



## Welcome to Pilates a.k.a Contrology

### What is Pilates?

Pilates is a form of exercise that if performed regularly, re-establishes correct muscle recruitment which restores good posture. This is achieved by identifying which muscles are weak, strong, short, long etc. and then correcting the muscle imbalances by stretching and relaxing tight, short muscles and then strengthening weak, long ones. This is unlike many other forms of exercise that strengthens further, the already strong muscles, resulting in even more of an imbalance.

A typical example of muscle imbalance is the trapezius group of muscles. Lower trapezius, a back muscle, can be weak so upper trapezius, another back muscle, takes on its role of shoulder blade (scapula) stabiliser. Upper trapezius then becomes tight because it is doing a job that it is not designed to do. This is why a lot of people are tight in their shoulders. Pilates can isolate and strengthen a specific muscle such as lower trapezius, to allow the over dominant muscle, in this case upper trapezius, to relax and let go. The result is a long, lean and strong body with hidden strength. This is all down to Pilates unique effectiveness at restoring the correct way we use and recruit our muscles. In fact, it's the way we used to move as children.

Poor muscle recruitment, which is likely when muscles are not at their correct length, can play havoc, often resulting in joints being held out of alignment. There are many attributing factors for this, such as a sedentary lifestyle, sustained positions, workplace conditions, repetitive movements, stress, illness and injuries. Since it is likely that these changes have occurred over a period of time, this faulty movement pattern can feel normal. Usually pain is the first sign that there is a problem, although some people have bad posture and no pain.

Pilates re-trains the body to work efficiently, with minimal effort. Stamina and co-ordination are improved as the body comes into perfect balance and alignment. The immune system is stimulated and the level of general health very often increases as the internal organs can now dwell in their correct place and function correctly.

### The 8 Principles of Pilates

There are 8 principles to Contrology, they are:

- 1, Concentration
- 2, Relaxation
- 3, Breathing
- 4, Core Stabilisation
- 5, Alignment
- 6, Co-Ordination
- 7, Fluidity of Movement
- 8, Stamina

What does each of these mean.

**Concentration:** You must be consciously aware of your body and its movements, otherwise you cease to learn, you 'just do'. Failure to concentrate will result in loss of alignment and/or recruitment of the wrong muscles. Contrology - Pilates requires you to train the mind as well as

the body as the two are undoubtedly connected.

**Relaxation:** Over dominant muscles will continue to be overactive unless they are switched off. So it is important to relax and lengthen short, tight muscles before you try and strengthen weak ones. Otherwise, the tight muscles will inhibit the action and a faulty movement pattern will continue with strength gained by 'trick' movements.

Recognising areas of undue tension, relaxing the body before you start each exercise and then focusing attention on the relevant area will lead to sound muscle recruitment patterns as well as greatly reducing the risk of injury and adding to the calming effect of a session.

**Breathing:** Joseph Pilates said "Squeeze out the lungs as you would wring a wet towel dry. Soon the entire body is charged with fresh oxygen from toes to fingertips, just as the head of the steam in a boiler rushes to every radiator in the house."

He wanted the lungs to be squeezed of every last ounce of air so as much air as possible could be inhaled to charge the body with oxygen. He saw correct breathing as a way of cleansing the body, increasing oxygen levels, stimulating circulation and digestion. Deep breathing can also act like an internal massage for the organs, particularly the liver and heart. It also releases endorphins and natural brain chemicals that make us feel good.

Few people breathe properly. The benefits of good breathing are well documented and are especially relevant when exercising. Correct breathing techniques are central to the Contrology - Pilates Method. When asked to take a deep breath, people usually either breathe too shallowly in the upper chest or throw out their abdominals. The deep abdominal breathing practised in yoga is wonderful but not applicable to Contrology - Pilates as it is inhibited by the use of the core abdominal muscles. It is impossible to keep a strong centre and to practise deep abdominal breathing at the same time. Lateral/thoracic breathing is taught in Contrology - Pilates®, making maximum use of the expansion of the ribcage and therefore the lower lungs. It is a very efficient way of breathing and also promotes flexibility in the upper body.

Contrology - Pilates uses the timing of the breath to maximise the effectiveness of the movements. Each exercise has its own breathing pattern which can differ for beginners, intermediate and advanced. As a general rule for beginners:

- Inhale to prepare for movement
- Exhale on the movement
- Inhale to recover

This timing compliments the use of the abdominals as transverses abdominus, a stabilising muscle of the abdomen, is the muscle of forced exhalation. It also ensures that the breath is not held or excessive tension created anywhere in the body. When stretching, it encourages relaxing into the stretch.

**Alignment:** The goal is for the individual to recognise good alignment themselves, so that they can take this knowledge into their everyday activities. Great attention is paid to correct alignment to ensure good muscle recruitment.

**Core Stabilisation:** The creation of a 'girdle of strength' is one of the main aims of Contrology - Pilates. Abdominal training is key with every exercise to support and protect the spine.

**Co-Ordination:** A typical training programme will begin with awareness training to help the individual release tension and maintain correct alignment. Then lateral/thoracic breathing with co-ordinated centring with movement is taught. Small range motion skills to isolate the key muscles are taught initially, moving on to more challenging choreographed sequences, but always with the core stabilised and correct alignment. Co-ordination skills are finely tuned as the mind and body work together to perform the advanced exercises.

