PRACTICAL APPLICATION OF PORTION CONTROL FOR USE IN FOOD SERVICE INSTITUTIONS IN THE PHILIPPINES

By

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1957

Submitted to the Faculty of the Graduate School
of the Oklahoma State University
in partial fulfillment of
the requirements for
the degree of
MASTER OF SCIENCE
May, 1964

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ACKNOWLEDGEMENT

The writer wishes to express her deep appreciation to her adviser, Miss Mary E. Leidigh, Associate Professor of Food, Nutrition and Institution Administration and Director of Food Service Administrative Internship, Oklahoma State University, whose kindness, valuable guidance and assistance was a source of inspiration.

Sincere appreciation is also expressed to Dr. Helen F. Barbour, Head of the Food, Nutrition and Institution Administration Department and Assistant Dean Coordinating Home Economics Research, Oklahoma State University, and Professor Edward C. Burris, Vice Dean of the College of Business and Professor of Economics and Management, Oklahoma State University, for serving on the committee.

Appreciation is also expressed to Mr. Art Benson for preparing the illustrations, and Miss Velda Davis for typing the manuscript.

Last, but not least, deep appreciation is acknowledged to the writer's mother, relatives and friends for their support and encouragement.

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CHAPTER I

INTRODUCTION

Portion control is a vital step in production control of food service institutions (22). It is an instrument used in a food cost control program. Without the establishment of size of portions and the prices of portions the production control of any food service institution would not be a success.

Similarity in portions is important in the operation of food establishments. Serving uniform portions aids in guests' satisfaction. Diners have a way of eyeing one another's portions. If one's portion is larger than another, there is apt to be unhappiness. Portion control eliminates this.

Observation of some food service establishments in the Philippines by the author showed that portion control was not being practiced to the fullest extent. The application of portion control in the Philippines appears to be in the infant stage compared to the United States of America. The author wishes to explore ways of controlling portions and to develop a few teaching procedures for employees which may be useful for food service institutions in the Philippines.

CHAPTER II

REVIEW OF LITERATURE

Ways of Controlling Portions

History has shown references to portion control many times before it was considered a management tool. According to the Old Testament (Daniel 1:15)(39), when Daniel and the servants ate "pulse" and drank water for ten days, their faces appeared fairer and fatter than all the children that ate of the king's meat. And Daniel (1:16)(39) also states: "Malasar took their portions, and the wine that they should drink, and he gave them pulse." While the Bible does not give a size for these "portions" evidently they were controlled in some way -- probably a rationed amount for each servant. There are other Biblical references to portions; such as "double portions" for the first born (Deuteronomy 21:17)(40) and the portion for the Prodigal Son (Luke 15:11)(40).

Moving to more recent times, during the first World War (38), food rationing was done in Europe to prevent any person from getting more than his allotted share, and to insure that he got that share regularly.

In the United States of America after Pearl Harbor (24), the need for rationing arose in order to prevent an undue rise in the prices of animal products and to maintain a balanced agricultural production. Meats, butter, cheese, and fats were rationed, as well as certain products which happened to be in short supply, such as sugar and coffee. The point ration system was used where each person received two sets of points: red and blue. The red points were used to buy fats, cheese, meat and meat products and the blue points gave the right to buy canned goods. Although this system did not determine the actual size of individual rations, it helped to control the consumption of the most important food groups. In other countries similar types of rationing were effected.

At the beginning of school feeding in Europe (4), portion control was practiced as each child was given a bowl of soup. In the United States of America (4), the Milk Act of 1934 made it possible for all school children to receive one-third of a pint of milk daily, indicating a measured portion at the price of a penny.

The School Lunch Act in 1946 introduced the "A" lunch which provided one-third of the daily nutritional requirements of students (37). The "A" lunch pattern requires measured amounts of foods, such as the protein foods. Examples of these are two ounces of lean meat, poultry or fish; or two ounces of cheese; or one egg; or one-half cup of cooked dry beans or dry peas or four

tablespoons of peanut butter.

