



Babywearing

Definition of Babywearing

Babywearing is the practice of keeping baby close by wearing or carrying baby in a sling or other type of carrier. Babywearing has been practiced for centuries around the world.

Benefits of Babywearing

Happy baby

Breastfeeding

Bonding

Free hands



Calm baby

Touch and motion

Digestion

Confidence

Benefits of Babywearing

- **Breastfeeding -carrying baby close stimulates mom's prolactin, helps her to identify early cues, can bf discreetly, increases duration**
- **Hands are free to attend to siblings or to do chores**
- **By being close to parent's chest, baby is comforted by heartbeat, breathing, and voice – best for preemies**

Benefits of Babywearing

- **Motor skills are enhanced by stimulating vestibular system by being exposed to a variety of sights, sounds, motion – different perspective**
- **Allows for natural development of the cranium, spine, and postural muscles (no flat head)**
- **Improved circulation, respiration, and digestion**

Benefits of Babywearing

- **Helps develop muscles needed to sit, stand, walk**
- **Baby spends more time in “quiet alert” state**
- **Baby falls asleep and sleeps deeper and longer**
- **Builds baby’s trust and parent’s confidence**

Essential Safety Points

- **Baby's chin is off the chest**
- **Baby is visible**
- **Baby is close enough to kiss the head**
- **Baby's back is straight (not in "C")**
- **Baby's hips are flexed (frog position)**

OPTIMAL POSITIONING: SOFT STRUCTURED CARRIER



close enough to kiss baby's head

chin off chest and airway is clear

carrier supports baby to the nape of the neck
(for newborns)



straps snug but not too tight

back supported (no slumping)

knees higher than bum



clips are securely fastened

panel supports M position without splaying legs

waistband is parallel with the floor

OPTIMAL POSITIONING: WRAP



close enough to kiss baby's head

chin off chest and airway is clear

fabric to the nape of the neck (for newborn)

back supported (no slumping)

fabric snug but not too tight

knees higher than bum



fabric knee to knee

deep seat with fabric between you and baby

tied with secure double knot

Tummy to Tummy

BEST NEWBORN POSITION



QUICK BABY WEARING REMINDERS

Sometimes, using a carrier comes naturally. Sometimes, it takes practice. Remembering these ABCs can help you achieve a safe and satisfying fit for you and your child.

A
AIRWAY

Airway: Ensure baby's airway stays open by keeping chin off of chest, and allow fresh air to circulate around baby's face. Keep child close enough to kiss and in view at all times.

B
BODY POSITIONING

Body positioning: Be sure the carrier supports baby in a way that is appropriate to his/her level of neck and trunk control and prevents slumping. Ideally with baby's knees higher than bum and weight borne by thighs and bottom.

C
COMFORT

Comfort: The carrier should be comfortable for you and baby. If you do not feel comfortable and confident with the carry you are doing, have a spotter nearby to help you. If you need help using your carrier, contact your local BWI chapter.

www.babywearinginternational.org

BABYWEARING INTERNATIONAL



Questions to consider in choosing a carrier

- How long do you plan to use it
- Who will use it
- Budget
- Do you want to only purchase one

Types of Carriers



Wrap



Ring Sling



Meh Dai



Buckle Carrier



Pouch Sling



The Science Behind Baby Wearing

23 EVIDENCE-BASED BENEFITS

This round-up of 23 compelling studies includes both baby carrying research but also highly relevant findings from closely related fields.

EVIDENCE TYPE:

- D** Directly measured benefit (from baby carrying study)
- I** Inferred benefit (from closely related research)
- K** Kangaroo Mother Care (KMC) benefits. KMC is typically characterized by skin-to-skin contact and babywearing, most often with preterm infants.





1 PROMOTES SECURE MOTHER BABY ATTACHMENT ^D



KEY STUDY/PAPER

Anisfeld E et al. (1990). "Does infant carrying promote attachment? An experimental study of the effects of increased physical contact on the development of attachment." *Child Development*, 61(5):1617-27.



