



RecipeMapping™

— 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.

We've said it once, we'll say it again: Success in the restaurant business is often measured in pennies. Toss in an inaccurate purchase order here, a dash of wasted product there, and mix in a bit of inefficient labor use, and you've got a recipe for slim margins. And while your friends and family never minded waiting an extra half-hour or so for your famous meatballs, your restaurant guests will not be so forgiving to 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.

We call it RecipeMapping — a three-step process that allows you to add new items to the menu consistently, methodically and profitably. We hope it helps “map out” your strategy for adding items to your menu, as well as help you put your startup “on the map.”

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 individual 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: Chicken Fajitas and Mango Mustard Glazed Salmon

This month's features were contributed by Michael Thomas, owner-operator of Tres Hombres Long Bar and Grill located in Chico, California and a new location in Petaluma.

Consulting chef, Tom Bruce, founder of Sacramento Food and Beverage Consulting, worked with the Tres Hombres' staff to provide the cost analysis for this month's featured menu items.



Menu items featured in our RecipeMapping department
are available online at www.RestaurantOwner.com/recipe.htm.



Chicken Fajitas

6	oz.	Sliced boneless chicken breast
1 1/2	oz.	Julienne-cut yellow onion
1 1/2	oz.	Julienne-cut red onion
1	oz.	Julienne-cut green bell pepper
1	oz.	Julienne-cut red bell pepper
2	fl. oz.	Chopped tomatoes
2	oz.	Shredded jack cheese
2	fl. oz.	Pico de gallo
2	fl. oz.	Guacamole
2	fl. oz.	Sour cream
4	ea.	6" flour tortillas
8	fl. oz.	Black beans
5	fl. oz.	Spanish rice
As needed		Chopped cilantro

Line Cook Instructions

1. Preheat service skillet over high heat.
2. Place a small amount of oil in a sauté pan and heat over a high flame. When the oil is hot add the sliced chicken and sauté rapidly.
3. Add the red and yellow julienne onions and sauté quickly, add the red and green julienne bell peppers and continue to sauté until peppers soften slightly.
4. Season lightly with salt, pepper and cumin. Toss quickly and add the chopped tomatoes.
5. Remove fajitas to the pre-heated service skillet and serve with black beans and Spanish rice.
6. Garnish with tortillas, shredded jack, pico de gallo, guacamole and sour cream.

Mango Mustard Glazed Salmon



1	each	8-oz. King salmon fillet
1	fl. oz.	Mango mustard glaze
4	fl. oz.	Black bean and mango salsa
4	oz.	Mixed vegetables
As needed		Cooking oil
As needed		Sea salt

Line Cook Instructions

1. Brush or spray salmon with oil and season lightly with sea salt.
2. Place bone side down on the grill for 2-3 minutes, turn 90° to cross mark and continue to cook another 2-3 minutes.
3. Remove from the grill and transfer to an oven-safe container, skin side down.
4. Brush liberally with mango mustard glaze and place in a hot oven for an additional 4-5 minutes or until done. If salmon was cooked with the skin on remove before plating.
If broiling: Skip steps 1 thru 3. Place the fillet skin side down in a medium hot area and cook 5-6 minutes, baste with the mango mustard glaze and cook an additional 3-4 minutes or until done.
5. Serve with black bean and mango salsa and steamed or sautéed veggies. Garnish with fresh chopped cilantro.

