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PREVENTION & REHABILITATION – SELF MANAGEMENT: PATIENT SECTION

Functional training with the kettlebell

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There are various types of traditional strengthening exercises such as Nautilus, free weights, pulleys, etc. Most follow a certain rule of isolating individual muscles and making them bigger and stronger. Kettlebells have been used in Russia for a long time, but are new in most other parts of the world. What is unique about kettle bells is that due to their shape they provide an unstable force which the body has to learn to handle. It is not merely a matter of building strength, but learning how to control – or stabilize – the weight. In this way kettlebell (KB) exercises are ideal for functional training that mirrors the challenges one faces in day to day activities (McGill, 2011).

Many people with persistent pain have trouble carrying objects. Carrying a briefcase, grocery bag, or baby requires both strength and stability. Strength is needed to lift the object, while stability is necessary to maintain balance or equilibrium during the task. Unfortunately, in training stability is usually ignored even though it is the more decisive of the two components in determining your injury risk. The KB exercises shown here are excellent for training both strength and stability during carrying activities. Key points are highlighted for each exercise to ensure that stability is not sacrificed while trying to build as much strength as possible.

Each of the exercises shown here focus on hip and trunk stability in what is called the frontal plane. Whereas popular exercises like sit-ups, chest press, or bicep curls train forward or backward bending motions, these carrying exercises work stability in a side to side direction. This is of great importance since instability in the frontal plane leads to excessive side to side motion which has been shown to cause injury to the knee or low back (see Fig. 1).

Suitcase Carry

- Start with this exercise
- Hold a KB in your hand like it is a suitcase (see Figure 2)
- Take about 20 steps at a normal or somewhat brisk pace
- Then, switch hands
- Start with a light weight such as 5 kg



Figure 1 Carrying a grocery bag (a) unstable (b) stable.

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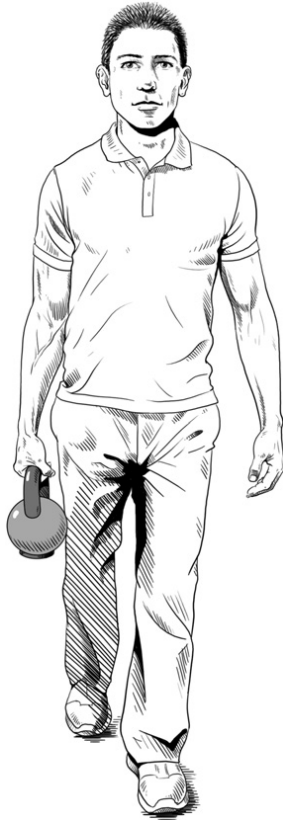


Figure 2 Suitcase Carry.



Figure 3 Waiter Carry.

- **Key Point:** Avoid excessive side to side swaying of the body

Waiter Carry

- Grip the KB in your hand like it is a barbell (see Figure 3)
- Take about 20 steps at a normal or somewhat brisk pace
- Then, switch hands
- Start with a light weight such as 5 kg
- **Key Point:** Avoid excessive shrugging of your shoulder on the side of the weight

Overhead Carry

- Grip the KB in your hand while reaching your arm overhead as far as possible (see Figure 4)
- Take about 20 steps at a normal or somewhat brisk pace
- Then, switch hands
- Start with a light weight such as 5 kg
- **Key Point:** Avoid leaning to the side when walking with the KB

Bottoms Up Carry

- Hold the KB by the handle firmly and turn it upside down so that it's bottom is facing up (see Figure 5a)
- Keep your elbow in at your side and slightly "brace" (i.e. tighten) your core to stabilize your body
- Take about 20 steps at a normal or somewhat brisk pace
- Then, switch hands
- Start with a light weight such as 5 kg



Figure 4 Overhead Carry.



Figure 5 Bottoms Up Carry (a) correct arm position (b) incorrect.

- **Key Point:** Avoid holding the KB away from your body (see Figure 5b)

The Farmer's Walk

- Hold a KB in each hand with arms extended down at your side (see Figure 6)

- Take about 20 steps at a normal or somewhat brisk pace
- Start with a light weight such as 5 kg
- **Key Point:** Avoid excessive swaying side to side while walking

Reference

McGill, S., 2011. Ultimate Back Fitness and Performance, fourth edition. Back Fit Pro.



Figure 6 Farmer's Walk.