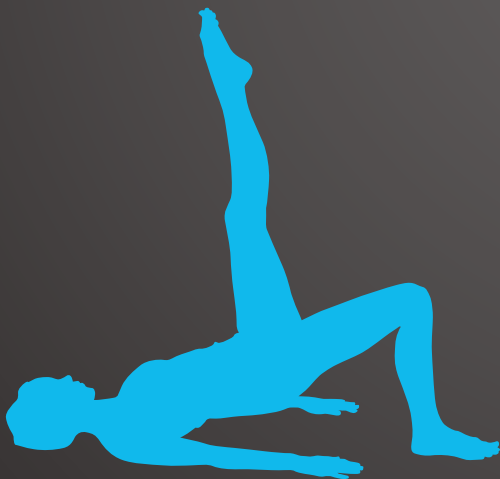
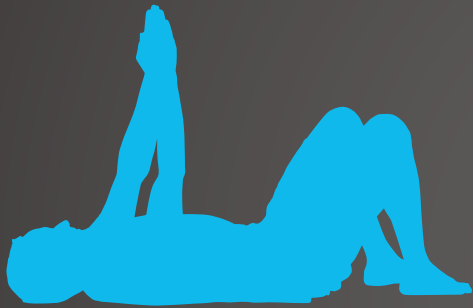


STEFANIE RAHN | CHRISTIAN LUTZ



PILATES

COMPLETE TRAINING FOR A SUPPLE BODY

MEYER & MEYER SPORT

Pilates

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With this book we have fulfilled a long-time dream: to pool our joint knowledge and make the Pilates concept accessible to lots of people.

Our plan met with lots of approval during our research and project implementation. Our collegial exchange and joint work made us realize how valuable and rewarding it is to work as a team, and we would like to express our gratitude for all the support we received.

We are particularly grateful to Meyer & Meyer Sport for their faith in us and for entrusting us with this project; the Artzt firm for making these outstanding photos possible and for allowing us the use of their training equipment; and Winshape for their products.

We would also like to thank the German Pilates Association as well as the German Gymnastics Association for their support.

Stefanie Rahn
Christian Lutz





1 PROLOGUE

My job as a sport scientist and osteopath and my career as a performance athlete have taught me the importance of working with great instructors and healthcare professionals. And I often realized that it is not just our physical condition that is pivotal. The mental component—the healthy mind in a healthy body—is just as important. During a competition, the course for victory or defeat is set way ahead of time. When I look at the life and work of Joseph Pilates, I understand very well why his method is still practiced today, and why his philosophy is prevalent around the world. Many of his ideas were ahead of their time and are more topical now than ever. I can see many similarities between his and my mindset: for instance, the desire to help people with our work. Sensible physical and mental work contributes significantly to a better life and greater productivity. In trying to work sensibly, I am—as was Pilates—a pragmatist and allow myself to be inspired by my daily work. Engaging with function and structure and dealing with systems instead of individual parts are additional commonalities. Although I am not explicitly familiar with every facet of his work, I can say that I am very impressed with his ideas, his attitude, and his unerring conviction that exercise heals. So when asked to write a prologue for this book, I immediately accepted. Like Stefanie and Christian, I, too, value the tried and tested while being open to the new. You can read this book as an instructor or active student and practice or teach the many classic exercises with enthusiasm as Pilates had intended, and be open to the many big and small variations.