As times have changed, the concept of portion control as a management tool has evolved. Now portion control means giving a definite quantity of good food for a definite price so that you can be sure of making a definite percentage of profit (45). When you change a dollar bill in a bank, you expect to get 2 halves, 4 quarters, 10 dimes or 20 nickles. You surely would not expect to get an extra spoonful of coins. There are exactly so many coins, no more and no less. This holds true for food. If a can of peaches contains 25 servings, then one should get exactly 25 servings from the can.

According to Johnson (19), portion control means a plan, and the execution of that plan, stating a definite size for every portion of food served, and making sure that each portion which goes on the customer's plate actually is the predetermined size.

This portion size may be stated in ounces, as in the case of most servings of fish and meat; in ladles, spoons and scoops which contain a standard number of ounces; in cuts per pan, as in pies, cakes and other desserts; or be controlled by the capacity of the container, as with beverages, juices, catsup, mayonnaise, or items which are served in paper portion cups.

Kotschevar (23) says that portion control starts with the planning of the menu. At that time, the portion size should be established and purchase specifications and

preparation methods from that time on should be designed to arrive at the desired portion size at service. Portion planning that contemplates serving two frankfurters, 10 to the pound, will not be achieved if frankfurters 6 to the pound are received, accepted, prepared, and served.

The use of standardized recipes is an important factor in portion control (29). Every cook should be taught to use recipes that have been tested and retested until proportion, seasoning, and manipulation give the desired quality. A standardized recipe, however, can be depended upon to give the stated number of portions only if the servings are of a uniform size. According to West and Wood (47), the number of portions to be obtained from a given recipe or finished product should be determined by the director of the food service, and the persons who serve the food should keep within this limit.

One means of establishing standardized service is to know size and yield of all pans, measures, ladles, scoops, dishers (Figure 1), and other small equipment used in the serving of foods. For example, if one gallon of broth is to yield 16 servings, there must be accurate measurements both of the original quantity of broth and the amount taken in the soup ladle. Ladles are used also in serving stews, creamed dishes, sauces, gravies and other similar products. The number of ounces is usually listed on the handle of the ladle. The following are the various number of ounces and capacity of ladles (19):

