

AMEDA PLATINUM® BREAST PUMP— A RESEARCH-BASED DESIGN

The design and features of the Ameda Platinum hospital-grade breast pump are based on an understanding of years of breast pumping research.

Personalized Controls Make a Difference

The Ameda Platinum breast pump has independent customizable speed and suction controls which allows mothers to choose the settings most effective and comfortable for them to establish and maintain an adequate milk supply. The ranges chosen for each, speed (30-80 cpm) and suction (-30 to -250 mmHg) were based on years of research.

CUSTOMIZING SPEED TO MAXIMIZE MILK FLOW

1986 – Woolridge describes the infant sucking mechanism, how the infant initiates the milk ejection reflex (MER) with short, fast sucking bursts then slows his pace to half that speed as the milk begins to flow $^{\rm I}$

2002–Mitoulas et al. find a speed of 47 cpm with a waveform similar to the Ameda Platinum pump waveform, compared to higher speeds of 54-78 cpm with other waveforms, is able to remove a greater percentage of available milk in the first five minutes after milk begins to flow ²

2003 – Kent et al. find time to MER is not related to faster cycling speeds (45 vs 125 cpm)³

2005 – Ramsay et al. find that in the time prior to MER, a slow speed (47 cpm) yields greater milk volume than a fast speed (120 cpm)⁴

2012 – Larkin et al. find that mothers using the Ameda Platinum breast pump are able to develop an adequate milk supply by using speeds between 66-80 cpm to initiate MER and speeds of 45-60cpm to remove the milk during a pumping session⁵

Speed Speed



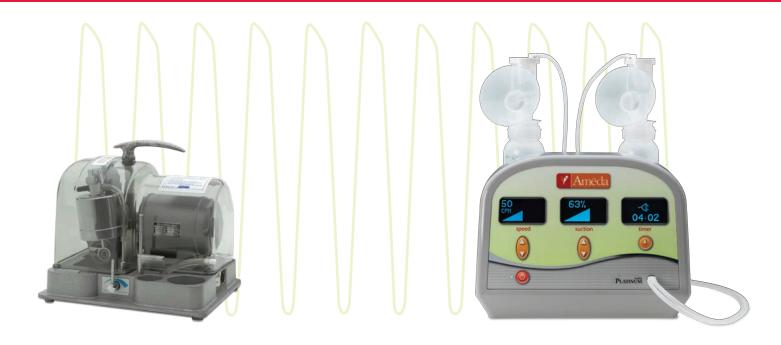
CUSTOMIZING SUCTION FOR COMFORT

2003 – Kent et al. find time to MER is not related to initiation of pumping with stronger suction (range studied -41 to -148 mmHg), however increasing the suction after MER can elicit a greater milk volume in the first minute after MER³

2006 & 2008 – Ramsay et al. and Kent et al. find when mothers set the suction at their maximum comfortable setting, their milk flow rate and overall breast milk yield are enhanced ^{6,7}

2012 – Larkin et al. find that mothers using the Ameda Platinum breast pump are able to develop an adequate milk supply by using suction levels between 27 and 41% (-59 and -90 mmHg) to initiate MER and suction levels between 58 and 71% (-128 and -156 mmHg) to remove the milk during a pumping session⁵





A Proven Pump Waveform

The smooth, rhythmic waveform chosen for the Ameda Platinum breast pump has been shown to be the most effective for establishing and maintaining adequate milk production. It was originally researched by the founder of Ameda, Einar Egnell, and has been used in Ameda pumps for over 70 years.

1945 – Egnell develops a breast pump using a waveform that mimics the effects of a suckling infant and removes breast milk safely & effectively^{8,9,10}

2002 – Mitoulas et al. find a greater percentage of available milk is removed in the first five minutes after MER with the waveform similar to the Ameda Platinum pump when compared to other waveforms²

2005 – Ramsay et al. find a greater volume of milk is removed before MER with the waveform similar to the Ameda Platinum pump when compared to other waveforms⁴

2008 – Meier et al. find the time to MER is shorter with the waveform similar to the Ameda Platinum pump waveform¹¹

2012 – Larkin et al. using the Ameda Platinum pump, find the pump waveform is able to establish an adequate milk supply for mothers of infants in the NICU, yielding an average maximum daily milk volume of 814 mL/24 hours by day 14 postpartum⁵

References

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