mam
Since 1976

Together in every step.

WHITEPAPER

Pulsi

From Womb to World

Inspired by baby's first feeling of calm

Table of Contents

1. A New Chapter in Calming Support

For 50 years, MAM has worked with medical experts and families to create products that support babies and parents from the very beginning. Now, we are proud to present Pulsi — an innovation that expands our portfolio and opens a new category in calming support.

Pulsi began with an observation by its founders, Jasmine Rawlinson and Julie St Dennis: before birth, babies live in a world shaped by closeness, movement and rhythm. Inspired by the pulsation of the umbilical cord, they set out to translate this natural principle into a tactile tool for life after birth.

Together with MAM, that idea became Pulsi. Its patented sawtooth pulsation and baby-friendly design offer a gentle sensory cue for supervised calming moments at home and in professional care settings.

The need is clear. The transition from womb to world can be overwhelming, and around 78 % of mothers told us they struggle to calm their baby in unsettled moments.[1]

Pulsi is not a soother replacement. Nor does it replace parental touch, presence or instinct. It complements them by adding one more option to the ways families already help their babies find calm.

With Pulsi, we reaffirm our commitment to families worldwide: transforming meaningful insights into trusted innovations that support babies and parents from the very beginning — together in every step.

Dr. Philipp Schoeller
CEO, MAM

2. Executive Summary

Pulsi is a new calming tool designed to support babies in moments of unrest. It can be used in everyday calming moments, during bonding, rest and transitions.

The product is based on a simple scientific rationale: babies are familiar with rhythm before birth. As Kerstin Lüking, a German midwife and member of the Pulsi Medical Advisory Board, puts it: **"Babies come from a world of rhythm and heartbeat. I believe this is one main reason why Pulsi works so well."** Pulsi builds on this idea with a gentle tactile rhythm inspired by the umbilical cord, as observed in sonography and umbilical arterial Doppler imaging.

The hypothesis behind Pulsi is that a familiar pulsation may help babies calm more easily and support caregivers in everyday soothing routines. It is not designed to replace touch, feeding, holding or bonding. Instead, it adds one sensory cue to existing calming strategies. Almost two dozen medical experts tested Pulsi during research and development. They described infant soothing as multimodal: parents often combine closeness, movement, skin-to-skin contact or a soother. Pulsi can complement these routines, especially for babies who respond well to rhythm and touch.

In total, Pulsi was **tested with 312 babies.** During the final testing period, **15 medical experts tested it with 240 babies; a Home Use Test (HUT) involved 72 babies and their families.** The results are discussed in Chapter 8. In these practical tests, Pulsi showed a statistically significant calming effect in Medical Expert Testing, while home use confirmed promising everyday relevance. Medical experts rated the product positively, and all seven members of the Medical Advisory Board recommended it as a supportive calming tool. In the HUT, 31 % of babies were soothed almost every time.[2]

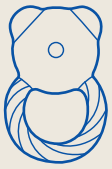
Pulsi is available in two sizes, both inspired by the umbilical cord reflected in its patented sawtooth pulsation and ergonomic design. Size one is designed for use from birth and is especially light, with an extra-gentle pulsation for newborns; size two offers stronger pulsation and added texture for sensory exploration from around four months onward.

In essence, Pulsi is a complementary calming tool that can be used within existing soothing routines or on its own — always in supervised moments of care.

"Babies come from a world of rhythm and heartbeat. I believe this is one main reason why Pulsi works so well." – Kerstin Lüking, midwife and member of the Pulsi Medical Advisory Board (Germany)

Available in two sizes

0+ MONTHS



4+ MONTHS

Mimics the natural pulsation of the umbilical cord

93%

Medical experts confirm: Pulsi calms babies down.*

PATENTED TECHNOLOGY**

Unique patented pulsation technology

Home Use and Medical Expert Testing with 312 babies in total

*Tested by HCPs with 240 babies (2026).
**Granted in the US and UK, with applications pending in other countries.

3. Infant Distress & Calming Support

Why early soothing matters

Crying is one of the earliest ways babies communicate a need for care and signal distress. It may occur in response to hunger, need for contact and reassurance, pain, discomfort or overstimulation.[3,4,5] Yet in the first months of life, distress is often difficult to interpret by the parents or caregivers. A baby may cry even when fed, changed and comforted. For parents, this can be deeply unsettling: they want to respond, but may not know what their baby needs.

Research describes infant distress as more than crying alone. It can include fussing, facial tension, motor restlessness sleep fragmentation and physiological arousal. Distress may indicate that a baby is struggling to calm without support. This is especially relevant in early life, when babies still depend on caregivers to help them move from agitation back to calm.[6]

The first months are often described as the "fourth trimester": a period of transition from the protected sensory world before birth to the more varied, stimulating world outside the womb. Light, sound, hunger, digestion, handling and fatigue can all become too much. What adults may perceive as an ordinary environment can feel like a flood of stimuli to a newborn.

Frequent infant crying has been linked with parental exhaustion and depressive symptoms.[7] In rare and severe cases, overwhelming stress may also contribute to serious safety risks, including leading to a 'non accidental head injury' – previously known as "shaken baby syndrome" in moments of parental anger.

MAM's market research points in the same direction: **nearly 78 % of mothers reported struggling when their baby is unsettled.**[1] This finding reflects a challenge many parents experience during the first months of life.