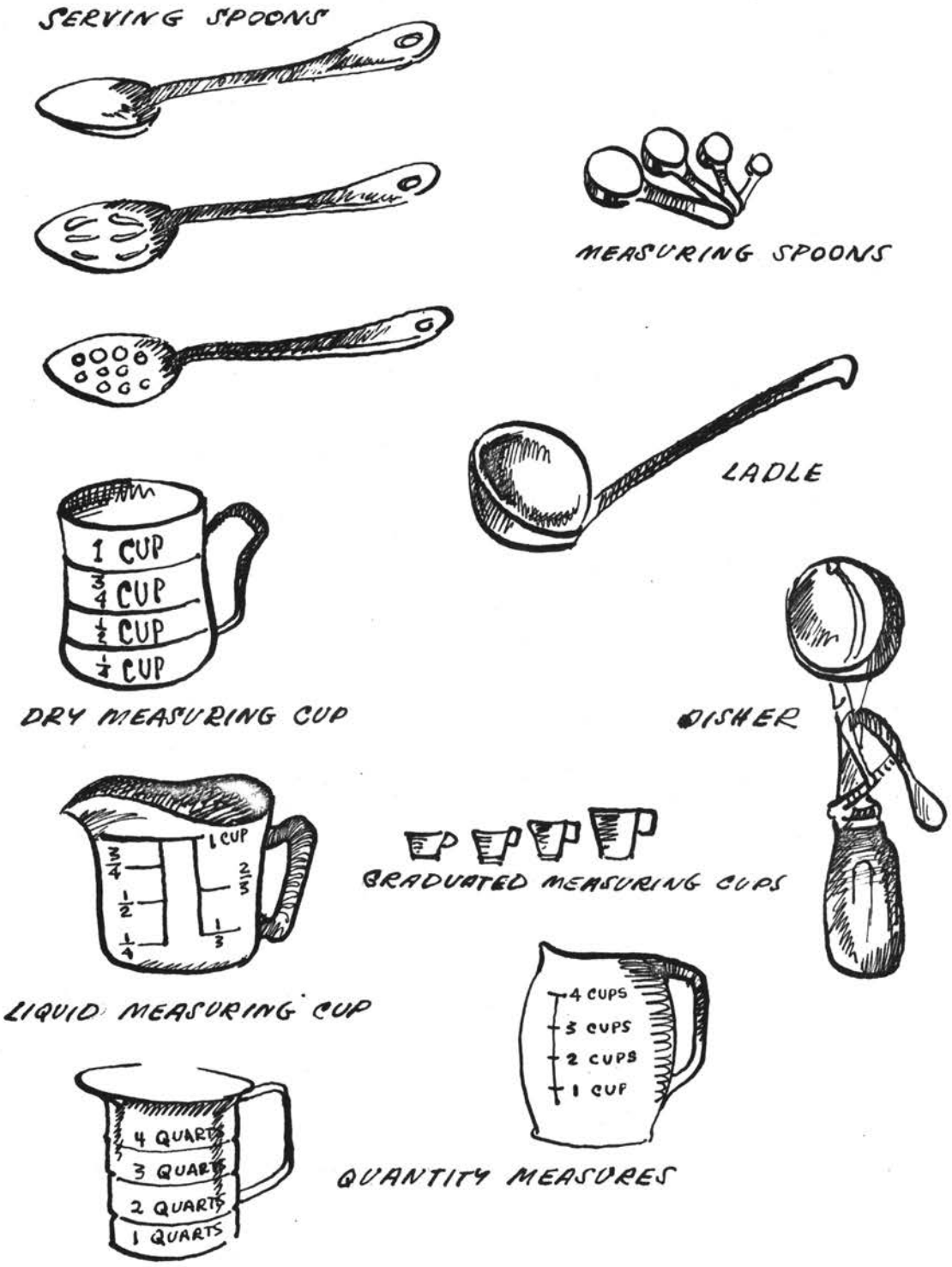

Figure 1. Tools for Portion Control

Number	Capacity
2 oz.	1/4 cup
4 oz.	1/2 cup
6 oz.	3/4 cup
8 oz.	1 cup

Serving spoons of which there are three types -- solid, slotted and perforated -- are used depending on the type of foods to be served. For example, a slotted spoon would be better for serving vegetables, such as string beans while a solid spoon would be advisable for serving vegetable omelet. Since serving spoons are not identified by number, it is necessary to measure or weigh the quantity of food from sizes of spoons to obtain the desired serving size (7) (19).

Scoops are used not only in serving potatoes, vegetables, salads, and desserts, but also for portioning such items as drop cookies, muffins, meat patties, salads, and sandwich fillings. Scoops should not be used when they tend to pack the product or to break it and make it look unappetizing. For example, rice may be kept in a fluffy condition if served with a spoon, rather than packed into a scoop. Scoops are numbered but the ounces are not shown. The level measures of each scoop in cups or tablespoons are as follows (19):

Scoop Numbers	Level Measures
6	2/3 cup
8	1/2 cup

Scoop Numbers	Level Measures
10	2/5 cup
12	1/3 cup
16	1/4 cup
20	3 1/5 tbsp.
24	2 2/3 tbsp.
30	2 1/5 tbsp.
40	1 3/4 tbsp.

When purchasing these pieces of serving equipment, it is wise to purchase those that are keyed by color or number to a given capacity. It is always important that the server use a serving tool holding the correct amount, once the desired portion size is decided on. For example, a server should use a 3 ounce spoon for serving 3 ounces of casserole dishes rather than dipping twice with a 2 ounce spoon.

