

Foot Measurement Procedure

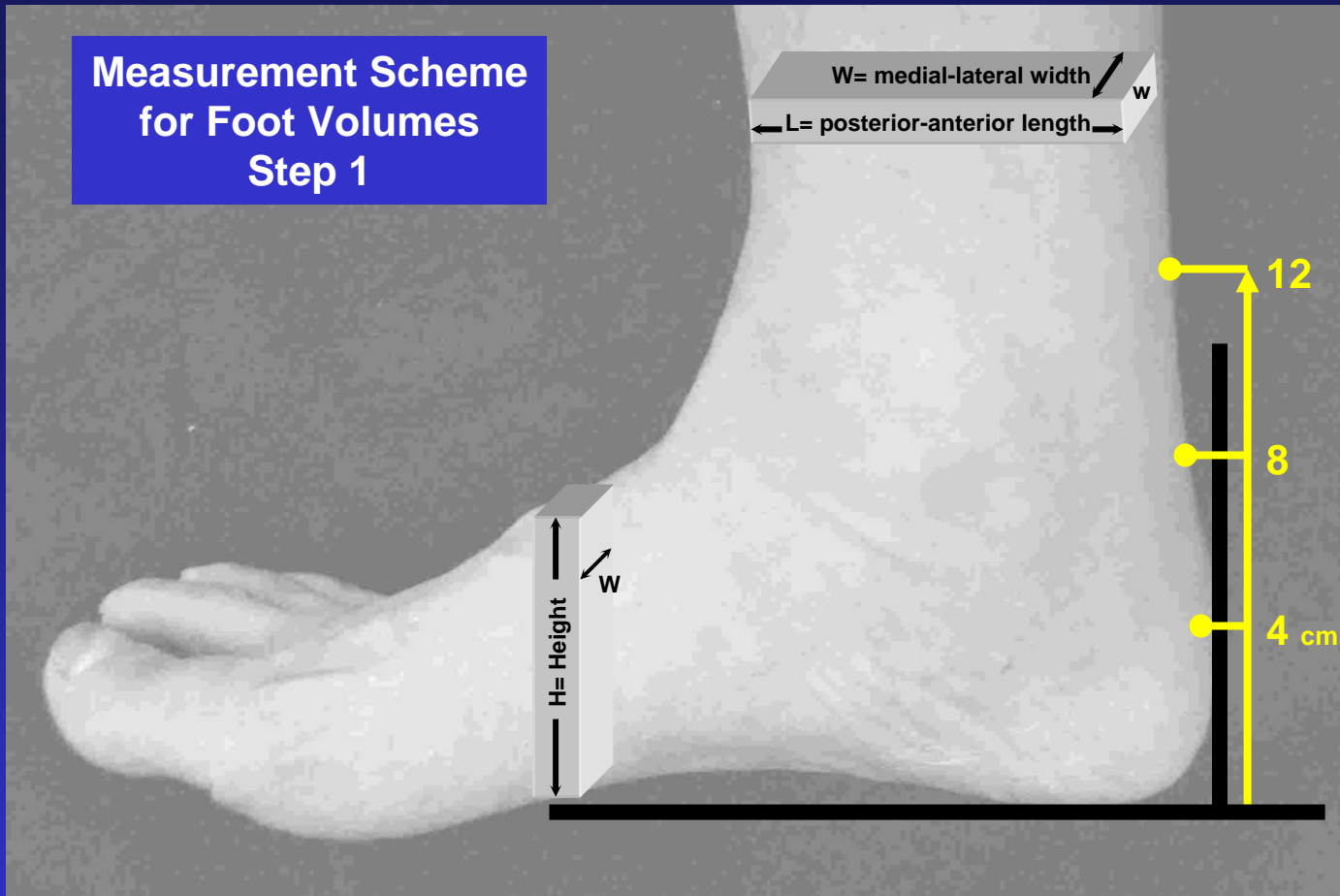
The following pages illustrate the measurements needed to assess foot volumes and a recommended sequence for those measurements. On the last page is a data sheet that is useful for recording the measurements, which should make it easy to input the data to Limb Volumes Professional 4.0 (LVP4.0). When using LVP4.0 to track and document lower extremity volume changes, you have the option of including foot volumes to the total determination of extremity volume.

The algorithm used by LVP4.0 to determine foot volume and its change with therapy has been substantiated by extensive research in which foot volumes were determined directly using the water displacement method, which is the accepted gold standard. Volume estimates based on the algorithm deviate on average from those obtained with water displacement by less than 5%, which is adequate for most clinical purposes.

The instructions are broken down into discrete steps. Although inclusion of foot volume requires some additional time, there are many clinical conditions in which such additional effort is well warranted. You the clinician/therapist are the best judge of its utility.

