

# 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:

### Mason Jar Cheesecake and Brick Oven Soy Citrus Chicken

This month's article features two dishes under development for a client with a lodge concept in the California Sierras. 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).

## MASON JAR CHEESECAKE

- 1 ea. Mason Jar Cheesecake
- 1 ea. Whipped cream
- 2 oz. Fresh yellow Peaches

### LINE COOK INSTRUCTIONS:

1. Place the whipped cream portion on the top of the cheesecake and smooth with a frosting spatula.
2. Add the freshly cut peaches as a garnish for service.
3. Serve with a chilled teaspoon.



## BRICK OVEN SOY CITRUS CHICKEN

- 1 ea. Roasted Chicken
- 1 ea. Roasted Dutch Potatoes
- 4 oz. Fresh Asparagus, large
- 0.2 oz. Extra-virgin olive oil
- 0.1 oz. Sea salt

### LINE COOK INSTRUCTIONS:

1. Remove the roasted chicken from the warmer. Using a boning knife, remove the leg/thigh section and cut at the joint.
2. Remove the breast by cutting along the breast cartilage and following along the wishbone. Remove the wing at the first joint. This will give you a semi-boneless breast.
3. Place the chicken portion, pre-roasted potatoes, and asparagus on a flat oven pan. Mist the asparagus with extra-virgin olive oil and season with salt.
4. Place in the wood-fired oven until the chicken is heated through and the skin is browned and crispy. The potatoes will be hot and the asparagus will be cooked at the same time.
5. Remove and plate 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
** Asparagus, fresh large	1/11-lb.	Box	31.73	OZ-wt	176	74%	0.244
* Cheese, cream	1/3-lb.	Each	7.20	OZ-wt	48	100%	0.150
** Chicken, fresh whole WOGS	24/4-lb. avg.	Each	5.92	EA	1	100%	5.920
* Cream, heavy whipping	12/32-oz.	Case	48.83	OZ-fl	384	100%	0.127
* Cream, sour	2/5-lb.	Case	15.66	OZ-fl	160	100%	0.098
* Egg, shell large	12/15-dzn.	Box	42.91	EA	180	100%	0.238
* Extract, vanilla	1/32-oz.	Each	7.01	OZ-fl	32	100%	0.219
** Garlic, fresh peeled	1/5-lb.	Jar	20.06	OZ-wt	80	100%	0.251
** Juice, lemon	1/1-gal.	Each	12.12	OZ-fl	128	100%	0.095
** Juice, orange	4/1-gal.	Case	26.45	OZ-fl	512	100%	0.052
** Oil, olive extra-virgin	3/1-gal.	Case	79.44	OZ-fl	384	100%	0.207
* Peach, yellow fresh	1/8-lb.	Box	16.80	OZ-wt	128	77%	0.170
** Pepper, black table	3/5-lb.	Case	66.82	OZ-fl	504	100%	0.133
** Pepper, red crushed	1/15-lb.	Each	97.80	OZ-fl	710.4	100%	0.138
** Potatoes, Dutch yellow	1/20-lb.	Case	28.37	OZ-wt	320	100%	0.089
** Salt, sea	12/26-oz.	Case	39.66	OZ-fl	293.28	100%	0.135
** Sauce, soy light	1/5-gal.	Each	51.09	OZ-fl	640	100%	0.080
** Seasoning, chicken Montreal	1/23-oz.	Each	10.67	OZ-fl	87.86	100%	0.121
* Strawberry, fresh	8/1-lb.	Box	14.40	OZ-wt	128	92%	0.122
* Sugar, granulated	24/1-lb.	Case	33.27	OZ-fl	382.87	100%	0.087

\*Mason Jar Cheesecake \*\*Brick Oven Soy Citrus 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:

- Black pepper ground weighs 0.238 oz. per Tbsn.
- Chickens averaged right at 4 lbs. each at \$1.48 per pound.
- Fresh asparagus yields 74% after trimming.
- Granulated sugar weighs 7.1 ozs. per cup.
- Montreal seasoning weighs 0.131 oz. per Tbsn.
- Olive oil weighs 7.7 oz. per cup.
- Peaches averaged 13 ozs. before processing, 10 ozs. after processing.
- Red pepper crushed flakes weigh 0.169 oz. per Tbsn.