The scale (Figure 2) is a valuable tool for portion control (19) (34). A line of portion control scales is equipped with a movable dial which can be set to zero after an empty dish or container has been put on it. This marks the weight of a portion right on the dial. Such scales should be placed in each production unit of the kitchen. One should be placed at the butcher's unit to enable constant checking of the meat portions being cut. Another one should be placed in a convenient spot for checking the weights of cold cuts, cheeses and sandwich spreads. One should also be placed at the salad

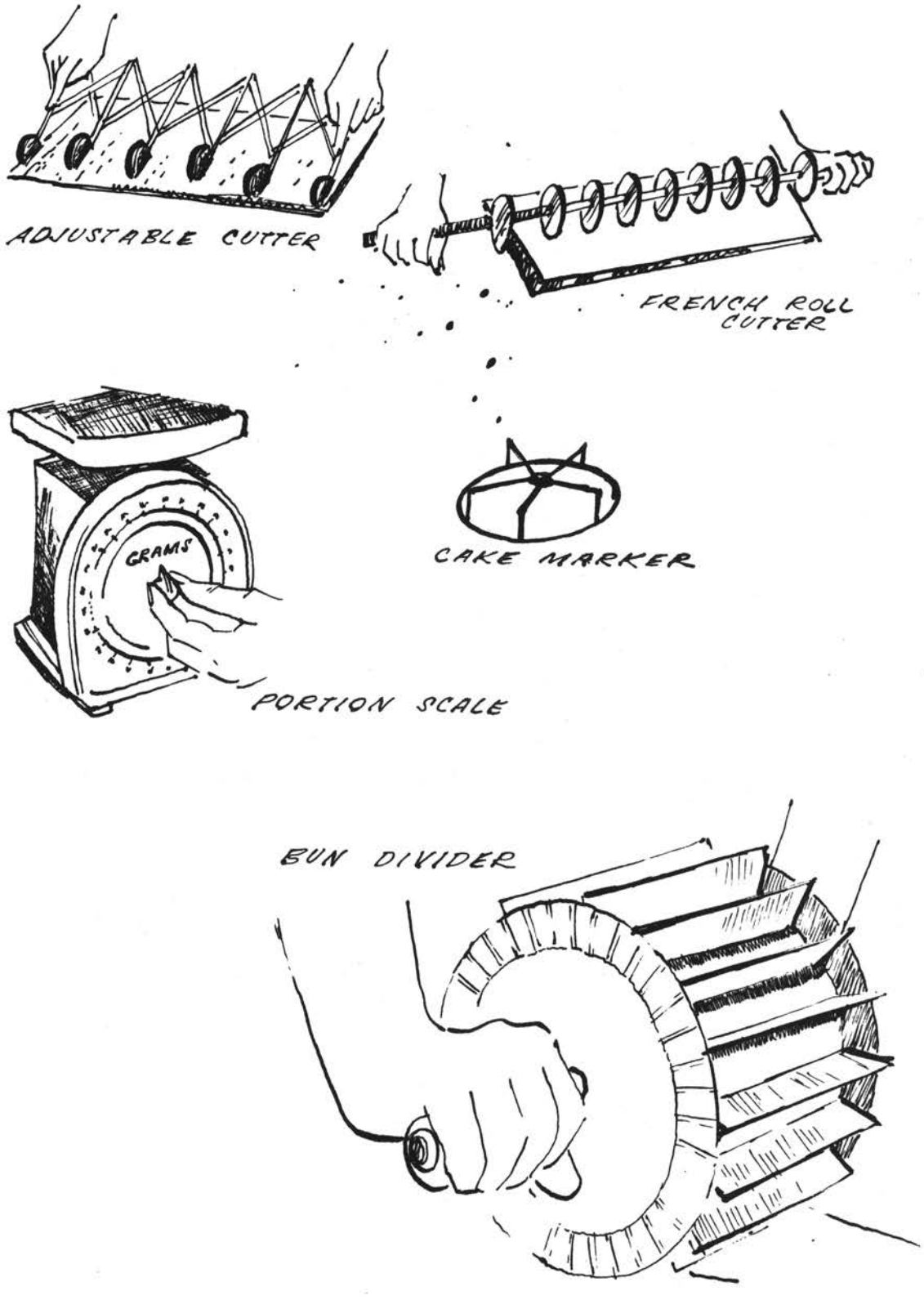

Figure 2. Tools for Portion Control

preparation unit to enable accurate checking of uniform portion servings of salads.

