

Recipes:

Recipe costing and yields

A **recipe** is a set of **wr**_____ instructions for producing a specific food or beverage

A **standardised recipe** is one that is adjusted for the kitchen (restaurant) for their operation. So for example, the meals on the menu: each Chef will know the amount required for that dish using a standardised recipe. Standardised recipes are customised by the kitchen for their particular use.

- The **type** and **amount** of each ingredient
- The **preparation** and **cooking** procedures
- The **yield** and **portion size** (yield is adjusted for the kitchen's requirements)

Standardised recipes are useful for the Chef and management because:

- The written form assists with training cooks
- Educating wait staff
- Controlling **fin**_____ matters
 - Standardised recipes help customers receive a consistent **qu**_____ and **qu**_____ from the restaurant
 - Are essential for recipe **cos**_____ and menu **pri**_____

Weight

- Refers to the mass or heaviness of a substance
- Expressed in terms such as **gr**_____ (g), **kilo**_____ (kg), pounds (lbs) and tons

Volume

- Refers to the space occupied by a substance
- Expressed in **milli**_____ (ml), centilitres (cl), **li**_____ (l), tablespoons (tbsp), teaspoons (tsp)
- Count

Commonly used in **purchasing** to indicate the size of an individual item

U.S. system

- Used only in the United States
- Uses pounds for weight and cups for volume

Metric system

- Most common system in the world
- A decimal system in which grams, liters and meters are the basic units of weight, volume and length, respectively

Recipe Conversions

Recipe conversions used when scaling a recipe **up** or **down**. Every recipe is designed to produce a certain amount of something. This is its **Yield**

- The total amount of a product made from a specific recipe; also, the amount of a food item remaining after cleaning and processing
- **Conversion factor (C.F.)** The number used to increase or decrease ingredients and recipe yields

Converting Total Yield

- **Step 1**
Divide the desired (new) yield by the recipe (old) yield to obtain the conversion factor (C.F.)

$$\text{New Yield} \div \text{Old Yield} = \text{Conversion Factor}$$

- **Step 2**
Multiply each of the ingredient quantities by the conversion factor to obtain the new quantity

$$\text{Old Quantity} \times \text{Conversion Factor} = \text{New Quantity}$$

For example:

- You find a recipe for what you want. However, the recipe makes too much or too little. Therefore we convert the **total yield** for what **we want**. So for example, we want to make **2 litres** of Cauliflower Soup and the recipe you have makes **4 litres**. So we only need to make **half**.

Step one: Determine the **conversion factor (C.F.)**:

- $2 \text{ litres} \div 4 \text{ litres} = 0.5$
- **(New Yield \div Old Yield = Conversion Factor)**

It can then be used for any unit millilitres, grams, kilograms etc.

Step two: Apply the conversion factor to **each ingredient** in the soup recipe:

Ingredient:	Old quantity	x	C.F.	=	New quantity
Cauliflower, chopped	2.5kg	x	0.5	=	1.25 kg
Celery stalks	4	x	0.5	=	2
Onions	1	x	0.5	=	(0.5) Half an onion
Chicken Stock	2 litres	x	0.5	=	1 litre
Heavy Cream	1.5 litres	x	0.5	=	750ml (or 0.75 litres)

Now you try to do the conversion:

We would now like to make **MORE** (double) than the original quantity.

- We would like to make **8 litres** of the Cauliflower soup.

Ingredient:	Old quantity	x	C.F.	=	New quantity
Cauliflower, chopped	2.5kg	x		=	
Celery stalks	4	x		=	
Onions	1	x		=	
Chicken Stock	2 litres	x		=	
Heavy Cream	1.5 litres	x		=	

Additional Conversion Problems:

Equipment:

Evaporation:

Recipe errors:

Time:

Calculating Unit Costs and Recipe Costs:

Food service (kitchen) operations purchase (buy) more foods from suppliers in bulk or wholesale packages.

Calculating Unit Cost:

Unit cost = the price paid for one of the specified units such as pound, can, gallon, bunch or carton for example.

As Purchased (A.P.) = the condition or cost of an item as it is purchased or received from the supplier

Convert the as-purchased (A.P.) costs to unit costs or prices:

A.P. \$ cost ÷ Number of units = Cost per unit

A case of Tomato paste cans contains six individual cans. If the case of tomato paste costs \$23.50, then each can costs \$3.92

- In the example 3.3 we see $\$23.50 \text{ A.P. case cost} \div 6 \text{ cans per case} = \$3.92 \text{ cost per can}$

Another example, we buy a 10-carton case of milk for **100rmb**. How much does **each carton** cost?

