

Contemporary Issues in Foods and Nutrition

FCS 321

MEAL PLAN PROJECT REVIEW



2-DAY MEAL PLAN

- Must include a **MENU** and **MEAL PLAN**
- **What is the difference?**
- Drinks/beverages?
 - Coffee, tea, juices, milk, etc...
 - Don't need to include water
 - NO bottled water, use tap water

2-DAY MEAL PLAN

- For your recipes, list as:

Dinner

1 serving Greek Salad **

3 oz grilled salmon

1-6" whole wheat pita bread

**See recipe attached

- Then attach ALL, retyped recipes AFTER your 2-day meal plan

2-Day Meal Plan

5 total printouts for your entire meal plan

- Diet
- Bar Graph with Comparison
- MyPlate
- Calories & Fats Pie Chart
- Spreadsheet—landscape layout
 - “expand” all meals, “compress” all recipes

Nutrients* to address in your meal plan projects

**14 nutrients in all*

Calories

Protein

Total Fat

Saturated Fat

Trans Fats

Fiber

Sodium

Cholesterol

Total CHO

Vit A

Vit C

Folic Acid

Iron

Calcium

Table Set Up

Profile (RDA)		Actual	Difference
Calories	2016	1637	81%
Protein			
Total Fat			
Trans Fat			
Saturated Fat			
Total CHO			
Fiber			
Sodium			
Cholesterol			
Vitamin A			
Vitamin C			
Folate			
Iron			
Calcium			

Your discussion should include:

- The differences between the recommended and actual intake and % difference
 - Suggest modifications to either increase or decrease foods in your meal plan to meet your client's needs. **USE YOUR SPREADSHEET.**
- Look at % of calories from protein (10-15%), fat (<30%), & CHO (50-60%)
 - Address if these are significantly off and make recommendations if necessary

- Address any nutrients that are met or exceeded by the meal plan
 - OK to exceed vitamin and mineral RDA if come from food sources
- If client is getting at least 66% of RDA, they've met their needs
 - RDAs are set high to encompass most of the population, so it's OK if your client is below 100% RDA for some nutrients

- Make sure you address EACH of the 14 nutrients thoroughly
- USE your spreadsheet to identify specific changes you can make
- LOOK at your recipes—can you modify them further or reduce the serving size to ½ a serving to make your meal plan more nutritionally balanced?

Think of your meal plan as a whole...

- Identify the nutrients that you have exceeded and that you need to reduce the amounts/quantities
- Any common threads?
- Can you tackle a few food items/recipes which will affect more than one nutrient?

DO YOU HAVE ALL OF THE PRINTOUTS? (The final count)

For EACH of the **FOUR** recipes, you need:

- ☐ **1 RECIPE** (per recipe = 4)
- ☐ **1 LABEL DISPLAY** (per recipe = 4) (= Nutrition Facts Food Label)
- ☐ **1 MULTICOLUMN** (per recipe = 4)
- ☐ **1 SPREADSHEET** (per recipe = 4)

For your client's **2-DAY AVERAGE**, you need all of the following reports:

- ☐ **1 PERSONAL**
- ☐ **1 DIET**
- ☐ **1 RECOMMENDATIONS** (Which is the **PROFILE** w/ RDAs for your person.)
- ☐ **1 WEIGHT GAIN/LOSS**, if applicable
- ☐ **1 BAR GRAPH** with **COMPARISON** for your client
- ☐ **1 CALORIES** FROM FAT PIE CHART
- ☐ **1 ChooseMyPlate** and finally...
- ☐ **1 SPREADSHEET** (Printed from the **Reports PLUS**)

Recipe Card with Multicolumn – Recipes PLUS

BREAKFAST BURRITO TL

Number of Servings: 1 (115.5 g per serving)

Amount	Measure	Ingredient	Comments
1.00	ea	Tortilla, whole wheat	
1.00	ea	Eggs, scrambled	
1.00	Tbs	Cheese, cheddar, low fat, shredded	
1/16	tsp	Salt, table	
1/32	tsp	Spice, pepper, black, ground	

Notes

Gently whip together all ingredients except tortilla. Heat pan, spray with PAM. Pour egg mixture into pan and over low-moderate heat, cook thoroughly, using a spatula to evenly cook.

