

INGREDIENTS

	Control (%)	1% WPC 80 (%)	20/ WDC 90 (0/)
	Control (%)	170 WFC 60 (70)	3% WPC 80 (%)
Beef	40.00	36.00	40.00
Soy protein isolate (pre-emulsion)	6.00	6.00	3.00
Vegetable oil (pre-emulsion)	6.00	6.00	6.00
Water, ice (pre-emulsion)	24.00	24.00	12.00
Starch	5.00	5.00	5.00
Ice water	15.50	18.50	27.50
Phosphate	0.30	0.30	0.30
Seasoning	1.70	1.70	1.70
Salt, nitrate	1.50	1.50	1.50
Whey protein concentrate, 80% protein (WPC 80)	-	1.00	3.00
Total	100.00	100.00	100.00

BENEFITS OF USING U.S. DAIRY

WPC 80

- Meat replacement (1 part WPC : 3 parts water to replace 4 parts lean beef)
- Formulation cost savings
- Increase cook yield
- Maintain texture
- Improve juiciness
- Reduce package purge
- Improved flavor due to soy replacement

PREPARATION

- 1. Make and oil emulsion with soy protein isolate, oil and water in the ratio of soy protein isolate:water:oil = 1:4:1.
- 2. Make an emulsion by mixing one part ISP with 4 parts ice water.
- 3. Chop lean beef in a bowl chopper, with salt, phosphate, WPC 80 and small amount of water until the temperature reaches 10°C (50°F).
- 4. Add the soy protein isolate emulsion, the rest of the ingredients and remaining water and chop until the temperature reaches 18°C (64°F).
- 5. Stuff into cellulose or collagen casings.
- 6. Dry, smoke and cook the sausage.
- 7. Shower for 20 minutes with water temperature 25-30°C (77-86°F).
- 8. Peel, vacuum package and store at 5°C (41°F).



NUTRITIONAL CONTENT

Per 100g	Control	1% WPC 80	3% WPC 80
Calories	200kcal	300kcal	300kcal
Total Fat	21g	20g	21g
Saturated Fat	5g	5g	6g
Trans Fat	0.5g	0.5g	0.5g
Cholesterol	45mg	45mg	50mg
Total Carbohydrates	8g	8g	8g
Dietary Fiber	1g	1g	Og
Sugars	Og	Og	Og
Protein	21g	21g	21g
Calcium	68mg	80mg	96mg
Magnesium	17mg	18mg	21mg
Phosphorus	243mg	238mg	214mg
Potassium	210mg	200mg	230mg
Sodium	1680mg	1700mg	1630mg
Iron	3mg	3mg	2mg
Vitamin A	OIU	2IU	6IU
Vitamin C	0mg	Omg	Omg

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)

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