Edo Hemar

In terms of its complexity, variety, and adaptability, the Pilates method is hard to beat. The Pilates instructor must be very competent in order to lead the exercises in detail and with precision, and the student is asked to follow these instructions and translate them into physical movement. Countless Pilates books have been written, DVDs have been produced, and YouTube and Facebook are rife with Pilates athletes demonstrating their skills. With this book, Stefanie and Christian have managed beautifully to highlight the essence of the Pilates method, to communicate the movements concisely, and to place the focus on precision of movement. The emphasis is placed on the three most important Pilates principles—breathing, centering, and alignment—allowing the student to focus on the substance. The excellent photos in this book are a feast for the eyes and allow even beginners to easily replicate the gymnastic exercises. The mastery of effectively teaching this intelligent exercise method is in meeting the participant at his current level and to further his abilities without overwhelming him. With this book, Stefanie and Christian don't just demonstrate their core competency as outstanding instructors, teachers, and trainers. Their joy and passion reach participants at every single PILATES Bodymotion workshop they teach. Stefanie enchants and touches everyone with her bubbly, funny, and smart personality. And Christian, with his approachable and sensitive personality, inspires confidence in one's own abilities. Paired with a highly professional teaching style and broad expertise, the spark of the passion for this method leaps to the participants and carries everyone along on the Pilates journey that will ideally last a lifetime. It is our great pleasure and gain to have these two special people on our training-instructor team!

Britta Brechtefeld and Ute Weiler



2 MOTIVATION AND INTRODUCTION

The idea to write a Pilates book stemmed from our long-time activity as Pilates students, instructors, and training instructors. Our bodies have spent countless hours in our own training sessions, classes, and workshops. We have an ongoing exchange with colleagues from a variety of orientations, whose questions and suggestions both enrich us and inspire us to reevaluate our own actions. We are united by our fascination with the Pilates method, the Pilates philosophy, and their unbelievable bandwidth.

With this book, we hope to create a broad base to bring this method anywhere we believe it belongs: every living room, every gym or athletic field, every medical practice or rehab facility, every fitness studio or health center. Anywhere people wish to learn sensible exercise. Pilates—with its training principles, as an independent form of exercise, a functional supplement to sport-specific training methods, and an effective physical therapy method—simply belongs.

The outside perception of Pilates is still that of a mere gymnastics program practiced on a mat by women. In fact, Pilates is a functional exercise program that uses various implements and offers countless possibilities.

This book will provide you with the essential basic knowledge under consideration of current scientific findings and research results. Every theoretical digression is made tangible and accessible via practical exercises and can be immediately implemented. The body of the book includes target group-specific exercise programs with and without small implements. In addition to the exercise description we have included tips and suggestions for instructors and students. It is our wish to support instructors and participants in integrating the Pilates method into their training programs and to help Pilates occupy its proper place in the world of sports and healthcare.

2.1 WHAT IS PILATES?

Pilates is a well thought-out, intelligent, and extensive exercise concept. It promotes concentration ability, strength, and flexibility, and is alterable and adaptable with respect to the student and his exercise goals. The frequently cited exercises that are anchored in the public consciousness, such as “One Hundred,” represent only a fraction of the exercise repertoire. These frequently cited exercises are much like an iceberg of which only the tip is visible. Some consider the Pilates method a classic that is firmly entrenched in the world of exercise and healthcare, while others still consider it a dark horse. And as extensive and detailed knowledge about the life and work of Joseph Pilates, his method, his milieu, his way of working and his equipment is, as little does the broader public know about it so far. And that’s in spite of the fact that over the past 30 years, the name Pilates has appeared in countless magazines, books, articles, broadcasts, and programs. Even its entry into physical therapy and rehabilitation, high-performance sports, and, of course,

the exercise programs of prominent performers has not resulted in a breakthrough. Joseph Hubertus Pilates was actually way ahead of his time. His exercise program is well thought out all the way through and represents the complete coordination of body and mind (Pilates & Miller, 2003, pg. 9).

He says about his method, which he called contrology:

Contrology develops the body uniformly, corrects wrong posture, restores physical vitality, invigorates the mind, and elevates the spirit. In childhood, with rare exceptions, we all enjoy the benefits of natural and normal physical development. However, as we mature, we find ourselves living in bodies not always complimentary to our ego. Our bodies are slumped, our shoulders are stooped, our eyes are hollow, our muscles are flabby, and our vitality extremely lowered, if not vanished. This is but the natural result of not having uniformly developed all the muscles of our spine, trunk, arms, and legs in the course of pursuing our daily labors and office activities. (Pilates & Miller, 2003, pg. 9).

Contrology facilitates the body's uniform development, corrects poor posture, restores physical vitality, and invigorates mind and soul. During childhood we tend to benefit from a natural and normal physical development. But as we get older we find ourselves in bodies that don't always seem flattering. Our bodies have caved in, our shoulders slump, our eyes sink deep into their sockets, our muscles are slack, and our vitality is very low, if not gone completely. It is the sad consequence of neglecting our trunk, arm, and leg muscles due to our daily workload (Übers. S. Rahn).

Joseph Pilates wrote those words in 1945. More than 70 years have passed since then, but we still struggle with the same problems. One more reason to continue to spread the Pilates concept.

2.2 JOSEPH H. PILATES AND HISTORY

Joe Pilates was born Joseph Hubertus Pilates on December 9, 1883, in Mönchengladbach, Germany. It was a time of rapid industrialization during which Germany developed from an agrarian society into an industrial state. This time period was characterized by economic fluctuations during which heyday and depression alternated. Hard physical work for women and children was still the order of the day, and living and working conditions for laborers were bad. That was also the case in the Pilates household. His mother Helena Pilates, nee Hahn, (1860-1901), worked in a factory, and his father Heinrich Friedrich (Fritz) Pilates (1859-1922) was an assistant locksmith.

At that time, the infant and maternal mortality rate dropped significantly due to improved hygiene, medical advancements, and better nutrition, and the population of the German Empire sharply increased. Particularly in the urban centers of large cities, the population pressure intensified, and an overseas emigration wave during the 1880s and 1890s was followed by the biggest domestic migratory movement in German history. By the time he was 16 years old, the life of Joseph Pilates was also shaped by constant moves.

He had what it took to pursue a respectable career as a beer brewer, but his fascination with and love of exercise and the development of a strong and supple body caused him to repeatedly leave his job to pursue his passion.

From the time he was young, Joseph Pilates observed the seemingly effortless yet powerful movements of animals, and later, with enthusiasm, his daughter's physical development: kicking her legs, stretching, reaching, rolling over, pushing up, and crawling.

He meticulously practiced the complex sequences of gymnastics and boxing. He learned about the muscles responsible for the different motion sequences from an anatomy book, a gift from his mother's physician. He developed a good eye and a high awareness for the movements of the human body, exercised passionately, and developed from a skinny boy into a muscular young man.

The concept of a body culture emerged with natural exercise sequences, and as a result, Pilates turned more to boxing because the motion sequences in gymnastics seemed increasingly unnatural to him. In Eugen Sandow, Elisabeth Mensendiek, and Genevieve Stebbins, he found role models for a movement and exercise culture intended to help people move better, become healthy in mind and body, and maintain their good health for a lifetime. Next to the correct execution of his exercises, letting go and relaxing as well as consciously using the breath were new exercise principles that had previously attracted little interest in the gymnastics and boxing world he was familiar with.

In November 1913, after the death of his wife Maria, Joseph Pilates emigrated to England. The assertion made by other sources that Pilates had already left for England as a boxer in 1912, cannot be verified. However, there is proof he personally registered his wife's death at the civil registry office in November 1913.

Whatever the reason Pilates left Germany and whatever his occupation might have been in England, WW I brought it all to an abrupt halt. Germans, Turks, and Austrians (men between the ages of 17 and 55) were declared foreign aliens and interned. The dreary surroundings, the lack of power over their situation, and the forced inactivity quickly led to a desolate and depressive mood amongst the prisoners.

Joseph Pilates' moment had come. To counter the hopelessness surrounding him, he began to organize activities and exercised his fellow prisoners with a kind of boxing gymnastics to keep them physically and mentally fit.

In the fall of 1915, he was moved to Camp Knockaloe on the Isle of Man, a giant camp with better infrastructure and more opportunity for activities. Here Pilates became part of an up-and-coming boxing culture that not only included athletic aspects, but also became an important social event in everyday prison life.

Pilates began to observe animals again (here cats in particular) and developed a training concept that would both stretch and strengthen the body by consciously performing the exercises in due consideration of specific training principles. (Romana Kryzanowska once defined the Pilates method as a two-way stretch with a strong core.)

Pilates may have gotten the idea to use springs for resistance in his apparatuses in Knockaloe. They were intended to stimulate the tissue's tensile resistance against which students would vigorously stretch.

After the end of WWI, Pilates returned to Germany in March 1919, and in the following years focused more on the sport of boxing. He established his own boxing school and even fought several matches.

But he still continued work on his exercise plan and invented apparatuses to facilitate these exercises. In August 1922, he submitted his first patent application for the foot corrector to the patent office of the German Reich in Berlin. It was approved in May 1923.

Due to the bad economic climate in Germany, Joseph Pilates' younger brother Fritz left Germany for America in 1923.

During the summer of 1923, Pilates found a job as a self-defense instructor for the Hamburg police department. There he learned the Japanese martial art Jiu- Jitsu, which purposefully uses the opponent's hands as resistance during training and specifically integrates breathing into the practice. He promoted good physical hygiene and added the concept of free body culture (nudism) with its dislike of clothing that prevents the rays of the sun from accessing the human body to his method.

In August 1924, Joseph Pilates received the patent for his physical training apparatus—later known as the Universal Reformer—in Hamburg. That same year, Joseph Pilates met the American boxing journalist Nat Fleischer, who was excited about his method and his physical training apparatus, and convinced him to travel to New York for the first time in 1925.

In 1926, Joseph Pilates left Germany for good and moved his residence to New York. During his ocean passage, he met Clara Zeuner (1883-1976), his subsequent life companion and major supporter in bringing his plans to fruition.

With help from Nat Fleischer, Joseph Pilates found a space for his studio at 939 8th Avenue between 55th and 56th Street. There Joseph Pilates worked with his first clients primarily on his physical training apparatus, for which he now also owned a patent in America under the name Gymnastic Apparatus. On his business card, he changed the year of his birth to 1880.

In spite of the global economic crisis, Pilates was able to establish his studio and acquire a good reputation in the world of dance. Working with Ruth St. Denis and Ted Shaw resulted in a regular teaching job at the Summer Camp for Dancers at Jacob's Pillow in the Berkshires starting in 1941.

In the meantime he had published his first book, *Your Health*, in 1934, which was followed by *Return to Life through Contrology* in 1945. This book was an invitation to all people to exercise according to his method and improve their lives in the process. It includes 34 exercises that can be done anywhere and requires only one's own body as a training tool.

Later efforts to make his method accessible to the American medical profession and establish it as part of the healthcare system in the United States failed. The extent to which Joseph Pilates was convinced of his method's effectiveness is evident in a letter written in 1961, to the then president of the United States, John F. Kennedy, in which he offers to improve the government's physical fitness program through his concepts.

During the following years, Pilates withdraw more and more from his studio. He reduced his own exercise regimen and largely neglected his body. He became seriously ill in 1965. Pulmonary emphysema caused him severe breathing problems and even made climbing the steps to his studio difficult.

At the end of September 1967, he was hospitalized at Lenox Hill Hospital in New York with severe respiratory distress and died there on October 9, 1967.

2.3 THE STATUS QUO

Although he was born and raised in Germany, it is taking a long time for the Pilates method to become known here and it is spreading very slowly. While the first studios in Great Britain were created as far back as the 1970s, in Germany the first stirrings only took place in the 1980s. The mat exercise program established itself very tentatively in gymnastics, dance, and fitness studios. The first Pilates studios with equipment were set up. Instructor training was still limited to just a few schools. Today, there are approximately 800 Pilates studios in Germany, offering mat exercises and equipment workouts. This translates to approximately 95,000 active members. Sixty-one percent of fitness facilities offer Pilates classes. Pilates is particularly popular in the large German cities like Munich, Cologne, Hamburg, and Berlin. But even in Stuttgart, Frankfurt, Düsseldorf, and Erfurt, relatively many people seek out these class offerings (source: fitogram). However, in rural areas the Pilates spirit has yet to be found. Pilates apparatuses like the Reformer, Trapeze Table, Chair, or Barrel are largely unknown, even among many instructors. And that in spite of the fact that since the founding of the German Pilates Association in 2006, the number of training institutions has increased from 5 to 16. Add to that the many other training opportunities through clubs and associations that have realized that even experienced instructors need more than one weekend to familiarize themselves with the Pilates principles.