Calming is physiological

Soothing a baby is not simply about stopping crying. Studies suggest that effective calming involves coordinated behavioural and physiological changes. In a study by Luiejik et al. (2020), infants under six months who were carried by a walking mother moved less, stopped crying and showed a rapid decrease in heart rate compared with infants held by a seated mother. The authors described this as an infant "calming response" involving motor, cardiac and central regulation.[8] Other studies use similar markers to assess calming: less fussiness, lower heart rate and changes in heart rate variability. Heart rate variability is often used as an indicator of parasympathetic, or vagal, activity — the part of the nervous system involved in rest, recovery and regulation. The key point is clear: calming has measurable physiological effects. It can be seen in behaviour, but it also unfolds beneath the surface.[7]

This helps explain why rhythm, touch and movement can be so effective. Especially in early infancy, calming happens primarily through the body rather than through words. Babies may settle when they are held, carried, rocked, fed, touched or offered a soother. These methods engage sensory channels that are already familiar to the infant nervous system.

Soothing is usually multimodal

Medical experts involved in Pulsi's development repeatedly described calming as multimodal. In everyday life, parents rarely use a single method. They may hold the baby close, move their baby gently, offer skin-to-skin contact, use a soother, reduce stimulation or create rhythmic stimuli to mimic the environment in the womb.

Research supports this practical experience. Studies on sensory-based calming show that touch, swaddling techniques, movement and sound can help regulate an infant's state, especially when used in combination and adapted to the baby's response.[7]

This distinction is important. Commentaries on mechanical soothing have stressed that babies need human contact and that device-based support should be available to complement, rather than a substitute for caregiving.[9]

Infant distress is relational

A crying baby affects the caregiver. A stressed caregiver, in turn, can find it harder to soothe the baby. This does not mean parents cause infant distress, but rather that calming is often a shared process in which baby and caregiver influence each other.

Studies on parental responses to infant crying show that caregiver stress level and regulation can shape how parents respond to distress cues. Education may help: a 2024 study found that infant soothing training for first-time mothers improved maternal role perception, maternal attachment and breastfeeding self-efficacy, while also extending infant sleep duration and reducing crying.[10,11]

Therefore, support tools should be designed with both the baby and the caregiver in mind. A useful calming method should be simple, intuitive and compatible with real care moments.

The need for supportive tools

The science of infant calming points to a practical conclusion: babies often need help regulating, and parents need tools to support their care. Effective soothing is multimodal. No single method works for every baby, every time.

Pulsi was developed against this background. It offers gentle, sensory-based support that can be easily integrated into everyday routines – offering caregivers one more way to respond when a baby needs help finding calm.

4. Inside Pulsi: Design, Function and Use

Pulsi is a nature-inspired calming tool for babies – the world's first of its kind. It translates one of the earliest rhythms a baby experiences before birth into a gentle tactile cue: the pulsation of the umbilical cord.

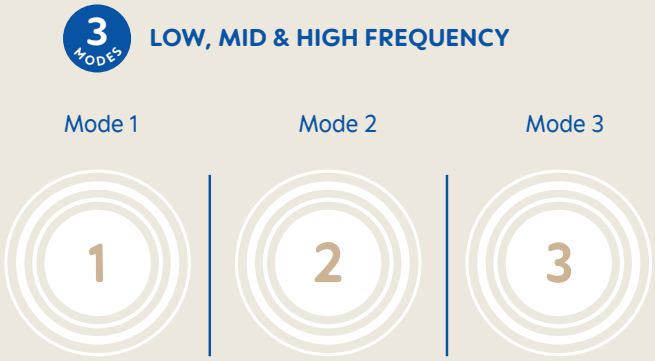
Its patented sawtooth pulsation is inspired by the rhythm of the umbilical cord, as observed in sonography and umbilical arterial Doppler imaging. Combined with a soft, ergonomic shape, Pulsi creates a new type of sensory support: not a soother or a sound machine, but a tactile calming tool.

Pulsi is intended for supervised calming moments at home and in professional care settings. Depending on the baby's response, caregivers may place it gently on the stomach or let the baby hold it in the hand. Research and expert feedback suggest that these positions are most effective.

The device should always be used as instructed. Pulsi should not be placed on the baby's head or below the waist. Further guidance for home and professional use is provided in Chapter 10.

How Pulsi works

3 MODES **LOW, MID & HIGH FREQUENCY**



The pulsation can be felt through the surface of the device. It is designed to provide a rhythmic sensory cue that babies can feel on their bodies or in their hands.

Two sizes for different stages of development

Pulsi is available in two sizes. Both follow an ergonomic design inspired by the umbilical cord. Its smooth surface was developed to feel pleasant for babies and to be easy to clean. The built-in battery powers Pulsi for up to six hours. For additional safety and ease of use, the device shuts off automatically after ten minutes.

Size 1

0+
MONTHS

ESPECIALLY GENTLE & LIGHT

Size 1 is designed for use from birth. It is extra-light and offers a particularly gentle pulsation for newborns.

Size 2

4+
MONTHS

MULTI-SENSORY TEXTURES

Size 2 is designed for babies from around four months onward. It is larger, offers stronger pulsation and includes different textures for sensory exploration.

5. The Story Behind Pulsi

Pulsi began with a repeated observation.
In 2015, while working as a sonography assistant in the United Kingdom, Jasmine Rawlinson noticed something that stayed with her. **During 4D ultrasound scans, many babies appeared to bring the umbilical cord close to their face.** Some seemed to hold, nuzzle or suckle on their cord. At first, it was a practical challenge: the cord could distort the images. But because Jasmine saw the behaviour again and again, she began to wonder whether it was more than chance.

"It seemed purposeful rather than random," she recalls. "I remember thinking: so many babies are doing the same thing with their cord."

