

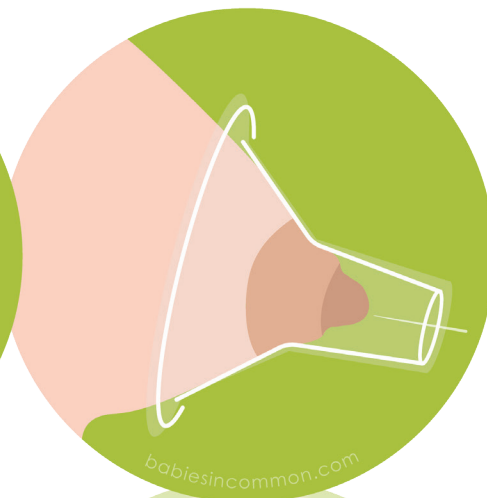
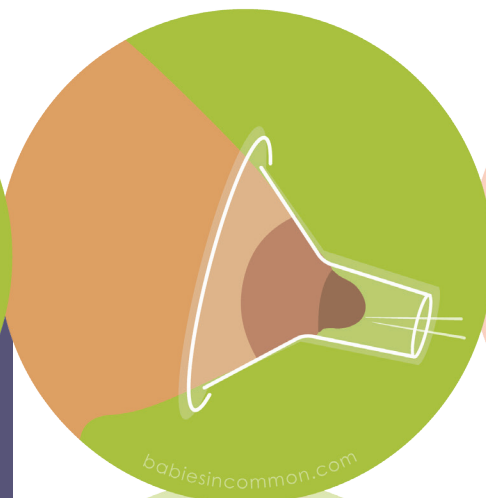
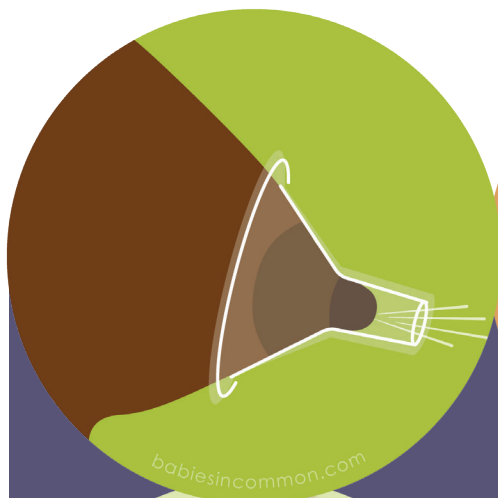
THE FLANGE FITS™ GUIDE

for optimal comfort, efficiency and milk yield

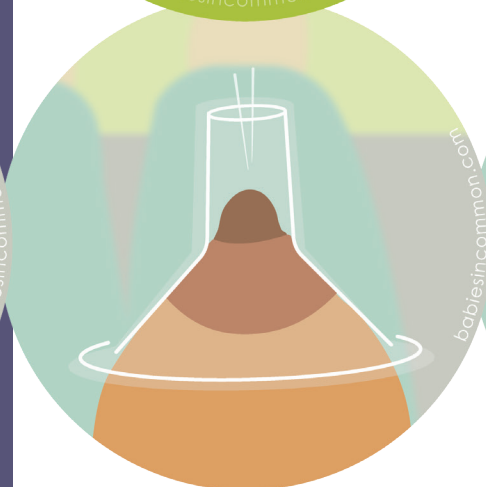
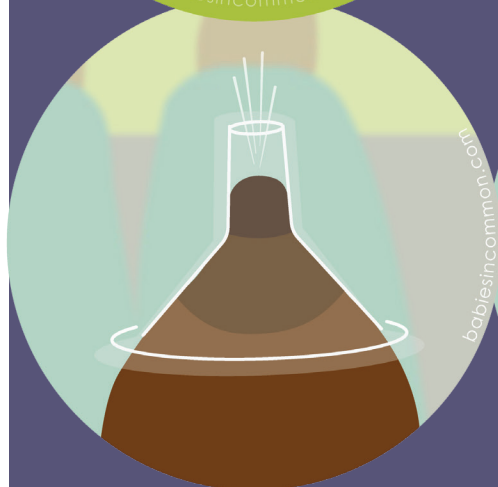
a results-based method for pumping

Feel — Intensity — Tempo — Supply

SIDE VIEW



PARENT'S VIEW



Best Fit

- only nipple pulled into tunnel
- sides of nipple touch walls of tunnel
- nipple moves a little bit back and forth in tunnel
- milk sprays during pumping
- best to pump 15-20 minutes (both sides at same time)
- feels like nothing or a gentle tug

Too Large

- might hurt
- might get less milk or more drips than sprays
- nipple might move side to side in tunnel
- pumping might take a long time
- more chance for nipple swelling and damage
- areola goes into tunnel and can swell
- outdated recommendations will indicate this as best fit; newer clinical evidence finds this too large

Much Too Large

Feel of the flange (size, shape, material)

Which flange size, shape or material is the most comfortable (but also gets out the most milk)?

