



SELF-MANAGEMENT: PATIENT'S SECTION

Functional fitness training: The functional reach [☆]

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Introduction

If your goal is to carry grocery bags and babies, walk on uneven surfaces or even step off a curb you do not know is there without falling then traditional exercises may not be enough to stabilize you. A new type of training is popping up in gyms called "functional training" or "functional fitness". Besides weight machines and floor exercises functional exercises get you on your feet, balancing, using gym balls, balance boards, and pulleys or elastic resistance bands.

What follows is a progression of functional "core" stability exercises. For each exercise follow the following steps:

- Master correct form first.
- Practice daily with supervision until you can perform one set of 8–12 repetitions with good form.
- If this is well tolerated then begin to perform additional sets; however, cut the frequency down to 3–4 times/week.
- The second set can be performed with 20% fewer repetitions than the first.
- Gradually add additional sets up to total of 5, with each subsequent set using approximately 20% fewer repetitions.
- For example,
 - Set one—12 reps.

- Set two—10 reps.
- Set three—8 reps.
- Set four—6 reps.
- Set five—4 reps.

Supported functional reach

Purpose:

- Train buttock and thigh muscles.
- Dynamically stretch the back of your hip.

Procedure

- Stand in front of a bar or handle.
- Reach one leg straight back as far as possible.
- The other leg that you are standing on should flex at the knee while the thigh approaches horizontal (see Fig. 1a).

Progressions

- Add depth and use the hands on the bar only for support rather than gripping (see Fig. 1b).
- Perform the exercise with a rocker board or balance pad under the foot.

Common errors:

- Bending at the waist without flexing the support leg's knee.
- Gripping too hard.

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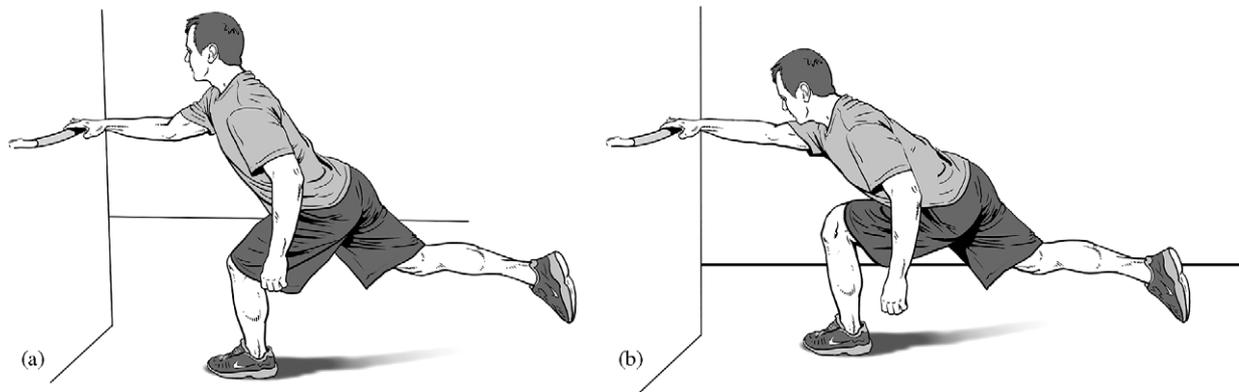


Figure 1 Supported functional reach. (a) Basic, and (b) advanced progression.

What you should feel:

- Buttock and thigh effort along with buttock stretching.

Functional (balance) reach

Purpose:

- Activate buttock (leg reach to 6:00) and hip (leg reach to 5:00 or 7:00).
- Groove control of your knee during upright activities.

Procedure

- Stand on star diagram (with lines pointing around a clock—12:00, 1:00, 3:00, 5:00, 6:00, 7:00, 9:00, 11:00 and 12:00) and reach at different angles with leg (see Figs. 2a–c showing 7:00 reach).
- Bowler movement is to 5:00 when standing on the right leg or 7:00 when on the left leg.

Progressions

- Add resistance from pulley.
- Add a balance pad under the foot.

Common errors:

- Unlevel hips or shoulders.

- Loss of balance.
- Forward movement of knee beyond your toes.
- Inward movement of your knee.