When she asked the sonographer she worked with, why this might happen, the answer became the spark for Pulsi: **The blood flow through the umbilical cord creates a natural pulsation.** For Jasmine, the idea clicked: perhaps babies were responding to this familiar sensation.

She shared the idea with her mother, Julie St Dennis, also the co-founder of Pulsi. The idea resonated with Julie, reminding her of the instinctive ways children soothe themselves through small, sensory rituals that feel natural. Together, they began to ask a simple question: could this familiar pulsation be translated into a calming tool for babies after birth?

As they explored the idea further, they found that no comparative product drew on the pulsatile sensory experience. Over time, the observation became a concept, then a patent, then the first prototypes and testing.

Pulsi was shaped by a precise insight. It was never meant to copy a mother's heartbeat. **Its inspiration came from the pulsatile waveform of the umbilical cord — a rhythm connected to the baby's first world.** This idea guided the founders as they translated an organic principle into a tactile postnatal device.

At a Baby Show in London in 2024, Julie and Jasmine approached MAM and introduced the concept that was to become Pulsi. The meeting marked the beginning of a partnership that moved the invention towards product reality. For the founders, this mattered because MAM understood both the concept and its emotional purpose: to support babies as they adapt to life outside the womb, and providing parents with an additional way to nurture calm.

Jasmine and Julie want parents to feel "calm, reassured and connected" when they first hold Pulsi — as if they are offering their baby a sense of continuity from womb to world.

6. Scientific Rationale: Rhythm, Touch, and Early Regulation

Before birth, babies develop in a rhythmic environment. The foetus is exposed to the mother's heartbeat, breathing, voice and movement. These rhythms are not isolated. They reach the baby through several sensory channels at once: sound, pressure, touch and motion.[12]

After birth, this sensory world changes abruptly. The baby now encounters light, air, hunger, handling, external noise and longer phases without the familiar background of maternal rhythms. This transition is part of normal early life, but it can challenge a newborn's still immature regulatory system.

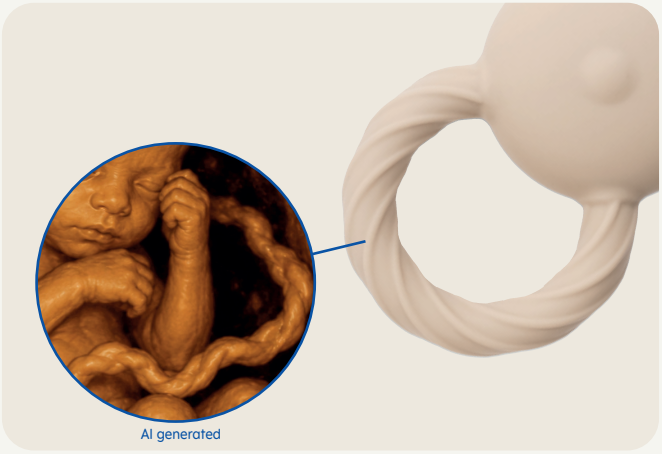
Rhythm is a basic organising principle in early development. Sounds, movement and touch can support regulation when they are adapted to whether the baby is calm, alert, tired or unsettled, and are offered gently. Pulsi builds on this principle. Its scientific rationale rests on the familiarity of antenatal rhythm, the role of tactile stimulation in early regulation and the umbilical cord as a biological model for a gentle pulsating tool.

Pulsi translates these ideas into a tactile calming aid for moments when a baby may benefit from a steady rhythm and the caregiver needs another way to support calm.

The umbilical cord as design inspiration

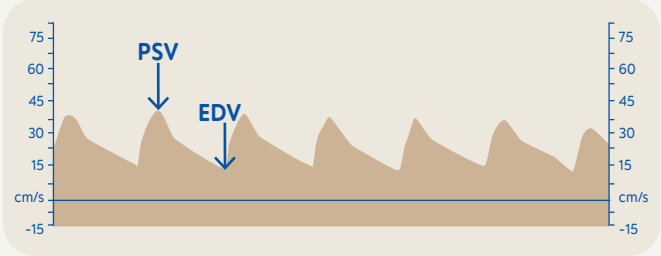
The umbilical cord is the baby's lifeline before birth. It connects the foetus and placenta and supports the exchange of oxygen, nutrients and metabolic waste. The umbilical arteries carry deoxygenated blood from the foetus towards the placenta; the umbilical vein carries oxygenated, nutrient-rich blood back to the foetus.[13]

Its structure also shaped Pulsi's design. The cord contains two arteries and one vein, surrounded by protective connective tissue. It is usually around 50–60 cm long and roughly 1–2 cm in diameter. Pulsi does not reproduce the cord's length, for safety and usability reasons. Instead, its form takes inspiration from the cord's diameter, softness and ergonomic feel.



The sawtooth pulsation

Another source of inspiration comes from Doppler ultrasound, which can visualise changes in blood-flow velocity in the umbilical vessels over time. In the umbilical artery, this appears as a repeating wave that resembles the teeth of a saw. Pulsi translates this biological pattern into its patented sawtooth pulsation — a gentle tactile postnatal calming tool.[12]



Normal umbilical artery flow velocity waveform tracings obtained during the 3rd trimester via a standard spectral Doppler ultrasound. PSV peak systolic velocity | EDV end-diastolic velocity. Figure adapted from Rocha et al. 2021.[13]

7. An Expert-Informed Development Pathway

Pulsi was not developed in a straight line. It evolved through observation and prototype testing. Through medical expert feedback and repeated redesign. From the beginning, the central questions were practical: **Can a tactile pulsation tool support babies during calming moments? And can it fit safely and intuitively into real care moments?**

From concept to first prototypes

Early prototypes translated the rhythm, form and tactile qualities of the umbilical cord idea into a handheld pulsation device. At this stage, the focus was exploratory. The team wanted to understand how babies would respond to the sensation, how parents would handle the device and how medical experts would assess its potential.

