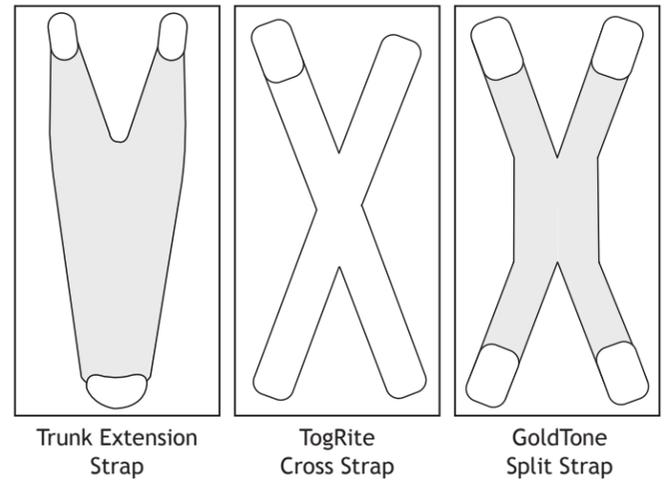


We designed the Wunzi™ System to support the primary goal of achieving trunk control as a foundation for using the limbs to move and to function. Because infants developing typically achieve bilateral, symmetrical extension against gravity first, and flexion second, we listed the following strapping procedures in order of priority, beginning with those intended to optimize the building of trunk extension strength and control.

-Beverly Cusick, PT, MS, NDT, COF



1. SHORTEN & ASSIST THE SPINAL EXTENSORS

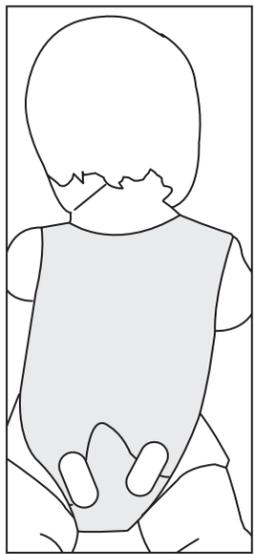


Fig 1. Tab down 2 folds.

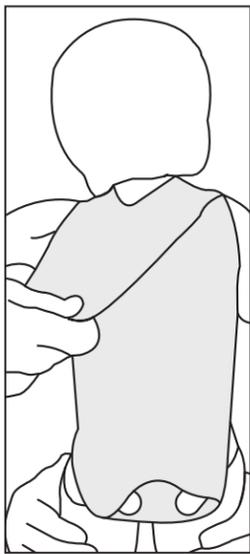


Fig 2. Attach shoulder flap tabs to the garment front panel.



Fig 3. Draw the bottom of the WTE downward.

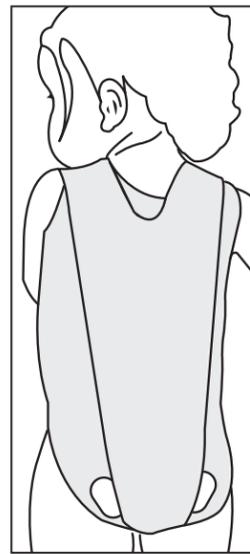
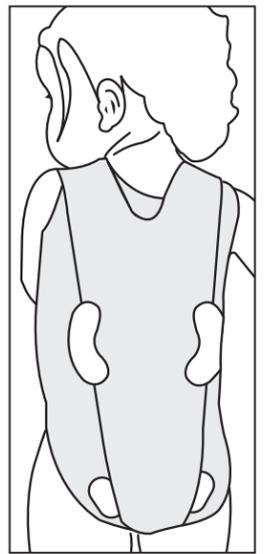


Fig 4. Attach WTE to garment under the crotch.



Fig 5. Use 2 banana tabs to secure the WTE on the garment.



The new V-shaped Wunzi Trunk Extension-Assist (WTE) Strap is well-suited to the Wunzi garment design. It is stiff vertically, and pre-tabbed at the top and bottom ends for ease of use. Here's how to apply it:

1. Take two folds in the fabric lying over the outer buttocks and tab them down (like a dart) (Figure 1).
2. Lay the WTE lengthwise on the child's back with the foamed side down and the 2 narrow straps draped over the shoulders.
3. Attach the two shoulder straps to the upper front side of the garment, avoiding the garment shoulder tabs (Figure 2).
4. With the child's back straight, draw the bottom end of the WTE Strap downward and attach the tab to the garment that runs over the crotch (Figures 3 & 4).
5. Use 2 "banana"-shaped tabs to attach the WTE to the garment (Figure 5).
6. Place the child in sitting and assess the effect.
7. Adjust the WTE tension and side tab locations to optimize the effect without compromising comfort.
8. When satisfied, mark all tab attachment sites on the garment.