# STEP TWO: PREP STAGES

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

## MASON JAR CHEESECAKE

Central Coast Food & Beverage Mason Jar Cheesecake			Batch			
INGREDIENTS	MEASURE	PROCEDURE	Recipe Cost			
Cheese, cream	2 blocks	1. Soften the 3 lb. cream cheese blocks to room temperature for 1-2 hours. 2. Using a stand mixer with the whip attachment, blend the cheese until air is incorporated and the cheese is soft. 3. Add the sugar and blend on medium speed until the sugar is dissolved. Scrape the bowl and re-blend. 3. Add the sour cream and vanilla, blend until smooth. 4. Scrape the bowl to ensure all ingredients are well mixed. 5. On low speed, add the eggs slowly, and mix only until incorporated, don't over mix. 6. Place 1-½ ounces of compote in each of the 36- 8 oz. canning jars. 7. Ladle in cheesecake mix until the jars are about ¾ filled. Cap the jars, taking care not to over tighten. 8. Place in a pre-heated water bath at 168°, allow the water to return to temperature. Cook for 90 minutes. Make sure the jars are covered with water. 9. Remove the jars and cool to room temperature, refrigerate for service.	RU	# of RU	RU Cost	Cost
Sugar, granulated	3-½ cups		OZ-wt	96	0.150	\$ 14.40
Cream, sour	1-¾ cups		OZ-fl	28	0.087	\$ 2.43
Egg, shell large	15 each		OZ-fl	14	0.098	\$ 1.37
Extract, vanilla	3 Tbsn.		EA	15	0.238	\$ 3.58
Strawberry Compote	1 batch		OZ-fl	1.5	0.219	\$ 0.33
			EA	36	0.173	\$ 6.22
					-	\$ -
					-	\$ -
					-	\$ -
<b>TOOLS/EQUIP.:</b> Measuring spoons, measuring cup, stand mixer with whip attachment, baker's spatula, 6 oz. ladle and 36 canning jars.			<b>Total</b> \$ 28.32			
<b>STATION:</b> Prep cook			<b>RU</b> EA			
<b>YIELD:</b> 36 individual cheesecakes			<b># of RU</b> 36			
<b>SHELF LIFE:</b> 5 days			<b>RU Cost</b> \$ 0.79			

**CHEF'S NOTE:** Everyone has a favorite cheesecake recipe, but we've found this to be a good base. You can add pumpkin, coffee flavoring, or liqueurs to create seasonal specialties.

Central Coast Food & Beverage Strawberry Compote			Batch			
INGREDIENTS	MEASURE	PROCEDURE	Recipe Cost			
Strawberry, fresh	3 lbs. drained	1. Cut the strawberries in 2-3 pieces each and place in a medium saucepot. 2. Add the water and bring to a simmer. 3. Blend in the sugar using a heatproof spatula. Return to a simmer and cook 8-10 minutes at a low boil. 4. Remove from the heat and cool to room temperature.	RU	# of RU	RU Cost	Cost
Sugar, granulated	6 ozs. diced		OZ-wt	48	0.122	\$ 5.87
Water, tap	1 cup		OZ-fl	4	0.087	\$ 0.35
			OZ-fl	12	-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
<b>TOOLS/EQUIP.:</b> Ounce scale, measuring cups, paring knife, medium saucepot and wire whisk.			<b>Total</b> \$ 6.22			
<b>STATION:</b> Prep cook			<b>RU</b> EA			
<b>YIELD:</b> Enough for 36 1.3-oz. portions			<b># of RU</b> 36			
<b>SHELF LIFE:</b> 4 days			<b>RU Cost</b> \$ 0.17			

**CHEF'S NOTE:** We used fresh strawberries as they were in season when we built this recipe. You can also use frozen fruit; berry blends work especially well.

