

**By your side**  
and beyond



**Cardinal Health™**  
Kangaroo OMNI™  
Enteral Feeding Pump  
**Thick Formula Introduction Guide**







Tube feeding can be a big adjustment due to emotional and physical changes. Your home tube feeding prescription, including your formula and all the supplies needed for your daily feeding regimen, has been prescribed by a healthcare professional based on your individual nutrition needs. It is important that you follow this prescription as directed.

This guide will help you understand what thick formula is and how the Kangaroo OMNI™ device delivers thick formula. The Kangaroo OMNI™ Enteral Feeding Pump is by your side to meet your unique tube feeding needs.

Prior to use, refer to the instructions for use supplied with the Kangaroo OMNI™ device for indications, suggested procedures, warnings and precautions.

### **In this guide:**

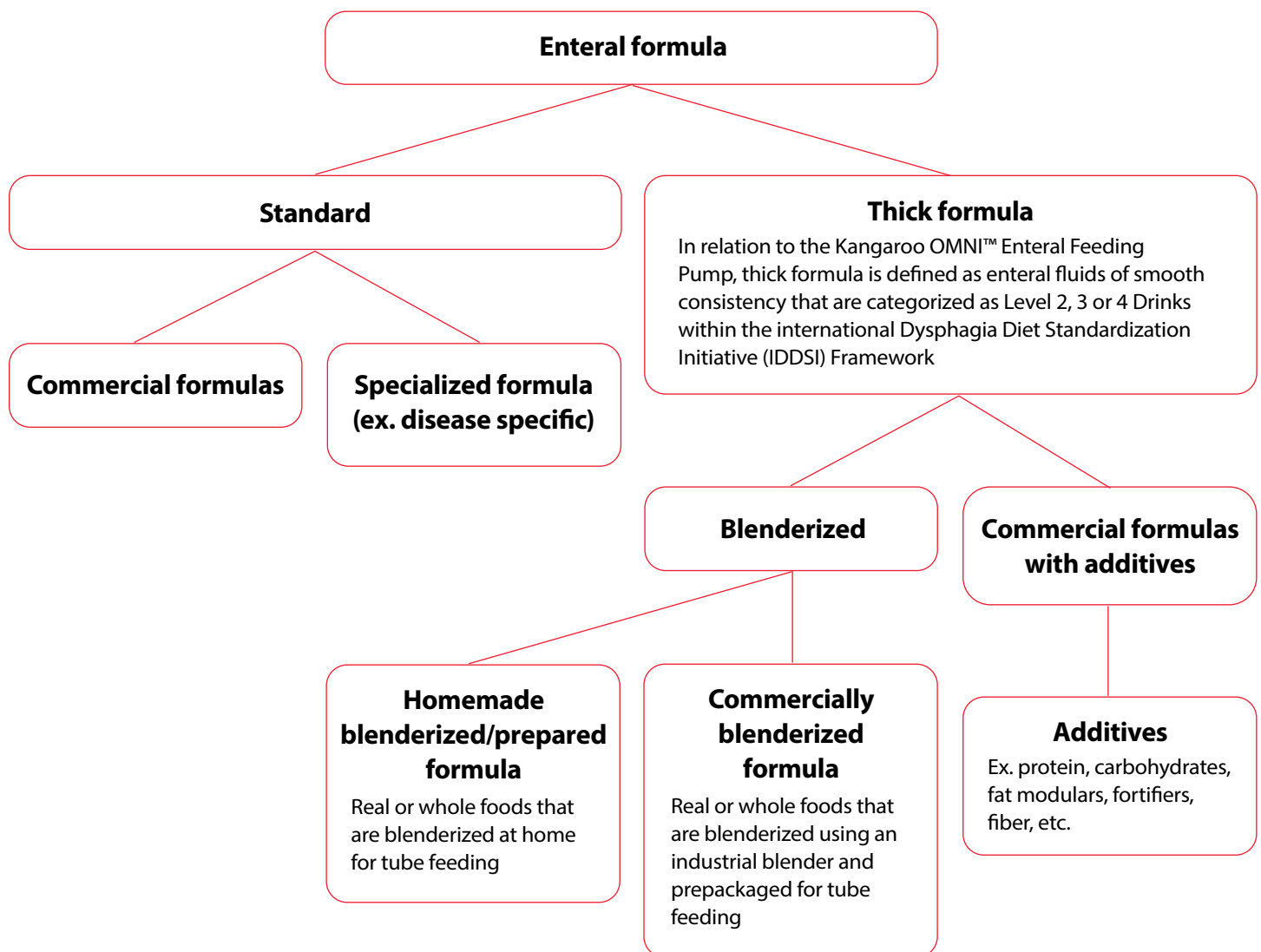
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# Thick formula defined