A key early milestone was a testing event in December 2024 at MAM's Health and Innovation Centre in Austria. 34 babies took part while 9 medical experts and members of the MAM project team observed and documented how babies interacted with early prototypes. The aim was to observe at least 30 baby-device interactions and collect structured feedback.

Several babies showed curiosity and engaged with the device. Some brought it to their mouths, making oral contact an important consideration for material safety and design. No increase in restlessness was observed during the documented interactions. Medical experts also identified areas for refinement: the device should support, not replace, parental soothing; some frequencies felt too fast or stimulating; and the shape needed further adaptation for newborn use.

Home Use Test: learning from daily life

After some additional work on the prototype to implement this feedback, the next step was an early Home Use Test (HUT) in Austria in April 2025. 50 families with babies aged 2-5 months received prototypes for use in everyday routines. The goal was to understand usability, design, effectiveness, preferred modes and real-life use cases.

This test generated a broad dataset of documented use situations and parent feedback: 5 questionnaires, 56 questions, 1,431 use cases and more than 17,000 responses. The prototypes were made from soft, bite-resistant silicone and incorporated the umbilical cord as a design element.

The HUT showed that Pulsi could calm babies in certain situations, especially when combined with other soothing methods. Some parents reported easier falling asleep and more relaxed behaviour. Acceptance among babies was high, particularly among soother users. Some babies calmed down, while others showed little change.

Deep-dive interviews and focus-group refinement

In June 2025, 12 HUT participants were interviewed online. The group included parents with both high and low satisfaction scores. The aim was to understand what drove positive and negative reactions: timing, use cases, preferred modes, safety perceptions and design concerns. The MAM-team concluded that the tested prototype was too large and heavy for babies under four months.

Further design work followed. New, more child-friendly prototypes were developed with greater attention to colour, size and suitability for babies. In September 2025, a focus group with five mothers and babies aged 4-8 months reviewed the latest versions. Parents responded positively to the refined bear-shaped prototype, particularly to its ears, which made it easier to grip.

Medical Expert Initiative

In October and November 2025, the Medical Expert Initiative brought together 17 medical experts from Austria, Brazil, the USA Switzerland, Germany and the UK, including midwives, paediatric dentists and speech language pathologists. They reviewed the concept and the latest prototypes.

The response was encouraging: all 17 experts viewed the concept favourably. They supported the portfolio approach, with versions tailored to different ages and needs, and saw potential for use with babies with varying sensory needs, provided Pulsi is used appropriately and under supervision.

From feedback to structured testing

Each stage narrowed the question: not only whether babies responded to Pulsi, but also how the tool needed to feel, look, and function to become safe, intuitive, and useful in real care. The development process involved observation, testing, feedback, and redesign — with families and medical experts shaping the product at every step.
This pathway led to the structured HUT and Medical Expert Testing described in the next chapter.

8. Evidence from Home Use and Medical Expert Testing

How to read this chapter

Pulsi was evaluated in two complementary test settings: a HUT with families and Medical Expert Testing in professional care contexts. Together, **these tests involved 312 babies.** The aim was to understand whether Pulsi supports calming, how babies and caregivers respond to it, and which use situations, modes and placements appear most promising.

The two test settings should not be read as identical evidence. They answer different questions. The HUT shows how families repeatedly used Pulsi in everyday routines. Medical Expert Testing provides broader professional observation across a larger number of babies. Together, they offer a practical picture of Pulsi in real care.

Study design at a glance

HOME USE TEST (HUT)	MEDICAL EXPERT TESTING
72 parents	15 Medical Experts*
2 weeks	2 weeks
72 babies	240 babies
Age of babies 0-4 m | 5-12 m	Age of babies 0-4 m | 5-12 m
AT	UK, US, DE, IT, FR

*Paediatricians, Midwives, Speech-language pathologists, Health visitors, Osteopath, Childcare assistant, Physiotherapist, IBCLC.
This study design combines breadth and depth. Medical Expert Testing included more babies and gives stronger support for the statistical calming result. The HUT included fewer babies, but offers insight into repeated use in everyday family life.

Study objectives

The testing programme had four main objectives:

1. Assess whether Pulsi supports calming in babies
2. Understand acceptance, usability and product perception
3. Identify preferred use situations, placements and modes
4. Gather feedback from parents and medical experts before launch

8.1. Medical Expert Testing

Design and method
In the Medical Expert Testing, **15 medical experts** tested Pulsi with **240 babies over two weeks.** The babies were divided into two age groups (0-4 months and 5-12 months) corresponding to the two sizes of Pulsi. Medical experts assessed the baby's calmness **before, during, and after** contact with Pulsi.

Main result: statistically significant calming effect
Medical Expert Testing showed a statistically significant calming effect. The reported effect size was Cohen's d = 0.772, with p < 0.001. Cohen's d describes the size of the observed change relative to the spread of the data. A value of 0.772 is close to the conventional threshold for a medium-to-large effect. In practical terms, babies appeared calmer after using Pulsi than they did before its use.