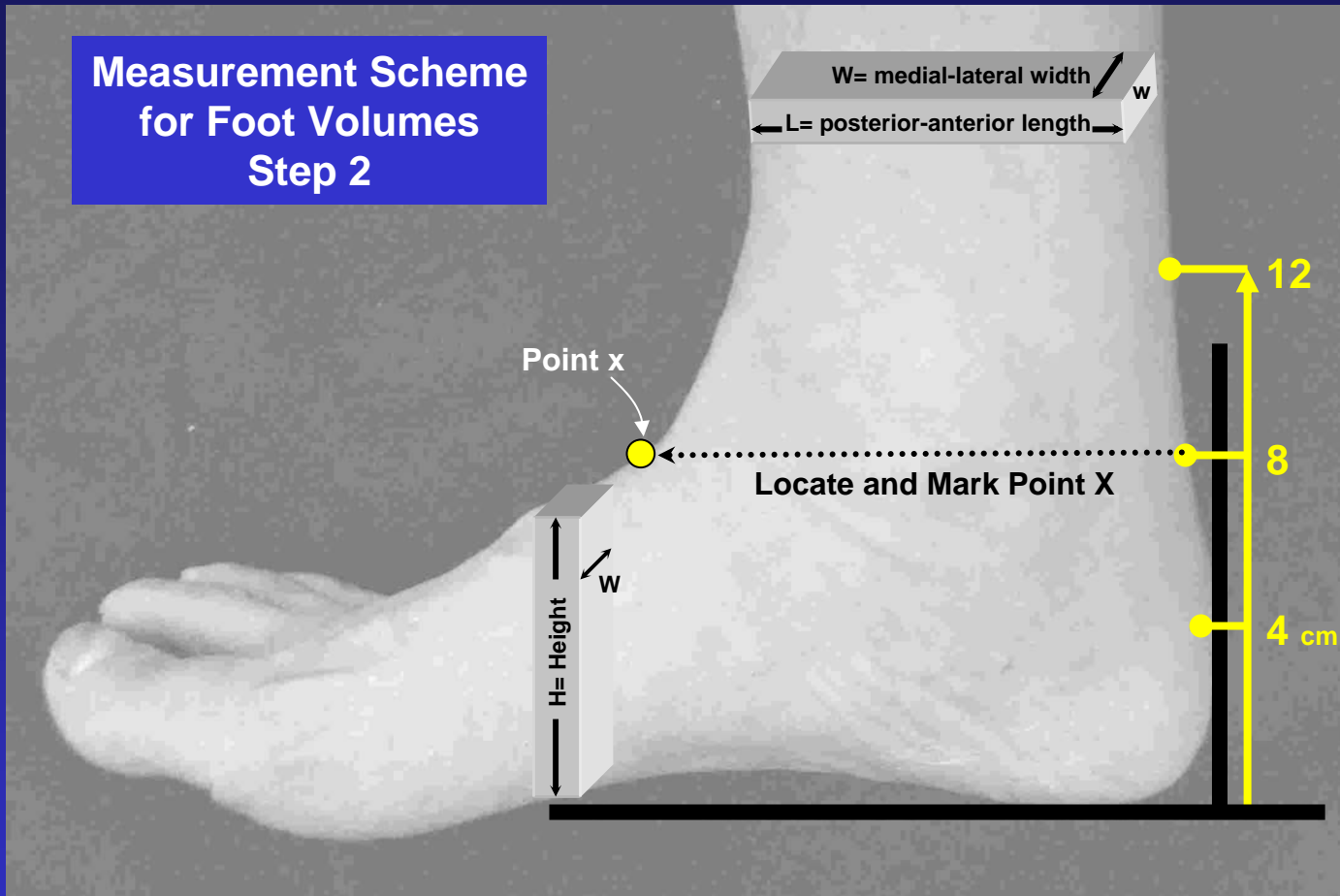
If there are any questions please contact us at: support@limbvolumes.ogr