In relation to the Kangaroo OMNI™ Enteral Feeding Pump, thick formula can be defined as enteral fluids of smooth consistency that are categorized as Level 2, 3 or 4 Drinks within the International Dysphagia Diet Standardization Initiative (IDDSI) Framework. There are some different categories of enteral fluids that thick formula can consist of. These categories may include:

**All types of enteral formulas are prescribed by a clinical healthcare team**



# The International Dysphagia Diet Standardization Initiative (IDDSI)\*



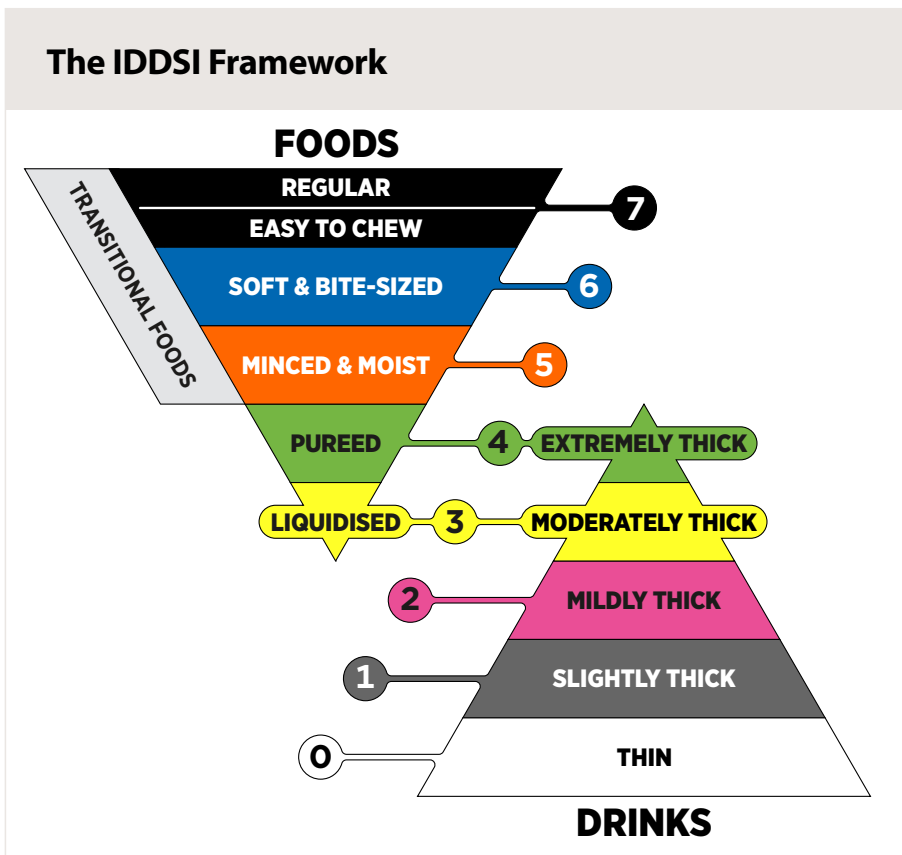
IDDSI is the first internationally recognized organization that methodically developed a framework to categorize texture-modified diets, including the viscosities of various foods and liquids. The framework standardizes the names and texture descriptions of foods and liquids for people with dysphagia (trouble swallowing).



## Why is this important for enteral feeding patients?

Uniformly categorizing various foods and liquids can be helpful, as there are large variations in viscosities in both foods and liquids. The formalized IDDSI scale offers a globally recognized set of standards that provide a more objective way to measure liquid thickness and texture. In doing so, it can allow patients with a feeding tube, clinicians and manufacturers to understand the compatibility of enteral formulas with enteral feeding pumps.

**\*The following information is directly from the IDDSI website ([iddsi.org](https://iddsi.org)).**



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# IDDSI testing methods\*



Within the IDDSI framework, there are two different tests to help differentiate between levels: the Flow Test and the Fork Drop Test. Determining the IDDSI level can give insight into whether the enteral fluid is compatible with the Kangaroo OMNI™ Enteral Feeding Pump. If the formula is greater than a Level 4 Drink on the IDDSI scale, it is not compatible with the Kangaroo OMNI™ Enteral Feeding Pump. For reference, within the IDDSI framework, water is categorized as a Level 0, and standard commercial enteral formula is typically categorized as Level 0–1. Additionally, if the formula has chunks, seeds or lumps, it may clog the feeding set tubing.