# STEP TWO: PREP STAGES

## BRICK OVEN SOY CITRUS CHICKEN

Central Coast Food & Beverage			Recipe Cost			
Roasted Chicken			Batch			
INGREDIENTS	MEASURE	PROCEDURE	RU	# of RU	RU Cost	Cost
Soy Citrus Marinade	12 whole chickens	1. Place ½ Tbsn. salt in the cavity of each chicken. 2. Season the chickens liberally with Montreal and black pepper. Allow to stand 10-25 minutes. 3. Mist the chickens with extra-virgin olive oil to prep for roasting. 4. Place the chickens in 2 roasting pans, evenly spaced for airflow. 5. Place in a 425° convection oven for 30 minutes, or until thoroughly browned. 6. Reduce the heat to 275° and finish the cooking process. 7. Remove the chickens from the oven and place in a hot holding unit for service.	EA	12	6.580	\$ 78.96
Salt, sea	6 Tbsn.		OZ-fl	3	0.135	\$ 0.41
Seasoning, chicken Montreal	½ cup		OZ-fl	4	0.121	\$ 0.49
Pepper, black table	2 Tbsn.		OZ-fl	1	0.133	\$ 0.13
Oil, olive extra-virgin	6 Tbsn.		OZ-fl	3	0.207	\$ 0.62
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
<b>TOOLS/EQUIP.:</b> Measuring spoons, measuring cup, 2 roasting pans, and mister/spray bottle for extra-virgin olive oil. <b>STATION:</b> Line cook <b>YIELD:</b> 24-roasted half chickens <b>SHELF LIFE:</b> 1 shift			<b>Total</b> \$ 80.60 <b>RU</b> EA <b># of RU</b> 24 <b>RU Cost</b> \$ 3.36			

**CHEF'S NOTE:** The approved cook temp for poultry is 165°, however, I usually take roast chickens to 170° or higher, at both the thigh and breast. This will avoid any issues with it appearing under-cooked. Avoid reheating the chickens for a second day. The pulled meat is great for salads and pastas.

Central Coast Food & Beverage			Recipe Cost			
Soy Citrus Marinade			Batch			
INGREDIENTS	MEASURE	PROCEDURE	RU	# of RU	RU Cost	Cost
Juice, orange	½ gal.	1. Place all of the ingredients except the chickens in a large mixing bowl, mix thoroughly with a wire whisk. 2. Wash the chickens, pat dry and place in a Lexan tub with a lid. 3. Pour the marinade over the chickens, cover and place under refrigeration for at least 24 hours. Turn the chickens once during the process to ensure even coverage. 4. Remove the chickens from the marinade and allow to drain thoroughly, refrigerate for final cooking. Discard the marinade.	OZ-fl	64	0.052	\$ 3.31
Juice, lemon	1 cup		OZ-fl	8	0.095	\$ 0.76
Sauce, soy light	1 qt.		OZ-fl	32	0.080	\$ 2.55
Garlic, fresh peeled	5 ozs. split cloves		OZ-wt	5	0.251	\$ 1.25
Pepper, red crushed	2 tsp.		OZ-fl	0.32	0.138	\$ 0.04
Chicken, fresh whole WOGS	12 whole chickens		EA	12	5.920	\$ 71.04
					-	\$ -
				-	\$ -	
				-	\$ -	
				-	\$ -	
				-	\$ -	
<b>TOOLS/EQUIP.:</b> Quart measure, measuring cups, ounce scale, measuring spoons, large mixing bowl, wire whisk, and Lexan tub with lid. <b>STATION:</b> Prep cook <b>YIELD:</b> 12 whole chickens or 24 half chickens <b>SHELF LIFE:</b> 3 days			<b>Total</b> \$ 78.96 <b>RU</b> EA <b># of RU</b> 12 <b>RU Cost</b> \$ 6.58			