Heat tortilla in microwave for about 5 seconds, just to soften. Put egg mixture into center of tortilla. Fold up the bottom of tortilla, then roll the sides around egg. Put filled tortilla into pan to gently heat and slightly brown the tortilla. Serve immediately.

Nutrient Analysis

<u>Nutrient</u>	<u>Value</u>	<u>Nutrient</u>	<u>Value</u>
Gram Weight (g)	115.50		
Calories (kcal)	254.31		
Protein (g)	12.49		
Carbohydrates (g)	23.52		
Dietary Fiber (g)	2.02		
Fat (g)	10.94		
Saturated Fat (g)	2.55		
Cholesterol (mg)	216.20		
Vitamin A - IU (IU)	344.07		
Vitamin C (mg)	0.12		
Folate (mcg)	19.08		
Calcium (mg)	72.95		
Iron (mg)	1.85		
Sodium (mg)	529.37		
Trans Fatty Acid (g)	0.36		

Recipe Card1– Recipes PLUS

BREAKFAST BURRITO TL

Number of Servings: 1 (115.5 g per serving)

Amount	Measure	Ingredient
1.00	ea	Tortilla, whole wheat
1.00	ea	Eggs, scrambled
1.00	Tbs	Cheese, cheddar, low fat, shredded
1/16	tsp	Salt, table
1/32	tsp	Spice, pepper, black, ground

Nutrients per serving

Nutrition Facts

Serving Size (116g)

Servings Per Container

Amount Per Serving

Calories 250 Calories from Fat 100

% Daily Value*

Total Fat 11g 17%

Saturated Fat 2.5g 13%

Trans Fat 0g

Cholesterol 215mg 72%

Sodium 530mg 22%

Total Carbohydrate 24g 8%

Dietary Fiber 2g 8%

Sugars 2g

Protein 12g

Vitamin A 6% • Vitamin C 0%

Calcium 8% • Iron 10%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4

Notes

Gently whip together all ingredients except tortilla. Heat pan, spray with PAM. Pour egg mixture into pan and over low-moderate heat, cook thoroughly, using a spatula to evenly cook.

Heat tortilla in microwave for about 5 seconds, just to soften. Put egg mixture into center of tortilla. Fold up the bottom of tortilla, then roll the sides around egg. Put filled tortilla into pan to gently heat and slightly brown the tortilla. Serve immediately.

Personal

Food Processor

View Database Window Help

anel

en

Person

Recipe

Ingredient

Personal Information

Personal

Client

Medical

Recommendations

Weight Gain/Loss

Groups

Notes

Display Units In: ☒ English ☐ Metric

First Name:

Last Name:

Age:

Gender:

Activity Level:

Height: ft. in.

Current Weight: lb.

User Code:

Created: 09/16/2014 Modified: 09/16/2014

OK Cancel

Personal and Diet

Female 25 Yrs. 5 ft. 5 in. 125.00 lb. Moderately Active BMI: 20.80

Diet

☒	Item Name	Quantity	Measure
☒ ☐	Day 1 (8/1/2010)		
☐	+ Breakfast		
☐	+ Morning Snack		
☐	+ Lunch		
☐	+ Afternoon Snack		
☐	+ Dinner		
☒ ☐	Day 2 (8/2/2010)		
☐	+ Breakfast		
☐	+ Morning Snack		
☐	+ Lunch		
☐	+ Afternoon Snack		
☐	+ Dinner		

Recommendations

Recommendations

Nutrients	Rcmd	Nutrients	Rcmd
Basic Components		Vitamins	
Calories (kcal)	2377.50	Vitamin A - IU (IU)	
Protein (g)	89.16	Vitamin C (mg)	75.00
Carbohydrates (g)	338.79	Folate (mcg)	400.00
Dietary Fiber (g)	33.28	Minerals	
Fat (g)	73.97	Calcium (mg)	1000.00
Saturated Fat (g)	23.77	Iron (mg)	18.00
Cholesterol (mg)	300.00	Sodium (mg)	2300.00
Trans Fatty Acid (g)			

