

# RETURN TO RUNNING

GUIDANCE



Physiotutors™  
Online Physiotherapy Education



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# Phase 1: Achieve & Assess Load Tolerance

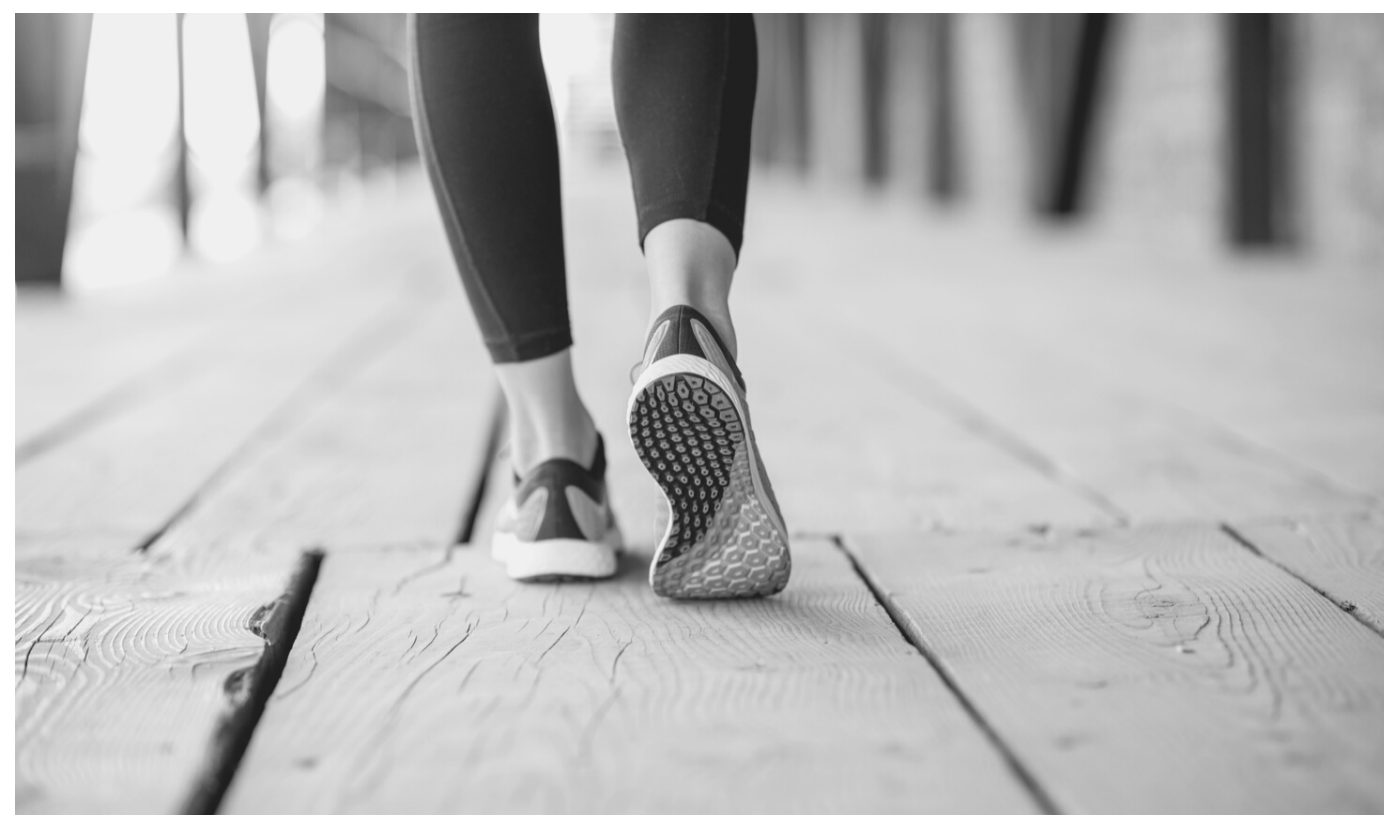
*Patient should be able to walk at least 30-minutes pain-free at a reasonable pace (at least 3-4 miles per hour).*

It is important to start on a flat terrain outdoors or on a treadmill without incline. In addition to walking for 30 minutes, other criteria which are necessary to be met, prior progression to the next phase are:

- No or minimal pain (VAS <2/10) with daily activities
- No Night pain or Swelling in symptomatic region (especially in the morning).
- Walking without limp

**Body-weight Strength Markers**  
(Pain-free and without increased symptoms)

- Single-leg Sit to Stand with Chair - 15 reps on each side
- Single-leg Calf Raise - 20 reps on each side
- Single-leg Hamstring Bridge on Chair - 10 reps on each side
- Single-leg Hip Abduction - 15 reps on each side



# Basic Strength Maintenance Exercises

Find below, a general body-weight routine, which can be done by the runner at home with minimal equipment, to supplement their return to running programme. This routine or a similar routine should be done for a minimum of 3 times a week. These exercises are useful for training endurance and body stabilization during running. For certain running injuries, an additional gym-based programme for additional external load, may be necessary.

