

# RECIPE MAPPING™

## HOW TO TURN GOOD RECIPES INTO GREAT MENU ITEMS

**A** good recipe for home cooking doesn't always work out when you attempt to replicate it in the restaurant. Startup restaurateurs find out quickly that a recipe intended to yield four, six or even 10 servings might not be practical when feeding dozens or even hundreds of guests — every day.

Success in the restaurant business is often measured in pennies. Inaccurate purchase orders, wasted product and inefficient labor use are ingredients for losing money. And while your friends and family never minded waiting an extra half-hour or so for your home recipes or varia-

tions in presentation, your restaurant guests will not forgive slow service and inconsistency.

For good recipes to become great menu items, you must learn to make them pleasing to both your guests and your accountant. You must break them down into stages that assist purchasing and inventory control, organize prepping, reduce production time, and maximize yield. Then you must build them up to serve dozens of covers.

Our proprietary name for this process is RecipeMapping, and it is designed to help you add new items to your menu consistently, methodically and profitably.

### **Step 1 – Add Ingredients to the Master Inventory**

**List.** Every restaurant should maintain a Master Inventory List that includes all of the ingredients that a restaurant must use in the preparation of their menu items. This list can be maintained using a spreadsheet format that includes purchasing information, such as the pack, size, and price of the ingredients — information that is useful when creating other management forms, such as inventory and order forms. But to accurately calculate the real cost to produce a menu item, the Master Inventory list should not only reflect the purchasing cost and unit of measure, but also the corresponding recipe cost and unit of measure. Any ingredient used in cooking can be expressed in one of three units of measure when using it in a recipe — weight measure (typically ounces or lbs.), volume measure (such as tsp., tbsp., cups, qts. or gal.), or by piece. Many products are purchased by weight units of measure but are measured for recipes in terms of volume (fluid) measure. To determine a true recipe unit cost, it can require measuring a pound of product to determine its recipe yield. We provide Recipe Conversion Notes to assist in this process.

### **Step 2 – Create the Prep Stages.**

Here we identify parts of the menu item that can be prepared prior to final cooking and presentation, to reduce the time from order to service. Even a simple, single menu item often requires several subrecipes that are produced in batch and become part of the routine preparation tasks. Each subrecipe is then added to the Recipe Manual for reference by the kitchen staff. The cost of each subrecipe ingredient is calculated by multiplying the number of recipe units used by the recipe unit cost listed in the Master Inventory. The subrecipe batch is then assigned its own recipe unit and cost based on total cost to produce the batch and how much it yields.

### **Step 3 – Calculate Menu Item Cost.**

Finally, the cost of the menu item is determined by calculating the cost of each recipe or ingredient needed to produce the menu item, then affixing a selling price that produces the desired profit. Restaurants should review their menu item cost every three to six months to ensure that cost expectations are accurate.

## THIS MONTH'S FEATURES:

### **Housemade Chicken Fried Top Sirloin and Crispy Winter Salad with Grilled Mango Chicken**

This month's article features the last item from the 2019 road trip through the southern US, Chicken Fried Steak and a new menu item in development for an existing client. Author Chef Tom Bruce of Central Coast Food & Beverage created the recipe mapping for these dishes.



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# MENU ITEMS

Menu items featured in our RecipeMapping department are available online at [www.RestaurantOwner.com/recipe.htm](http://www.RestaurantOwner.com/recipe.htm).

## HOUSEMADE CHICKEN FRIED TOP SIRLOIN

1	ea.	Chicken Fried Steak Prep
0.5	oz.	Butter, USDA AA Salted
0.75	oz.	Olive Oil, extra-virgin
1	ea.	Mashed Potatoes
1	ea.	Onion Mushroom Gravy
2.5	ea.	Fresh Green Beans, trimmed
0.5	ea.	Olive oil, extra-virgin
0.5	oz.	Kentucky Bacon
0.5	oz.	Roma Tomato, fresh

### LINE COOK INSTRUCTIONS:

1. Heat the olive oil over medium heat, then add butter.
2. Add the steak and brown on one side, then turn and brown on the other. Take care to keep the heat at a level that won't over brown the steak.
3. While the steak is cooking, heat the oil in a small sauté pan and add the green beans, toss quickly to sear, then add the tomatoes. Green beans can also be cooked in small batches.
4. Add the cooked bacon at the last minute to avoid making it soggy.
5. Plate the steak, mashed potatoes, and green beans, then finish with the gravy for service.



