pulling in your navel to your spine. Round your lower back.

Slightly bring your shoulder blades together keeping them stabilized. Gaze on your lower abdomen. In this position your knees are pressing to each other.

2. Inhale and roll yourself down to the upper part of your back (4b).

3. Exhale and return trying to catch the balance (4c). Now balance on your buttocks lifting your toes up from the floor.

4. Repeat for 5-6 times.

ATTENTION:

- Try not to swing your neck or your thoracic spine keeping the compact C-shape position;
- Press your knees to each other;
- Flatten your stomach;
- Gaze on your lower abdomen;
- Try not to increase the angle in your knee joints;
- Roll yourself up engaging each vertebra;
- Don't cross your arms or fingers;
- Try not to add inertia with your legs or your back.

REGRESSION:

- If it's too difficult for you to perform this exercise in such a compact position you can bring your feet hipwidth apart and try to perform the roll from this position.
- If it's too difficult to grab your lower legs you should grab the back surface of your hips (4d).
- If you feel that it's difficult to you to roll due to the lower back muscle contraction and you can hear a slaplike sound of your falling on a mat you should stretch your lower back before performing this exercise.

You can just keep a balance in this position and breath. Lift your feet from the mat. And in this balanced position just perform lateral intercostal breathing exercise.

- If you have difficulties with balance lower your toes on the floor.

PROGRESSION:

- Create very compact position by bringing your legs closer to your chest and lowering your head on your hips, grabbing your ankles with your crossed arms.

4a



4b



4c



4d



5. SINGLE LEG STRETCH – SLS

AIM: to train the abdominals to initiate movement and to support and stabilize the trunk as the arms and legs are in motion.

PERFORMANCE:

1. Take a laying starting position. Bend your knees. Press your knees to each other. Lengthen your hands from your shoulder joints forward. Bring your legs to Table Top position and roll your thoracic spine up gazing on your lower abdomen. Lengthen yourself through the crown of your head (5a). Don't relax your buttocks. Make one cycle of LB and engage your core muscles.
2. Inhale and bring your right leg to your chest and stretch your left leg bringing it to V-Pilates position at the extreme point (5b). Don't lower your left leg on a mat. Grab your lower leg and bring it closer.
3. EXHALE and switch legs. The left knee comes in. Now the left hand is at the left ankle and the right hand at the left knee. The hand-to-leg coordination continues with the outside hand of the bent leg going to the ankle and the other hand moving to the inside of the knee.
4. Repeat, switching legs up to 10 times.

ATTENTION:

- Keep your torso still and stable. Movement should be in your arms and legs only;
- Keep your feet moving in a straight line rather than allowing them to go up and down in a bicycling motion;
- Don't relax your stomach muscles;
- Lengthen yourself through the crown of your head engaging your core muscles. It will protect your neck muscles from excessive stress;
- When bring your leg to your chest try not to lift your sacrum from the floor;
- Lengthen your stretching leg even more from your hip joint forward bringing it to V-Pilates position;
- Try to stabilize your shoulder blades and chest area engaging your core muscles;
- Pull in your navel to your spine.

REGRESSION:

- If you have any problems with your lumbar spine or if you feel your lower back's lifted up when you stretch your leg than you shouldn't stretch your leg too low. You should stretch your leg in a high diagonal instead (5c).
- If you have any neck problems you shouldn't lift your head up from the mat before your core muscles are strong enough. Perform the same exercise with head laying on a mat, use a small ball or a flat pillow. You

can also support your head by your arms (5e).

- Don't add the coordinating arms' motions.
- In case of problems with knees grab the back surface of your hip a bit lower than joint (5d).

PROGRESSION:

- Increase the pace without losing coordination and stabilization of the body: INHALE – 2 switches; EXHALE– 2 switches.
- As your core strength increases, experiment with lowering the legs and/or raising the head and shoulders.

5a



5b



5c



5d



5e



6. DOUBLE LEG STRETCH – DLS

AIM: to strengthen upper and lower abs and to help stabilize core.

PERFORMANCE:

1. S.P. Imprint. Start lying on back with knees in the TableTop position and arms lengthened alongside calves. The low back should be pressed against the mat with head, neck and shoulders flexed up off the mat (6a). Make one cycle of LB activating your center muscles.
2. As you inhale, stretch your arms straight behind your head and legs straight to a diagonal position in front. Bring your legs to V-Pilates position (6b).
3. As you exhale, circle arms around and back to legs while drawing knees back in to the 90 degree angle (6c and 6d).
4. Repeat for 5-7 reps.