Cohen's d explanation

0.2 – Small effect
0.5 – Medium effect
0.8 – Large effect

Testing showed a statistically significant calming effect

Cohen's d = 0.772
P-value = 0.000

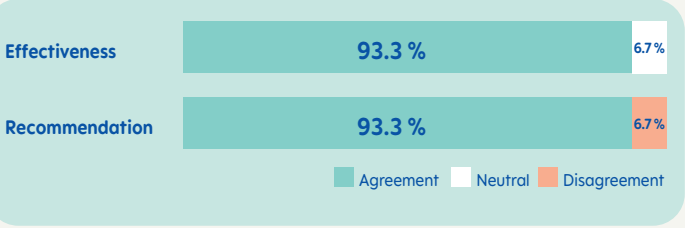
Calming effect by level of agitation
The subgroup analysis showed an important pattern. Babies who were already calm did not become calmer. Slightly agitated and very agitated babies showed strong effect sizes. The effect was also stable across both product sizes.

AGITATION	COHEN'S D	P-VALUE
Calm babies	-0.240	0.061
Slightly agitated babies	1.433	0.000
Very agitated babies	1.533	0.000
Size 1	0.711	0.000
Size 2	0.941	0.000

Pulsi is most relevant when a baby is unsettled, not when the baby is already calm. Pulsi should not be positioned as something that changes every baby's state at any time. It appears most meaningful in moments of unrest.

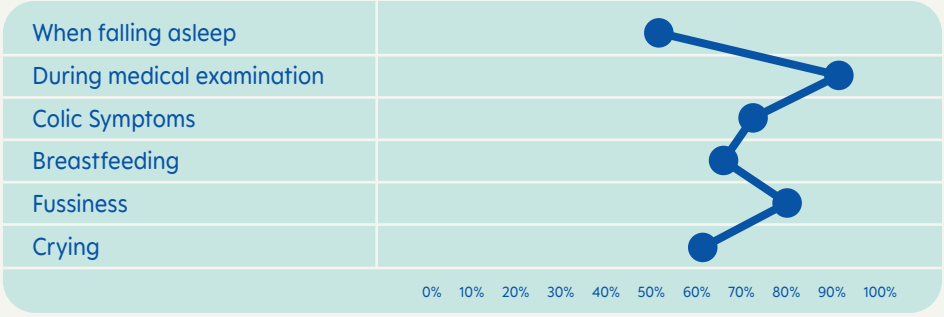
Medical expert perception
Medical expert feedback was strongly positive. **14 of 15 medical experts, corresponding to 93.3%,** indicated that they would recommend Pulsi as claimed on the packaging.

Please note: Recommendation does not mean Pulsi is suitable for every baby or every unsettled situation. It means medical experts perceived Pulsi as a useful, supportive, calming tool when used appropriately.



Medical experts saw practical value in Pulsi for professional contexts such as midwifery care, paediatric practice, lactation support, postnatal visits and routine handling situations.

Calming in different situations
The medical expert discussion suggests that Pulsi was not equally effective in all situations. It appeared more suitable for brief calming and care moments than for situations involving severe distress or possible medical concerns.



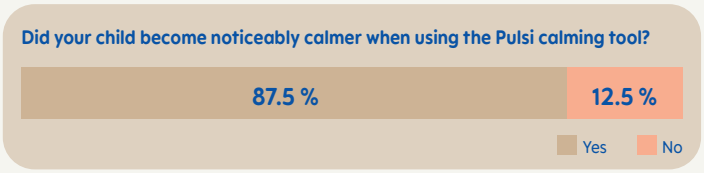
Pulsi may support calming during everyday care moments, transitions and care routines. It is not a solution for all crying, sleep problems, colic symptoms or breastfeeding challenges.

8.2. Home Use Test

Design and method
The HUT involved **72 parents and babies** recruited through the MAM club. Families used Pulsi at home for two weeks and completed a detailed questionnaire. The test captured repeated use in everyday routines, including moments of unrest, transitions, feeding-related situations and sleep routines.

The HUT adds a different kind of evidence from the Medical Expert Testing. It shows how Pulsi performs outside a professional setting, when parents use it repeatedly and adapt it to their own routines.

Main result: parent-observed calming
In the HUT, **87.5%** of parents reported that their child became noticeably calmer when using Pulsi. In addition, **30%** of babies were soothed almost every time.



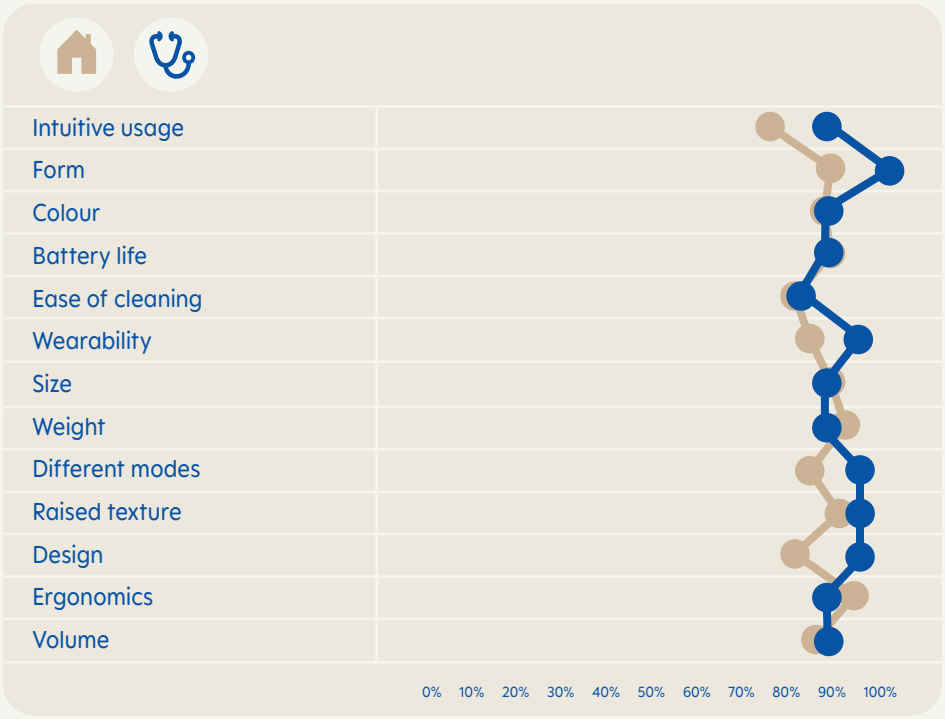
Most parents observed a calming response, and nearly one in three babies responded very consistently.