If your recipe needs only a part of the Tomato paste can (1 cup), then you calculate how much the part costs.

- **\$3.92** cost per can ÷ **13** cups per can = **\$.30** cost per cup (approx)

1. Say we have a **500ml** carton of milk. **Our recipe needs 50ml of milk**

The milk carton costs **10rmb**. What is the cost for our **recipe**?

2. What if our recipe requires **100ml of milk**: What is the cost for our **recipe**?

3. What if the cost of the milk carton rises to **12rmb**: What is the cost for our **recipe**?

Recipe costs:

As a standardised recipe lists all the ingredients and their quantities, it is possible to establish the total cost of the recipe. We then have the **total recipe cost**. We can then break that down to the **number of portions** it yields, and then to the **cost per portion**. This can be used for pricing the food in the restaurant.

Step 1

- Determine the cost for the given quantity of each recipe ingredient with the unit costing procedures described earlier

Step 2

- Add all the ingredient costs together to obtain the total recipe cost

Total recipe cost ÷ Number of portions = \$ Cost per portion

Recipe Costing Form (simplified):

Menu item: Cauliflower Soup			Date: 9.20.2011
Total Yield: 4 litres			
Ingredient	Quantity	A.P. (\$)	Recipe cost
Cauliflower, chopped	2.5kg	\$1 per kg	\$2.50
Celery stalks	4	\$0.25 each	\$1.00
Onions	1	\$0.50 each	\$0.50
Chicken Stock	2 litres	\$.50 per litre	\$1
Heavy Cream	1.5 litres	\$1 per litre	\$1.50
		Total recipe cost:	\$6.50
		Number of Portions:	10
		Cost per Portion:	\$0.65 or 65c

Below and on the next page, please complete the **Recipe Costing Form** for the different yields of **2 litres** and **8 litres** of Cauliflower Soup.

- You will first have to do the **conversion** for the *quantity required* and then calculate the cost

Menu item: Cauliflower Soup			Date: 9.20.2011
Total Yield: 2 litres			
Ingredient	Quantity	A.P. (\$)	Recipe cost
Cauliflower, chopped		\$1 per kg	
Celery stalks		\$0.25 each	
Onions		\$0.50 each	
Chicken Stock		\$.50 per litre	
Heavy Cream		\$1 per litre	
		Total recipe cost:	
		Number of Portions:	5
		Cost per Portion:	

Menu item: Cauliflower Soup			Date: 9.20.2011
Total Yield: 8 litres			
Ingredient	Quantity	A.P. (\$)	Recipe cost
Cauliflower, chopped		\$1 per kg	
Celery stalks		\$0.25 each	
Onions		\$0.50 each	
Chicken Stock		\$.50 per litre	
Heavy Cream		\$1 per litre	
		Total recipe cost:	
		Number of Portions:	20
		Cost per Portion:	

1. Your supplier decides to **increase** the price on some ingredients and **reduce** the price on others. Please work out the new total recipe cost.

Menu item: Cauliflower Soup			Date: 9.27.2011
Total Yield: 4 litres (new price)			
Ingredient	Quantity	A.P. (\$)	Recipe cost
Cauliflower, chopped		\$1.20 per kg	
Celery stalks		\$0.15 each	
Onions		\$0.40 each	
Chicken Stock		\$.60 per litre	
Heavy Cream		\$1.50 per litre	
		Total recipe cost:	
		Number of Portions:	10
		Cost per Portion:	

2. Due to this increase in costs, you **reduce** the portion size to get **more** portions from the same recipe.

Menu item: Cauliflower Soup			Date: 9.27.2011
Total Yield: 4 litres (new price)			
Ingredient	Quantity	A.P. (\$)	Recipe cost
Cauliflower, chopped		\$1.20 per kg	
Celery stalks		\$0.15 each	
Onions		\$0.40 each	
Chicken Stock		\$.60 per litre	
Heavy Cream		\$1.50 per litre	
		Total recipe cost:	
		Number of Portions:	13
		Cost per Portion:	

What other options do we have for dealing with **price rises**? What would you suggest?

Summary of worksheet	Summary of worksheet in Chinese

In your opinion, what is the most important thing to remember?

What are the keywords from this worksheet?

English:	Chinese translation: