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The NaturalWave[®] Teat

Designed to help maintain Established breastfeeding patterns



Information for Health Professionals

From the company who brought you HPA® Lanolin

Evidence based peristaltic teat for feeding expressed breastmilk

Pump, Store, Feed Breastmilk

For those times when mum is away from her baby due to work, social or other commitments, the Lansinoh[®] fully compatible pump-store-feed solution enables her to express quickly and easily and safely store her precious breastmilk so that her baby can always enjoy the benefits of mum's milk.



BPA BPS FREE





Research shows that the sucking style of babies involves three steps:



An evidence based peristaltic teat designed to help the baby maintain the natural sucking style learnt at the breast and preserve established breastfeeding patterns. Clinically proven to avoid nipple confusion in established breastfeed babies.

Studies demonstrated few differences between feeding on the breast and that seen with the NaturalWave® teat with babies employing peristaltic tongue movements most commonly seen in breastfed babies. Flow rate throughout the feed was found to be much more stable, therefore indicating a reduced risk of overfeeding and colic like symptoms when actively employed as part of a paced responsive feeding routine.



- 1 Teat tip Baby controls milk flow
- 2 Soft 100% Silicone Stretches and flexes for optimal compression
- 3 Inner vertical ridges Strengthen teat structure, making it collapse-resistant

encourage this natural feeding pattern.

- Unique gradual slope design
 Enables smooth peristaltic tongue movement
- **5 Wide, textured teat base** For easy latch on and effective suction
- 6 AVS[™] Air Ventilation System Reduces intake of air, a potential cause of colic

Wide Neck Bottle with NaturalWave® Teat



NaturalWave® Bottle and Teat Features

- NaturalWave[®] Teat promotes the peristaltic tongue movement which encourages natural, oral, jaw and facial development
- Teat is clinically proven to reduce nipple preference in established breastfed babies
- Enables baby to use natural feeding actions learnt at the breast
- Wide neck design makes bottle easy to clean and fill
- Hygienic protective cap to prevent spills
- Available in single and double packs
- Three teat sizes S,M,L
- BPA/BPS and Phthalate free



Scientifically Proven¹:

The NaturalWave® Teat enables the baby to maintain the natural sucking styles learnt at the breast.

An ultrasound study conducted at the University of Leeds examined the sucking style of breastfed babies when using the NaturalWave[®] teat compared to the breast. The average age of babies included in the study was 3-26 weeks. All babies were offered a bottle of expressed breastmilk for the first time using a NaturalWave[™] bottle and teat.

Babies showed individually characteristic



styles of feeding, which differed between babies, but which were consistent within the same baby across different sucking stimuli, i.e. between breast and bottle. There were few distinct differences between feeding on the breast and that seen on the bottle.

The style of feeding most likely to be seen on the bottle was best predicted by the style of feeding seen on the breast.

1 Woolridge et al. Leeds Ultrasound Imaging Study 2: How Breast-Fed Babies Bottle Feed, May 2011.



Latched onto the Breast



Nipple Compression

Baby feeding on NaturalWave[™] Teat



Latched onto NaturalWave™ Teat



Teat Compression

Baby feeding at Mothers Breast

Leeds Ultrasound Imaging Study 2 (LUIS-2): How Breast-Fed Babies Bottle Feed

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Amended version: May 2011

Précis

1. A recently conducted ultrasound study of breastfeeding (Woolridge et al. in prep) demonstrated that babies employ two distinct styles of feeding – 'suckling' and 'sucking' – to remove milk from the breast. The two styles complement each other, so would appear to be used synergistically, in a fluid, dynamic manner throughout a breastfeed; it is presumed that this is done to optimise milk removal in association with variation in milk availability throughout the feed. The median age of babies in the study of breastfeeding was 6.3 weeks (range 1.0 to 16.7 weeks).

2. The present ultrasound study compared bottle feeding with breastfeeding in the same babies, at the point at which mothers introduced bottles to their baby (mainly of expressed breastmilk); the median age of babies was 13.6 weeks (range 3.1 to 25.7 weeks).

3. From most perspectives, feeding on the bottle was qualitatively the same as feeding on the breast with babies employing both feeding styles.

4. 'Sucking' may be characterised as peristaltic front to back waves of pressure applied by the baby's tongue to the side of the bottle teat, resisted by the roof of the mouth.

- a. This action would be effective at removing milk from the bottle if the baby were able to occlude (block off) the neck of the teat, and then compress the teat bulb.
- b. We were rarely able to visualise occlusion of the teat neck, because this is obscured by the baby's lower jaw on ultrasound (as ultrasound does not pro pagate through bone).