FINDINGS

The high level of maternal touch associated with babywearing is related to enhanced mother-infant bonding and secure attachment.

3 AIDS BABY'S HEALTHY PHYSICAL DEVELOPMENT ^I



KEY STUDY/PAPER

Field T et al. (2010). "Preterm Infant Massage Therapy Research: A Review." *Infant behavior & development*, 33.2:115-124.



FINDINGS

Tactile stimulation in the form of massage or passive movement of limbs lead to weight gain and an increase in bone density.



2 BABY CRIES LESS ^D



KEY STUDY/PAPER

Hunziker UA, Barr RG. (1986). "Increased carrying reduces infant crying: a randomized controlled trial." *Pediatrics*, 77(5):641-8.



FINDINGS

Babywearing for three hours a day reduced infant crying by up to 54 percent.





4 MAKES MOTHER MORE RESPONSIVE TO BABY D

KEY STUDY/PAPER

Anisfeld E et al. (1990). "Does infant carrying promote attachment? An experimental study of the effects of increased physical contact on the development of attachment." *Child Development*, 61(5):1617-27.

FINDINGS

Mothers who wore their babies in a soft carrier were more responsive to their infants, indicating that the close physical contact promoted nurturing behavior.

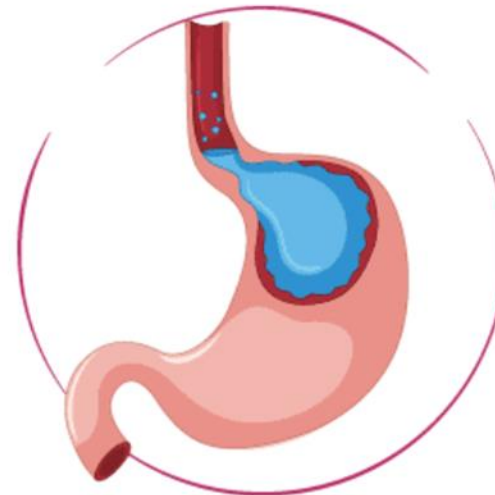
5 REDUCES REFLUX SYMPTOMS I

KEY STUDY/PAPER

Jung WJ et al. (2012). "The Efficacy of the Upright Position on Gastro-Esophageal Reflux and Reflux-Related Respiratory Symptoms in Infants With Chronic Respiratory Symptoms." *Allergy, Asthma & Immunology Research*, 4:17-23.

FINDINGS

Infants set in an upright position (as opposed to reclined on their backs) had fewer "reflux-related symptoms", ie, less spitting-up, vomiting, coughing, or breathing problems.





6 HELPS DEPRESSED MOTHERS TO NURTURE THEIR BABIES I



KEY STUDY/PAPER

Peláez-Nogueras M et al. (1996). "Depressed mothers' touching increases infants' positive affect and attention in still-face interactions." *Child Development*, 67(4):1780-92.



FINDINGS

Babies respond positively to touch even when their depressed mothers remain quiet with a "still face". Touch stimulation may compensate for a depressed mother's flat vocal and facial expression.



7 IMPROVES BREASTFEEDING RATES D



KEY STUDY/PAPER

Pisacane A et al. (2012). "Use of baby carriers to increase breastfeeding duration among term infants: the effects of an educational intervention in Italy." *Acta Paediatrica*, 101(10):e434-8.



FINDINGS

Mothers who used a baby carriers for at least 1h per day during the first month of life had significantly higher breastfeeding rates at three and five months.

8 SOOTHES BABY WHEN DISTRESSED I



KEY STUDY/PAPER

Byrne JM, Horowitz FD. (1981). "Rocking as a soothing intervention: The influence of direction and type of movement." *Infant Behavior and Development*, 4:207-218.



FINDINGS

Distressed infants between 1-3 days old were most effectively soothed when held and rocked with a continuous motion.

9 ENCOURAGES WELLBEING AND RELAXATION IN BOTH MOTHER AND BABY 1



KEY STUDY/PAPER

Uvnäs-Moberg K. (1997). "Oxytocin linked antistress effects--the relaxation and growth response." Acta Physiol Scand Suppl. 640:38-42.