**Fluidity of/Flowing Movement:** All Contrology – Pilates movements are controlled, graceful and flowing, lengthening outwards from a strong centre. Muscles are worked with control through their full range of movement and in different combinations, resulting in long, lean muscles with greater strength. Control is paramount. It is harder to perform an exercise slowly than quickly. It is also less easy to cheat.

**Stamina:** Stamina is both an end goal and an end result. Good recruitment pattern results in efficient movement - you learn to use minimum effort to do a task which frees up your energy. Contrology - Pilates works on all systems of the body and naturally increases stamina. However, Pilates is not an aerobic workout, although some of the advanced sequences are cardiovascular. Therefore, it is advisable to combine Contrology - Pilates with some aerobic style exercise, such as brisk walking, cycling or swimming. But even in the absence of other activity, stamina is increased and in particular, the postural muscles will have greater endurance.

## What are the Benefits of Pilates?

The benefits of Pilates are immense and include:

- Less incidence of back pain
- Better posture
- Improved flexibility
- Lowered stress levels
- Toned buttocks and thighs
- Toned arms and shoulder area
- A flatter stomach and a trimmer waist
- Fewer headaches (where they are posture-related)
- More efficient respiratory, lymphatic and circulatory system
- No more unevenly worn shoes (where posture related)
- A better balance between strength and suppleness
- Greater strength and muscle tone
- Boosted immune system

- Increased bone density - suitable for Osteoporosis sufferers
- Greater joint mobility
- Better co-ordination
- Greater body awareness
- Fewer injuries
- Improved performance

It's success rate has brought it to the attention of the medical profession. Osteopaths, Chiropractors and Physiotherapists are now recommending Pilates as one of the safest forms of exercise available. The worlds of dance and sport have also taken a keen interest in Pilates, with many premier football clubs arranging classes for their players.

## What to Expect.

Firstly, we will ask you to complete an enrolment form to ensure that you only perform exercises that you can do safely. If you have been referred to Pilates by a specialist practitioner, eg. your doctor, a Physiotherapist, Osteopath or Chiropractor, we will ask for your permission to liaise with them to ensure that you get the best possible care.

Next, body awareness is focused on. Most people have a very poor sensory awareness. Pilates teaches you how to focus and concentrate while moving, how to release unwanted tension from your body and how to relax.

Lateral thoracic breathing into the lower lungs is taught as well as how to find your best possible posture alignment. This will change over time as Pilates corrects your posture. You will learn how to engage your deep stabilising muscles of the lumbar spine (transversus abdominis, pelvic floor and multifidus), how to keep your pelvis stable and the importance of doing so and good scapulo-humeral rhythm is taught for better shoulder mobility.

As you progress, more movement skills and strengthening techniques are introduced. As we recognise people will progress at different rates, even in a class environment, you will only ever be asked to perform the level of exercise that you can safely achieve. However, you will be gently encouraged to step out of your comfort zone so that you do not become static in your development. We can not emphasise enough, that safety is always paramount. No more than 12 clients are permitted in any one class, to allow this.

Pilates is more dynamic than yoga and less high impact than jogging, aerobics or gym work - all of which can place tremendous strain on the joints. Pilates may have become highly fashionable, but a high proportion of clients come to Pilates for medical reasons, such as bad backs, necks, shoulders, joints or other physical problems.

## Q & A

### **Q: Who is it for?**

**A:** Everybody! Young or old, including those with:

- Postural problems
- Back pain
- Osteoporosis
- Stress-related conditions
- Asthma

It can also help athletes wanting to enhance their performance. There is no age limit on learning Pilates.

### **Q: How often do I need to do Pilates?**

**A:** It is recommended at least twice a week. However, even one class a week is better than none and we will always encourage you to do some homework, especially if you are using Pilates to help with your rehabilitation.

### **Q: Why is Pilates so popular?**

**A:** Because it really does work so it gets a lot of good press. It is endorsed by Physiotherapists, Osteopaths and some doctors and has a huge celebrity following, such as Madonna, Sharon Stone, Courtney Cox, Wayne Sleep, Pat Cash, Uma Thurman, Michael Crawford, Jodie Foster, Glenn Close, Belinda Carlisle, Hugh Grant, Jennifer Aniston, John Cleese, Patrick Swayze, Liz Hurly and Gwyneth Paltrow to name but a few. In fact, it would almost be quicker to complete a list of celebrities who do not do Pilates!

### **Q: What Should I Wear To A Pilates Class?**

**A:** Something that you are comfortable in and that does not restrict movement - leggings, tracksuit, t-shirt etc. We do not wear trainers in Pilates, but ideally, socks will be worn.

### **Q: Anything else?**

**A:**

- Do not eat a heavy meal immediately prior to a class
- Do not drink alcohol
- Do not participate if you are feeling unwell
- Painkillers can mask the signs of pain so you may wish to avoid taking them before a class
- Pilates is a fitness regime, so as which is normal practice, if you are on medication or have any illness or injuries that you feel may be affected by exercise, always consult your doctor first
- You may like to bring a small bottle of water to class

### **Q: Do I need to Supply any Equipment?**

**A:** No, all equipment will be supplied during the class. You may wish to purchase your own Pilates mat, however these are provided also.