30% of babies were soothed almost every time!

Please note: The HUT supports the claim that Pulsi may help babies calm in everyday routines. It should not be read as a guarantee that every baby will calm down every time.

8.3. Product Aspects and Usability in both Test Settings

Parents and medical experts evaluated Pulsi positively across several product aspects, including intuitive use, form, colour, battery life, ease of cleaning, size, weight, modes, texture, design, ergonomics, and volume.



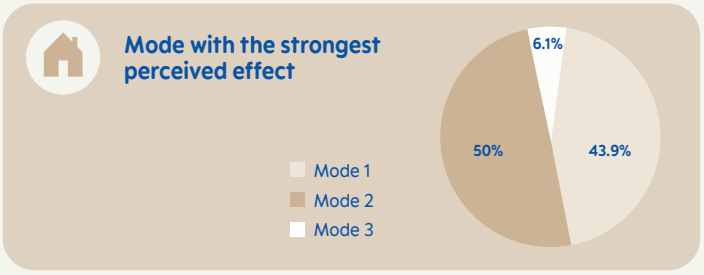
For a calming tool, usability is part of effectiveness. A product used in stressful moments must be easy to understand, pleasant to handle and simple to clean. The positive perception of these product aspects supports Pulsi's fit for everyday use.

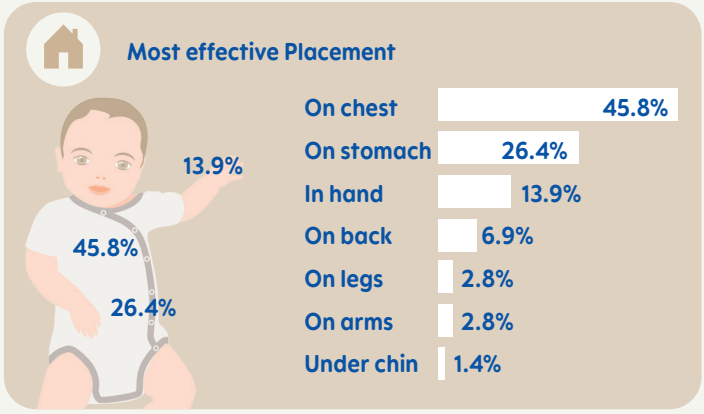
8.4. Placement and Modes

Placement
Medical Advisory Board members considered Pulsi **most effective when applied to the stomach or the hand.** In the HUT, parents also reported strong use in the baby's hand. Detailed placement and safety guidance is provided in Chapter 10 and in the instructions for use.

Safety note:
Pulsi should not be placed near the baby's head, face or ears and below the waist. Placement guidance must be age-sensitive and consistent with the instructions for use.

Modes
Modes 1 and 2 were perceived as most effective across Home Use Testing. Mode 3 was perceived as the least effective mode.

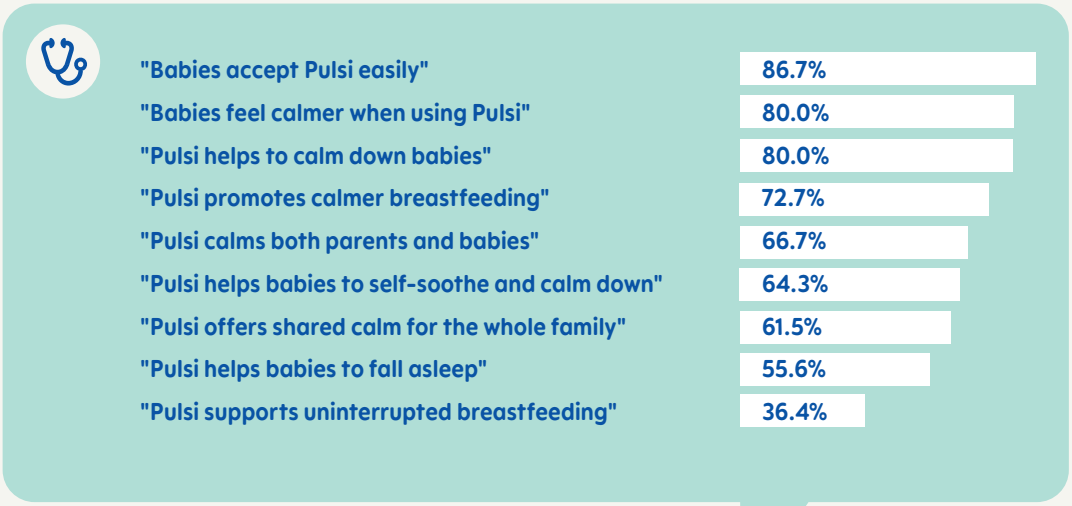




The preference for Modes 1 and 2 supports a gentle-use strategy. Caregivers should start with a slower rhythm and observe the baby's response. Higher frequency is not necessarily better, especially for younger babies, but can be offered if needed.

