

UCBL Shoe Insert

(University of California Biomechanics Laboratory Shoe Insert)

(University of California Berkeley Laboratory Shoe Insert)

General Description:

The UCBL (or UCB) shoe insert is a maximum-control foot orthosis that was named after the laboratory where it was researched and developed. It was developed in 1967 at the University of California Biomechanics Laboratory, which is sometimes referred to as the University of California Berkeley Laboratory.

The UCBL foot orthosis is used to stabilize a flexible foot deformity, which in most cases is a flexible flat foot. The UCBL differs from other foot orthoses in that it fully encompasses the heel with a molded heel cup which in turn holds the heel, or hind foot, in a neutral, vertical position. While correcting and holding the heel in a neutral position, the UCBL also controls the inside arch of the foot and the outside border of the forefoot. These three corrective forces keep the foot held in a neutral position.

It is very important to understand that the foot must be flexible enough to be held in a neutral position comfortably. If the foot deformity is rigid, the UCBL will be very uncomfortable if used to try to correct the deformity. If the foot is rigid, the UCBL is made to the shape of the foot and the goal is to prevent further deformity.

The UCBL is made out of a rigid material, usually plastic, that is molded over a replica of the foot that is created by casting the foot. The foot section of the insert usually ends behind the toes by the ball of the foot. This allows for a natural rollover motion at the toes when walking. If a full footplate is necessary, a strap may be added across the top of the foot to hold the heel within the UCBL.

The UCBL ends just below the anklebones. Because of this design, the UCBL is not seen outside of the shoe. The best shoes to accommodate the UCBL are basic “gym shoes” or walking shoes with laces or Velcro. The UCBL does not work well with dress shoes or sandals.

Application:

Many times, the UCBL is left inside of the shoe in which it is worn just as other arch supports are (See Figure 1).

- Always wear socks, as the UCBL should not be directly against the foot.
- Place UCBL inside of the shoe and place the foot inside of the UCBL.
- It is very important that the heel is properly seated inside of the heel cup in order to properly control the hind foot.
- Make sure the foot and UCBL fit comfortably inside of the shoe. In some cases a slightly larger shoe may be required or, if possible, the insole of the shoe may need to be removed to accommodate the UCBL.



Figure 1

Wearing Schedule:

On the first day you receive the brace, begin by wearing for only 1 hour. After 1 hour, remove the brace and check your skin for red marks. Some small, light red marks may be noticed on the skin that should go away in 20 to 30 minutes after removing the brace. Slight redness is common over the instep and under the ball of the foot. If the red marks

do not go away in 20 to 30 minutes or if you notice any scratching, bruising, or blistering, **do not put the brace back on**. Call immediately to schedule an appointment with your orthotist.

If the skin is ok, wait at least 1 hour and then put the brace back on for 1 hour at a time for the rest of the first day, checking the skin after each hour.

On the second day, put the brace on for 2 hours. After 2 hours, remove the brace and check the skin. If the skin is ok, put the brace back on for 2 hours at a time for the rest of the day, checking the skin after every 2 hours. If your skin is ok, gradually increase wearing time by 1 hour each day, checking the skin after each wearing time.

Cleaning and Maintenance:

The best way to clean the UCBL is to spray the inside with rubbing alcohol and wipe dry to remove body oils and residue. It can also be cleaned by wiping it out with a damp towel and anti-bacterial soap or anti-bacterial, moist towelettes. Keep the UCBL away from excessive heat to prevent damage to the plastic.

Tips and Problem Solving:

When putting the UCBL on a child's foot, it is very important to make sure the heel is properly seated inside the orthosis.

If you notice any red marks, bruises, or blisters on your skin, discontinue wearing the brace and call your orthotist to schedule an appointment.

If there are any problems, please consult the orthotist.