PHILIPS

AVENT

Electric breast pumps

Randomized, crossover trial evaluating the performance of Philips Avent Single and Double Electric Breast Pumps

We conducted a community-based clinical study with lactating mothers, experienced with breast pumps, using the newest Philips Avent Breast Pump with a novel collapsing expression kit.

Population

N=20

Delivered a healthy, term singleton infant

(birth weight above 2.5 kg and at least 37 weeks gestation)

Moms: Ages 18 - 50 yr. (exclusively breastfeeding)

Babies: Ages 1 - 4m

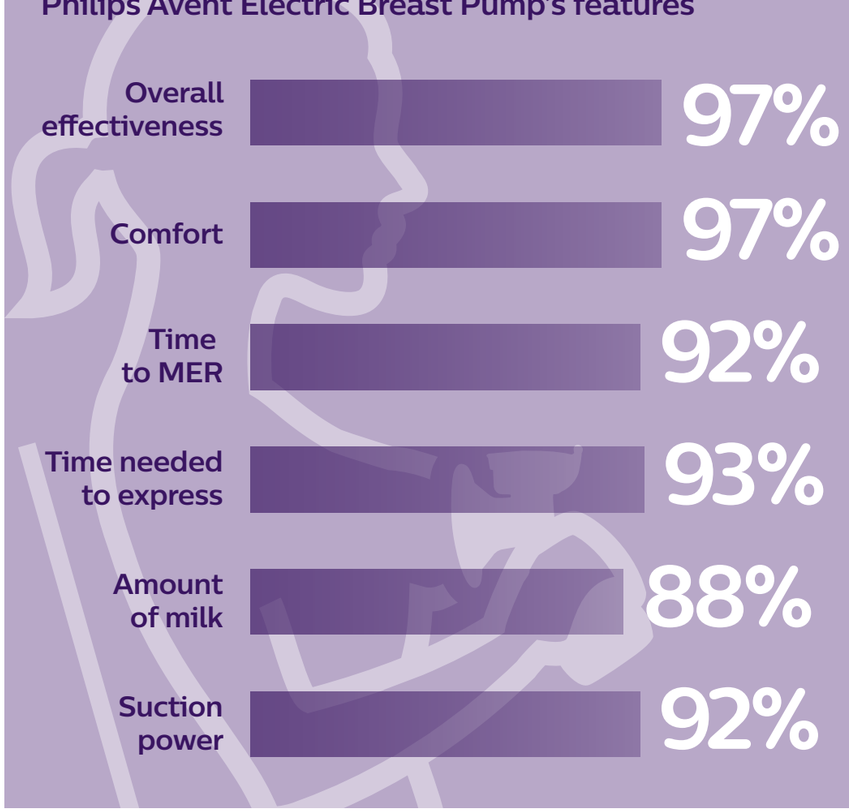
Method

Sessions took place at a subject's home and was led by a lactation specialist

20 Moms × 4 Sessions = 80 Sessions total

Effective expression*

Mom's feedback on their satisfaction with the Philips Avent Electric Breast Pump's features



Quicker time to MER

184s
Conventional breast pump**

almost 4x faster

We measured from the moment mom starts to use a breast pump untill the first ejection of milk ... this is known as MER

51.8s
Philips Avent Single Electric

46.1s
Philips Avent Double Electric

Conclusion:

97%

of moms agree, the Philips Avent Electric Breast Pump is effective

and it initiates MER within as little as ...

46 seconds

*Based on milk flow initiation time (time to Milk Ejection Reflex - MER) results from clinical trial with 20 participants over a total of 80 expressing sessions (Netherlands, 2019) compared to time to MER results for other Philips predecessor pump technology from Feasibility study with 9 participants (Netherlands, 2018);
** Philips Avent SCF334

PHILIPS

AVENT

Electric breast pumps

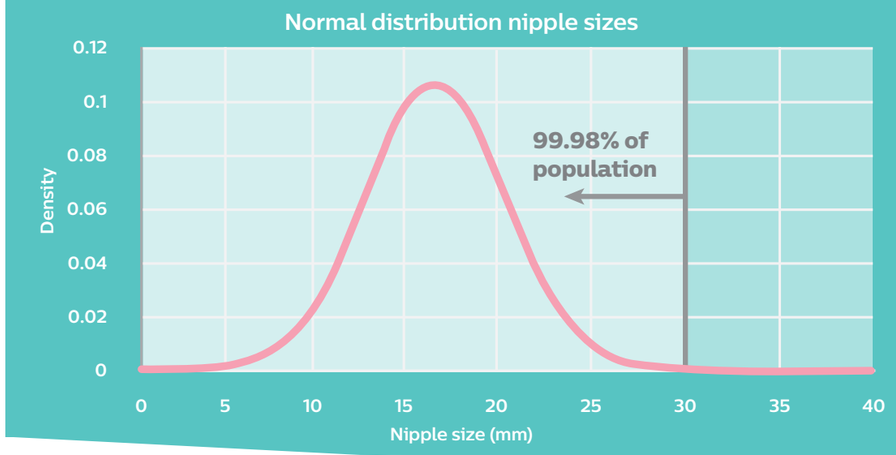
Achieving comfortable and effective milk expression with the new Philips Avent Electric Breast Pumps

We considered three main parameters to ensure fit:

Nipple size data

N=157 data points

Considering difference in nipple physiology between countries or continents, the probability that the nipple size is smaller than 30mm is 99.98% (assuming normal data).



Stretch observation

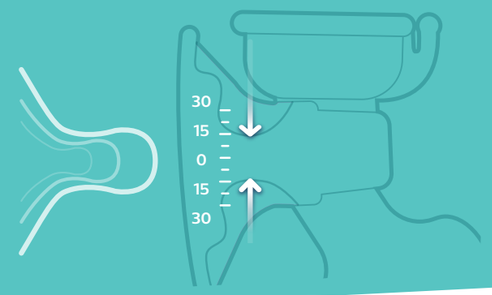
Based on knowledge that nipples stretch substantially during expressing, observations were made providing a clear view on how much stretch there can be.

Most of the stretching occurs in the first minute, and stretch is not determined by starting size, but rather by flexibility of tissue.

From a volume perspective the nipple, on average, increases almost 9 times compared to its starting volume.

Design for collapse

Our new collapsing technology adequately touches, and thereby, messges even the smallest nipple size.



Conclusion:

The Philips Avent improved, collapsing, one-piece, silicone cushion adapts to:

99.98%

of nipple sizes*

*Based on: Mangel et al. Breastfeeding Medicine, 26 April 2019, (109 participants, Israel); Ziemer et al. Journal of Obstetric, Gynecologic & Neonatal Nursing, May 1993, (20 participants (Caucasian), USA); Ramsay et al. 2005, (28 participants, Australia). Up to 30mm