8.5. Claims and Product Perception

Medical experts showed high agreement with several Pulsi-related statements. The strongest agreement was seen for statements such as "Babies accept Pulsi easily", "Babies feel calmer when using Pulsi" and "Pulsi helps calm down babies". Lower agreement was seen for claims around uninterrupted breastfeeding and falling asleep.



The strongest claim territory is general calming and acceptance. Claims linked to specific outcomes — such as sleep, breastfeeding or family-wide calm require more caution. This shows once again that Pulsi does not solve one specific problem, but that it offers gentle sensory support during moments of unrest.

8.6. Parent and Expert Voices*

„Practical soothing tool for newborns, with a simple, pleasant design and easy to use. Unlike other products, Pulsi is compact enough to conveniently use on the go."

"My little one loved it."

"A brilliant product.
Honestly, Pulsi has almost been a lifesaver for us."

"Highly recommended.
Helps calm the baby during sleep and breastfeeding."

"Pulsi really helped my son sleep through the night and soothe himself, especially when used together with a pacifier."

"Babies come from a world of rhythm and heartbeat."
Kerstin Lüking (Germany), Midwife

"The testing results are very reassuring."
Emily Liczbinski (US),
International board certified lactation consultant

"Pulsi is an amazing tool to support regulation in babies alongside responsive caregiving."
Lara Taylor (UK), Midwife

"I would recommend Pulsi to parents and colleagues."
Marina Brinkmann (Germany),
Midwife and attachment therapist

"I'm convinced that Pulsi may support calm during routine examinations."
Dr. Adib Salim (Italy), Paediatrician

"Pulsi should support bonding moments, not become the next quick fix."
Angela Willis (UK), Midwife and health visitor

* Quotes reflect individual user experiences and should not be read as clinical evidence.

8.7. Evidence Summary

The testing programme supports four central conclusions:

1. **Pulsi showed a statistically significant calming effect** in Medical Expert Testing.
2. **87.5% of parents** in the HUT reported that their baby became noticeably calmer when using Pulsi.
3. **Medical experts rated Pulsi positively,** with 93.3% rating it effective and 93.3% willing to recommend it.
4. **Pulsi was perceived as most effective on the stomach or in the hands,** especially in Modes 1 and 2.

Cross-learnings

Across both test settings, several findings are consistent:

- Pulsi showed a statistically significant calming effect in Medical Expert Testing. In the HUT, most parents reported that their baby became noticeably calmer.
- The effect was most meaningful in babies who were unsettled. Babies who were already calm did not show further calming, which supports the rationale for using Pulsi during moments of unrest.
- Pulsi was not equally suited to every situation, responses varied between babies and according to circumstance, developmental stage and underlying need. The evidence supports positioning around supervised calming moments, transitions, and care routines, rather than broadly around sleep, colic, breastfeeding, or procedural pain.
- Placement and mode matter. Use on the stomach or in the hands (with Modes 1 and 2) should be the preferred starting points.
- Both parents and medical experts recognised Pulsi as a practical support tool. Its value lies not only in the pulsation itself but also in its usability, simplicity, and ability to fit into real care moments.

8.8. Limitations

The tests were designed to evaluate Pulsi in practical use settings. They were not randomised, blinded clinical trials. The HUT relied on parent reporting, while Medical Expert Testing relied on professional observation. These are valuable perspectives, but they should not be merged as if they measured the same outcome in the same way.

Pulsi is not a cure-all and not a replacement for parental care. It is a new sensory calming tool that can be used on its own to calm baby in a responsive way or alongside familiar calming methods — offering babies and caregivers another way to move from unrest towards calm.

9. The Medical Advisory Board

On the 27th of May 2026, seven medical experts met at the MAM Health & Innovation Centre in Austria, to discuss Pulsi before its launch.[14] The board brought together professionals who work closely with babies and families in the first months of life:

Marina Brinkmann (Germany), Midwife and attachment therapist

Emily Liczbinski (US), International board certified lactation consultant

Kerstin Lüking (Germany), Midwife

Dr. Adib Salim (Italy), Paediatrician

Lara Taylor (UK), Midwife

Andréa Thimbo (France), Childcare assistant

Angela Willis (UK), Midwife and health visitor

The core questions

The board examined Pulsi from several angles: test results, real-life use, safety, instructions, communication and the limits of responsible product claims. The experts discussed where Pulsi may fit in home and professional care, how it should be explained to parents and what it should not be expected to do.

They also discussed the HUT and Medical Expert Testing. The first showed how families used Pulsi repeatedly in everyday routines; the second assessed its performance with a larger number of babies in professional settings. The full results are presented in Chapter 8.

A central point was positioning. The experts agreed that Pulsi should not be framed as a universal answer to crying or unsettledness. It should be presented as a sensory calming tool that may support regulation, either on its own under adult supervision or alongside familiar methods such as holding, feeding, movement, skin-to-skin contact or a soother.

Boundaries and conclusion

The board also defined clear limits. Not every baby will accept Pulsi, and not every unsettled moment is suitable for its use. Several experts suggested introducing it at the first signs of unrest rather than when a baby is already highly distressed, hungry, ill or in need of medical assessment.

Central consensus

Several experts highlighted the strength of the product story. The link between the umbilical cord, rhythm and pulsation was seen as intuitive and meaningful. Lara Taylor described Pulsi as "an amazing tool to support regulation". Others described the combination of pulsation, low noise and gentle haptics as thoughtful and appropriate for babies.

The board also saw potential in short care moments, including weighing, handling, postnatal visits, consultations and routine examinations. Dr Adib Salim noted that Pulsi could be used close to the baby during physical examinations. The recommended settings and applications are explored in Chapter 10.