**Measurement Scheme
for Foot Volumes
Step 1**

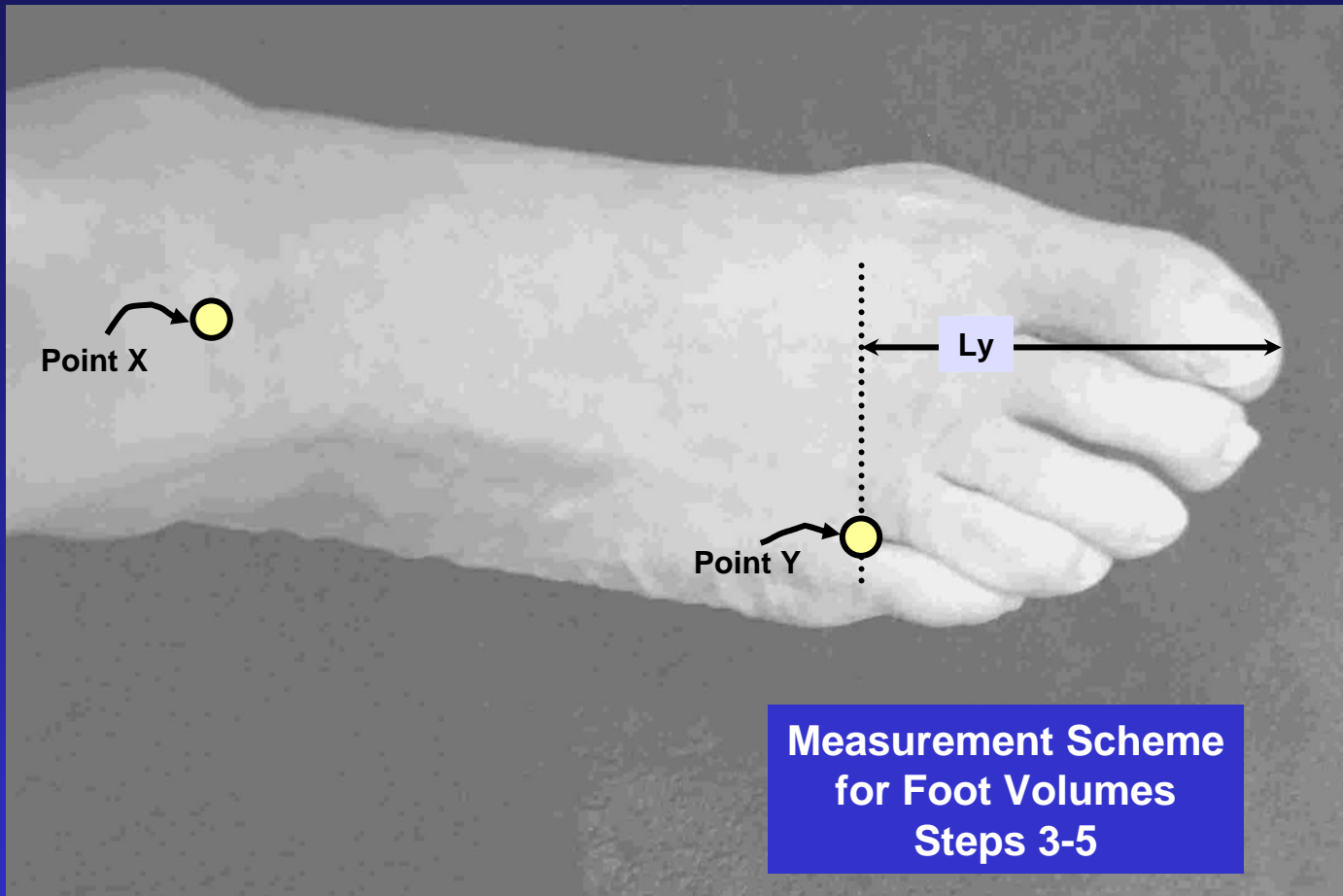


1. Position foot at about 90° flexion and then mark the foot at heights of 4, 8 and 12 cm from bottom.

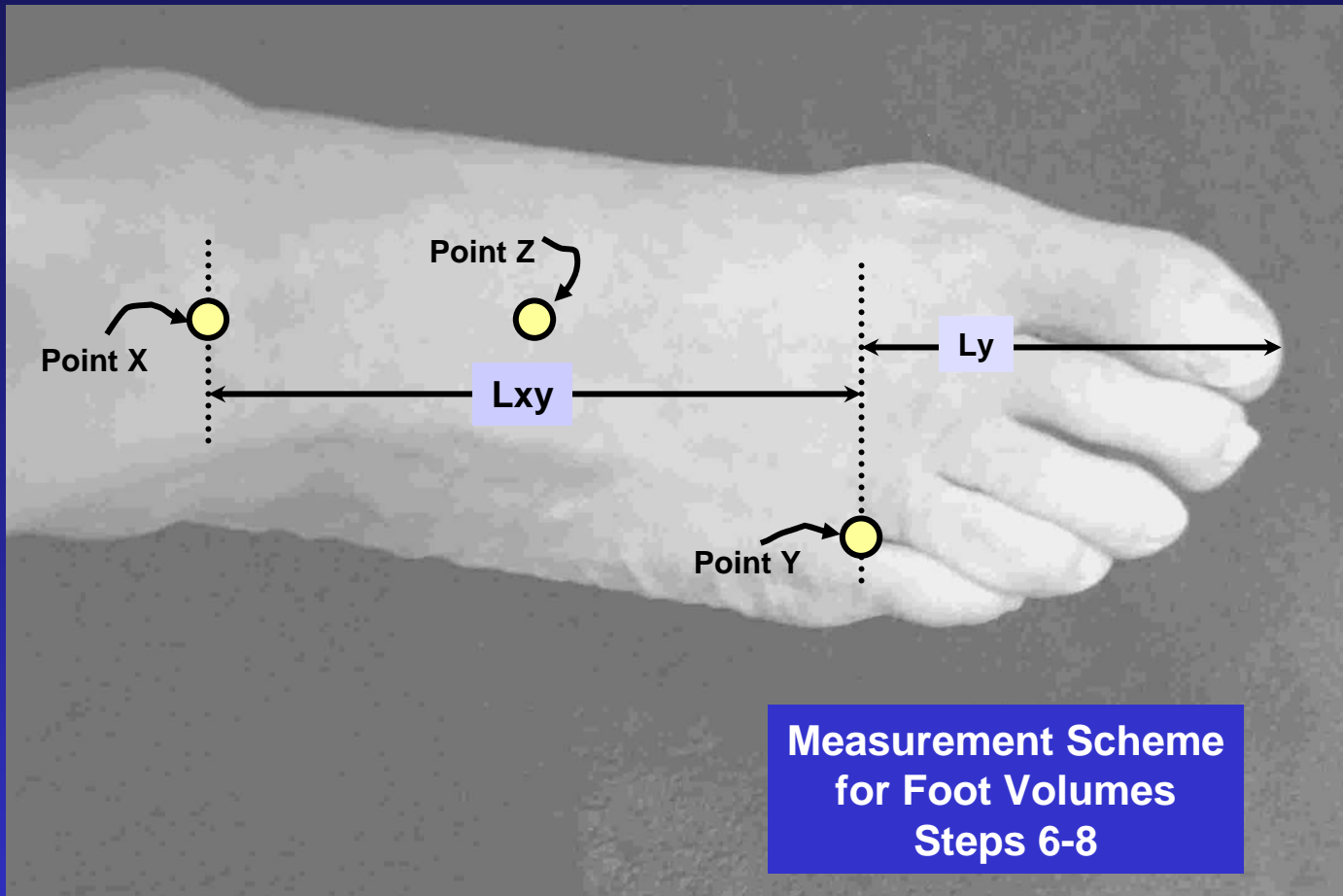
