

Caution: These notes should be used in conjunction with the recorded interview. While every effort is made to ensure accuracy, APM cannot guarantee freedom from any errors. Treatment should be based on the advice given by the expert speaker during the interview. Please let us know if you find any errors in this text so that we can correct them.

Pilates in Practice With Karen Grinter

About Karen Grinter

- REPS Level 3 Advanced Instructor in Pilates and REPS Level 4 specialist instructor in Low Back Pain and Bone Health.
- Teaching in Northamptonshire since 1997. Practising with Northants County Cricket since 1998.
- Formed part of the teacher training programme for Body Control Pilates and runs workshops for Health Professionals and teachers.
- Clients include elite performers across a wide age-range.

Pilates

- Originated by Joseph Pilates during World War I, concentrating on awareness of breath, alignment of the spine, strengthening the deep torso and abdominal muscles, etc.
- The Register of Exercise Professionals (REPS) is largest UK register for exercise professionals, including Pilates instructors, but there is no statutory requirement for registration.
- Classical Pilates is not for the majority - recommended only to those with a very flexible spine and body.
- Pilates should teach good alignment and how to change the body gently and achieve something nearer the optimum.

Pilates equipment

- Equipment is not necessary. Quality of instructor matters more than equipment available.

Pilates reformer



This is useful for patients with hip, knee, and alignment issues.

- The Pilates reformer is a carriage on wheels, attached to the frame by springs, which govern resistance.
- It has a bar which can be used by feet or hands as the user moves the carriage. It has straps with handles which can be pulled with legs or arms to move the carriage.
- Exercises on the reformer can be done lying down, sitting, standing, kneeling, etc.
- While people cannot do exactly the same exercises without the reformer, they can mimic some of the exercises on it with resistance bands or loops and other exercise equipment.

Cadillac



- This Pilates equipment provides a diverse motion challenge for the body whether sitting, standing, lying or upside down, etc.
- This costs around £5,500.

Wunda chair

- This is used for both upper body exercises (i.e. neck, arms, shoulders) and lower body exercises (i.e. lower back, abdomen, pelvis).

	<ul style="list-style-type: none"> • Useful in strengthening the hip, knee, and ankle.
---	---

<p>Spine Corrector</p> 	<ul style="list-style-type: none"> • This equipment is not for most of the people – it is for correcting or restoring the spine's natural curve.
---	---

<p>Ladder Barrel</p> 	<ul style="list-style-type: none"> • This is used for exercises intended to strengthen and lengthen the muscles, improve range whilst developing spinal flexibility.
--	---

Demo exercises

35:45 – 1:17:00 in the broadcast recording

- The photo below shows how to get the optimum position for a body – neutral head and neutral spine. The pole is used to guide the alignment of the head, spine, and sacrum.



- Hip hinging as shown below is about bending forward to about 45 degrees: knees slightly bent, pelvis tilted, spine gently brought forward then backwards. This is a great way to start a movement among individuals with back issues – build up their back using that support from the pelvic floors and abdominal walls creating intra-abdominal pressure that lifts the spine off itself.



- The photo below shows how to take the hip hinge (left photo) into a squat – both hands holding the pole, knees bent: start squat from the hips, pelvis out like when you are about to sit on a chair.



Benefits of hip hinging using a pole

- People with back issues (i.e. osteoporosis, compression fractures in the spine, etc.) will get used to maintaining a neutral spine, especially when bending forward to pick up objects off the floor.
- Proper spine alignment and proper posture will be eventually achieved. It educates people to bend at the hip not at the waist, to protect their back.
- This helps correct prolonged forward head posture that deconditions the muscles in the neck, chest and upper back.
- People get to learn how to keep their back stable as they progress to more flexible movements like squats, lunges, roll down/up, among others.
- Engaging their pelvic floors and the abdominals can be a great help for back support.

Specific exercises for the psoas, QL, and diaphragm

Area of the body	Specific exercise
Diaphragm	<ul style="list-style-type: none">Breathing techniques (breathe in when extending backwards; breathe out when flexing forward).
Psoas, QL	<ul style="list-style-type: none">Hip flexes, side bends



This exercise (left photo) is for people with a very tight QL. This can be done as often as they can.

- Sitting on ischial tuberosities, right hand behind head, Sternum lifted, shoulders relaxed, then side-bend to the left and use the left hand for support.
- Chin lifted up, eyes ahead. Lift right buttock off the chair/table - hold for a few seconds, then push it back down. Individuals should be able to feel that stretch through the QL through that side. Individuals may opt to add rotations (i.e. rotate head forwards/backwards).
- Repeat directions above to the other side.



The left photo shows a good exercise to stretch the psoas – keep the sternum lifted, then do a pelvic tilt (pubic bone to bellybutton) for about a minute. Then do it to the other side.

- This exercise can be repeated for as many times individuals can do it depending also on their situation (not recommended for those with knee issues).



This exercise (photo above) is recommended for runners who have tight hip flexors and people who sit a lot. This is also for those with an acute back problem – to stabilise them before they progress to more flexible movements:

- Foot flexed, toe pointed on the floor then knee lifted.
- Lift the foot (left photo below), abduct hip then back to neutral (repeat). Gets the head of the femur moving – good for runners, those whose jobs involve protracted sitting.
- Bend the knee (right photo below), lift off floor. then internally rotate hip and return to neutral (repeat) – this allows internal and external rotation going in the hips.
- Can also incorporate spiky balls in inguinal crease, including straight leg with internal/external rotation of hip.



Exercise to encourage transverse abdominis recruitment






- Lay supine on a flat surface/mat. Pillow or head support is optional depending on the neck and head alignment of the individual.
- Bend knees (as shown above); both hands on the abdomen.



- Imprint lower back into the mat (for back and abdominal loading), engage the pelvic floor.
- Breathe in. Raise one leg (i.e. single knee fold) then pause. Lower. Repeat with other leg.
- If competent at above: raise leg, then pause. Then raise other leg. Do not raise both legs at the same time. Gently lower one leg back down then the other leg. Repeat 40-50 times.
- Exhale when lifting the leg. When breathing in, pull in the abdomen a bit more.
- This exercise is a bit of a challenge for individuals without much body tone.

Exercise for the rotator cuff

	<ul style="list-style-type: none">• Individuals should be seated – neutral position (head, neck, shoulders are aligned). Bend the elbows, cushions inserted just below the armpits.• Palms up, hold the resistance band, then gently stretch or pull it out then back in.
	<ul style="list-style-type: none">• The other end of the resistance band can also be attached to a door or any stable post, then start pulling it back in (as shown in left photo).
<p>***</p> 	<ul style="list-style-type: none">• Another way of using the resistance band: Both hands holding the band; Take the arms up without moving or bending the back (farthest left photo) then bring them behind stretching the band – arms extended (left photo). Maintain a neutral spine when doing this.• This is a good exercise for the scapula.

Breathing technique

- When bending forward, always breathe out. Breathing in when doing an abdominal curl is counterproductive.
- When doing an extension exercise, do that on an in breathe then come down on an out breathe.

- When doing a hip flexion exercise, breathe in (when lifting the knee up) and hold it, then breathe out.

Other relevant notes

- For people with Ankylosing Spondylitis, the best approach is to strengthen their spine and keep as much mobility as they can.
- When assessing Pilates teachers see to it that they are at least Level 3 REPS qualified. Check who they trained with and look at what the prerequisites for that training company are. Check their client recommendations and ratings.