Spreadsheet – tool to troubleshoot

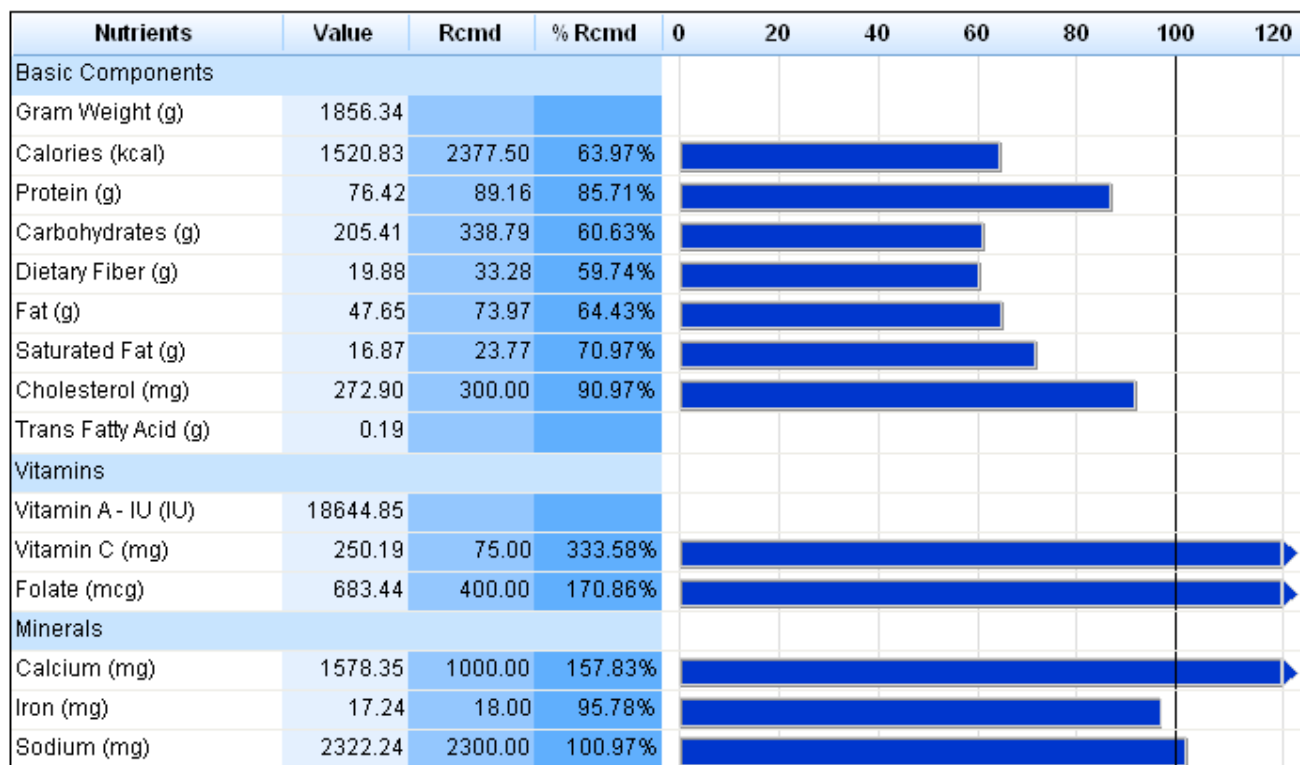
Spreadsheet									
Item Name	Quantity	Measure	Wgt (g)	Cals (kcal)	Prot (g)	Carb (g)	Fib (g)	Fat (g)	
A. 2010 Student - adj									
Day 1 (8/1/2010)			2247.59	1937.26	103.22	264.49	28.37	56.13	
Breakfast			615.30	519.52	25.94	73.35	4.81	12.64	
	Milk, nonfat/skim, w/add vit A & D	8 Ounce-w...	226.80	77.11	7.64	11.25	0	0.18	
	BREAKFAST BURRITO TL	1 Serving	115.50	254.31	12.49	23.52	2.02	10.94	
	Juice, orange, fresh	1 Cup	248.00	111.60	1.74	25.79	0.50	0.50	
	Bread, whole wheat, tstd, slice	1 Each	25.00	76.50	4.07	12.79	2.30	1.02	
Morning Snack			170.10	97.41	5.99	17.98	0	0	
	Yogurt, blueberry, nonfat	6 Ounce-w...	170.10	97.41	5.99	17.98	0	0	
Lunch			605.80	587.60	24.17	66.07	8.71	28.28	
	Sandwich, grilled cheese, w/whole wheat	1 Each	131.80	431.30	20.25	30.05	4.34	26.78	
	Apples, fresh, med, 3", USDA	1 Each	182.00	94.64	0.47	25.13	4.37	0.31	
	Salad, tossed, veg, w/o dressing, fast food	2 Cup	276.00	44.16	3.45	8.89	--	0.19	
	Salad Dressing, honey dijon, low fat	1 Tablespo...	16.00	17.50	0	2.00	0	1.00	
Afternoon Snack			148.00	202.23	10.50	33.77	4.25	3.46	
	Bar, energy, tstd nuts & cranberries	1 Each	48.00	167.23	9.86	25.53	1.35	3.33	
	Carrots, fresh, baby, med	10 Each	100.00	35.00	0.64	8.24	2.90	0.13	
Dinner			708.39	530.50	36.62	73.31	10.60	11.75	
	SALMON, ATLANTIC, FARMED, BAKED OR BROILED, FLAKED (Meas Raw-Fillet)	3 Ounce-w...	76.54	157.68	16.92	0	0	9.45	
	Potatoes, baked, med, 2 1/4" to 3 1/4" (Meas Raw)	1 Each	172.50	160.43	4.31	36.48	3.80	0.22	