Other aids for portion control are devices used for cutting food in uniform sizes such as the various slicers - meat, cheese, egg, butter, and tomato. Other devices are patty machines that exactly portion ground meats and fish cakes and breads in uniform sections, and special devices such as lemon sectioners to aid in the quick portioning of fruit (5). A baker's French roll cutter (Figure 2) may be used successfully in cutting brownies (7). This cutter consists of round discs about five inches in diameter which are attached to a rod. The discs are adjustable so that any size may be cut, making it possible to quickly and accurately cut a baked product to the specified size. This saves time, as well as assuring each customer the same measure.

A similar device, an adjustable cutter (Figure 2) with small wheels about two and one-half inches in diameter can be used for marking soft cakes or cutting gelatin. Another device, a bun divider (28) (Figure 2) can be used for cutting Danish pastries, donuts and similar bakery products uniformly. Such devices save time, provide better customer satisfaction, and help assure uniform portion control. To keep employees informed of portion sizes, giant charts were hung in the kitchen of a New Orleans, Louisiana, restaurant (35). This plan proved much more effective than the former procedure of printing the

portions in the chef's notebook, since information was available at a glance. The listing and posting of standardized portions in the different production units, and pictures of dishes as served may be helpful in giving employees an idea of portion size.

The individual dishes in which the food is served are also tools for portion control. It is important to use the correct size of dishes, and the amount of food to be served should be determined in advance of the purchase of the dish. Correctly sized soup cups and bowls, vegetable and dessert dishes, casserole and pot pie dishes are important portion control aids, as well as good merchandising tools.

The value of paper cups for portion control is enormously important (17). These eliminate waste and guesswork, provide exactly identical servings at all times, and allow for pre-dishing of many foods. Pre-dishing speeds up operations during rush hours, and makes it possible for management to have an immediate and accurate estimate of how many portions are obtained from the amounts purchased or prepared. Now, there are paper portion cups available for serving any quantity of foods, hot or cold.

Food dispensers also aid in portion control. A butter dispenser eliminates the handling of butter (31). The standard unit dispenses 90 pats to the pound but may be adjusted to dispense any desired number of pats. Cream dispensers can be obtained that are adjustable to dispense

one-half or one ounce of cream as desired (5). Milk and fruit juice dispensers are also available issuing a predetermined portion, as six or eight ounces. Even special refrigerated facilities have been devised so that controlled portions may be stored in the same way and same area each time they are prepared (15) (25).

Today, there is a trend for food manufacturers in the United States of America to market more of their products in prepackaged and prefabricated units. Increasing labor costs and automation make these practices more and more lucrative to industry (11) (26) (41). Preportioned seasonings, condiments, salad dressings, jams, and jellies are being used in food service institutions. Dry cereals can be purchased in individual serving packages with several varieties per case. Instant tea, coffee, cocoa, postum, and bouillon can be obtained in individual packets that ensure a standard product upon reconstitution. The majority of biscuit and cracker companies now offer these products in individual packets.

Dairies offer brick ice cream in individually wrapped pieces. Ice cream also can be purchased in paper cups, cartons, or disposable plastic containers in varying amounts from one-half pint to one gallon. Different kinds of milk are either bottled or packed in cartons of various sizes ranging from one-half pint to one gallon. Nonfat dried milk solids can be obtained in pound packages, as well as by bulk in a drum or 50 pound bag.