RecipeMapping

Step 1 Inventory Master

	Item Description	Case	Purchase Unit (PU)		Recipe Cost Unit (RU)			
			U/M	Current Price	U/M	# RU per PU	Yield %	Cost
**	Chicken breast, B/S, 6-oz.	24 ea.	Case	22.95	OZ-wt	144	100%	0.159
*	Salmon, king, 12-16 lbs.	whole fish	LB	3.79	OZ-wt	16	72%	0.329
**	Cheese, shredded Jack	4/5#	Case	51.51	OZ-wt	320	100%	0.161
**	Sour cream	40#	Carton	41.38	OZ-fl	600	100%	0.069
**	Peppers, red bell	25#	Case	20.15	OZ-wt	400	84%	0.060
***	Peppers, green bell	25#	Case	16.50	OZ-wt	400	84%	0.049
***	Peppers, jalapeno	10#	Case	15.15	OZ-wt	160	94%	0.101
*	Peppers, poblano	20#	Case	28.15	OZ-wt	320	92%	0.096
**	Avocado, Haas	60-ct.	Case	42.90	EA	60	100%	0.715
*	Pineapple	6-ct.	Box	19.50	EA	6	100%	3.250
***	Cilantro	60-bunch	Case	15.90	EA	60	100%	0.265
*	Mango	12-ct.	Box	8.15	EA	12	100%	0.679
**	Garlic, whole peeled cloves	3#	Jar	8.00	OZ-wt	48	100%	0.167
***	Onions, yellow	50#	Bag	13.90	OZ-wt	800	91%	0.019
***	Onions, red	25#	Bag	15.35	OZ-wt	400	91%	0.042
***	Tomatoes, # 2 choppers	25#	Case	7.90	OZ-wt	400	94%	0.021
***	Carrots	25#	Bag	16.40	OZ-wt	400	81%	0.051
*	Corn, frozen kernels	25#	Case	16.40	OZ-wt	400	100%	0.041
*	Squash, zucchini	25#	Box	14.65	OZ-wt	400	94%	0.039
*	Squash, yellow	22#	Box	20.15	OZ-wt	352	96%	0.060
***	Beans, black turtle	50#	Bag	23.15	OZ-wt	800	100%	0.029
**	Rice, long grain white	50#	Bag	12.76	OZ-wt	800	100%	0.016
*	Cauliflower	12-ct.	Case	13.40	OZ-wt	432	60%	0.052
*	Sierra Nevada Pale Ale	15½-gal.	Keg	80.00	OZ-fl	1,984	100%	0.040
*	Mango nectar	12/1-liter	Case	20.40	OZ-fl	407	100%	0.050
*	Honey	5#	Can	9.25	OZ-wt	80	100%	0.116
***	Vinegar, white wine	4/1-gal.	Case	15.00	OZ-fl	640	100%	0.023
***	Oil, olive	6/1-gal.	Case	108.75	OZ-fl	768	100%	0.142
**	Vegetable shortening	50#	Box	24.15	OZ-wt	800	100%	0.030
*	Mustard, Dijon	5#	Can	15.95	OZ-wt	80	100%	0.199
**	Tortillas, flour, 6-inch	24/12-ct.	Case	18.51	EA	288	100%	0.064
***	Lime juice	4/1-liter	Case	15.44	EA	4	100%	3.860
**	Tomato puree	6/#10-cans	Case	14.94	EA	6	100%	2.490

*Mango Mustard Glazed Salmon **Chicken Fajitas ***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 there are in each purchase unit.

Recipe Conversion Notes

Many products are purchased by the weight units 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:

- ✓ 1 cup of chopped bell peppers weighs about 4.5 oz.
- ✓ 1 cup of chopped tomatoes weighs about 5.9 oz.
- ✓ 1 seeded jalapeno weighs about 1 oz.
- ✓ 1 cup of diced onions weighs about 4.5 oz.
- ✓ Garlic cloves can be measured by weight or volume
- ✓ 60 ct. avocados weigh about 6.5 oz. ea. and yield about 78%
- ✓ Black beans will triple in weight after cooking
- ✓ Long grain rice yields about 330% after cooking
- ✓ A 4 1/2-lb. pineapple yields about 2 1/4 lbs.
- ✓ 1 cup of sour cream weighs about 8.5 oz.