## Flow Test \*The following information is from the IDDSI website (iddsi.org).

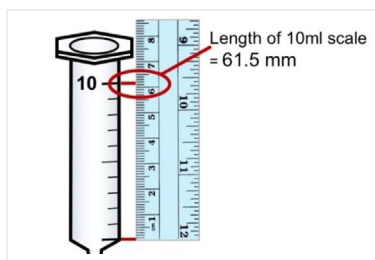
For complete instructions, please visit the IDDSI website (iddsi.org).

### THE IDDSI Flow Test is used to classify liquid thickness

IDDSI uses an objective measurement tool for liquid thickness, 10 mL syringe. In the near future, funnels specifically designed for IDDSI testing may be available.

#### #Before you test...

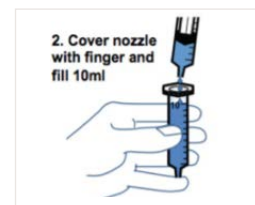
You **must check** your syringe length because there are differences in syringe lengths. Your syringe should look like this



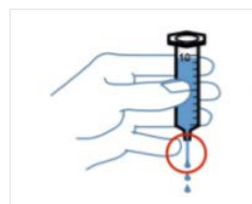
#### IDDSI Flow Test instructions



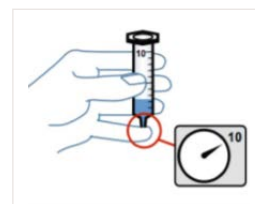
1. Remove plunger



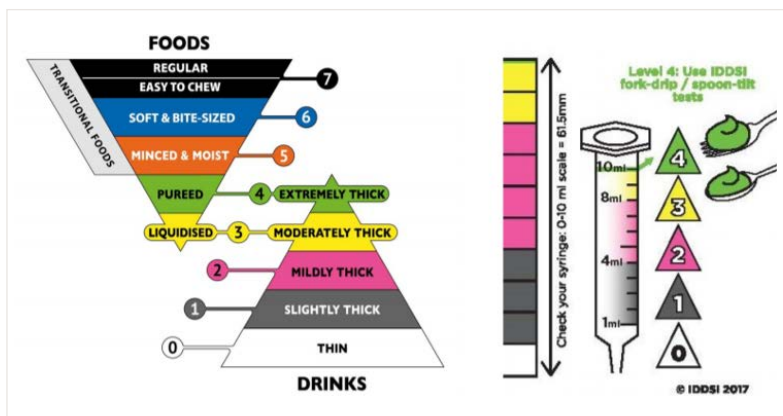
2. Cover nozzle with finger and fill 10ml



3. Release nozzle and start timer



4. Stop at 10 seconds



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**Note:** Before use, check the nozzle is clear and free from any plastic residue or manufacturing defects that often occur.

**Note:** The Spoon Tilt Test is used predominantly for measures of samples in levels 4 and 5. Kangaroo OMNI™ is not approved for use with liquids above IDDSI Level 4.

