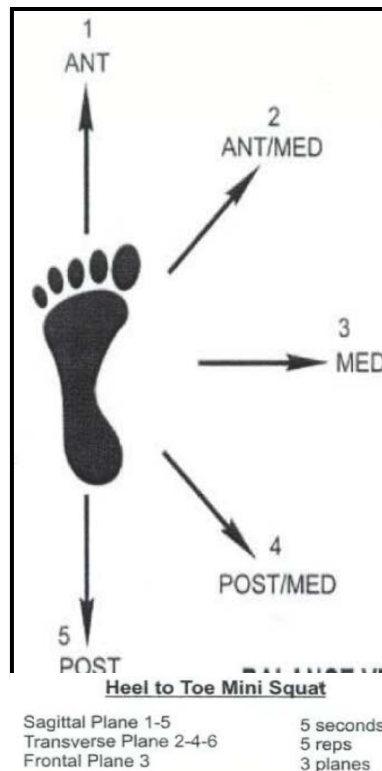


# HAVE YOU TRIED THIS YET?

## “Balance Vector Training”

Balance vector training is a mode of exercise that focuses on strengthening and balancing, challenging your muscles in different directions. It's often incorporated into knee injury rehabilitation programs and is a great exercise to help ensure that you have healthy knees.

To perform vector training, you start with balancing on one leg and then point your other leg out to 1 of 6 angles. After you begin to balance you then proceed to “load” the balancing leg into a “mini squat” (a slight bend into the knee that activates the leg muscles). You will hold this for at least 5 seconds for 5 reps. Each of the angles you take your leg out to will place your leg into the different “planes” in your body and will increase or decrease the difficulty and recruitment of muscle fibers. For example, if you take the non balanced leg out to the side, your leg is being placed in what is called the frontal plane and is the most difficult to balance. When you place your leg in front or in back, you are placing your leg into the sagittal plane and is less difficult to balance. The other plane you can place your non—balance leg would be at a diagonal—the transverse plane, and where you receive the most recruitment of muscle fibers. It is usually recommended to use 3 of the 6 angles, eventually challenging yourself in all three planes.



Advancing this exercise can be done by making it more difficult to balance. One way to easily do this is by closing your eyes. After you have challenged yourself with your eyes closed, you can then make the surface unstable. This can be done by using a balance pad, BAPS board, or a BOSU ball, all of which are quite difficult. You can also try throwing a medicine ball at a trampoline or with a partner while balancing to create a response.

Due to the increased muscle recruitment while using the balance training and by strengthening the leg muscles through loading the muscles, vector training can really improve the integrity of the knee joint. Many times there can be a muscle imbalance and this can cause pain in the structures within or surrounding the knee joint. Doing exercises such as these can incorporate all the muscles within your leg to help bring proper balance alignment, alleviating excess pressure on certain structures. To learn more about vector training and other ways to do exercise such as these, talk with our Nimkee Fitness Personal Trainers.

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