Step 2 The Prep Stage - Chicken Fajitas

Tres Hombres - Recipe Card			Recipe Cost			
Black Beans		Batch				
INGREDIENTS	MEASURE	PROCEDURE	RU	# of RU	RU Cost	Cost
Beans, black turtle	½ bag	1. Place beans in a food-grade container and cover with water, let stand overnight. 2. Use a colander to drain the beans and rinse thoroughly. 3. Preheat a rondo or large heavy-bottom saucepot; add olive oil. 4. When olive oil is hot add the onions and bell peppers. Sweat the vegetables until softened and the onions become somewhat transparent. 5. Add the black beans and cover with water about 2 inches above the beans. Bring to a simmer and continue to cook over low heat. 6. Cook beans until slightly soft, about 1 hour, adding water as necessary. 7. Add jalapenos, cilantro and vinegar, continue to simmer for 15 minutes and season to taste with salt, pepper and cumin (optional). 8. Remove to hot line for service or place in shallow pans to cool.	OZ-wt	400	0.029	\$ 11.58
Onions, yellow	4 lbs., finely chopped		OZ-wt	64	0.019	\$ 1.22
Peppers, green bell	4 lbs., finely chopped		OZ-wt	64	0.049	\$ 3.14
Cilantro	2 bunches finely chopped		EA	2	0.265	\$ 0.53
Peppers, jalapeno	1 lb. finely chopped		OZ-wt	16	0.101	\$ 1.61
Vinegar, white wine	1 cup		OZ-fl	8	0.023	\$ 0.19
Oil, olive	1 cup		OZ-fl	8	0.142	\$ 1.13
					-	\$ -
					-	\$ -
					-	\$ -
TOOLS/EQUIP.: Pound scale, measuring cups, colander, rondo or large saucepot, service spoon						
STATION: Prep cook						
YIELD: About 11½ gallons						
SHELF LIFE: 3 days						
			Total		\$ 19.40	
			RU		OZ-fl	
			# of RU		1,480	
			RU Cost		\$ 0.01	

Black Beans
Additional subrecipes used but not shown include Spanish rice, pico de gallo, and vegetable preparation.

Tres Hombres - Recipe Card			Recipe Cost			
Guacamole		Batch				
INGREDIENTS	MEASURE	PROCEDURE	RU	# of RU	RU Cost	Cost
Avocado, Haas	1 case	1. Split avocados, remove pits and scoop from skins using a soup spoon. 2. Place avocados in a large mixing bowl and mash using a potato masher. 3. Add remaining ingredients and blend thoroughly using a large plastic spatula; ensure that all ingredients are thoroughly incorporated. 4. Season with salt and pepper to taste, and refrigerate for service.	EA	60	0.715	\$ 42.90
Cilantro	1 bunch finely chopped		EA	1	0.265	\$ 0.27
Onions, yellow	2 lbs. finely chopped		OZ-wt	32	0.019	\$ 0.61
Peppers, jalapeno	6 ozs. finely chopped		OZ-wt	6	0.101	\$ 0.60
Sour cream	1 cup		OZ-fl	8	0.069	\$ 0.55
Garlic, whole peeled cloves	1 oz. finely chopped		OZ-wt	1	0.167	\$ 0.17
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
					-	\$ -
TOOLS/EQUIP.: Pound scale, ounce scale, measuring cups, French knife, soup spoon, large mixing bowl, potato masher, large plastic spatula						
STATION: Prep cook						
YIELD: About 2¼ to 3 gallons						
SHELF LIFE: 1 day						
			Total		\$ 45.10	
			RU		OZ-fl	
			# of RU		375	
			RU Cost		\$ 0.12	

Guacamole
For a smoother guacamole process the avocados with a potato ricer or a buffalo chopper.

Step 2 The Prep Stage - Mango Mustard Glazed Salmon

Mango Mustard Glaze

A single menu item may have several subrecipes, and a recipe card should be created for each step. Other subrecipes for this dish but not shown include Black Bean and Mango Salsa, prepping the salmon fillets, and pre-portioning the vegetable mix.

Tres Hombres - Recipe Card

Mango Mustard Glaze

Batch

INGREDIENTS	MEASURE	PROCEDURE
Sierra Nevada Pale Ale	½ cup	1. Combine all ingredients in a mixing bowl and blend thoroughly with a wire whisk.
Mango nectar	1 cup	
Honey	8 ozs. (⅔ cup)	2. Store under refrigeration for service.
Mustard, Dijon	16 ozs. (2 cups)	

TOOLS/EQUIP.: Measuring cup, mixing bowl, wire whisk

STATION: Prep cook

YIELD: About 1 quart

SHELF LIFE: 5 days

Recipe Cost

RU	# of RU	RU Cost	Cost
OZ-fl	4	0.040	\$ 0.16
OZ-fl	8	0.050	\$ 0.40
OZ-wt	8	0.116	\$ 0.93
OZ-wt	16	0.199	\$ 3.19
		-	\$ -
		-	\$ -
		-	\$ -
		-	\$ -
		-	\$ -
		-	\$ -
		-	\$ -
		-	\$ -

Total \$ 4.68

RU OZ-fl

of RU 33

RU Cost \$ 0.14

Tropical Salsa

The Tropical Salsa can be combined with cooked black beans to create the Black Bean and Mango Salsa (not shown) used for this dish. Blend 2 1/2 cups of cooked beans per gallon of Tropical Salsa.