NOTE: If the spine still bulges in sitting and/or standing, add a Split Strap (see below).

2. ENHANCE THE WTE STRAP EFFECT WITH A GOLDTONE™ SPLIT STRAP OR TOGRITE™ CROSS STRAP

SAFETY PRECAUTION: The elasticized white TogRite material is too strong to wrap completely around any limb.

1. Attach 3 more same-size tabs and turn the Split Strap (shown in Fig 6) or the Cross Strap so that the longer length is horizontal to the body. Try them both to assess for optimum effect on posture.
2. Lay the strap center over the part of the spine that needs more support.
3. Attach the top 2 ends of the strap to the garment on the sides of the upper ribcage near the nipples.
4. Draw the bottom 2 ends toward the pelvis & wrap them around the waist (Fig 6).
5. Attach them to the lower front panel on the garment (Fig 7).
6. Assess the effect; adjust strap selection, position, length, and tension to optimize trunk extension.
7. When satisfied, mark and number the strap attachments on the garment.
8. To increase attachment space in front, add a GoldTone straight strap across the lower torso below the navel (Fig 8A).
9. Attach the lower 2 strap ends to the lower abdominal straight strap (Fig 8B).

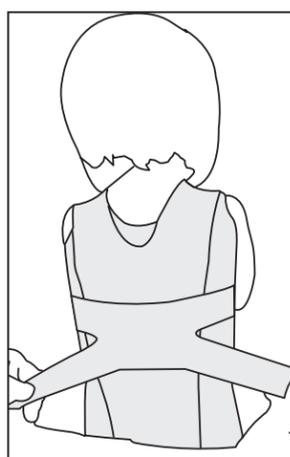


Fig 6. Attach top two ends of the horizontal Split Strap over the upper chest. Pull the bottom 2 ends down & around the lower torso.

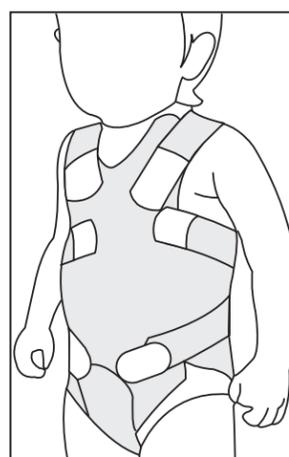


Fig 7. Attach the bottom 2 strap ends to the lower front panel.

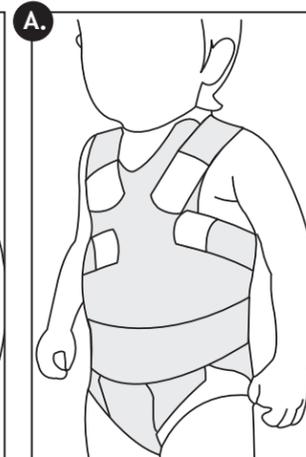
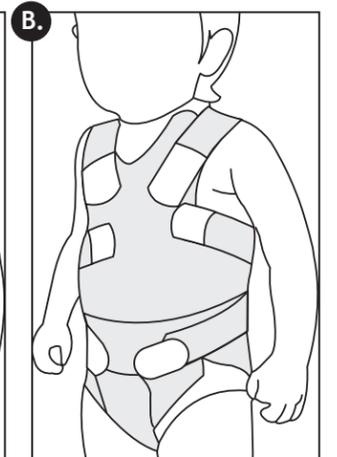
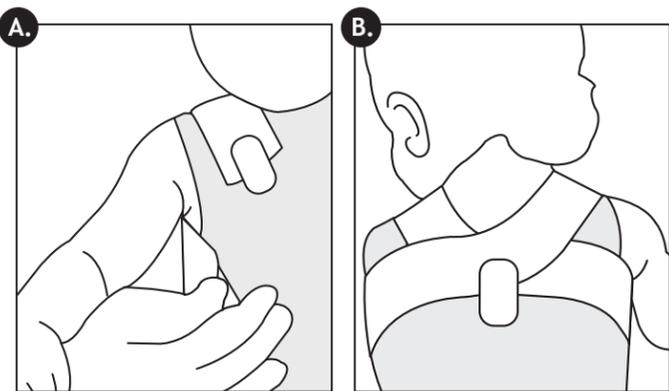


Fig 8. (A) To increase attachment space in front, cut & add a GoldTone Straight Strap across the torso below the navel.