All seven board members said they would recommend Pulsi to parents and colleagues when used according to the instructions. Lara Taylor described it as an "amazing tool" to support regulation, while Emily Liczbinski called the testing results "very reassuring".

The board's conclusion was positive but measured: Pulsi was seen as a new sensory approach to calming, with a clear place in supervised care. Its value lies not in promising calm every time, but in offering parents and professionals one more supportive option in moments of unrest.

10. Expert Interpretation & Recommended Use Scenarios

WHERE PULSI FITS IN REAL CARE

An additional tool, not a replacement

Earlier chapters described Pulsi as a sensory calming tool that can complement familiar soothing methods or be used on its own under adult supervision. The expert discussions confirmed this intended role.

Medical experts did not see Pulsi as a replacement for parental care, feeding, skin-to-skin contact, rocking or a soother. Instead, they viewed it as an additional option within the broader range of ways caregivers respond to an unsettled baby. Pulsi adds a gentle tactile rhythm and may be used when this type of sensory input suits the baby and the situation.

The expert interpretation therefore supports the positioning set out in Chapters 3 and 4: Pulsi is designed for supervised calming moments and gives caregivers one more practical way to respond.

Supporting co-regulation

Chapter 3 described calming as a shared process between baby and caregiver. The expert discussions added a practical dimension to this idea.

Several medical experts observed that Pulsi may also help caregivers pause and settle themselves. Some parents held the device first, felt the rhythm and then used it with their baby. This was not measured as a clinical effect, but it suggests that Pulsi may support the calming interaction as a whole, rather than acting only on the baby.

In this sense, Pulsi may contribute in two ways: through a tactile cue for the baby and through a simple, steady action that helps the caregiver remain present and responsive. It becomes part of a shared calming moment, not merely a device placed near or on the baby.

Best-fit moments at home

Pulsi appears most relevant in short, supervised moments when a baby shows early signs of unrest. These are situations where a caregiver is present, watching the baby's response and ready to adjust or stop.

Possible home-use scenarios include:

- Transitions between activity and rest
- Moments before or after feeding
- Early signs of fussiness
- Settling before sleep routines
- Brief hands-free moments, such as when a caregiver needs to put the baby down safely
- Calming routines that already include holding, rocking, skin-to-skin contact or a soother

The key is timing. Experts suggested that Pulsi may be more useful when introduced early, before the baby is already highly distressed. Used regularly in calm routines, it may become a familiar cue. Used too late, during intense crying or clear hunger, it may be less effective.

Parents should be encouraged to observe the baby rather than the device. If the baby relaxes, softens, settles or remains calmly engaged, Pulsi may be supporting the calming process. If the baby turns away, becomes more unsettled or shows signs of discomfort, Pulsi can be set aside and tried again at another time.

Practical guidance for parents

Pulsi should be used only under adult supervision and according to the instructions for use. Caregivers should follow the recommended placement guidance and observe the baby's response throughout.

Pulsi is not intended for situations in which a baby may need medical assessment. This includes fever or other signs of illness, unusual or persistent crying, feeding problems, marked lethargy, signs of pain or difficulty breathing. Preterm or medically fragile babies, and babies in neonatal care, require separate evaluation before use.

If a baby turns away, becomes more unsettled or appears uncomfortable, Pulsi can be set aside and tried again at another time. When caregivers are unsure whether its use is appropriate, they should seek professional advice.

Use in Professional Care

In professional settings, Pulsi can provide support during brief care moments and help medical experts demonstrate calming approaches to parents. Relevant contexts may include midwifery care, lactation consulting, paediatric practice, postnatal home visits and early parent counselling.

During weighing, handling or routine examinations, Pulsi may offer gentle sensory support. Medical experts can also use these moments to show parents how to introduce the device, choose a mode, place it correctly and understand the baby's response.

This practical guidance can build confidence and clarify Pulsi's limits. Persistent crying, feeding problems, fever, lethargy, breathing concerns or unusual behaviour require medical assessment. Pulsi should therefore be understood as a supportive calming tool for routine care moments, not as a medical intervention or pain-management device.

Pulsi can become part of a broader conversation about infant regulation. It can help parents understand that calming is not about one perfect trick. It is about reading the baby, reducing stress and offering the right support at the right moment.

Recommended positioning

Pulsi's strongest use cases are gentle and practical: early unsettledness, transitions, care routines, short hands-free moments and professional examinations. It should be positioned as a sensory calming tool; not as a cure-all, not as a treatment and not as a replacement for parental care.

11. Conclusion

The first months of life ask a great deal from babies and caregivers alike. Babies are learning to regulate in a world that is brighter, louder and less predictable than the one they knew before birth. Parents are learning how to read their signals and respond with confidence.

Pulsi was developed for this space between unrest and reassurance. Inspired by prenatal rhythm, it adds a gentle tactile cue to supervised calming moments at home and in professional care.

The evidence gathered so far is encouraging. Pulsi showed a statistically significant calming effect in Medical Expert Testing, and many parents reported positive experiences in the HUT. Medical experts also saw clear potential for everyday care. At the same time, the findings call for responsible application: not every baby or situation will be suitable.

Pulsi is not a quick fix and does not replace touch, feeding, closeness or medical assessment. Its role is more modest — and more meaningful: to support responsive care and give babies, parents and professionals one more way to help calm begin.

Pulsi's promise is therefore both practical and human. Quiet, easy to clean and simple to integrate into everyday routines, it turns scientific rationale, thoughtful design and expert input into a gentle sensory experience for babies.

For MAM, Pulsi extends its long-standing commitment to supporting families from the very beginning. By empowering families as they navigate each stage of their parenting journey.

Together in every step.

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