FINDINGS

Warmth and touch stimulate oxytocin release which is known to induce anti-stress-like effects such as reduction of blood pressure and cortisol levels.



10 BABY SPITS-UP LESS 1



KEY STUDY/PAPER

Hopper HE, Pinneau SR. (1957). "Frequency of regurgitation in infancy as related to the amount of stimulation received from the mother." Child Development. 28(2):229-35.



FINDINGS

10 min of additional handling per day resulted in a significant reduction in regurgitation for infants.

11 LOWERS RISK OF OTITIS MEDIA 1



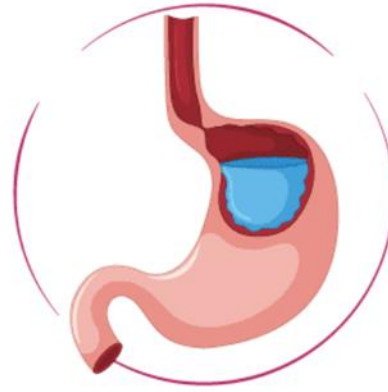
KEY STUDY/PAPER

Tasker A et al. (2002). "Is gastric reflux a cause of otitis media with effusion in children?" Laryngoscope, 112(11):1930-4.



FINDINGS

Reflux can deposit gastric juice in a child's middle ear. This is associated with otitis media, a leading cause of deafness. (Reflux is reduced when baby is held in an upright position.)



12 IMPROVES BABY'S DIGESTION K



KEY STUDY/PAPER

Diego MA et al. (2007). "Preterm infant massage elicits consistent increases in vagal activity and gastric motility that are associated with greater weight gain." *Acta Paediatrica*, 96(11):1588-91.



FINDINGS

Massaging infants increases gastric activity and stimulates the release of hormones responsible for food absorption. Touch might therefore foster growth by making digestion more efficient.



13 EASES TRANSITION IN TO WORLD BY MIMICKING WOMB I



KEY STUDY/PAPER

Gatts J D, "Infant environmental transition system and method", US Patent, US5385153A.



FINDINGS

At birth, every parameter of the infant's environment changes abruptly which is stressful for newborns. It is therefore thought that infants feel most comfortable in an environment approximating that before birth.



14 BABY LESS FUSSY D



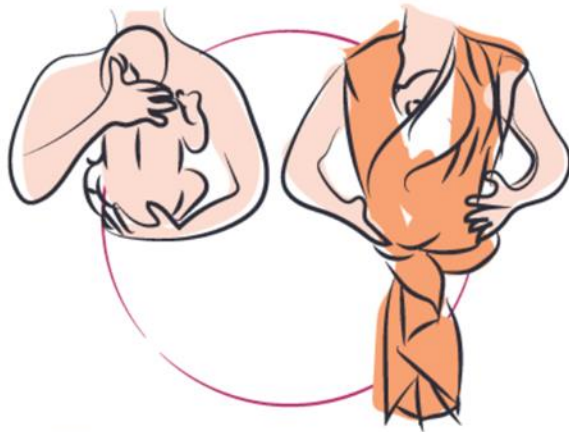
KEY STUDY/PAPER

Hewlett BS et al. (1998). "Culture and early infancy among central African foragers and farmers." *Developmental Psychology*, 34(4):653-61.



FINDINGS

Babies in a modern African hunter-gatherer peoples whose parenting practices are characterized by almost continuous holding, frequent nursing, and prompt responsiveness, fuss and cry significantly less.



15 MEETS NEWBORN'S NEED TO BE CLOSE TO MOTHER I



KEY STUDY/PAPER

Christensson K et al. (1995). "Separation distress call in the human neonate in the absence of maternal body contact." *Acta Paediatrica*, 84(5):468-73.



FINDINGS

Human infants recognize physical separation from their mothers and start to cry. This stops at reunion. Postnatal crying may be a human counterpart to the "separation distress call" used by other species to restore proximity to the mother.