Cake mixes are available in small packages for six cakes, as well as in large quantities thus making closer control possible. Pastries, such as rolls and pies, can be purchased frozen in various size packages. Also, frozen vegetables are available in packages of various weights ranging from one-half pound to five pounds to help control waste of over production.

In the meat industry, extensive choices of both expensive and inexpensive cuts of meat are available in different portion sizes (30). Different cuts of chicken can be purchased in packages of various sizes and counts. Frozen fish, either breaded or unbreaded, and precooked frozen fish are available in packages of various sizes and counts.

O'Brien (33) says that the great saving in pre-cut or portion controlled meat is realized primarily in labor costs. He figured that portion controlled tenderloins cost almost double per pound the price of the uncut whole tenderloins. But, by the time the meat is cut properly, considering the waste in fat, trimmings, and labor cost, it will probably cost more than the portion controlled meat.

Portion controlled meat cuts require less storage space and eliminate waste and employment of skilled labor for cutting (21). Costs are easily figured, as the weights and prices of portions are predetermined. Individually packed items are easy to handle, sanitary and may eliminate food waste. According to Hartman (16), in the long

run these portion controlled items are no greater expense considering the time saved in portioning and uniformity of the product obtained.

Today, some canning manufacturers are specifying the number of portions to be obtained from a can. It is now possible to know how many servings of sliced or whole fruits as well as vegetables are in the various sizes of cans. Number of cans to be purchased and costs are easily figured (18).

Training Employees

Chruden and Sherman (6) state that some type of training is carried on in practically every company. According to them, training in business and industry may be used as a means for imparting information, teaching skills, and influencing opinions and attitudes of the employees. Proctor and Thornton (32, p. 43) say:

> The chief function of industrial training is to effect change- change in people who subsequently bring about improvement in their own performance so that the organization's capability of attaining its goals is enhanced ... The goal in industrial training is to bring each trainee up to or beyond an accepted standard of performance with a minimum expenditure of time and money.

West and Wood (47) estimate the cost of inducting a new employee from fifty to one hundred fifty dollars. George and Heckler (12) advocate that a training program offered to benefit all persons concerned will decrease labor turnover. They say that money spent to increase

efficiency, build desirable relationships, and arouse the interest of workers will often decrease the cost of labor and food.

There are different methods for training employees (6). The most commonly used are on-the-job training and classroom training. On-the-job training involves the dietitian or supervisor instructing the employee in the use of tools, methods, and procedures of the job to which he is assigned. Some large institutions employ a dietitian whose time is devoted exclusively to the training of employees. However, the demands placed upon the dietitian in most institutions make continuous supervision impossible (1).

Classroom training, according to Chruden and Sherman (6), provides for handling the maximum number of trainees with a minimum number of instructors. Group instruction as a method of training not only saves time when several employees are to be instructed in the same procedures, but it affords opportunity for discussion of problems and leads to better cooperation among the workers (1). Proctor and Thornton (32) say that the best group instruction methods are those which encourage the trainee to participate. They further say that discussion techniques are probably the most widely used of all participative methods, but, in general, discussion groups must be kept relatively small: 10 to 12 participants.

According to Jucius (20), the best length of time for

classroom work must be determined. Lectures ordinarily should not be longer than fifty to sixty minutes: discussion periods can be longer, provided intermissions of about ten minutes are provided after forty-five minutes. Cushman (8) says that the span of attention for the average group for oral informational presentation is approximately 20 minutes.

Jucius (20) states that the use of graphical, illustrative, and sample materials in training employees may increase interest of students up to 40 per cent, increase their range of immediate understanding up to 25 per cent, and increase their retention of information up to 35 per cent. To illustrate the importance of visual aids to all training situations, Von Bleicken (42), set up the following table showing the five senses and the relative value of each when applied to the learning process:

Sight ..... 75 per cent

Hearing ..... 13 per cent

Smell, Taste,

Touch ..... 12 per cent.