# IDDSI testing methods\* (continued)

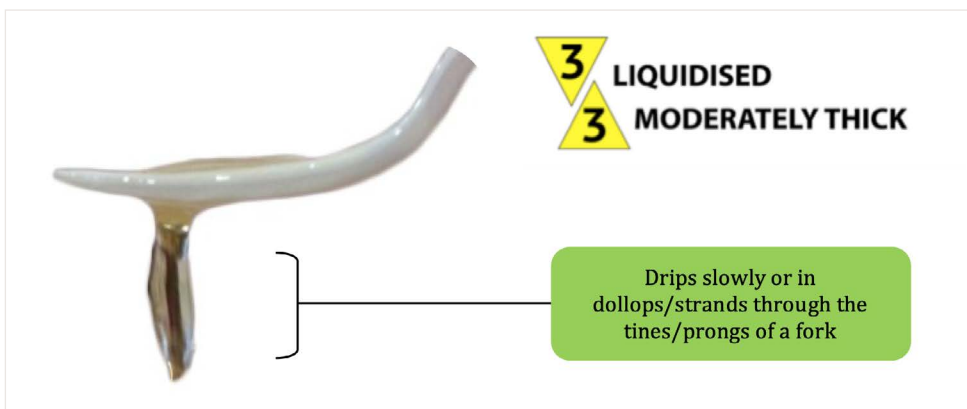


## Fork Drip Test **\*The following information is from the IDDSI website (iddsi.org).**

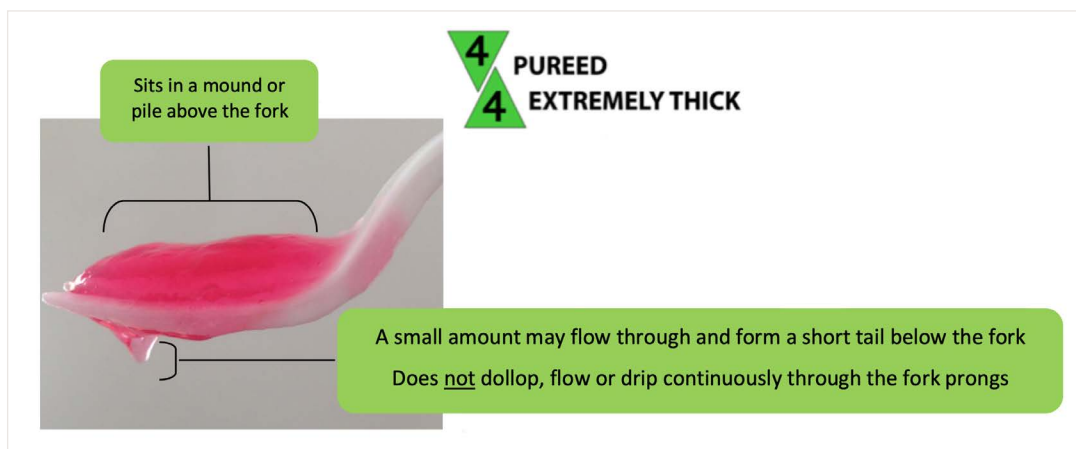
For complete instructions, please visit the IDDSI website (iddsi.org).

Thick drinks and fluid foods (Levels 3 and 4) can be tested by assessing whether they flow through the tines/prongs of a fork and comparing against the detailed descriptions of each level. Fork drip tests are described in existing National terminologies in Australia, Ireland, New Zealand and the United Kingdom (Atherton et al., 2007; IASLT and Irish Nutrition & Dietetic Institute 2009; National Patient Safety Agency, Royal College Speech & Language Therapists, British Dietetic Association, National Nurses Nutrition Group, Hospital Caterers Association 2011).

**Images for Level 3** - Liquidized/Moderately Thick are shown below.



**Images for Level 4** - Pureed/Extremely Thick are shown below.



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# Kangaroo OMNI™ Enteral Feeding Pump and thick formula

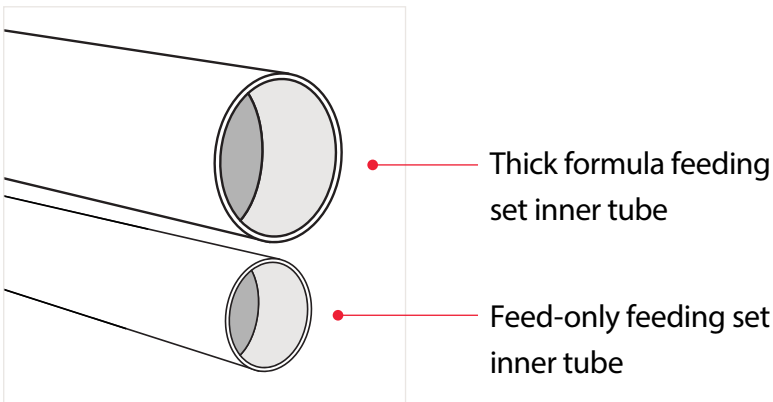


## The future of enteral feeding

The Kangaroo OMNI™ Enteral Feeding Pump has the versatility to deliver certain thick formulas.

The Kangaroo OMNI™ Enteral Feeding Pump is the first enteral feeding pump designed to deliver thick formula to help provide enteral feeding patients more options to meet unique tube feeding needs.