17 TOUCH AND MOTION PHYSIOLOGICALLY CALM BABY I



KEY STUDY/PAPER

Esposito G et al. (2013). "Infant calming responses during maternal carrying in humans and mice." *Current Biology*, 23(9):739-45.



FINDINGS

Infants carried by a walking mother exhibit a physiological calming response that is a coordinated set of central, motor and cardiac regulations.



16 HUMANS ARE BIOLOGICALLY ADAPTED TO CARRY THEIR INFANTS D



KEY STUDY/PAPER

Nicolai K, (2013), "Cache or Carry? Comparative biology and infant carrying". Published online.



FINDINGS

When categorizing mammals with respect to postnatal parent-infant behaviour, humans occupy the "carried young" or "parent clinger" category. In contrast, other mammals have "nested or cached young" (that are deposited in a safe place) or "parent followers" (that almost immediately walk and follow their mothers).





18 MAY LESSEN POSTPARTUM DEPRESSION I

KEY STUDY/PAPER

Bigelow A et al. (2012). "Effect of mother/infant skin-to-skin contact on postpartum depressive symptoms and maternal physiological stress." *J Obstet Gynecol Neonatal Nurs.*, 41(3):369-82.

FINDINGS

Mothers who provided their newborns with skin-to-skin contact for 5h daily during the first week and 2h daily during the first month reported significantly lower scores on a depression scale.

19 REDUCES RISK OF FLAT HEAD I

KEY STUDY/PAPER

Mawji A et al. (2014). "Risk Factors for Positional Plagiocephaly and Appropriate Time Frames for Prevention Messaging." *Paediatrics & Child Health*, 19.8:423-427.

FINDINGS

Odds of developing flat head are increased when infants sleep on their backs, especially if they have a preference for a single head position. (To prevent SIDs it is recommended that infants sleep on their backs. Babywearing is safe option that reduces the risk of flat head at other times, eg, during the day.)



20 USES LESS ENERGY THAN IN-ARM CARRYING D

KEY STUDY/PAPER

Wall-Scheffler CM et al. (2007). "Infant carrying: The role of increased locomotory costs in early tool development". *American Journal of Physical Anthropology*, 133(2):841-846

FINDINGS

The burden of carrying in-arms is 16% greater than using a baby carrier.

21

SYNCHRONIZES MOTHER AND BABY BIOLOGICALLY I



KEY STUDY/PAPER

Feldman R et al. (2011). "Mother and infant coordinate heart rhythms through episodes of interaction synchrony." *Infant Behavior and Development*, 34(4): 569-577.



FINDINGS

Mothers and infants coordinate their heart rhythms during social interactions. This happens through touch but also increases substantially when interacting with facial expression and vocalizing.



22

SUPPORTS PHYSICAL GROWTH IN PRETERM INFANTS K



KEY STUDY/PAPER

Gathwala G et al. (2010). "Effect of Kangaroo Mother Care on physical growth, breastfeeding and its acceptability." *Tropical Doctor*, 40(4):199-202



FINDINGS

Preterm infants whose mother practiced Kangaroo Mother Care (which is often characterized by skin-to-skin contact and babywearing) gained more weight and grew more in size.

23

MAY INCREASE MOTHERS' RESILIENCE AND PARENTAL CONFIDENCE K



KEY STUDY/PAPER

Tessier R et al. (1998). "Kangaroo mother care and the bonding hypothesis." *Pediatrics*, 102(2):e17.



FINDINGS

Mothers practicing Kangaroo Mother Care (which is often characterized by skin-to-skin contact and babywearing) reported feeling more competent when responding to stressful child care situations.



LEARN MORE

We The Parents

WeTheParents.org/babywearing-benefits-evidence

REFERENCES

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Resources

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- <https://www.healthline.com/health/parenting/baby-wearing>
- <https://hipdysplasia.org/baby-wearing/>
- <https://www.lli.org/breastfeeding-info/baby-wearing/>