



Abdominal Training Level 2: 45° Leg-Raises

(a) The Correct Performance of Leg-Raises

When leg-raises are performed the lumbar spine must remain in contact with the floor at all points in the exercise.

1. It is when the exercise is performed with the lumbar spine *arched* (in exaggerated lordosis) that the hip flexors will shorten as they strengthen. This will lead to lower back problems.
2. A spine in exaggerated lordosis whilst performing leg-raises is an indication of weak abdominals.

(b) 45° Leg-Raises

Figure 1



Figure 1: Lie on the back with legs straight out in front.

Figure 2



Figure 2: Now draw the knees up until the angle between the thighs and the lower legs is only 45°.

Figure 3



Figure 3: Keeping this angle, raise the thighs until they are vertical.

Figure 4



Figure 4: Keeping the lower back flat on the floor, draw the navel up towards the ribs (so engaging the *transversus abdominis* muscle). Now lower the legs until the feet brush the floor, then raise them up to vertical again. This is one repetition.

Train once or twice per week. Build up to two sets of 15 repetitions. When they can be performed *without* arching the lower back, move on to level 3.