**CHEF'S NOTE:** This is a good all-around marinade; it works great with pork loin.

## STEP TWO: PREP STAGES CONTINUED

### BRICK OVEN SOY CITRUS CHICKEN

Central Coast Food & Beverage			Roasted Dutch Potatoes				Recipe Cost						
			Batch										
INGREDIENTS	MEASURE	PROCEDURE	RU	# of RU	RU Cost	Cost							
Potatoes, Dutch yellow	10 lbs.	1. Place the potatoes in a large roasting pan. 2. Add the extra-virgin olive oil, garlic, salt and pepper. Toss well to coat evenly. 3. Place in a 350° convection oven and roast for 10-15 minutes. Stir once with stainless steel service spoon. 4. When the potatoes are just fork tender, remove from the oven and hot hold for service.	OZ-wt	160	0.089	\$ 14.19							
Oil, olive extra-virgin	1 cup		OZ-fl	8	0.207	\$ 1.66							
Garlic, fresh peeled	12 ozs. of whole cloves		OZ-wt	12	0.251	\$ 3.01							
Salt, sea	4 Tbsn.		OZ-fl	2	0.135	\$ 0.27							
Pepper, black table	1 Tbsn.		OZ-fl	0.5	0.133	\$ 0.07							
						-	\$ -						
<b>TOOLS/EQUIP.:</b> Pound scale, ounce scale, cup measure, measuring spoons, roasting pan and stainless steel service spoon.													
<b>STATION:</b> Line cook													
<b>YIELD:</b> About 40 4-oz. portions													
<b>SHELF LIFE:</b> 1 day													
						<b>Total</b>	\$ 19.19						
						<b>RU</b>	EA						
						<b># of RU</b>	40						
						<b>RU Cost</b>	\$ 0.48						

**CHEF'S NOTE:** The residual roasted garlic can also be served along with the potatoes.

## 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: Mason Jar Cheesecake					Menu Item: Brick Oven Soy Citrus Chicken					
Item Description: Made in-house and finished with fresh strawberry compote, whipped cream and seasonal fruit.					Item Description: Marinated for 24 hours, then slow roasted, finished in our brick oven. Served with roasted Dutch potatoes and asparagus.					
Recipe Unit	Quantity	Ingredient	Unit Cost	Extension	Recipe Unit	Quantity	Ingredient	Unit Cost	Extension	
EA	1	Mason Jar Cheesecake	0.79	0.79	EA	1	Roasted Chicken	3.36	3.36	
EA	1	Whipped Cream	0.07	0.07	EA	1	Roasted Dutch Potatoes	0.48	0.48	
OZ-wt	2	Peach, yellow fresh	0.17	0.34	OZ-wt	4	Asparagus, fresh large	0.24	0.97	
			0.00	0.00	OZ-fl	0.2	Oil, olive extra-virgin	0.21	0.04	
			0.00	0.00	OZ-fl	0.1	Salt, sea	0.14	0.01	
			0.00	0.00				0.00	0.00	
			0.00	0.00				0.00	0.00	
			0.00	0.00				0.00	0.00	
			0.00	0.00				0.00	0.00	
			0.00	0.00				0.00	0.00	
EA	1	Plate cost (Q-cost)	0.00	0.00	EA	1	Plate cost (Q-cost)	0.35	0.35	
				<b>Total Cost</b>					<b>Total Cost</b>	5.22
				<b>Menu Price</b>					<b>Menu Price</b>	18.00
				<b>Gross Profit</b>					<b>Gross Profit</b>	12.78
				<b>Food Cost %</b>					<b>Food Cost %</b>	28.99%

**CHEF'S NOTE:** For higher volume service, break down the chickens in advance, take care not to get too far ahead as they'll dry out.