We can only guess why Pilates in its entirety is still relatively unknown. One reason may be the lack of a centuries-old history and tradition like that of yoga. The proper training is also long and expensive. Just like the Pilates apparatuses. Their acquisition, use, and amortization are only possible with a well thought-out concept and the appropriate setting. Regardless, we Pilateros and Pilatistas have to take a good look in the mirror. Marketing and networking are not our forte. By the way, that was the case with Joseph Pilates, too, but instead of an excuse it should be an incentive to become more active and publicize the method's many advantages, particularly with respect to other sports. Its reputation as an exercise for women, a stretching program, or relaxation training, still precedes the method. In fact the application of the Pilates principles makes Pilates unique. They invigorate every exercise and make it a special, individual, and target-oriented experience.

2.4 WHO SHOULD PRACTICE PILATES?

Anyone can do Pilates, from the rehab patient to the performance athlete, from the adolescent to the senior citizen. Joseph Pilates developed an exercise method that enables anyone, regardless of age, gender, and fitness level, to master life's tasks with joy and dedication. What matters is the motivation or the goal an interested party brings to the table. Some just want to unwind for an hour each week or be around other people. Others focus on the physiological aspects. People who work want some balance during their lunch break or after work, athletes want to supplement and optimize their training. In cases of injury or illness—like, for instance, a torn ACL, joint replacements, or arthritis—Pilates is the ideal exercise (in consultation and collaboration with the treating physician or therapist, of course) for a quick recovery and to regain lost strength, mobility, stability, and control. While a physical therapist makes sure that the injured body region receives the necessary care, we as instructors can support the rest of the body to reverse compensation and adaptation patterns and restore the desired function. Next to the positive effects on physical health, the method also promotes and helps maintain mental health. The results of studies done with people suffering from depression have verified the positive effects of regular Pilates training (Opitz, 2013).

Participants are motivated by different things that often aren't very well defined. That makes it difficult for us instructors to put together the ideal program. It is a good idea to clarify beforehand what happens in a Pilates class and what Pilates can accomplish, because Pilates is not a universal remedy and does have its limitations. For overweight people, Pilates is an excellent exercise program that helps increase general well-being, body awareness, and an upright posture. But anyone expecting the pounds to melt away will be disappointed. Pilates is also not suited for cardiovascular training, nor does it work as exercise on the side with the television on or while chatting with the neighbor. During their exercise units, our participants must be ready for new physical experiences and bring with them a certain amount of eagerness and diligence (Joseph Pilates recommended 3 times a week). Then Pilates will take full effect resulting in "mens sana in corpore sano."



3 TRAINING PRINCIPLES

3.1 PILATES IS A PRINCIPLE-BASED PRACTICE

Joseph H. Pilates based his exercise on a very distinctive philosophy. The traditional Pilates principles subsequently developed from these seminal ideas and considerations. It is less about mindlessly working through a specific exercise sequence, and more about performing the movements in a way that creates the balance between body and mind Joseph Pilates intended (Pilates, 1934). The principles also give structure to the exercise and serve as a kind of guideline the student can always go back to. The instructor uses them as a basis to prepare, compile, and properly teach the exercises. The following principles were listed by Friedman and Eisen in 1980, in their book *The Pilates Method of Physical and Mental Conditioning* (Friedman, Eisen, 1980, pg. 5), and have been used as the Pilates principles ever since:

- Concentration
- Centering
- Control
- Breathing
- Precision
- Flow

Over the course of the past decades, these principles have been interpreted in different ways, and have been supplemented or increasingly refined. For this book, we decided to make a choice and add the alignment principle to the list. Anyone who practices Pilates will quickly notice that practicing according to and with this valuable principle will result in better quality of execution and, as Joseph Pilates envisioned, the uniform development of the body, correction of poor posture, and restoration of physical vitality (Pilates & Miller, 2000-2005, pg. 9).

