

# GOS Application Sheet



## Yoghurts 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 fibres, replace sugars and fats, thus lower product 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, per 225g serving;

- 3g prebiotics.
- 2g total fibre (1.6g/100 kcal) – allows fibre claim.
- 14% less sugars\*\*

### Formulation

Skimmed Milk Powder (SMP).....	10.00 %
Water .....	83.00 %
Promovita® GOS.....	3.00 %
Sucrose.....	4.00 %

Yoghurt cultures

*Flavours, additions as required*

### Procedure

- Add SMP, Promovita® GOS, sucrose and water to vessel and mix
- Preheat mixture to 55°C
- Homogenize
- Pasteurise 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

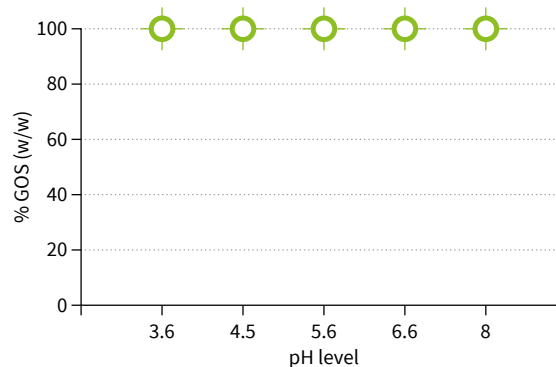
\*\*Comparing to standard recipe (where sucrose substitutes GOS)

### 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

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