ATTENTION:

- Keep your body aligned to maximize the benefit;
- It is helpful to focus on staying very narrow;
- Keep your legs tightly together as they extend, think of the abs and ribs moving toward the center line, and use the image of the sit bones coming together;
- Do not let the extension of the arms drop the level of the chest. Your chest and head remain lifted for the duration of the exercise;
- You might need to adjust the height of your arms and legs as you reach. The lower they are, the more difficult it is to keep your lower back close to the mat in a neutral pelvis position;
- Your upper back and neck should remain stable;
- Don't pull your shoulders to your ears;
- Avoid tilting the head back as you raise your arms.

REGRESSION:

- If your core muscles are not strong enough for

6a



6b



6c



this exercise or if you're not sure whether your sacrum press on the floor you can perform the parts for upper and lower body separately without connecting them to the full version;

- If you have any problems with your lumbar spine or lower back you should stretch your legs in a high diagonal instead (5e);
- If you have any neck problems you shouldn't lift your head up from the mat before your core muscles are strong enough. Perform the same exercise with head laying on a mat, use a small ball or a flat pillow. You can also support your head by your arms (5e).

6d



6e



7. SPINE STRETCH FORWARD

AIM: breathing exercise for stretching the spine.

PERFORMANCE:

PERFORMANCE:

1. The starting position is sitting on your buttocks. Lengthen your legs from your hip joints. Feet hip-width apart. Toes are directed to your body in order to press the whole back surface of your legs firmly to the mat for support. Keep your spine and lower back in the neutral position. Your pubic bone must be directed to the floor. Lift yourself up on your buttocks, engage them to work. And now stretch your hands forward parallel to the floor shoulder-width apart, not wider nor narrower. Your palms are facing to each other. Stabilize your shoulder blades and slightly bring them to the central line directing their lower edges downward. INHALE and lengthen yourself through the crown of your head continuously keeping axial traction of your spine (7a).
2. Exhale and roll yourself down starting with your cervical spine. Your neck, then your thoracic spine. Continue to stretch your arms forward and flatten your stomach trying to pull it in under your lower ribs. Your lower back takes C-shape position. Stretch forward (7b).
3. At the extreme point make an inhale.

4. Exhale and stretch your spine starting with your lumbar spine and finishing with your neck and head. Perform one more time.
5. Perform 5-8 times.

ATTENTION:

- Stretch yourself forward by your hands;
- Imagine that you try to go around the ball or an arch with your body;
- Don't change your pelvis position, don't tilt it forward or backward;
- Allow your core muscles and your transverse abdominal muscle to stretch your lower back;
- Your neck continues your spine;
- Avoid any flattening of the spine;
- Don't stop breathing;
- Engage your buttocks.

REGRESSION:

- If you have any difficulties with stretching your legs you can slightly bend them keeping your feet directed to your body (7c). You can also sit down on the flat pillow.
- For better awareness of rolling up and down movements vertebra by vertebra try to do this exercise leaning on the wall with your back.

PROGRESSION:

- Try reverse/paradox breathing – roll down with an INHALE and roll up with an EXHALE. This will challenge your lower back stabilization but will give you better lengthening of the thoracic spine.

7a



7b



7c



8. SIDE KICKS SERIES I

AID: to tone and strengthen the hips and thighs.

PERFORMANCE:

1. S.P. laying on your side I (Neutral). You have to lie down on your side. Align your body to one long line. Heel above the heel. Feet are in V-Pilates position. Knee above the knee. Iliac bone above the iliac bone. Your shoulder joints are aligned. To make them aligned you should pull your lower arm closer to you creating a space between the mat and your side. You need a small arch here to have your lateral muscle chains same in length. Support your upper arm on your fingers or on your palm in front of your chest for added balance. Try not to bring your shoulder forward. Your shoulder blades should be stabilized and brought to the central line (8a).

*** S.P. laying on your side II (Neutral)** (for individual working with client) - Carry your feet to 45-degree angle to your body in V-Pilates position. Place your hand with the fingers and thumbs together at the base of your skull and pull to create length. Check to make sure that your upper arm is along the edge of the mat in line with your spine and that your eyes are looking straight ahead. Place your top hand on the mat in front of the breastbone.

1.1. UP/DOWN: Inhale - lift your top leg straight up to the ceiling and point your toe (8b). Lift your leg only as high as you can manage with it remaining straight. Exhale - resist gravity, flex your foot, and bring it back down to starting position (8c). Think of reaching and stretching your leg out of your hip. Repeat for 5-10 times on each side.