Weight Gain/Loss & Bar Graph

Weight Gain/Loss

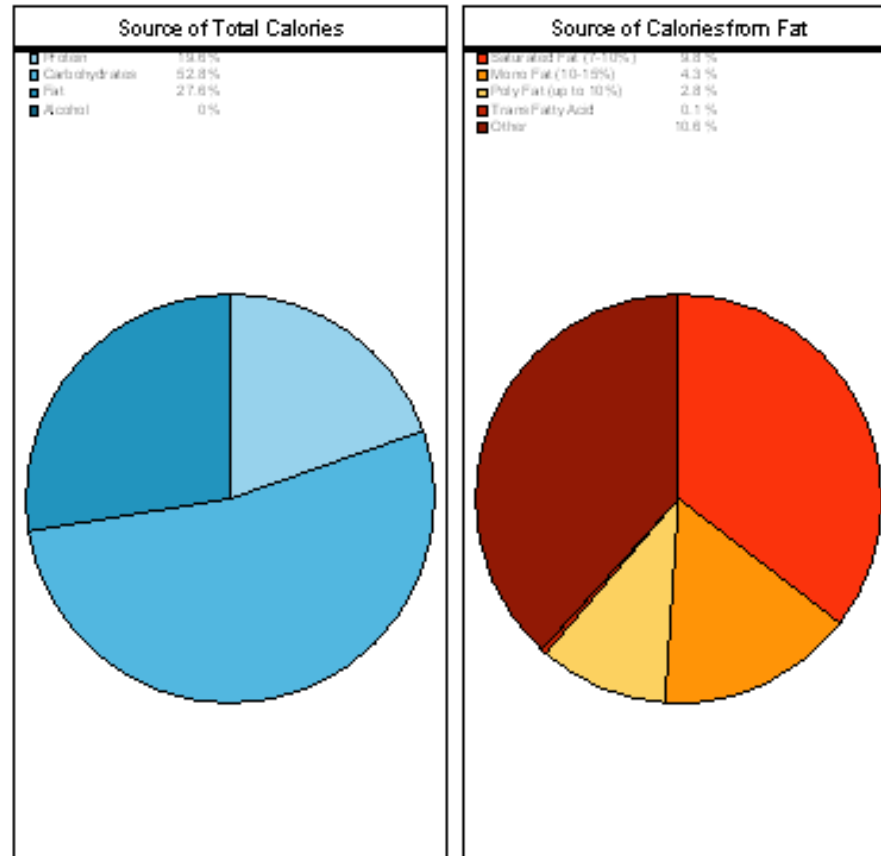
N/A	N/A
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Bar Graph



Percent Calories Pie Chart

Person: A, 2010 Skatent - all



MyPlate

7/2014 | All Days

Female

Age: 18 Yrs.

Height: 5 ft. 4 in.

Weight: 100.00 lb.