**Measurement Scheme
for Foot Volumes
Step 2**



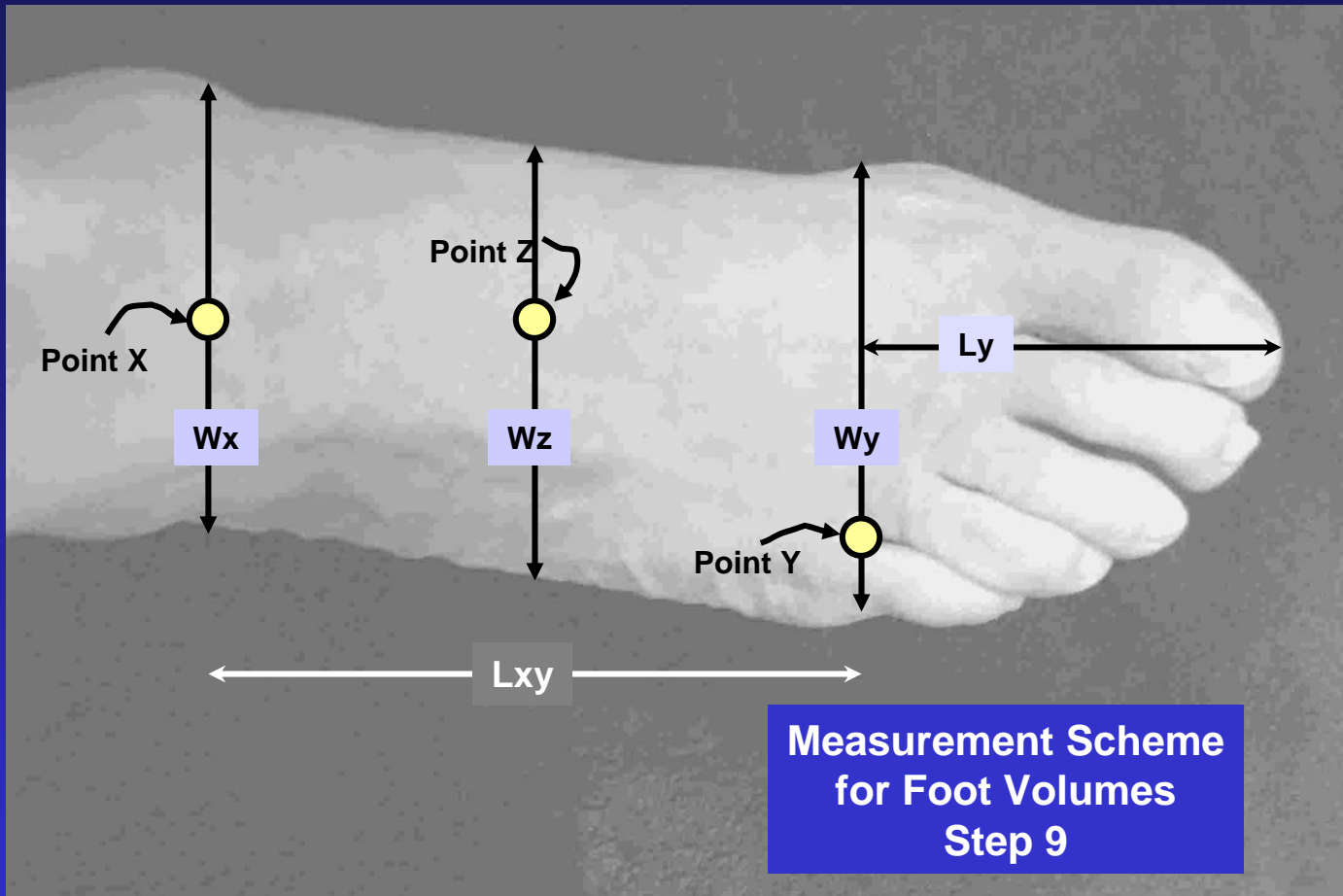
2. At the 8 cm height locate and mark point x. This is determined by the point where a horizontal line, if drawn, would end.