3.1.1 BREATHING

BREATHING MAKES A DIFFERENCE

Breathing is certainly the principle that is most different from other types of exercise and gymnastics. It is the breath that makes the exercises special, the thing that makes Pilates what it is, and allows the complete execution of the exercises with respect to strength, flexibility, and relaxation. Moreover, the breath accompanies each exercise, dictates its rhythm and tempo, and is in itself an exercise. The better the breathing technique, the better the execution of the exercise. Regardless of physical limitations and injuries, exercises based on the breathing principle can be performed anywhere, anytime. After all, breathing is the first and last thing a human being does. We can live without food or water for a while, but without breathing life ends within minutes. The breath is the direct link between the inner world and the outer world, and it signals any change in our physical and mental state. Taking belly breaths has a calming effect, while breathing into the upper chest area will cause a sense of panic. Thus, being able to control the tempo, intensity, and direction of one's breath can also mean being able to more consciously direct and control our emotions, moods, and feelings.

The breath may be the most important key to concentration and relaxation. Just think of meditation and relaxation techniques during which the use of conscious, slow breaths lowers the heart rate and blood pressure. This cannot be done by sheer will, only with the breath as a bridge (Laarz, D., 2017, pg. 42). It is also the critical factor in strength and stability. We can hear this in the explosive exhalations of a tennis player during a powerful serve, or during blows and kicks in martial arts.

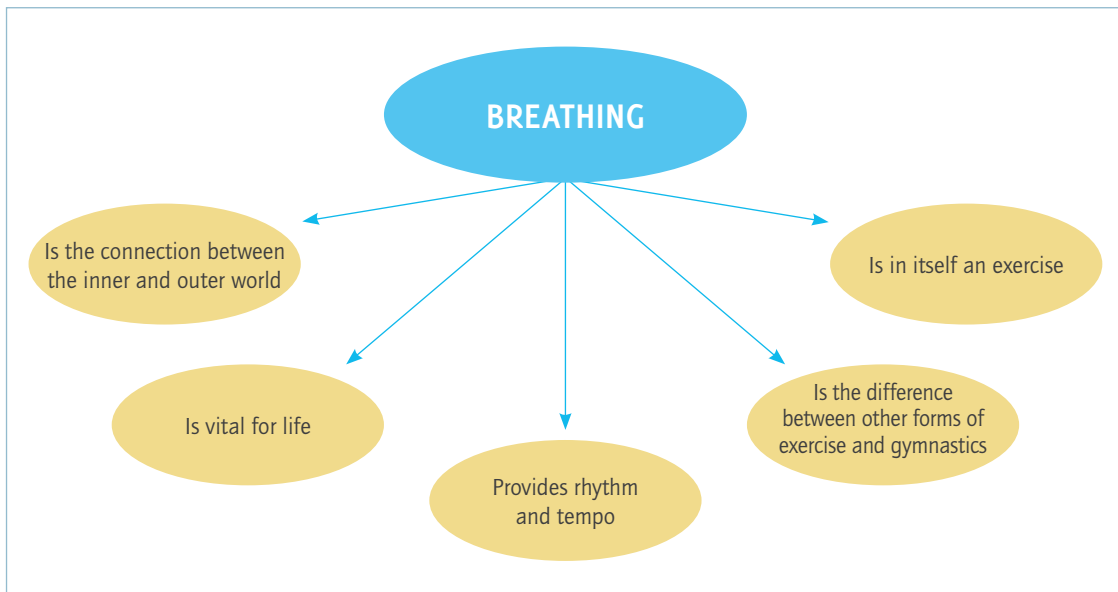


Figure 1

HOW DOES BREATHING WORK?