## CRISPY WINTER SALAD WITH GRILLED MANGO CHICKEN

1	oz.	Spring Mix Lettuce
1	ea.	Fennel Slaw
1	ea.	Mango Chicken Prep
0.3	oz.	Green Onions
0.5	oz.	Sesame Ginger Dressing
0.1	oz.	Basil, fresh

### LINE COOK INSTRUCTIONS:

1. Line a chilled sled plate with spring mix and place the slaw evenly down the center.
2. Place the chopped chicken down one side of the slaw and dress with a small amount of dressing.
3. Garnish with the reserved Mandarin oranges along the opposite side from the chicken.
4. Finish with a basil sprig or fennel sprout for service.



# STEP ONE: INVENTORY MASTER

Item Description	Case Pack/Size	Purchase Unit (PU)		Recipe Cost Unit (RU)			
		U/M	Current Price	U/M	# RU per PU	Yield %	Cost
* Bacon, Kentucky	random pack	LB	6.10	OZ-wt	16	85%	0.449
** Basil, fresh	1/1 lb.	Bag	8.56	OZ-wt	16	56%	0.955
* Bean greens, fresh trimmed	2/5 lb.	Case	28.03	OZ-wt	160	100%	0.175
* Bread, crumb panko	1/25 lb.	Bag	28.66	OZ-wt	400	100%	0.072
* Butter, USDA AA Salted	30/1 lb.	Case	74.07	OZ-wt	480	100%	0.154
** Carrots, matchstick	1/5 lb.	Bag	4.98	OZ-wt	80	100%	0.062
** Chicken, thigh b/s	4/10 lb.	Case	64.89	OZ-wt	640	100%	0.101
** Dressing, sesame ginger	6/12 oz.	Case	26.79	OZ-fl	72	100%	0.372
** Egg, shell large USDA AA	1/15 dz.	Case	39.91	EA	180	100%	0.222
** Fennel, anise fresh	1/6 ct.	Box	17.71	OZ-wt	84	56%	0.376
** Flour, all-purpose	25 lb.	Bag	15.90	OZ-wt	400	100%	0.040
** Flour, seasoned	5.25#	Bag	16.40	OZ-wt	84	100%	0.195
** Garlic, whole peeled	1/5 lb.	Each	19.70	OZ-wt	80	100%	0.246
** Ginger root, fresh	1/5 lb.	Box	10.10	OZ-wt	80	92%	0.137
* Gravy mix, brown	1/21 oz.	Jar	11.80	EA	1	100%	11.800
** Juice, mango	6/1 liter	Case	26.73	OZ-fl	203	100%	0.132
** Juice, orange pasteurized	4/1 gal.	Case	30.27	OZ-fl	512	100%	0.059
** Lemon choice	1/140 ct.	Case	35.99	EA	140	100%	0.257
** Lettuce, spring mix	6/2 lb.	Case	25.51	OZ-wt	192	100%	0.133
** Mango, cubes	2/5 lb.	Case	25.89	OZ-wt	160	100%	0.162
* Milk, 2% reduced fat	1/6 gal.	Box	23.76	OZ-fl	768	100%	0.031
* Mushroom, white	1/5 lb.	Case	10.21	OZ-wt	80	100%	0.128
** Oil, extra-virgin olive	6/1 gal.	Case	185.03	OZ-fl	768	100%	0.241
** Oil, sesame blended	1/1 gal.	Each	13.20	OZ-fl	128	100%	0.103
* Onion, yellow jumbo	1/50 lb.	Box	12.80	OZ-wt	800	91%	0.018
** Onions, green	4/2 lb.	Bag	17.18	OZ-wt	128	83%	0.162
** Orange, mandarin	5 lb.	Bag	19.50	OZ-wt	80	73%	0.334
** Pea, sugar snap	12/2 lb.	Box	40.51	OZ-wt	384	94%	0.112
** Pepper, bell red	1/5 lb.	Box	12.51	OZ-wt	80	81%	0.193
* Pepper, white ground	1/5 lb.	Each	56.48	OZ-fl	141.6	100%	0.399
* Potato, russet	1/10 lb.	Box	8.10	OZ-wt	160	91%	0.056
** Salt, sea	12/26 oz.	Case	36.96	OZ-fl	293.28	100%	0.126
* Sauce, soy light	6/5 gal.	Case	40.41	OZ-fl	384	100%	0.105
* Steak, top sirloin center cut	40/6 oz.	LB	9.06	OZ-wt	16	100%	0.566
** Tomato, roma fresh	1/25 lb.	Case	33.79	OZ-wt	400	92%	0.092
** Vinegar, rice natural	4/1 gal.	Case	35.29	OZ-fl	512	100%	0.069
** Water	1/1 gal.	Each	0.00	OZ-fl	128	100%	0.000

\*Housemade Chicken Fried Top Sirloin \*\*Crispy Winter Salad with Grilled Mango Chicken \*\*\*Both

The first step is to identify each ingredient for all the subrecipes and then to get the purchasing unit pack, size, and cost information from your foodservice distributor. Raw ingredients for these menu items were chosen based on availability from local distributors. Once you have the purchasing information, you're ready to calculate the number of recipe units in each purchase unit.