3. Locate and mark the point Y where the crease between toes 5 and 4 ends.
4. Draw a line through point Y as shown.
5. Measure the perpendicular distance (L_y) to furthest point on toes
RECORD L_2

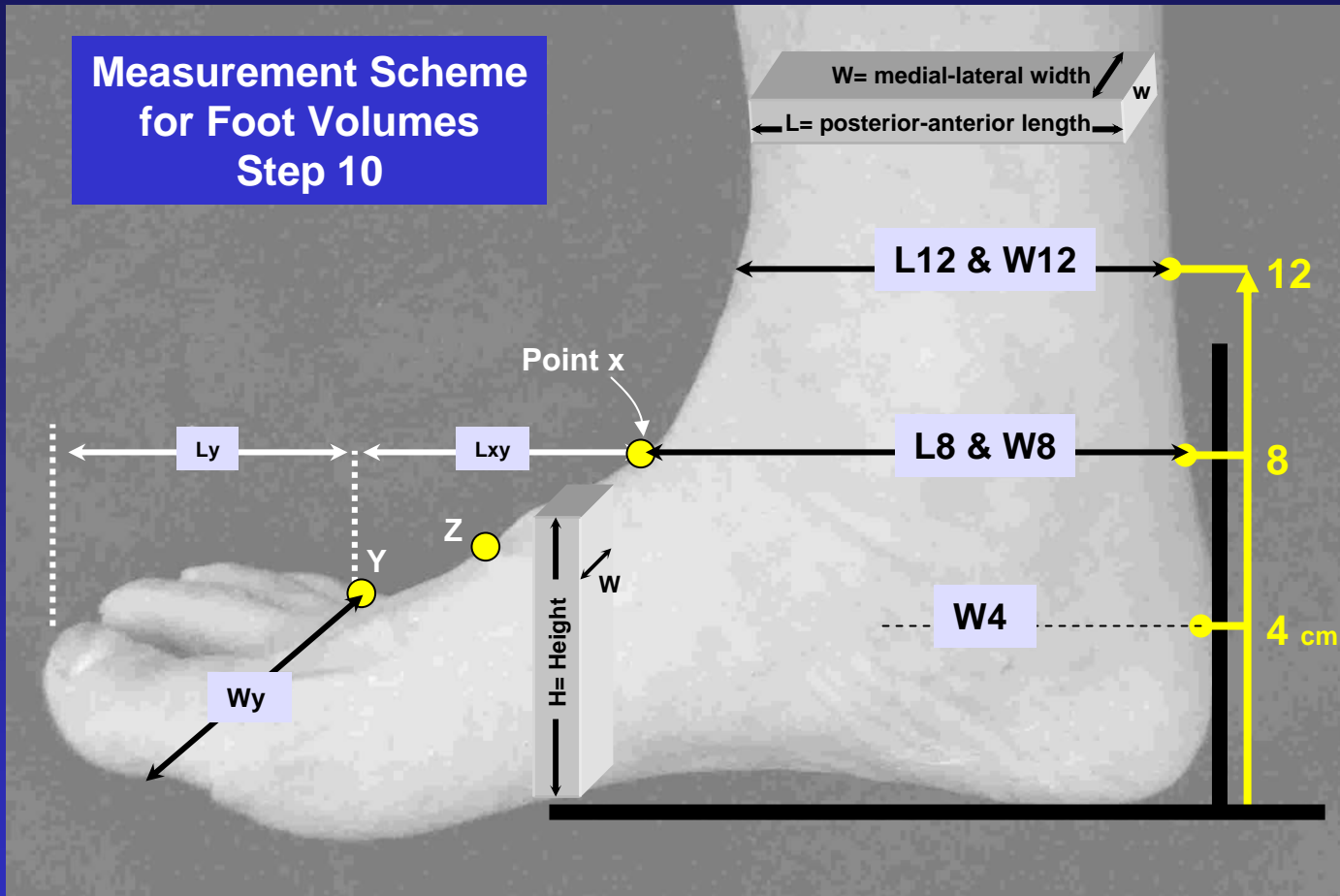


