

Caramel with WPC 34



INGREDIENTS

	Control (%)	50% WPC 34 (%)	100% WPC 34 (%)
Corn syrup, 42 DE	30.31	30.08	30.09
Sugar, granulated	25.27	25.08	25.08
Water #1	18.70	18.56	18.56
Milkfat/butterfat	10.40	11.08	12.63
Water #2	8.29	8.22	6.67
Whole milk powder	6.07	3.01	-
Whey protein concentrate, 34% protein (WPC 34)	-	3.01	6.02
Lecithin	0.51	0.51	0.50
Salt	0.40	0.40	0.40
Vanillin	0.05	0.05	0.50
Total	100.00	100.00	100.00

NUTRITIONAL CONTENT

Per 100g	Control	50% WPC 34	100% WPC 34
Calories	420kcal	410kcal	420kcal
Total Fat	16g	14g	16g
Saturated Fat	11g	9g	11g
Trans Fat	0g	0g	0g
Cholesterol	45mg	35mg	40mg
Total Carbohydrates	68g	70g	68g
Dietary Fiber	0g	0g	0g
Sugars	47g	48g	47g
Protein	2g	3g	2g
Calcium	74mg	70mg	44mg
Magnesium	7mg	8mg	7mg
Phosphorus	62mg	65mg	46mg
Potassium	105mg	75mg	30mg
Sodium	240mg	340mg	250mg
Iron	0mg	0mg	0mg
Vitamin A	494IU	412IU	481IU
Vitamin C	1mg	0mg	0mg

PREPARATION

1. **Hydrate whole milk powder (WPC 34) in water #1 for 15-20 minutes.**
2. **Combine corn syrup, sugar, fat, lecithin, salt, water #2 and 1/4 of the hydrated milk powder solution from step 1, under constant agitation and bring to a boil.**
3. **Slowly add the remaining milk powder (WPC 34) solution, keeping the caramel at a rolling boil.**
4. **Cook to 117°C (243°F).**
5. **Add vanillin.**
6. **Pour out into 2 cm (0.75") bars to cool.**
7. **Cut and wrap.**

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