## RECIPE CONVERSION NOTES:

Many products are purchased by the weight unit of measure but are measured for recipes in fluid measures, such as teaspoons, tablespoons or cups. Precise conversion formulas are necessary to attain accurate costs. Here are some facts we noted when calculating the number of recipe units:

- Bacon, Kentucky yields 85% after cooking
- Fennel bulbs weigh about 14 oz. each.
- Flour, all-purpose weighs 4.6 ozs. per cup.
- Green onions weigh about 3.5 ozs. per bunch.
- Pepper, white ground weighs 0.282 oz. per Tbsp.
- Russet potatoes yield 91% after peeling and cleaning.
- Salt, sea weighs 0.534 oz. per Tbsp.

# STEP TWO: PREP STAGES

Subrecipes are usually prepared ahead of time and can be components for one or several menu items.

## HOUSEMADE CHICKEN FRIED TOP SIRLOIN

Central Coast Food & Beverage			Recipe Cost			
Chicken Fried Steak Prep			Batch			
INGREDIENTS	MEASURE	PROCEDURE	RU	# of RU	RU Cost	Cost
Steak, top sirloin center cut	8 ea.	1. Place the steaks on a cutting board and tenderize with a mallet. Turn, and tenderize the other side. 2. Combine the eggs and milk in a medium mixing bowl and blend well with a wire whisk. 3. Place the all-purpose flour in a #200 half pan. 4. Combine the seasoned flour and panko crumbs in a second #200 half pan. 5. The breading sequence is: dredge the steak in the all-purpose flour, then dip in egg wash and dredge in seasoned flour/panko mix.	OZ-wt	48	0.566	\$ 27.18
Egg, shell large USDA AA	4 ea.		EA	4	0.222	\$ 0.89
Milk, 2% reduced fat	1-½ cup		OZ-fl	12	0.031	\$ 0.37
Flour, all-purpose	4 ozs.		OZ-wt	4	0.040	\$ 0.16
Flour, seasoned	4 ozs.		OZ-wt	4	0.195	\$ 0.78
Bread, crumb panko	2 ozs.		OZ-wt	2	0.072	\$ 0.14
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
<b>TOOLS/EQUIP.:</b> Ounce scale, measuring cup, cutting board, tenderizing mallet, medium mixing bowl, wire whisk and 2-#200 half pans.			<b>Total</b>		\$	29.52
<b>STATION:</b> Line cook			<b>RU</b>			EA
<b>YIELD:</b> 8 steaks			<b># of RU</b>			8
<b>SHELF LIFE:</b> 1 shift			<b>RU Cost</b>		\$	3.69

**CHEF'S NOTE:** The steaks are best if breaded to order, however, if volume dictates, they can be breaded in small batches. Avoid deep frying the steaks or cooking ahead.

Central Coast Food & Beverage			Recipe Cost			
Mashed Potatoes			Batch			
INGREDIENTS	MEASURE	PROCEDURE	RU	# of RU	RU Cost	Cost
Potato, russet	8 lbs. peeled and diced 1"	1. Place the diced potatoes in a medium stockpot, cover with cold water. 2. Add 2 Tbsp. of the salt and bring to a simmer. 3. Continue to cook until the potatoes are fork-tender. 4. While the potatoes are cooking, heat the milk to about 180° and hold. 5. Drain the cooked potatoes using a colander, be sure to drain thoroughly, but don't allow them to cool. 6. Immediately place the potatoes in a stand mixer equipped with a wire whip attachment. 7. Mix on low stopping once to scrape the bowl. Add the butter in 1-ounce increments until incorporated. 8. Add the hot milk in small batches with the mixer running. When the potatoes become soft increase the speed. 9. Continue to add the milk until the desired consistency is achieved. 10. Scrape the bowl and mix again, add salt and pepper to taste. 11. Remove to hot holding for service.	OZ-wt	128	0.056	\$ 7.12
Milk, 2% reduced fat	1-¼ cup		OZ-fl	10	0.031	\$ 0.31
Butter, USDA AA Salted	8 ozs. diced		OZ-wt	6	0.154	\$ 0.93
Salt, sea	6 ozs. diced		OZ-fl	1.5	0.126	\$ 0.19
Pepper, white ground	6 ozs. diced		OZ-fl	0.33	0.399	\$ 0.13
Water	1-½ ozs. finely chopped		OZ-fl	128	-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
<b>TOOLS/EQUIP.:</b> Pound scale, ounce scale, measuring cups, measuring spoons, French knife, medium stock pot, colander, mixer with wire whip attachment and heat proof spatula.			<b>Total</b>		\$	8.68
<b>STATION:</b> Prep cook			<b>RU</b>			EA
<b>YIELD:</b> About 24-6 oz. portions			<b># of RU</b>			24
<b>SHELF LIFE:</b> 1 shift			<b>RU Cost</b>		\$	0.36

**CHEF'S NOTE:** The key to great mashed potatoes is maintaining temperature throughout the process. If the drained potatoes cool too much, or the milk is cold, the entire batch turns gummy.



