

Low-Fat Yogurt Smoothie



INGREDIENTS

	Usage Levels (%)
Yogurt Base	100.0
Low-fat milk (2% fat, 10% MSNF)	75.0
Skimmed milk (0.2% fat, 9% MSNF)	14.3
Sucrose	5.0
Culture	3.0
Whey protein concentrate, 80% protein (WPC 80)	1.4
Modified food starch	0.9
Kosher gelatin	0.4
Flavor Solution	100.0
Water	81.6
Sucrose	12.5
Fruit juice concentrate (3:1)	5.0
Modified food starch	0.9
Flavor and color	variable
Yogurt Smoothie	100.0
Yogurt base	60.0
Flavor solution	40.0

NUTRITIONAL CONTENT

Per 100g	
Calories	60 kcal
Total Fat	1 g
Saturated Fat	0.5 g
Trans Fat	0 g
Cholesterol	5 mg
Total Carbohydrates	10 g
Dietary Fiber	0 g
Sugars	8 g
Protein	3 g

PREPARATION

Yogurt Base

1. **Mix WPC 80 into low-fat and skimmed milk.**
2. **Mix modified food starch and gelatin with sucrose and add to milk mixture.**
3. **HTST pasteurize and homogenize.**
4. **Heat to 85°C (185°F) and hold for 30 minutes with slow mixing.**
5. **Cool to 42°C (108°F) and mix in culture.**
6. **Incubate at 42°C (108°F) until pH reaches 4.5.**
7. **Break the gel and cool to 18-20°C (64-68°F).**

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PREPARATION

(continues)

Flavor Solution

1. **Mix modified food starch with sucrose and add to water.**
2. **Mix in fruit juice concentrate.**
3. **Pasteurize at 90°C (194°F), hold 15-30 seconds.**
4. **Cool to 18-20°C (64-68°F).**

Final Yogurt Smoothie

1. **Mix yogurt base and flavor solution at a 60:40 ratio.**
2. **Homogenize at (low pressure) <3.5 MPa (508 psi).**
3. **Bottle and store at 0-4°C (32-39°F).**

Rely on the dynamic lineup of U.S. dairy to meet consumer demands for global product development. The U.S. Dairy Export Council (USDEC) offers resources on ThinkUSAdairy.org including a dairy ingredient supplier search, consumer, nutrition and product research, technical insights and prototype assistance to help develop and launch your next successful product.  [@ThinkUSAdairy](https://twitter.com/ThinkUSAdairy)

This formula serves as a reference. Product developers are encouraged to modify the formula to meet manufacturing and finished product specification needs. Developed by Hugunin & Associates, USA. ©2014 U.S. Dairy Export Council.