The diaphragm is the largest respiratory muscle. It is a dome-like structure located in the ribcage between the lower part of the sternum, the lower ribs down to the lumbar vertebrae, and thus separates the belly and the chest. During inhalation the diaphragm works concentrically, flattens, drops, and pushes the abdominal organs down. The chest area enlarges three-dimensionally and the lungs fill with air. The deep abdominal muscle and the pelvic floor relax and lengthen eccentrically to resist the pressure in the abdomen. The opposite pattern takes place during exhalation. The diaphragm returns to its dome shape, the ribs can relax, the abdominal organs return to their previous position. The deep abdominal or thoracic breaths alone allow the organs to experience a regular massage. The ribcage and the thoracic spine are gently moved in all directions. During Pilates, inhalation occurs preferably through the nose, exhalation takes place through the slightly open mouth and is a little throaty, which keeps the jaw loose and relaxed and moderates the pressure in the abdomen. Exaggerated exhalation or loud noises are unnecessary. Instead it is suggested to exhale like a sigh rather than blowing the air out.

A good breathing technique has even more benefits: Due to its position at the inside of the lumbar spine, the diaphragm is able to affect the function of the psoas muscle. The diaphragm spans the fibers of the psoas like a bow and is therefore also able to constrict it when it is taut (see Bohlander, Geweniger, 2011). A flexible diaphragm is essential to an efficient and functioning psoas. Here respiration is directly linked to an upright gait. And due to the diaphragm's functional and fascial connection to the deep abdominal muscle and the pelvic floor, respiration is closely linked to the centering principle. Paying sufficient attention to breathing, particularly when first practicing Pilates, is therefore beneficial in more ways than one, even if it is often confusing to know when one should ideally inhale or exhale during an exercise. The more confident breathing becomes, the easier and self-evident is its use.

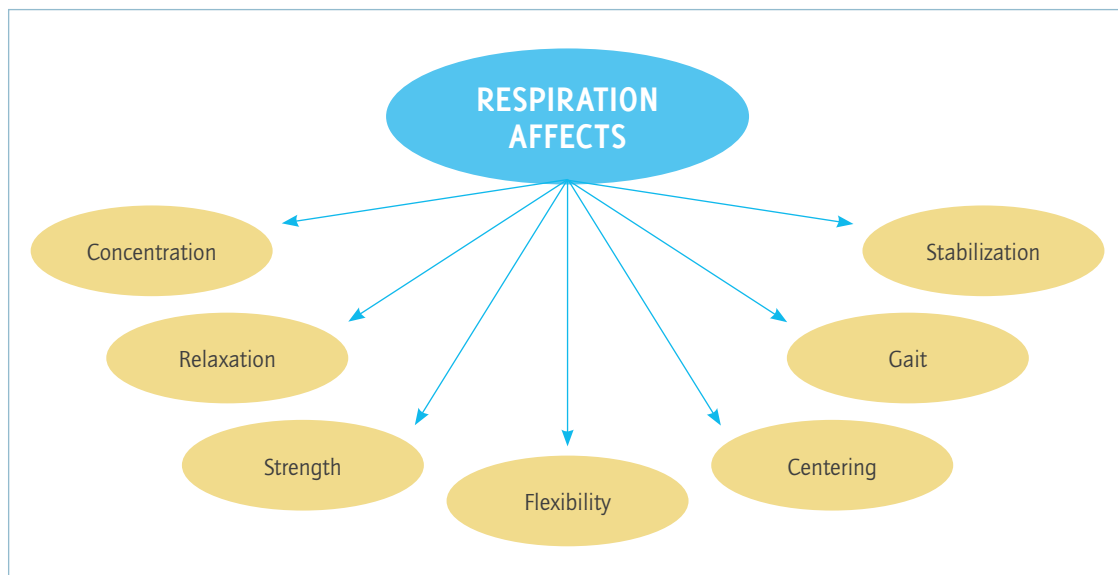


Figure 2

When choosing the breathing exercises, we let ourselves be guided by Eve Gentry. She was an actual student of Joseph Pilates and has further refined his technique because she realized that her students benefitted more from exhaling instead of inhaling upon exertion. It is a frequently seen ground rule. Advanced participants are certainly able to also inhale upon exertion and should practice doing so, particularly since inhalation supports movements in extension. But the exercises in this book are also intended for beginners and amateurs, meaning the people who come to our classes and generally do so only once a week. We therefore deviate from the breathing patterns Joseph Pilates mentioned in his notes.