## STEP TWO: PREP STAGES CONTINUED

### CRISPY WINTER SALAD WITH GRILLED MANGO CHICKEN

Central Coast Food & Beverage			Recipe Cost			
Sesame Ginger Dressing			Batch			
INGREDIENTS	MEASURE	PROCEDURE	RU	# of RU	RU Cost	Cost
Dressing, sesame ginger	4 cups	1. Place the sesame ginger dressing in a large mixing bowl. 2. Using a wire whisk, blend in the sesame oil and orange juice. 3. Juice the lemons through a wire mesh strainer and whisk to incorporate. 4. Store under refrigeration for service.	OZ-fl	32	0.372	\$ 11.91
Lemon choice	6 ea.		EA	6	0.257	\$ 1.54
Oil, sesame blended	1 cup		OZ-fl	8	0.103	\$ 0.83
Juice, orange pasteurized	2 cups		OZ-fl	16	0.059	\$ 0.95
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
<b>TOOLS/EQUIP.:</b> Measuring cups, large mixing bowl, wire whisk, paring knife and wire mesh strainer.			<b>Total</b>		\$	15.22
<b>STATION:</b> Pantry			<b>RU</b>		OZ-fl	
<b>YIELD:</b> 62 fluid ozs			<b># of RU</b>		62	
<b>SHELF LIFE:</b> 5 days			<b>RU Cost</b>		\$ 0.25	

## STEP THREE: CALCULATE COSTS

The final step for turning the recipe into a menu item is to add the cost of the ingredients needed to produce it. Calculating the cost of each recipe needed to produce the menu item makes it easy to cost out the finished menu item and affix a selling price that is profitable.

Menu Item: Housemade Chicken Fried Top Sirloin				
Item Description: Breaded to order and pan fried in olive oil and butter then finished with onion and mushroom gravy. Mashed potatoes and green beans with Kentucky bacon.				
Recipe Unit	Quantity	Ingredient	Unit Cost	Extension
EA	1	Chicken Fried Steak Prep	3.69	3.69
OZ-wt	0.5	Butter, USDA AA Salted	0.15	0.08
OZ-fl	0.75	Oil, extra-virgin olive	0.24	0.18
EA	1	Mashed Potatoes	0.36	0.36
EA	1	Onion Mushroom Gravy	0.28	0.28
OZ-wt	2.5	Bean greens, fresh trimmed	0.18	0.44
OZ-fl	0.5	Oil, extra-virgin olive	0.24	0.12
OZ-wt	0.5	Bacon, Kentucky	0.45	0.22
OZ-wt	0.5	Tomato, roma fresh	0.09	0.05
			0.00	0.00
			0.00	0.00
EA	1	Plate cost (Q-cost)	0.35	0.35
			<b>Total Cost</b>	5.77
			<b>Menu Price</b>	17.00
			<b>Gross Profit</b>	11.23
			<b>Food Cost %</b>	33.92%

Menu Item: Crispy Winter Salad with Grilled Mango Chicken				
Item Description: Shaved fennel, carrots, bell peppers, snap peas and fresh Mandarin oranges tossed in a light sesame ginger dressing and basil.				
Recipe Unit	Quantity	Ingredient	Unit Cost	Extension
OZ-wt	1	Lettuce, spring mix	0.13	0.13
EA	1	Fennel Slaw	1.92	1.92
EA	1	Mango Chicken Prep	1.08	1.08
OZ-wt	0.3	Onions, green	0.16	0.05
OZ-fl	0.5	Sesame Ginger Dressing	0.25	0.12
OZ-wt	0.1	Basil, fresh	0.96	0.10
			0.00	0.00
			0.00	0.00
			0.00	0.00
			0.00	0.00
EA	1	Plate cost (Q-cost)	0.35	0.35
			<b>Total Cost</b>	3.74
			<b>Menu Price</b>	14.00
			<b>Gross Profit</b>	10.26
			<b>Food Cost %</b>	26.75%

**CHEF'S NOTE:** We used a mix for the gravy as it seemed appropriate for the dish. We've done several house-made sauces in the last few issues if you'd prefer something more sophisticated. The steak will come out of the pan at medium-rare/medium. If you need it more done, move it to a hot oven to finish it. Kentucky bacon is actually pork butt cured and processed like belly bacon. It's leaner and more flavorful, use it for the best BLT ever!