CLAIMS

1. An apparatus, comprising:

a foot mat;

a depth sensing camera;

an elevated foot platform that reduces or prevents rotational movement of a foot;

a processor in communication with the depth sensing camera, the processor further configured to calculate the circumference of a user's leg based on data from the depth sensing camera while the user has one foot on the foot mat and one foot on the elevated foot platform, the processor further configured to select a recommended product for the user's knee or ankle from among a set of pre-manufactured candidate products for knees or ankles based at least in part upon the leg circumference of the user; and

an output device to display information received from the processor, the information identifying the recommended product to the user.

2. The apparatus of Claim 1, wherein the elevated foot platform comprises one, two, or three foot wells.

3. The apparatus of Claim 1, wherein the foot mat is a pressure array foot mat, wherein the processor is in communication with the pressure array foot mat, the processor configured to receive a plurality of pressure measurements from the pressure array foot mat while the user stands thereupon.

4. The apparatus of claim 3, wherein the processor is configured to calculate an arch index of the user's foot, the processor further configured to select a recommended product for the user's foot from among a set of pre-manufactured candidate products for feet based at least in part upon the plurality of pressure measurements and arch index.

5. The apparatus of Claim 1, wherein the processor is adapted to infer the location of a leg joint of the user and calculate the circumference of the user's leg at a target distance from the inferred leg joint.

6. The apparatus of Claim 1, wherein the processor is adapted calculate the circumference of the user's leg while the user is in a first standing position and while the user is in a side standing position relative to the depth sensing camera, and wherein the processor is adapted to combine the two calculations to calculate a more accurate circumference of the leg.

7. A process for identifying a recommended product to a user from among a set of pre-manufactured candidate products, the process comprising:
providing an apparatus, comprising:
a foot mat;
a depth sensing camera;
an elevated foot platform that reduces or prevents rotational movement of a foot;
a processor in communication with the depth sensing camera, the processor further configured to calculate the circumference of a user's leg based on data from the

depth sensing camera while the user has a first foot on the foot mat and a second foot on the elevated foot platform, the processor further configured to select a recommended product for the user's knee or ankle from among a set of pre-manufactured candidate products for knees or ankles based at least in part upon the leg circumference of the user; and

an output device to display information received from the processor, the information identifying the recommended product to the user; and

displaying information received from the processor, wherin the information received from the processor identifies the recommended product to the user for the user's knee or ankle from among a set of pre-manufactured candidate products for knees or ankles.

8. The process of Claim 7, wherein the elevated foot platform comprises one, two, or three foot wells.

9. The process of Claim 7, wherein the foot mat is a pressure array foot mat, wherein the processor is in communication with the pressure array foot mat, the processor configured to receive a plurality of quasi-dynamic pressure measurements from the pressure array foot mat while the user stands thereupon.

10. The process of Claim 9, wherein the processor is configured to calculate an arch index of the user's foot, the processor further configured to select a recommended product for the user's foot from among a set of pre-manufactured candidate products for feet based at least in part upon the plurality of pressure measurements and arch

index, and wherein the information received from the processor identifies the recommended product to the user for the user's foot from among a set of pre-manufactured candidate products for feet.

11. The process of Claim 7, wherein the processor is adapted to infer the location of a leg joint of the user and calculate the circumference of the user's leg at a target distance from the inferred leg joint.

12. The process of Claim 7, wherein the processor is adapted calculate the circumference of the user's leg while the user is in a first standing position and while the user is in a side standing position relative to the depth sensing camera, and wherein the processor is adapted to combine the two calculations to calculate a more accurate circumference of the leg.