(B) Reattach the bottom Split Strap ends to this strap.



3. STABILIZE SCAPULAE AGAINST WINGING.

1. Tab and hold the Cross Strap horizontally across the upper back.
2. Attach the upper straps to the Front Panel under the collar bones.
3. Attach the lower straps to the front panel on the rib cage (Fig. A).
4. Check for optimum tension. Adjust the strap length and attachment sites to optimize stabilization of the shoulder blades.
5. Use a spare tab to draw the Cross Strap center down on the back panel to clear contact with the neck (Fig. B).

4. SHORTEN & ASSIST THE OBLIQUE ABDOMINAL MUSCLES

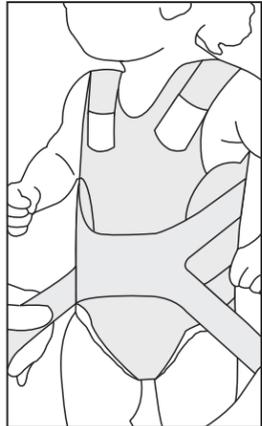


Fig 9. Apply the Split Strap to assist the oblique abdominal muscles.

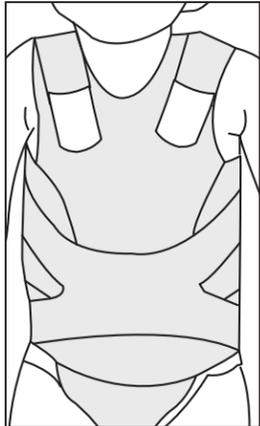


Fig 10. If a more elastic assist is needed, try using the TogRite Cross Strap instead of the Split Strap.

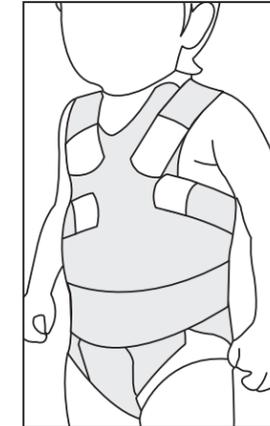
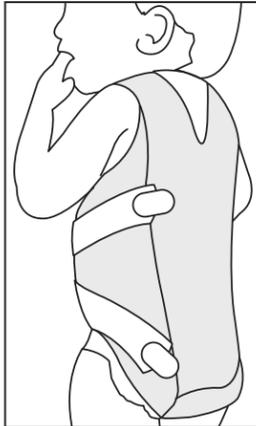


Fig 11. Add lower abdominal Straight Strap if needed.

1. Attach 3 more same-size tabs to the GoldTone Split Strap and turn the longer length horizontal to the body.
2. Lay the strap center bridge over the garment covering the child's navel.
3. Attach the top 2 strap ends to the sides of the upper/posterior ribcage. Snapping it onto the WTE strap is optional.
4. Draw the bottom 2 ends toward the back of the pelvis and check the fit. Remove excess strap fabric if needed; reapply the tab.
5. Attach the strap and assess the effect (Figs. 9 & 10).
6. Add the Straight Strap lower abdominal assist if needed (Fig. 11).
7. When satisfied, mark and number strap attachments on the garment.

5. FACILITATE KICKING WITH ABDOMINAL MUSCLE ACTIVITY

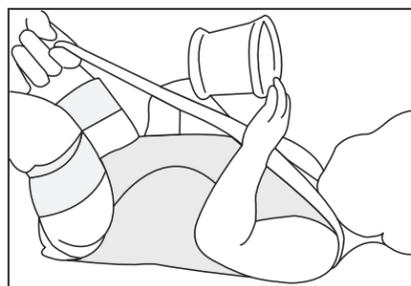
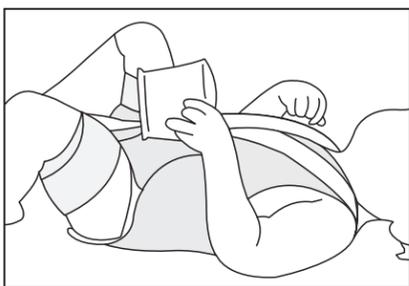


Fig 12. Connect the shoulders to the thighs with the Cross Strap, wrapping the lower straps under the thighs and attaching them to the limb cuffs.