- c. Babies were generally able to achieve between 70-100% compression of the soft tip of the teat, and there was evidence that this was achieved through wave like propagation of compression from the front of the mouth backwards (from the base of the teat to its tip), as would be observed on the breast.
- d. This is the obligate form of infant feeding, and was present in all recorded sequences, irrespective of whether the baby was feeding on the breast or the bottle, and independent of the baby's age.
- e. This finding was unexpected as we presumed that a peristaltic suckling action would be much less effective on the bottle.

5. 'Sucking' may be used to describe a more localised lowering of the mid-section of the tongue, at a particular point in the suck cycle (close to the teat tip), which produces increased negative suction pressure, and is likely to draw milk from the teat bulb as a result of this suction; these are described as 'extractive tongue movements'.

a. This type of sucking tends to be the subordinate form of feeding observed during breast feeds, although they give the appearance that milk flow is greatest when it is employed.

6. There are two qualitative differences, however, in the appearance of feeding on either the breast or the bottle: (i) 'extractive tongue movements' were present for a greater proportion of the feed on the bottle (compared to the breast); but (ii) there are less distinct, commonly being more muted in appearance than they are on the breast.

- a. The explanation for this may be that while milk flow on the breast fluctuates in a dynamic way throughout the breastfeed (with variation in the activation of the let-down reflex), milk is constantly available from a bottle, the principal determinant of flow being the size of hole (aperture) in the teat tip.
- b. The availability of milk from a bottle is only likely to change if negative pres sure accumulates in the bottle as milk is withdrawn; but this effect was pre vented in the case of these studies as the teats has an 'anti-colic' vent.
- c. As a consequence the flow rate throughout the feed is likely to be much more stable. The balance between the two styles can therefore be set at the start of the feed and maintained throughout it (unlike at the breast). This may explain the much less variable ratio of 'peristaltic tongue movements' to 'extractive tongue movements' during bottle feeds.

7. While peristaltic tongue movements may be less effective at removing milk from the bottle, they remain essential for expelling the accumulated milk bolus past the soft palate into the gullet (oro-pharynx).

8. A key behavioural marker for the presence of an 'extractive tongue movement' is a shearing movement of the soft palate, downwards and forwards in the baby's mouth. In some bottle feeding sequences this was so marked that it resulted in the soft palate intermittently making contact with the tip of the bottle teat. We can only speculate as to why the 'extractive tongue movement' appear less distinct on the bottle, but it may be a way the baby protects its soft palate from excessive distortion.

9. Baby's showed individually characteristic styles of feeding, which differed between babies, but which were consistent within the same baby across different sucking stimuli, i.e. between breast and bottle.

10. Summary: Among the babies in this study, who were established breastfeeders, there were few distinct differences between feeding on the breast and that seen on the bottle; the style of feeding most likely to be seen on the bottle was best predicted by the style of feeding seen on the breast.

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| The NaturalWave [®] Bottle & Teat Range | | | |
|--|---|-------------------|---------------|
| Product code | Product description | On pack languages | Barcode |
| | Feeding Bottle with NaturalWave® Teat 160ml | GB, I, E, GR, PL | 5060062999488 |
| | Feeding Bottle with NaturalWave® Teat 240ml | GB, I, E, GR, PL | 5060062999518 |
| | Feeding Bottles with NaturalWave® Teat 2x240ml | GB, I, E, GR, PL | 5060062999549 |
| | Feeding Bottle with NaturalWave® Teat 160ml | GB, TR, H | 5060062990454 |
| | Feeding Bottle with NaturalWave® Teat 240ml | GB, TR, H | 5060062990461 |
| | Feeding Bottles with NaturalWave® Teat 2x240ml | GB, TR, H | 5060062990478 |
| | Glass Feeding Bottle with NaturalWave® Teat 160ml | GB, F, NL, D, TR | 5060420230680 |
| | Glass Feeding Bottle with NaturalWave® Teat 240ml | GB, F, NL, D, TR | 5060420230710 |
| | NaturalWave [®] Slow Flow Teats (2pcs) | GB, I, E, GR, PL | 5060062999693 |
| | NaturalWave® Medium Flow Teats (2pcs) | GB, I, E, GR, PL | 5060062999723 |
| | NaturalWave® Fast Flow Teats (2pcs) | GB, I, E, GR, PL | 5060062999754 |
| | NaturalWave [®] Slow Flow Teats (2pcs) | GB, TR, H | 5060062990485 |
| | NaturalWave® Medium Flow Teats (2pcs) | GB, TR, H | 5060062990492 |
| | NaturalWave® Fast Flow Teats (2pcs) | GB, TR, H | 5060062990508 |

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