What you should feel:

- Buttock and hip effort (i.e. a “burn”).

Functional (balance) reach with ball

Purpose:

- Activate hip and buttock muscles.

Procedure (see Figs. 3a and b)

- Place a ball at the height of the hip joint against a wall.
- Raise the leg closest to the wall.
- Be careful that the support leg is vertical and not leaning.
- Perform running man exercise (6:00 reach) without letting the ball slip down.

Progressions

- When an exercise set is complete continue standing on support leg and perform frontal plane translation without hip hiking of the leg closest to the wall.
- Add a balance pad under the foot.

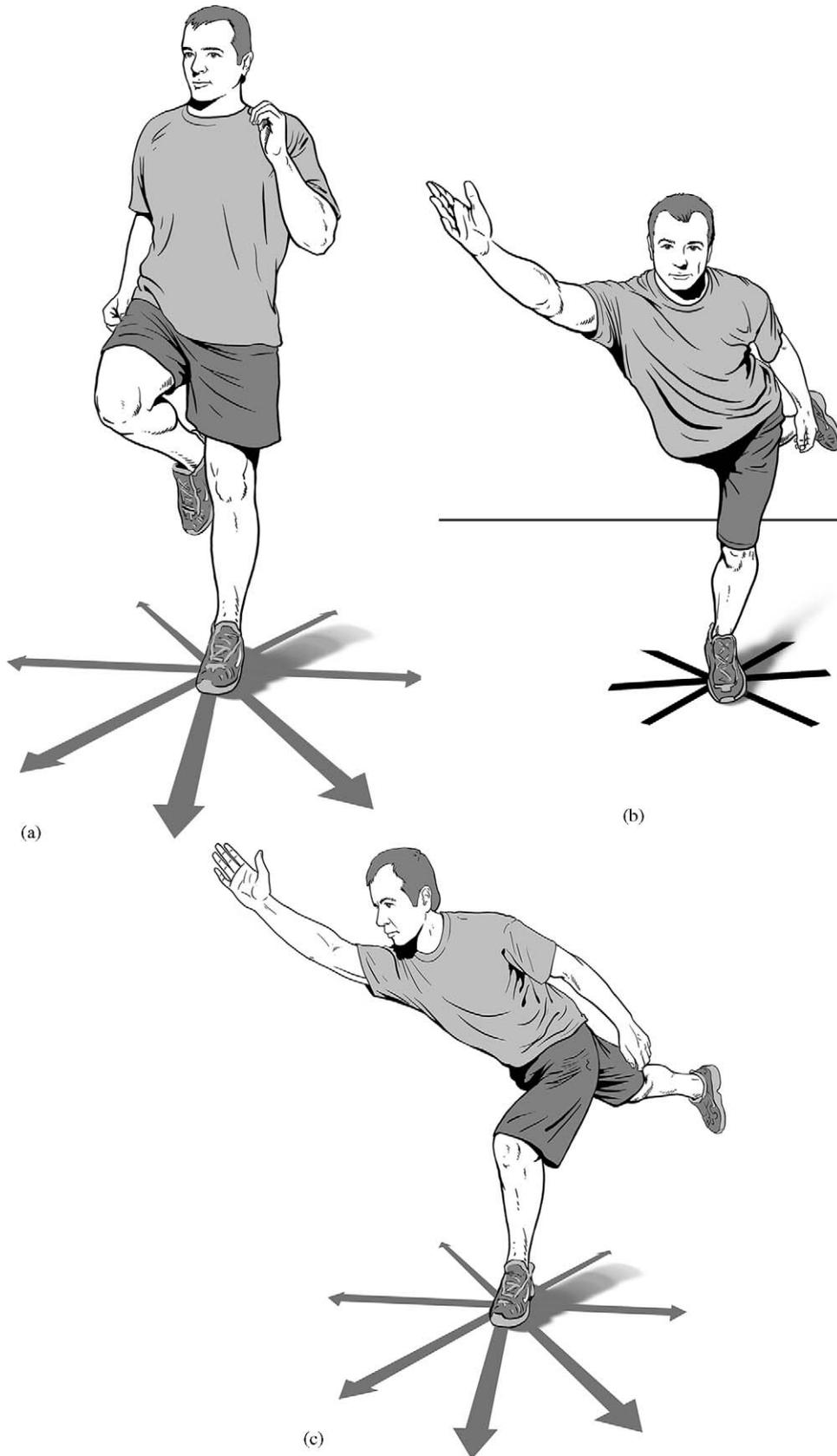


Figure 2 Functional (balance) reach. (a) Beginning position, (b) final position, and (c) side view.