Moderately Active

BMI: 17.16



My Plate - Intake vs Recommendation 2600 Calories Pattern

Group	Percent of Rec.	Comparison	Amount (Daily)
Grain Total Intake	0 %		0 oz equivalent
Grain Total Recommended			9 oz equivalent
Vegetable Total Intake	0 %		0 cup equivalent
Vegetable Total Recommended			3.5 cup equivalent
Fruit Intake	0 %		0 cup equivalent
Fruit Recommended			2 cup equivalent
Dairy Intake	0 %		0 cup equivalent
Dairy Recommended			3 cup equivalent
Protein Total Intake	0 %		0 oz equivalent
Protein Total Recommended			6.5 oz equivalent

Make at least half your grains whole grains.

Vary the vegetables that you eat:

- Dark Green Vegetables = 3.00 cups weekly
- Red & Orange Vegetables = 2.50 cups weekly
- Beans and Peas = 3.50 cups weekly
- Starchy Vegetables = 7.00 cups weekly
- Other Vegetables = 8.50 cups weekly

Spreadsheet – Recipes PLUS

BREAKFAST BURRITO TL

Number of Servings: 1 (115.5 g per serving)

Weight: 115.5 g

Item Name	Item Quantity	Item Measure	Wgt (g)	Cals (kcal)	Prot (g)	Carb (g)	Fib (g)	Fat (g)	SatFat (g)	Chol (mg)
BREAKFAST BURRITO TL			115.50	254.31	12.49	23.51	2.02	10.94	2.55	216.20
Tortilla, whole wheat	1.00	ea	47.00	140.00	4.00	22.00	2.00	3.00	0.00	0.00
Eggs, scrambled	1.00	ea	61.00	101.87	6.76	1.34	0.00	7.45	2.24	214.72
Cheese, cheddar, low fat, shredded	1.00	Tbs	7.06	12.22	1.72	0.13	0.00	0.49	0.31	1.48
Salt, table	0.06	tsp	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spice, pepper, black, ground	0.03	tsp	0.06	0.22	0.01	0.04	0.02	0.00	--	--

Item Name	Vit A-IU (IU)	Vit C (mg)	Folate (mcg)	Calc (mg)	Iron (mg)	Sod (mg)	TransFat (g)			
BREAKFAST BURRITO TL	344.07	0.12	19.08	72.95	1.84	529.37	0.36			
Tortilla, whole wheat	0.00	0.00	--	0.00	1.08	170.00	--			
Eggs, scrambled	328.79	0.12	18.30	43.31	0.73	170.80	0.36			
Cheese, cheddar, low fat, shredded	14.62	0.00	0.78	29.31	0.03	43.22	--			
Salt, table	0.00	0.00	0.00	0.09	0.00	145.34	0.00			
Spice, pepper, black, ground	0.66	0.00	--	0.24	0.00	0.01	0.00			

Final Meal Plan Project

Due on Tuesday, October 28th

DO NOT put anything that I will grade or comment on in a sheet protector

- Pictures, maps, any “extras” are OK to put in sheet protectors

DO NOT bind the entire project! I need to be able to remove pages in order to grade it

Food Costing



FOOD COSTING

Net income—take home pay

– Expenses

- Fixed expenses: mortgage/rent
- Variable expenses: entertainment, hobbies
- Mixed expenses: phone bill

Where does **food** fit in?

Food: A Variable Expense



The amount of variable income dictates how much you can spend on food, and therefore the quality and kinds of food you can buy

Food Insecurity

- Only a fixed amount of money for food
- Fruits & vegetables are expensive
- Junk food = cheaper, ↑ calories, ↓ nutrients
- The Food Stamps* program - now working with local Farmer's Markets so low income families can afford produce



*Food Stamps: Supplemental Nutrition Assistance Program (SNAP)/CalFresh Electronic Benefit Transfer Project