Often, a flange that is closest to the actual size of the nipple feels best (and gets the most milk out). Start by measuring how wide the tip of each nipple is (left can be different than right).

1. Gently touch/tug the nipple to help it stick out a bit.
2. Use a tool with centimeters (cm) or millimeters (mm). Start with 0 next to one edge of the nipple tip. The tool does not need to touch the nipple.
3. Turn on the pump on a low vacuum/intensity level and try pumping with 2 or 3 hard plastic flange sizes: one a little smaller than the nipple, one about the same size, and one a little bigger than the nipple.
 - **Best fit or optimal fit:** The sides of the nipple touch the sides of the flange tunnel and the nipple gently glides a little bit back and forth. It should also be comfortable and milk should come out easily.
 - **Too small:** The nipple will not move easily in the tunnel and less/no milk comes out.
 - **Too large:** It may hurt, make the nipple get bigger than it usually is (swollen) and less milk comes out.

A thin layer of coconut oil or nipple balm on the bend of the flange can increase comfort. Pumping should feel good and get plenty of milk out!

Intensity of the pump (vacuum pressure/pull)

How strongly does the pump pull on the nipple?

The intensity of the pull of the nipple into the flange tunnel depends on the pump. Not all pumps are the same. Not all pumping parents need a strong pull when pumping. Once milk starts spraying and there is complete comfort, stay on that vacuum level and play with the pump cycle speed.

Increase the intensity of the pull during the pumping session if it is comfortable and you see more milk sprays.

Pumping should be comfortable from start to finish – it should not be something to "tolerate". Nipples should feel good when the pumping session is done. The size of the nipple (width) should be about the same as before pumping (but the nipple may be longer after pumping).

What about silicone flanges and inserts?

For parents who wish to get more milk during pump sessions but who want to try silicone inserts or silicone flanges, it is best to try hard plastic flanges first to find the ideal size for each nipple. Then try silicone flanges and/or inserts and see how the comfort and amount of milk pumped compares to using the best fitting hard flange. Many people find that they get more milk with a hard flange that is the optimal size, and they are completely comfortable.

Need help? Find a lactation professional who has experience observing pumping sessions with varied flange options. They can do an in-person or video meeting to help find the optimal flange size for you. If you have questions or want help finding someone near you who can help with flange fitting, email jeanette@babiesincommon.com.

For research supporting this Guide: Anders, L. A., Mesite Frem, J., & McCoy, T. P. (2025). Flange size matters: A comparative pilot study of the Flange FITS™ Guide versus traditional sizing methods. *Journal of Human Lactation*, 41(1), 54–64. <https://doi.org/10.1177/08903344241296036> ©Copyright Babies in Common 2023 Jeanette Mesite Frem, IBCLC. Reproduction permitted with attribution. August 2025.

Tempo of the pump (cycle speed, rhythm, vibration)

What is the best tempo of the pump?

The one that helps the most milk come out. The tempo is not only the speed, or cycle, but also the rhythm. Some pumps have simple tempos and others have options. Think of tempo like music for dance. Some tempos are faster, slower, or a combination of fast and slow. See what works best for your body with the pump you have. Some pumps have more of a pull-release rhythm and others have more of a vibration.

Helpful Tips:

- Start on the fastest tempo and after milk is coming out for 20-30 seconds, change to a slower tempo – more sprays should come out.
- If sprays stop at some point during the pumping session, change the tempo back to faster for 1-2 minutes and then back to slower again.

There are people who stay on a faster tempo the entire pumping session—play with the tempo to discover what works best to get the most milk out but with comfort. Some parents may need to find a different pump that works better for their body. A pumping session ideally would last 15-20 minutes.

Supply of milk (drips, dribbles; strong sprays are ideal)

How much milk should someone get when pumping?

The answer depends on many factors but the goal is to see sprays of milk during pumping. Drips and dribbles are fine for part of a pumping session but, ideally, sprays would be seen/heard for most of the pumping session.

Helpful Tips:

- Many people find they get the most milk when they have the best flange fit. They may also get the same amount or more milk in a shorter amount of time when pumping than with flanges that are too large.
- Hands-on pumping during pumping and hand expression of milk after pumping can help get more milk out.
- The left breast may make more or less milk than the right
- It's normal to get more milk in the morning hours.

If you want to make more milk overall, it's best to seek out help from a lactation professional who specializes in pumping and milk supply.

Measure nipple tip before pumping to estimate which flange sizes to try.

areola

nipple tip

1 cm = 10 mm. Flange sizes are in mm.