

Advancing the Arizona State University Knowledge Enterprise

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Device for Perfect Posture Training

Your posture is an important factor in proper and comfortable walking and can result in easier breathing and less back pain. It is also paramount in rehabilitation, especially for patients suffering from neural trauma. Having good posture does not come easily though, and training the body to walk properly (whether it is for pain relief or rehabilitation) is a long and slow process. Although, in-patient facilities provide top of the line care, at-home recovery has been shown to be highly beneficial, convenient and less costly.

Prof. Marco Santello at Arizona State University in conjunction with collaborators in Italy has developed a novel device to aid in posture training and walking correction. This device can be used for rehabilitation purposes post-trauma and post-operation and could also be used for health and wellness training, personal care, posture/walking training in high heels, etc. Specific configurations of the device enable pre-arranged movements of the foot, knee and hip, facilitating maintenance of the torso in an erect position.

This device uses novel parts and configurations to ensure certain walking movements are utilized which help achieve proper posture and gait of the user.

Potential Applications

- Device to perfect posture and correct walking
 - For use post-operation or post-trauma
 - For use in health and wellness
 - For use in correct posture and walking in high heels
 - Better breathing and less back pain

• Device to improve motor function

- Improved range of motion of various joints after injury or surgery
- · Improved coordination of muscles for voluntary joint or limb movements
- Enhanced muscle strengthening

Benefits and Advantages

- Low cost
- Usable in the home setting
- Easy and inexpensive to install and remove
- Maintains the torso in an erect and proper position
- Does not require a personal trainer

For more information about the inventor(s) and their research, please see $\underline{\text{Dr.}}$ Santello's departmental webpage