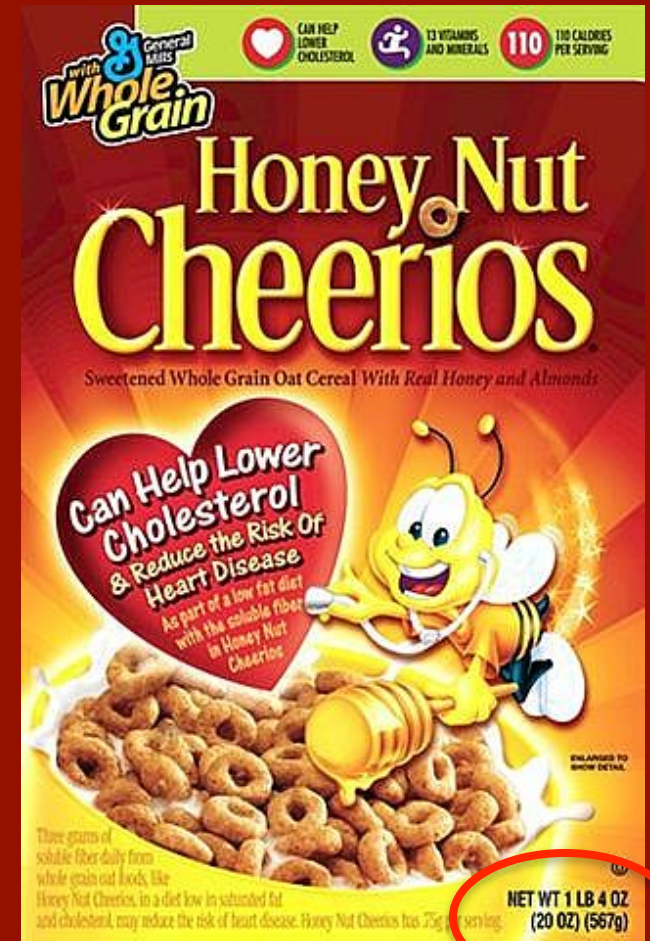
Some Definitions...

- **Market unit** → the entire container being sold
- **Standard unit** → ounces, grams, pounds
- **Serving size** → amount for each serving
- **Servings per market unit** → the number of servings you get in the entire container
- **Market unit cost** → price per market unit
- **Price per serving** → market unit price divided by number of servings per market unit

Market unit → the entire container being sold



Standard unit → ounces, grams, pounds



Serving size → amount for each serving



Nutrition Facts	
Serving Size: 5g (2 tsp)	
Servings Per Container: 90	
Amount Per Serving	
Calories 20	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 10mg	0%
Total Carbohydrate 5g	2%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 0g	
Vitamin A 0%	• Vitamin C 0%
Calcium 0%	• Iron 0%
*Percentage daily values based on a 2,000 calorie diet. Your Daily values may be higher or lower depending on your calorie needs.	

Servings per market unit → the number of servings you get in the entire container



Nutrition Facts	
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Dietary Fiber 0g	0%
Sugars 5g	
Protein 0g	
Vitamin A 0%	• Vitamin C 0%
Calcium 0%	• Iron 0%
*Percentage daily values based on a 2,000 calorie diet. Your Daily values may be higher or lower depending on your calorie needs.	

Market unit cost → price per market unit



\$6.05 each



59 cents per lb.



\$11.99 each

Price per serving → **market unit price**
divided by number of servings per
market unit

3 apples in 1 lb.

$$\$1.00/3 = .33$$

Each apple is 0.33 cents



Costing Example: Skim Milk

***Recipe requires 1 cup of skim milk**

- **Market Unit**
 - Bottle of Milk
- **Standard Unit**
 - Quart
- **Market Unit Cost**
 - \$2.00
- **Price per Serving =**
1 quart = 4 cups of milk
Cost is \$ 2.00/4 = **.50 cents**



**\$2.00 for 1
Quart of Milk**

Excel Costing Worksheet

B	C	D	E	F	G	H	I	J	K	L
	C	D	E	F	G	H	I	J	K	L
		AMOUNT NEEDED		MARKET UNIT SIZE		#/MARKT UNIT	Mkt. Unit	Ingred. Cost	Total recipe	Cost/serv.
PRODUCT	DESCRIPTION	QUANTITY	UNIT	QUANTITY	UNIT	(F/D)	Cost	I/H	Cost	K/# serv
									(Sum of J)	
						#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
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Costing Worksheet: Milk