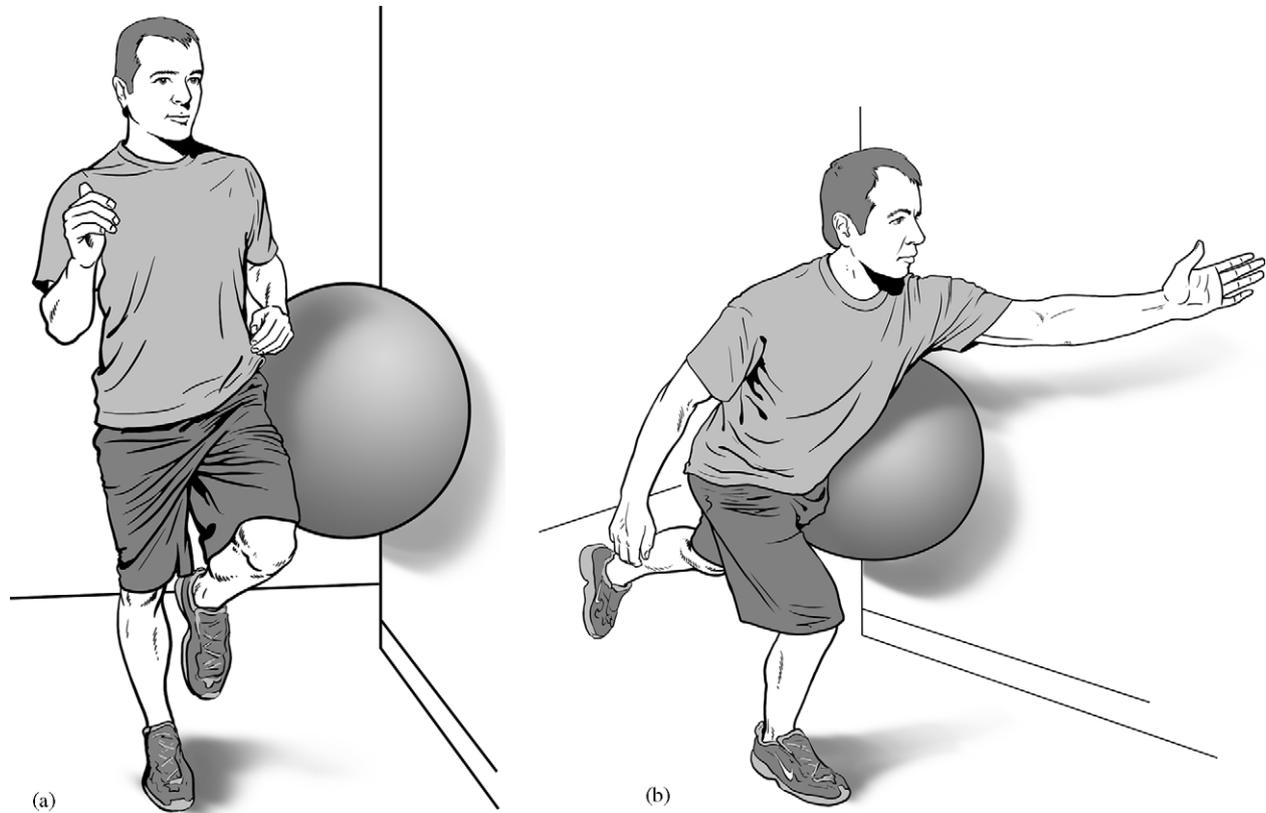


Figure 3 Functional balance reach with ball. (a) Beginning position, and (b) final position.

Common errors:

- Inability to keep your support leg vertical.
- Excessive inward movement of the knee.
- Collapse of the arch of your foot.
- Unlevel hips or shoulders.

What you should feel:

- Buttock and hip muscular effort, not knee or back strain.

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