CLAIMS

1. A method for calculating volumes of milk extracted from a breast by a breast pump, comprising:

tracking and storing motor location versus time;

tracking and storing vacuum versus time;

determining a relationship between motor location and volume of milk extracted from a breast by the breast pump; and

observing indications of purging of the breast pump and eliminating data other than that associated with a clean start and a clean finish between purges.

2. The method of claim 1, comprising mapping motor location versus volume at a specific vacuum.

3. The method of claim 2, wherein the specific vacuum level is -60mmHg.

4. The method of claim 1, further comprising generating known rates of flow within the breast pump at a known specific vacuum within the breast pump and identifying motor location.

5. The method of claim 1, further comprising adjusting for time to calculate volume.

6. The method of claim 1, further comprising filtering out data associated with vacuum levels other than a range about a target specific vacuum level.

7. The method of claim 1, further comprising adjusting volume calculations for flows above a pre-determined level.

8. The method of claim 1, further comprising distinguishing the volume of milk extracted from air pumped.

9. The method of claim 7, comprising recognising the distinction between pumping air versus pumping milk by correlating pressure changes with the amount of movement of a compression member needed to establish the pressure changes.

10. The method of claim 1, further comprising incorporating a mathematical constant into volume calculations to take into account when air is in the breast pump.

11. The method of claim 1, further comprising detecting leaks by holding a vacuum for a period of time and verifying that the vacuum is maintained and/or storing the volume of milk extracted in at least one milk collection container having a unique identifier.

12. The method of claim 11, further comprising recording information, using the unique identifier, including the volume of milk stored within the container and/or the time and date that the volume was collected.

13. The method of claim 1, further comprising collecting data comprising at least one of the average volume per extraction session, total volume extracted for any given day, and/or average volume extracted per day.

14. The method of claim 1, further comprising terminating the extraction phase upon elapse of a predetermined extraction phase time, calculation of a predetermined amount of milk having been pumped, or manual cessation of the extraction phase by the operator.

15. The method of claim 1, further comprising automatically distinguishing whether the breast pump has been attached to the left breast or the right breast of the user.

16. The method of claim 15, further comprising tracking data for each breast, including at least one of the volume of milk output per breast, per session, and/or total daily volume per breast.

17. The method of claim 16, further comprising communicating the data collected to an external device.

18. The method of claim 17, wherein data collected includes at least one of live data and historical data.

19. The method of claim 18, further comprising displaying the live data on the external device as a live stream.