Tres Hombres - Recipe Card

Tropical Salsa

Batch

INGREDIENTS	MEASURE	PROCEDURE
Pico de gallo	1 gallon	1. Place pico de gallo in a large mixing bowl.
Mango	6 each	
Pineapple	1 each	2. Peel and pit the mangos, then medium-dice, and add to the pico de gallo.
Peppers, red bell	¾ lb. finely chopped	
		3. Use a serrated knife to top, peel and core the pineapple. Cut into wedges and dice in the same fashion as the mango, add to pico de gallo.
		4. Add bell peppers and mix thoroughly with a plastic spatula, taking care not to damage the fruit.
		5. Place under refrigeration for service.

TOOLS/EQUIP.: Gallon measure, ounce scale, large mixing bowl, plastic spatula, French knife, serrated knife

STATION: Prep cook

YIELD: About 1½ gallons

SHELF LIFE: 2 days

Recipe Cost

RU	# of RU	RU Cost	Cost
OZ-fl	128	0.019	\$ 2.37
EA	6	0.679	\$ 4.08
EA	1	3.250	\$ 3.25
OZ-wt	12	0.060	\$ 0.72
		-	\$ -
		-	\$ -
		-	\$ -
		-	\$ -
		-	\$ -
		-	\$ -
		-	\$ -

Total \$ 10.42

RU OZ-fl

of RU 194

RU Cost \$ 0.05

Step 3 Calculate Menu Item Cost

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. (Please note: A standard practice when costing out menus is to include a cost for certain menu items for unlisted incidentals such as seasonings, bread, condiments, or sauces; oftentimes referred to as plate cost or Q-cost.)

Menu Item: Chicken Fajitas				
Item Description: Served in a sizzling skillet with black beans, Spanish rice, warm tortillas and all the extras.				
Recipe Unit	Quantity	Ingredient	Unit Cost	Extension
OZ-wt	6	Chicken breast, B/S, 6-oz.	0.16	0.96
OZ-wt	1.5	Onions, yellow	0.02	0.03
OZ-wt	1.5	Onions, red	0.04	0.06
OZ-wt	1	Peppers, green bell	0.05	0.05
OZ-wt	1	Peppers, red bell	0.06	0.06
OZ-wt	2	Tomatoes, # 2 choppers	0.02	0.04
OZ-wt	2	Cheese, shredded Jack	0.16	0.32
OZ-fl	2	Pico de gallo	0.02	0.04
OZ-fl	2	Guacamole	0.12	0.24
OZ-fl	2	Sour cream	0.07	0.14
EA	4	Tortillas, flour, 6-inch	0.06	0.26
OZ-fl	8	Black beans	0.01	0.10
OZ-fl	5	Spanish rice	0.01	0.06
EA	0.1	Cilantro	0.27	0.03
			Total Cost	2.38
			Menu Price	15.95
			Gross Profit	
			Food Cost %	14.95%

Menu Item: Mango Mustard Glazed Salmon				
Item Description: Fresh salmon fillet broiled and seared with our house recipe glaze using Sierra Nevada Pale Ale. Served with fresh veggies and black bean salsa.				
Recipe Unit	Quantity	Ingredient	Unit Cost	Extension
OZ-wt	8	Salmon fillets	0.33	2.63
OZ-fl	1	Mango mustard glaze	0.14	0.14
OZ-fl	4	Black bean and mango salsa	0.05	0.19
OZ-wt	4	Veggie mix	0.06	0.22
			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
			Total Cost	3.19
			Menu Price	15.95
			Gross Profit	12.76
			Food Cost %	19.99%