The Kangaroo OMNI™ Enteral Feeding Pump is strong enough to deliver thick formula (Level 2, 3 and 4 Drinks on the IDDSI framework) when used with specific feeding sets called Kangaroo OMNI™ Thick Formula ENTelliSet™ Feeding Sets. When using a thick formula as described above, it is important to keep in mind that the Kangaroo OMNI™ Enteral Feeding Pump has been tested using a 8 Fr. 36-inch nasogastric feeding tube. Feeding tubes with a smaller French size may have an impact on feeding pump performance. These feeding sets are the first of their kind, with larger feeding set inner tube diameters to accommodate more viscous formulas.



\*Tube drawings not to scale





# How to use Kangaroo OMNI™ Thick Formula ENTelliSet™ Feeding Sets

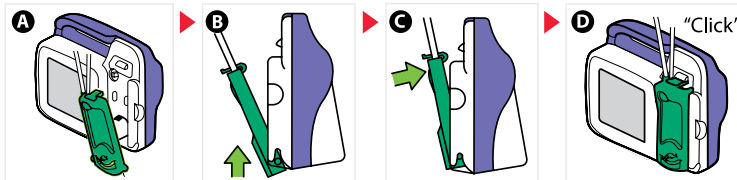


The Kangaroo OMNI™ Thick Formula ENTelliSet™ Feeding Sets should be used like any other Kangaroo OMNI™ Feeding Set.

**Note:** Prior to use, refer to the instructions for use that was provided with your feeding pump for more information regarding warnings, cautions and intended use.

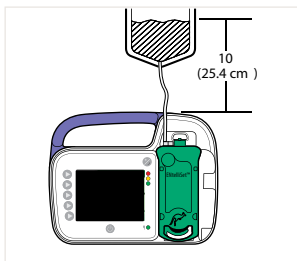


Load the cassette. There will be an audible “click” when it’s properly loaded.



Fill the feed bag with the preferred thick formula. If applicable, fill the flush bag with water.

**Note:** The top of the fluid column for both the feed and flush bags should be at a starting height of 25.4 cm (10 in.)  $\pm$  0.76 cm (0.3 in.) above the top of Kangaroo OMNI™ Enteral Feeding Pump.



Prime the feeding tube.

**Warning:** Patient must not be connected to Kangaroo OMNI™ Enteral Feeding Pump when priming the feeding tube.



Adjust the feed rate as prescribed. If applicable, adjust the flush rate too.



Begin to feed.



# Maintenance tips



Below are some important tips to help maintain performance of the Kangaroo OMNI™ Enteral Feeding Pump when it is used with a Kangaroo OMNI™ Thick Formula ENTelliSet™ Feeding Set and a thick formula.

- 1** — **Flush often.** Many notable organizations around the world (American Society for Parenteral and Enteral Nutrition, European Society for Clinical Nutrition and Metabolism, etc.) recommend flushing an enteral feeding pump after certain periods of time or after certain activities. Follow institutional flushing guidelines and/or prescribed orders to help keep the pump's feeding set tubing clear.
- 2** — **Remove lumps and chunks.** Some enteral formulas contain chunks, seeds, or lumps that may increase the risk of tube occlusion or underfeeding. Enteral fluids made in a blender present variability of unknown ingredients and inconsistency regarding the degree of mixing. The use of enteral fluids of smooth consistency that would be categorized as level 2, 3, or 4 Drinks within the IDDSI framework is recommended for use with the Kangaroo OMNI feeding pump. Always ensure that enteral fluids are homogenous and smooth consistency when using the feeding pump.
- 3** — **Avoid seeds.** Seeds are a common culprit in tube clogging. Avoid delivering thick formulas with seeds through Kangaroo OMNI™ Thick Formula ENTelliSet™ Feeding Sets.
- 4** — **Consider tube sizes.** Feeding tube size may impact enteral feeding pump accuracy. The Kangaroo OMNI™ Enteral Feeding Pump has been tested using a 8 Fr. 36-inch nasogastric feeding tube. Do not use the Kangaroo OMNI™ Thick Formula Feeding Sets for administration of thick formula with access devices less than 8 Fr. Feeding tubes with a smaller French size may have an impact on feeding pump accuracy.
- 5** — **Consider tube location:** Formula type and the route of administration is determined by the clinician. It is recommended to administer thick formula into the stomach for optimal digestion.
- For additional support, visit [mykangaroolearning.com](https://mykangaroolearning.com) to access videos on how to remedy common Kangaroo OMNI™ Enteral Feeding Pump alarms.





\* This guide does not include official IDDSI resources, educational materials or education programs and it is *not* meant to replace materials and resources on [iddsi.org](https://iddsi.org).

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