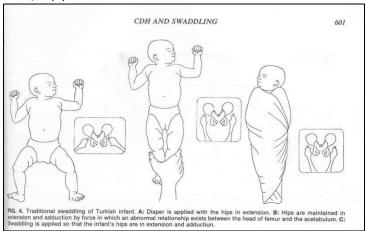
## **Swaddle Design Considerations**

Thank you for your interest in designing and promoting products that support healthy hip development. The International Hip Dysplasia Institute (IHDI) recognizes that the only harmful position identified for hip development is with the legs bound together and straight. Numerous human and experimental studies have shown that tightly binding the legs for prolonged periods of time can significantly increase the risk of hip dislocation and hip dysplasia. This is illustrated in the following image from Kutlu A, et al. *J Pediatr Orthop.* 1992;12(5):598-602.



Other positions that allow the legs to move and spread may not be harmful. However, the exact amount of movement that is required for natural hip development is unknown. A recent study from the duPont Institute evaluated infants with mild dysplasia with legs held in less than optimum position. That study showed that loose hips may become displaced when movement is restricted.

**Criteria for "Hip-Healthy" Swaddles:** Swaddling products are acknowledged as "Hip-Healthy" when they allow the infant to actively flex the hips without excessive restraint while also allowing moderate to full hip abduction and external rotation. Swaddling blankets and devices that hold the hips and knees straight with the thighs together will not be acknowledged as hip-healthy. This only applies to products for infants younger than six months of age.

Thank you again for your interest in healthy hip development.

Sincerely,

Charles T. Price, MD, FAAP Professor of Orthopaedic Surgery University of Central Florida College of Medicine

Director International Hip Dysplasia Institute 1222 S. Orange Avenue, 5<sup>th</sup> Floor Orlando, FL 32806

Ph: 321.843.5271 Fax: 321.843.5298