6. Draw a horizontal line through point X (previously marked) as shown.
7. Measure the length (L_{xy}) between the two lines - RECORD L_{xy}
8. Mark a point (Z) midway between X and Y



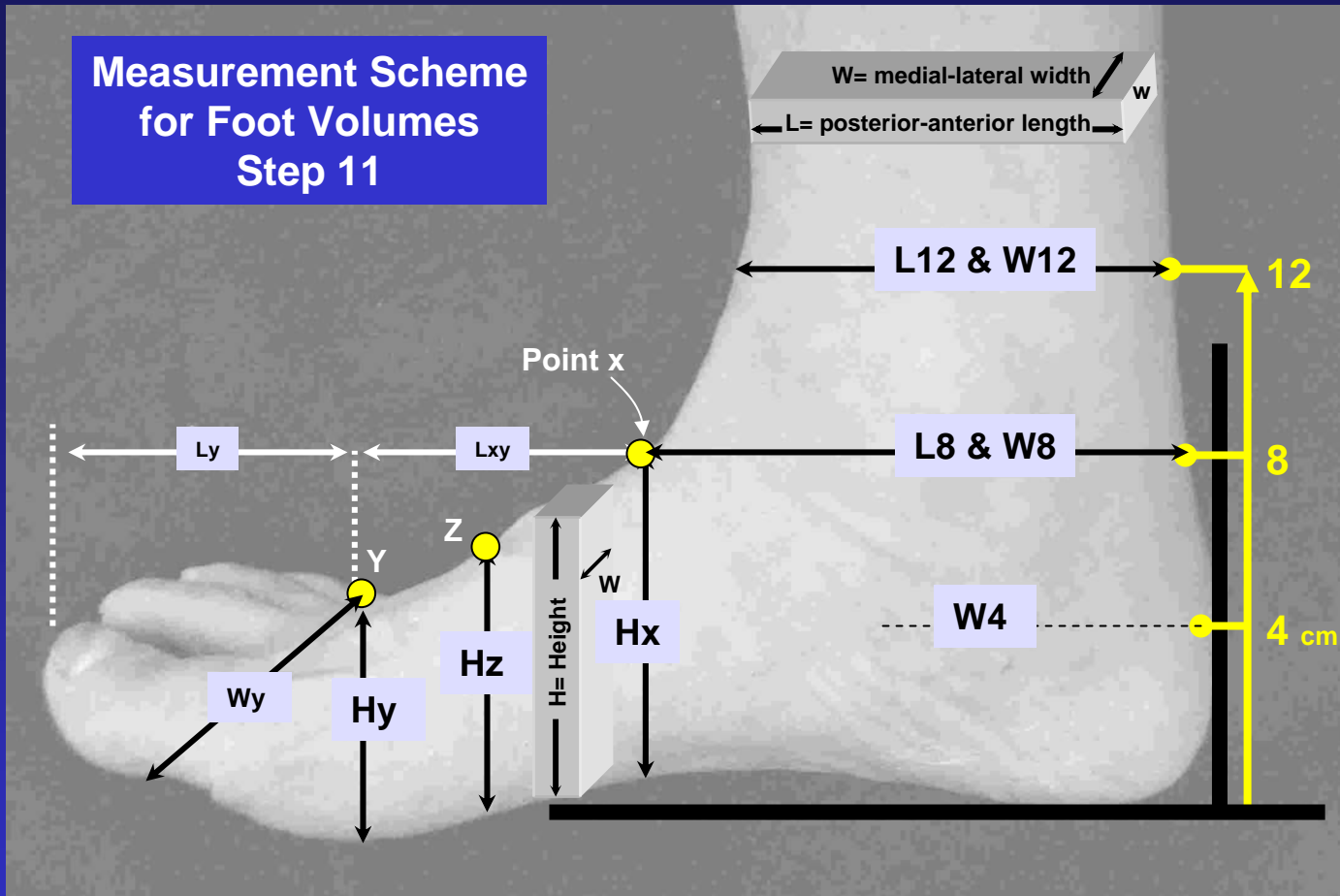
9. Using calipers measure and RECORD the widths W_x , W_z and W_y .

