

# Five Key Characteristics to Consider when Purchasing a Running Shoe

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The sheer number of running shoe options and the amount of information pertaining to shoe wear and musculoskeletal health are overwhelming. Although there is no “perfect” shoe for all runners, emerging evidence suggests that particular shoe characteristics may help foster healthy running patterns (3). The shoe should protect the runner from injury and allow the feet to do the work of controlling the motion while in stance phase of the gait cycle. Five key characteristics of shoes that promote healthy running motion are as follows:

- 1) Minimal heel-to-toe drop (this refers to the thickness difference between the heel cushion and the toe cushion; shoes with 6 mm or less are considered “minimal”);
- 2) Neutral (shoes do not contain stability or motion control elements that interfere with normal foot motion) (1);
- 3) Relatively light weight (shoes with weights >8 to 10 oz for women and men’s sizes of 8 to 9, respectively);
- 4) Wide toe box (the forefoot of the shoe should allow the runner to wiggle toes); and
- 5) Cushioning (excessive cushioning permits extra motion of the lower extremity during the stance phase and

dampens the proprioceptive feedback, whereas too little cushioning may be uncomfortable if the runner is not used to running with minimal cushion).

To test whether the shoe is too narrow, remove the shoe insert and step on it. If the foot hangs over the side of the insert, the shoe is too narrow. Running shoes should facilitate soft foot strikes, joint flexion in the lower extremity joints (2), controlled motion, and foot strength. These shoe characteristics also may facilitate muscle recruitment from lower body muscles that are unaccustomed to loading. Therefore, a slow transition from current shoes to shoes described here may be required to prevent excessive muscle soreness and foot discomfort.

## References

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