1. Wrap the Limb Cuffs around the lower thighs above the knees.
2. Use a Cross Strap to connect the upper trunk to the thighs (Fig. 12). Assess the effect.
3. If thighs fall apart, adduct them with a Straight Strap (not shown here, shown on video).

6. SHORTEN AND ASSIST WEAK ILIOPSOAS MUSCLES

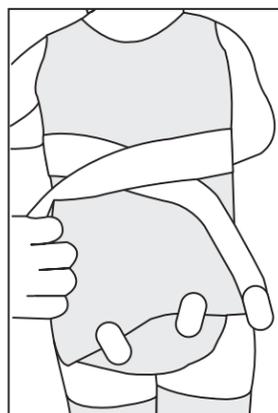


Fig 13. Extending the spine, draw the bottom ends of the Cross Strap forward and attach them to the inner undersides of the thigh cuffs.

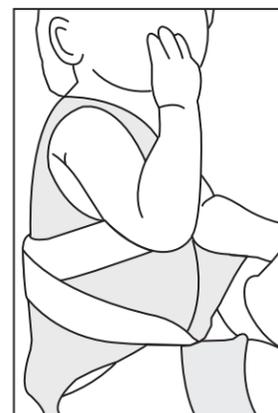


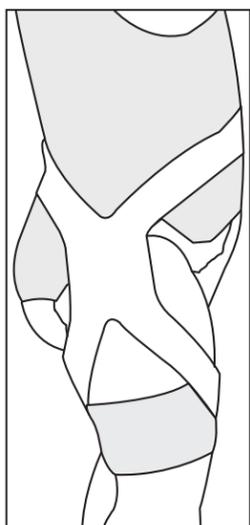
Fig 14. If the hips are too wide to allow lateral weight shifts, draw the thighs together with a Straight Strap.

1. Wrap the Limb Cuffs around lower thighs above knees.
2. Use a horizontal Cross Strap to connect the upper chest, over the lumbar spine and inner hips, to the thigh cuffs (Fig. 13).
3. Use a Limb Cuff to adduct the hips if needed (Fig. 14).

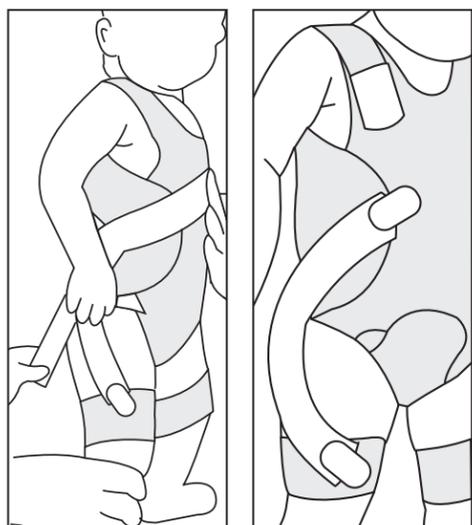
7. MORE STRAPPING APPLICATIONS USING THE SUPPLEMENTAL WUNZI LIMB KIT

You can purchase a supplemental Wunzi Limb Kit to create additional strapping applications. (Contact TheraTogs Customer Service for details.) Examples:

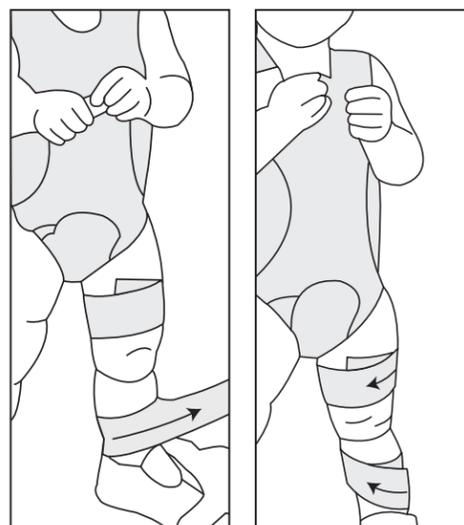
Assist the iliotibial band & stabilize Thigh Cuff with a small Split Strap



Use the Second Cross Strap to Assist the Iliotibial Band and Hip Abductors



Assist leg lateral (left) or medial (right) rotation with a Limb Cuff and Straight Strap



Assist leg and hip lateral rotation with a Limb Cuff & Straight Strap.

