



## The Science Behind Understanding the Rearfoot: C & D Foot Types

1 Hour Webinar – 1.5 Contact Hours

### Course Description:

This webinar outlines the different compensation methods, gait styles and pathologies when a neutral forefoot is combined with either an uncompensated (C) or compensated (D) rearfoot. Rearfoot function monitors and controls the rest of the foot during the gait cycle. The C & D foot types both have a neutral forefoot, thus eliminating the forefoot's influence on gait. The focus is on the rearfoot and whether it is pronated or more supinated. Having a full understanding rearfoot function is vital before one can fully understand the role of forefoot valgus (A&B) or varus (E&F) in gait and resultant pathologies. The golden rule that, "When a foot can pronate it will", is examined and the different compensation methods between the C & D foot types are discussed in detail. The instructor explains the specific orthotic design features necessary to control gait and balance the body. Athletic footwear recommendations for the foot types are also discussed.

Participants will be required to complete and submit a post webinar quiz and course evaluation for CEU eligibility.

1 Hour Program

### Learning Objectives/Outcomes:

1. Participants will understand the fundamental differences in gait and pathologies when a neutral forefoot is paired with either a compensated or uncompensated rearfoot.
2. Participants will learn about triplanar motion of the subtalar joint pronation and how heel eversion unlocks the midfoot and causes both lateral column and medial column foot instability compromising the windlass mechanism.
3. Participants will be able to differentiate between a compensated and uncompensated rearfoot function influences gait.
4. Participants will be able to understand the golden rule regarding, "If a foot can pronate it will." Plus be aware of other compensation methods, when STJ pronation isn't available.
5. Participants will learn that about the pathologies of these two foot-types with different types of rearfoot varus function and how these are the result of different compensation methods and gait.
6. Participants will be able to understand the required components of a functional orthotic

designed to address these foot-types and what athletic shoe features are most desired.

## References:

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12. Whittaker GA, Munteanu SE, Menz HB, Gerrard JM, Elzarka A, Landorf KB. Effectiveness of Foot Orthoses Versus Corticosteroid Injection for Plantar Heel Pain: The SOOTHE Randomized Clinical Trial. *J Orthop Sports Phys Ther.* 2019 Jul;49(7):491-500.