When describing the exercises, we differentiate between the direction and region in which the breath can flow, and the goal of the exercise, from belly breathing, which is similar to resting respiration, to thoracic breathing, which mobilizes the ribcage and the thoracic spine, all the way to typical Pilates breathing, a functional way of breathing used for all exercises that require strength.

BELLY BREATHING

Goal: Neutral breathing for relaxation.



Starting position: Neutral supine position with knees bent and feet planted; legs are parallel and hip-width apart; hands rest on the belly.



Execution: Inhale through the nose and purposefully direct the breath towards the pelvis, low back, and into the belly. The low back expands; the belly rises and lifts the hands with it.



Next, exhale through the slightly open mouth and notice the belly dropping beneath your hands; imagine the abdominal wall resting against the rear of the low back.

TIP:

Place an object (e.g., a light shoe) on your belly to emphasize the activation and receive immediate feedback by seeing the object move up and down.



Variation: Belly breathing in a prone position. Here the belly can relax and bulge into the floor, and then lift off the floor and rest against the rear of the low back during exhalation.

THORACIC BREATHING

Goal: Mobilizing the ribcage and thoracic spine and expanding the breathing space on a sagittal plane, meaning forward and back.



Starting position: Neutral supine position; knees are bent and feet are planted; legs are open hip-width apart; one arm rests alongside the body, the other hand rests on the upper part of the sternum.



Execution: Purposefully direct the inhalation underneath the upper part of the sternum so the sternum lifts the hand slightly. The collarbones pull sideways, widening the shoulder girdle.



As you exhale, feel the sternum relax; the hand drops and the space between the shoulder blades widens.



Variation 1: Rest the hands on top of the shoulders; elbows are open to the sides.

As you inhale, gently press the elbows into the floor so the collarbones pull sideways and the thoracic spine stretches slightly.



As you exhale, bring the elbows together in front of the body, the shoulder blades widen and the thoracic spine relaxes; the sternum drops between the shoulder blades.



Variation 2: Do variation 1 in a seated position.

BREATHING INTO ONE LUNG WITH ROTATION

Goal: Mobilizing the ribcage and thoracic spine on a horizontal plane. Inhaling into one lung generally results in more mobility and greater range of motion.



Starting position: Sit in an upright position (on the floor or on a stool); arms are relaxed at your sides. Cover your left nostril with your pinkie.

Preparation: Allow the inhaled breath to flow through the left nostril into the left lung. Repeat several times and then switch sides.



Execution: Place the right hand against the right costal arches for support.



As you exhale, use your right hand to gently push the ribs back into starting position.



Variation: Some participants respond better to the mental image of the costal arches pulling, while others prefer to imagine the pushing. Purposefully send your inhalation into the right lung as you rotate the spine to the left. The right costal arches push against your right hand, increasing rotation of the ribcage. Reverse the exercise. Purposefully send your inhalation into the left lung as the spine rotates to the right as though the left costal arches were pulling the ribcage into the rotation.

As you exhale, return to the starting position. Continue to alternate sides.



BREATHING INTO ONE LUNG WITH LATERAL FLEXION

Goal: Mobilizing the ribcage and thoracic spine on the frontal plane. Inhaling and exhaling while focusing on just one lung increases lateral flexion and supports erection of the trunk upon return.



Starting position: Sit in an upright position (on the floor or on a stool); arms are relaxed at your sides.



Execution: Send your inhaled breath underneath the left costal arches as you bend the spine to the right (lateral flexion) as though the left costal arches were being pushed up from the inside. The crown of the head reaches sideways into space. Keep looking straight ahead.

Now exhale via only the left lung while moving the left costal arches back into the upright starting position as though the left ribs were pulling the ribcage back in place.



Variation: You can intensify the exercise by extending the left arm up and over. Fingertips reach into space; the left shoulder remains down and the left shoulder blade rests against the ribcage.

