# GOS Application Sheet



## Yoghurt Drinks with Promovita® Galacto-oligosaccharides (GOS)

- Promovita® GOS can be used to produce gut healthy semi skimmed yoghurts or yoghurt drinks\*. The prebiotic effect can help to increase the activity of healthy bacteria in the gut leading to a general feeling of wellness.
- Promovita® GOS can be utilised to increase fibre, replace sugar and fats, and thus lower calories.
- Prebiotic GOS syrup also has the potential to increase bioavailability of essential minerals, such as calcium, magnesium and iron.
- Mildly sweet, pleasant taste; relative sweetness of Promovita® GOS to sucrose is 0.4.



#### Application: Yoghurt drink with Promovita® GOS

Formulation delivers:

- 2.3 g prebiotics, 1.6 g total fibre allows high fibre claim.
- 25 % reduced sugars, 15 % reduced calories\*\*

#### **Formulation**

Skimmed Milk Powder (SMP)	6.80 %
Water	84.70 %
Promovita® GOS	5.20 %
Sucrose	3.30 %

Flavours, additions, regulators as required

#### **Procedure**

- Add SMP, Promovita GOS®, sucrose and water to vessel and mix
- Preheat mixture to 55°C
- Homogenize
- Pasteurize at 85°C for 30 minutes
- Cool to 42°C
- Add Yoghurt cultures and incubate at 42°C until pH 4.5 is reached
- Chill and add additional flavourings (e.g. lemon essence)
- Pack aseptically and keep chilled at <5°C</li>

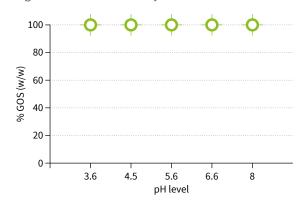
\*\*Comparing to standard recipe (where sucrose substitutes GOS)

### **Promovita® GOS Properties**

- Gram for gram 40 % less calories than sucrose.
- Binding/bulking agent Provides texture and mouthfeel
- High heat and acid stability of Promovita® GOS provides a major processing benefit over other prebiotic fibres.

#### GOS levels at 120 minutes at 121°C

Figure 1: Heat and stability of Promovita® GOS



#### **Customer enquiries**

sales@promovitaingredients.co.uk

Dairy Crest Ltd, Claygate House, Esher, Surrey KT10 9PN www.dairycrest.co.uk