ATTENTION:

- Remain long and lifted in the upper body as you kick your leg up and lengthen it down;
 - Don't roll your leg inward;
 - Keep a slight turnout in the hip and thigh throughout the exercise;
 - Stabilize your body with the powerhouse;
 - Nothing moves but the kicking leg. Shoulder and hips remain stacked.
2. Exhale and roll yourself down starting with your cervical spine. Your neck, then your thoracic spine. Continue to stretch your arms forward and flatten your stomach trying to pull it in under your lower ribs. Your lower back takes C-shape position. Stretch forward (7b).
3. At the extreme point make an inhale.
4. Exhale and stretch your spine starting with your lumbar spine and finishing with your neck and head. Perform one more time.

5. Perform 5-8 times.

1.2. SMALL CIRCLES: Lift your leg up to your hip joint height. Keep stabilization. Draw small circles moving clockwise. Two circles with an inhale and two with an exhale (8d). Perform for five breathing cycles. Stop and perform the same exercise counter-clockwise.

ATTENTION:

- Keep stabilization;
- Try not to swing your body and to keep stabilization working just in your hip joint;
- Draw accurate small circles by your big toe. You don't need a high amplitude here;
- Try not to swing and not to lean backward. Keep your body aligned.

1.3 LEG LIFTS: INHALE - keep V-Pilates position of your feet. Lift your both legs up not too high from the floor (8e).

Don't relax your core. Exhale and lower them down. Repeat for 5-7 times.

ATTENTION: In this exercise try to stretch your lower leg from your hip joint more than your upper leg in order not to shift your heels. Keep press your heels to each other simultaneously. not to bring your shoulder forward. Your shoulder blades should be stabilized and brought to the central line (8a).

8a



Keep in a line:

- Heels
- Knees
- Pelvic bones
- Shoulders

8b



8c



8d



8e



9. SEAL

AIM: to massage erector spinae muscles and also to work your coordination and balance.

PERFORMANCE:

1. S.P. Take a sitting starting position. Bend your knees. The grouping will be following. Slightly open your knees sideward, bring your hands under your lower legs from the inside and grab your ankle or a bit higher. Don't open your knees too wide sideward, they should be at approximately shoulder-width. Press your arms to your thighs and in the opposite direction. Gaze on your lower abdomen. Round your spine bringing it to C-shape position. Pull in your navel to your spine stretching your lower back and grouping your body. Lift your heels from the mat and take a balanced position (9a).
2. Inhale and roll yourself down to the upper part of your spine (9b).
3. Exhale - return to balanced position and make two heel bits. ATTENTION! The movement should be made from your hip joints!
4. Repeat for 7-10 time

ATTENTION:

- Make sure that you stay curved the whole time. Never throw your head and shoulders back;
- When doing this exercise, be sure you are rolling onto your shoulder blades and not onto your neck, head, or shoulders;
- Go backward by deepening the lower abs;
- Come back up by working the abs and the breath, not by throwing your legs or pulling up with your back;
- The movement should be made from your hip joints and not from your knee joints.

9a



REGRESSION:

- If you have back or neck issues, you should end at the prep step with feet just off the mat, balancing. Taking the preparatory position and holding it will provide a very good abdominal workout. You can adduct and abduct legs in this position.
- If your coordination and balance are not good enough to do the bits learn to make just a roll from starting position (9c and 9d).

PROGRESSION:

- Add 2 heel bits at the laying on your shoulder blades position after rolling down;
- Clap your feet together 3 times at the top and 3 times at the bottom of the movement.

9b



9c



9d



PREPARING PILATES PROGRAM FOR BEGINNERS



BREATHING



SHOULDER DROPS



PELVIC CLOCK



CHEST LIFT



ASSISTED ROLL UP



DEAD BUG



SIDE TO SIDE



SHOULDER BRIDGE I



BOOK OPENING



QUADRUPED



SIDE KICK SERIES I



SPINE STRETCH



SCARECROW



DART

BASIC PILATES PROGRAM FOR BEGINNERS



BREATHING



HUNDRED



ROLL UP



SINGLE LEG CIRCLE



ROLLING LIKE BALL



SINGLE LEG STRETCH



DOUBLE LEG STRETCH



SPINE STRETCH FORWARD



SCARECROW



DART



SHOULDER BRIDGE I



BOOK OPENING

SEAL SIDE KICK SERIES I



SEAL