[Half Side Plank with Leg Lifts](#)

[Gym-ball Hamstring Curls](#)

[Band Walks](#)

[Single-Leg Deadlift](#)

[Bulgarian Split Squat](#)

# Phase 2: Plyometric Loading Phase

*Plyometric training has been shown to reduce the energy cost of running when compared with dynamic weight training. Therefore, successful completion of this phase is a good indicator that an athlete is ready to initiate the running program*

Find below a sample low-level plyometric session which should

## Exercise

- Forward & Backward Skips
- High Knees
- 2-foot Line Jumps Front/Back with Bounce
- Alternating Hop/Hold

be completed for a minimum of 8 sessions (done in 2-3 weeks), before progressing to next phase

## Note:

All plyometric exercises must be pain-free. It is normal to feel mild feel soreness after the routine; However, the symptoms should settle within 24 hours. If it is persistent, try reducing the reps or go back to phase 1 strengthening exercises.

## Repetitions

- 3 sets of 60-90 seconds
- 3 sets of 30-60 seconds
- 3 x 12
  
- 3 x 10 total jumps

# Phase 3: Walk/Jog Program

*Upon completion of the low-level plyometric program, such as outlined in the phase above, a walk/jog progression may be initiated.*

The goal of this program is for the patient to start and gradually progress their running volume and expose their bodies to impact loads, without an increase in symptoms. There are multiple walk-jog programme available with varying distances from 5k, 10K to half-marathon.

The author's personal preference is the couch to 5k programme which is outlined in detail here. The NHS Couch to 5K is a progressive walk/jog programme, which guides a runner to 5K in 9 weeks. For runners with mild symptoms or low irritability, you can start the programme from week 4 or 5, rather than week 1, depending on running experience. Alternatively, you can also follow this 5-week programme, which might be suitable for if recovering from a minor injury.

Stage	Walk	Jog	Repeat for
Stage 1	5 Minutes	1 Minute	5 Times (30 min)
Stage 2	4 Minutes	2 Minutes	5 Times (30 min)
Stage 3	3 Minutes	3 Minutes	5 Times (30 min)
Stage 4	2 Minutes	4 Minutes	5 Times (30 min)
Stage 5	Jog every other day with a goal of reaching 30 minutes. Begin with five minutes of walking, gradually decreasing the pace to a comfortable walk.		

It is necessary to remind the runners on certain key aspects on the walk/jog programme, which are outlined below, to avoid flare-up or over-training.

1. Progress gradually, giving adequate time for tissue and joints to adapt and recover.
2. Start running on firm surfaces (either outdoors or treadmill). Avoid soft surfaces, sand training or uneven surfaces in this phase.
3. Avoid Running on consecutive days and not more than 3 days in a week. Cross-train with low-impact exercises like cycling or swimming is recommended on non-running days, if possible.
4. Avoid Speed training and Hills during this phase (minimum of 8 weeks, maybe more in certain injuries)
5. Monitor both your training volume (either distance or duration) and response to training sessions (e.g., RPE score 1-10)

Further, it is important that patients continue to monitor their discomfort level throughout the training progress as shown in Table 1.

## **Table 1: Monitor Discomfort Level Throughout the Training Progress**

### **Acceptable (progress training)**

General muscle soreness after run/walk session

Slight muscle or joint discomfort after workout or next day that resolves within 24 hours

Slight stiffness at beginning of run or walk that dissipates after first 10 minutes

### **Unacceptable (reduce training)**

Pain that lasts for >48 hours after run/walk session

Pain that is evident at the beginning of a run/walk then becomes worse as run/walk continues

- Pain that is keeping the patient awake at night
- Persistent swelling or signs of inflammation in a joint (e.g. knee, ankle)
- Sharp pain in areas of tendon insertion to the bone (achilles, hamstrings)

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# Dynamic Warm-Up Routine

*The purpose of the warm-up is to ensure that the muscles involved in running are warmed up and activated, and that the mobility necessary to run is available. Find below a dynamic warm-up routine, which can be incorporated prior a running session.*

## Exercise

- Knee tug to calf raise
- In/out heel taps
- Swing kicks
- Soldier walks
- Glute kicks
- Walking lunges with reach and rotation
- Lunge twist
- Quick steps
  
- Single-leg mini-squat to calf raise

## Repetitions

- 2 x 20 steps
- 2 x 20 steps
- 2 x 20 steps
- 2 x 20 steps
- 2 x 20 steps
- 2 x 10 steps
- 2 x 10 steps
- 2 x 20 in place  
then forward 20 ft  
then backward 20 ft
- 2 x 12 each leg

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