B	C	D	E	F	G	H	I	J	K	L
	C	D	E	F	G	H	I	J	K	L
		AMOUNT NEEDED		MARKET UNIT SIZE		#/MARKT UNIT	Mkt. Unit	Ingred. Cost	Total recipe	Cost/serv.
PRODUCT	DESCRIPTION	QUANTITY	UNIT	QUANTITY	UNIT	(F/D)	Cost	l/H	Cost	K/# serv
Milk	Skim	1	C						(Sum of J)	
						#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
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Costing Worksheet: Milk

B	C	D	E	F	G	H	I	J	K	L
	C	D	E	F	G	H	I	J	K	L
		AMOUNT NEEDED		MARKET UNIT SIZE		#/MARKT UNIT	Mkt. Unit	Ingred. Cost	Total recipe	Cost/serv.
PRODUCT	DESCRIPTION	QUANTITY	UNIT	QUANTITY	UNIT	(F/D)	Cost	I/H	Cost	K/# serv
Milk	Skim	1	C	1	QT				(Sum of J)	
						#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
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Costing Worksheet: Milk

B	C	D	E	F	G	H	I	J	K	L
	C	D	E	F	G	H	I	J	K	L
		AMOUNT NEEDED		MARKET UNIT SIZE		#/MARKT UNIT	Mkt. Unit	Ingred. Cost	Total recipe	Cost/serv.
PRODUCT	DESCRIPTION	QUANTITY	UNIT	QUANTITY	UNIT	(F/D)	Cost	I/H	Cost	KI# serv
Milk	Skim	1	C	1	QT				(Sum of J)	
				4	C	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
						#DIV/0!		#DIV/0!		
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Costing Worksheet: Milk

B	C	D	E	F	G	H	I	J	K	L
	C	D	E	F	G	H	I	J	K	L
		AMOUNT NEEDED		MARKET UNIT SIZE		#/MARKT UNIT	Mkt. Unit	Ingred. Cost	Total recipe	Cost/serv.
PRODUCT	DESCRIPTION	QUANTITY	UNIT	QUANTITY	UNIT	(F/D)	Cost	l/H	Cost	K/# serv
Milk	Skim	1	C	1	QT				(Sum of J)	
		1	C	4	C	4		\$ -	#DIV/0!	#DIV/0!
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Costing Worksheet: Milk

B	C	D	E	F	G	H	I	J	K	L
	C	D	E	F	G	H	I	J	K	L
		AMOUNT NEEDED		MARKET UNIT SIZE		#/MARKT UNIT	Mkt. Unit	Ingred. Cost	Total recipe	Cost/serv.
PRODUCT	DESCRIPTION	QUANTITY	UNIT	QUANTITY	UNIT	(F/D)	Cost	l/H	Cost	K/# serv
Milk	Skim	1	C	1	QT				(Sum of J)	
		1	C	4	C	4	\$ 2.00	\$ 0.50	#DIV/0!	#DIV/0!
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						#DIV/0!		#DIV/0!		
						#DIV/0!		#DIV/0!		

	C	D	E	F	G	H	I	J	K	L
Taganrogskii Salat		AMOUNT NEEDED		MARKET UNIT SIZE		#/MARKT UNIT	Mkt. Unit	Ingred. Cost	Total recipe	Cost/serv.
PRODUCT	DESCRIPTION	QUANTITY	UNIT	QUANITY	UNIT	(F/D)	Cost	I/H	Cost	K/# serv
Potato	Waxy	12	ea	1	lb		\$ 0.99		(Sum of J)	15
		4	lb	1	lb	0.25	\$ 0.99	\$ 3.96	\$5.43	\$0.36
Olives	Black	18	ea	55	ea	3.06	\$ 1.00	\$ 0.33		
Dill	Dry	0.5	Tbl	0.3	oz					
		1	g	8	g	8.00	\$ 4.89	\$ 0.61		
Olive Oil	Star	0.25	c	17	oz					
		0.25	c	2.13	c	8.52	\$ 4.20	\$ 0.49		
Vinegar		2	tsp	12	oz					
		0.66	Tbl	24	Tbl	36.36	\$ 1.44	\$ 0.04		
Sugar	White	0.5	tsp	10	lb					
		0.5	tsp	1134	tsp	2268.00	\$ 5.19	\$ 0.002		

SHOW WORK HERE