**Measurement Scheme
for Foot Volumes
Step 10**



10. Using calipers measure and RECORD the Lengths at 12 and 8 cm and the widths at 12, 8 and 4 cm as indicated.

**Measurement Scheme
for Foot Volumes
Step 11**



11. Measure and RECORD the Heights Hx, Hz and Hy as indicated.

Ly _____

Lxy _____

Wx _____

Wz _____

Wy _____

L12 _____

L8 _____

W12 _____

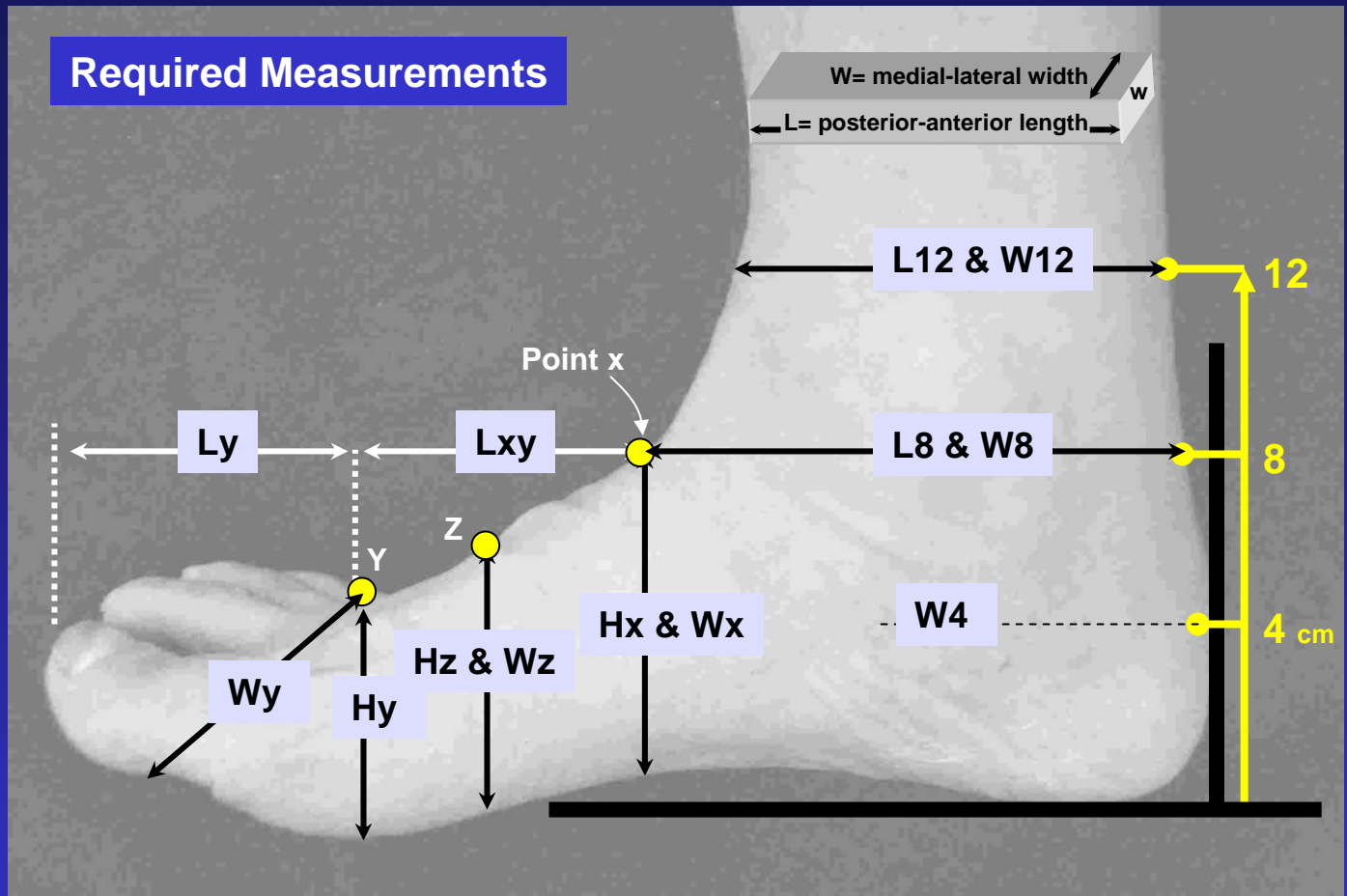
W8 _____

W4 _____

Hx _____

