Infant Carrier Design Considerations Criteria for "Hip-Healthy" Designation

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. Other positions that allow the legs to move and spread may not be harmful. However, there are noted professors who have proposed that allowing the legs to dangle while placing a partial support between the thighs may be detrimental to hips that have mild instability – see image below from *Congenital Dysplasia and Dislocation of the Hip*, Springer-Verlag, Editor Dietrich Tönnis .

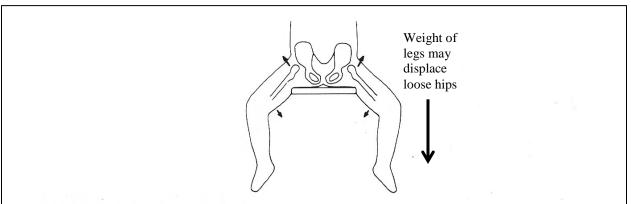


Fig. 17.4. Diagrams showing the potentially dislocating action of an abduction pillow of inadequate size. The width of the abducting segment should equal the distance between the popliteal fossae (Knees).

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 in these positions. Much of this is recent information and has caused the IHDI to re-evaluate infant carriers.

Although we have previously provided information about the optimum position, please note that some of the images on our website have been improved. Below are images showing the optimum positions that are pertinent to this letter.



Please note that the thighs are supported to the knees and the thighs are supported in the M-position. It is the opinion of IHDI that this position is most important before the age of six months. This position may be difficult to maintain when the infant is facing outward in a hip seat, or similar types of carriers, or when the thighs are not supported to the knees.

IHDI suggests that instructions accompanying carriers for infants younger than six months consider identifying the methods to maintain hip position near or at the optimum position for hip health in that particular carrier. This may be difficult to achieve in the outward facing position when the legs are allowed to dangle around the seat support or other supporting structures of the carrier. Less than the optimum position for hip development is not proven to be harmful, but the IHDI only acknowledges the positions that have evidence of benefit. Thus, lack of acknowledgement is not intended to imply harm.

In summary, IHDI can acknowledge as "Hip-Healthy" those carriers that support the M-position when worn as instructed for infants younger than six months of age. This is generally achieved by carriers that support the full thigh with the infant in the inward facing position during the first six months of life.

Infant Carrier Criteria: Carriers and babywearing products will be acknowledged as "Hip-Healthy" when they encourage the M-Position as described by Fettweis. Carriers may also be acknowledged as "Hip-Healthy" when they support the thighs with the hips spread forming an angle of 60 degrees to 120 degrees as measured between both thighs. The amount of optimum flexion has not been established but acceptable flexion ranges from approximately 70 degrees to 120 degrees with the hips spread. For "Hip-Healthy" designation the thighs should be supported to avoid a fulcrum effect that may occur from partial support between the thighs when the legs are hanging downward. This only applies to products for infants younger than six months of age.

Thank you again for your interest in healthy hip development.

Sincerely,

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