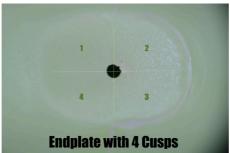
Key: RoseCup Design Specifications

- 1. The RoseCup has 3 handles to accommodate dexterity preferances, hemiplegia or hemiparesis and any level of carer support during the feeding process. The base of the handles extent from the cup base to provide secure tripod-like stability to the 250 ml device
- 2. The wide handle grip comfortably accommodates any size hand
- 3. A silicon over-mould enhance a secure comfortable grip of the handles
- 4. A breathing hole in the lid close to the back handle neutralizes negative pressure in the cup when feeding
- 5. The mat finish of a central square on the lid allow entry of personal information with a marker pen
- 6. A rigid screw-on cuff secures a removable spout. The triangle on the spout has to lineup up with the triangle on the cuff to ensure correct orientation of the spout



- 7. The dorsum (top) of the ergonomic designed spout is shaped to fit the anatomical curvature of the adult hard palate
- 8. The optimal spout length allows the deposit of the thickened liquid meal just posterior to the centre of the adult tongue. 3 Spout openings of 0.5 mm, 1.0 mm and 2.0 mm tightly control the flow of Levels 1, 2 and 3 thickened liquids respectively. Carefully monitored control of flow make it possible to *now safely feed in the near-dorsal positions*!

9. The bulb volume is set at 3 ml. To ensure a satisfying but safely controlled *tidal volume of 3 ml per suck* is delivered, a prolapsing 4 cusp valve was introduced in the thin-walled endplate of the 0.5 mm and 1.0 mm spouts



- 10. A depression at the base of the bulb allows advantageous access for the anterior aspect of the tongue. This configuration optimises the propulsive force on the bulb content with the upward thrust of the tongue against the hard palate.
- 11. The wide exit channel (diameter of 2.2 cm) manages to mobilise even level 3 thickened liquids from the cup into the spout. At 30-degree exit angle from the cup this achieves the remarkable ability to feed the patient in the safe near-upright sitting position.
- 12. The flow dynamics of No 11 above could only be achieved by creating an exit opening from the cup of 5.5 cm x 2.2 cm (vertical take-up of 2/3 of the hight of the cup). This large exit optimises the gravitational benefit of the cup content in the serve positions, pushing the thick liquid to exit the cup