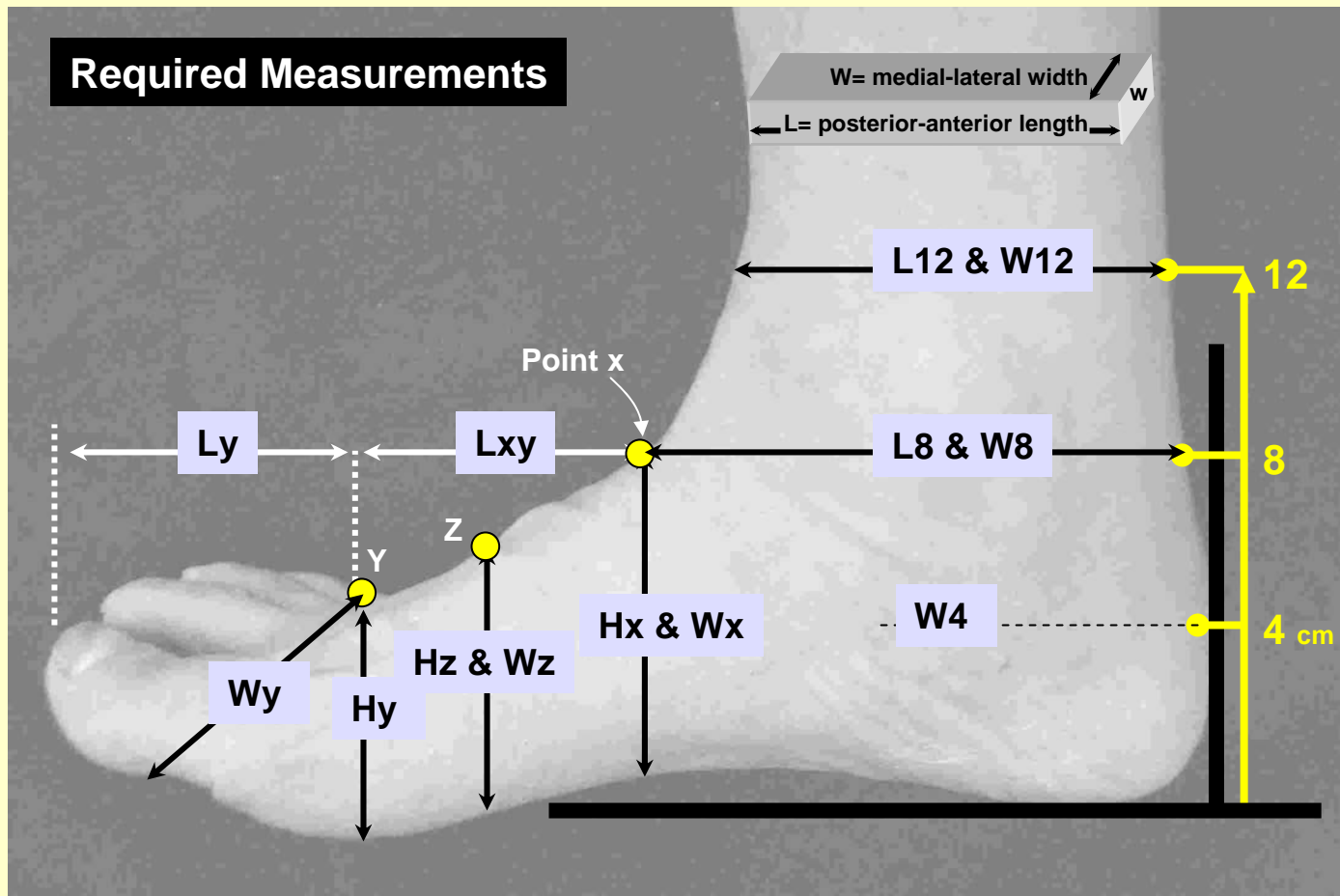
Hz _____

Hy _____



For ease of data entry and consistency, enter data in mm

Ly	_____
Lxy	_____
W _x	_____
W _z	_____
W _y	_____
L12	_____
L8	_____
W12	_____
W8	_____
W4	_____
H _x	_____
H _z	_____
H _y	_____



For ease of data entry and consistency, enter data into the FOOTC page of LVP4.0 in millimeters (mm) only

This page can be printed and used as a Data Recording Sheet for Your foot measurements