In order for a training program to be effective, the teacher must be thoroughly prepared. According to Proctor and Thornton (32), time and effort are required to draw up a program syllabus, teaching outlines and instructional aids. The best kind of teaching is based on good planning and presentation (43).

CHAPTER III

PRACTICAL APPLICATION OF PORTION CONTROL

It is not enough for the dietitian to know the factors that aid in portion control. Although the food service establishment is equipped with portion control devices and tools, there is no guarantee that uniform servings of food items will be produced. Since the employees are the ones responsible for preparing, portioning, and serving foods, training them in the application of portion control is needed to obtain maximum results. George and Heckler (12) state that successful training enables an employee to do a job more quickly, with less waste of energy, and more satisfactorily.

The employee must visualize each portion as it is to be served. Each employee must know what type and size of utensil should be used for each food item. Every cook should be taught to use standardized recipes. The use of scales should be stressed (34).

Training employees individually will require a lot of time on the part of the dietitian or manager. The author's plan is for the dietitian to hold regular 15 to 20 minute meetings with the employees to teach and discuss portion control. Demonstrations may be necessary to accomplish

accurate control of portions and to emphasize the importance of portion control to the employees.

In order to have some conception of time for a lesson and the amount of material that could be covered, the author met with a group of dietetic interns and presented the first lesson. This not only gave the author the idea of the length of time, but one of the students questioned an aspect of the lesson that was not clear. There has been no opportunity to test these lessons on Filipino employees, but throughout the author has kept in mind flexibility and the participation of employees as much as possible.

A teacher must have a plan that is flexible and easy to follow. It should contain the key phrases and notes which will serve as a guide for the instructor. The following plans prepared by the author will aid in teaching some practical applications of portion control to employees in food service institutions. The author expects these plans to be easily adapted and that the skills of planning lessons will be utilized in developing training sessions as the need arises in this and other areas of food service and production.

Lesson One

Topic: The Importance of Portion Control.

Aim: To impart to the employees the importance of portion control.

Dietitian's Preparation: Prepare 3 paper circles representing cakes. Cut cake number 1 into 4 slices; cakes no. 2 and 3 into 5 and 6 slices, respectively.

Dietitian	Employees
What is portion control? Portion control means giving a definite quantity of good food for a definite price.	
In order to make a profit, our cakes must sell for a dollar. What is our selling price for each slice or serving portion of cake, Sonia?	Twenty cents.
This shows very well that in cake no. 1 with 4 portions we are going to lose 20 cents.	
What do you think of the way cake no. 2 is cut, Eddie?	I think the cake was cut the way it should be cut. Since there are five slices and each slice sells

Dietitian	Employees
	at 20 cents, we will be getting a dollar which is our selling price for the whole cake.
What about cake no. 3, Alma?	
	Well, cake no. 3 has 6 slices and so we will get one dollar and twenty cents out of the whole cake which would be a nice profit.
But do you think the customers will like this size portion, Romeo?	No.
Supposing you are the customer and one day you get a slice of cake cut like cake no. 2 and another time you are served a slice of cake cut like no. 3. What would you think when you get the latter piece, Jose?	I would think I am being cheated because a serving from cake no. 3 is so small and I have to pay the same price for it as the bigger portion from cake no. 2. If I had a choice, I would pick the bigger portion.

Dietitian

Now, you see the importance of portion control. It means giving a definite quantity of good food for a definite price. In the case of our cake portioning, one serving is 1/5 of the cake, not more or less. It does not necessarily mean a smaller portion for the customer because he would be cheated for he would not get his money's worth. If we serve bigger portions as in cake no. 1, we would lose money. Let us try our best to serve the right portion always.

Are there any questions?

Employees

Lesson Two

Topic: Portion Scale.

Aim: To teach employees the use of portion scale.

Dietitian's Preparation: Have a portion scale, dessert dish, knife, fork, and a cake cut in fifths for demonstration.

Dietitian	Employees
During our first lesson, we talked about the importance of portion control. Do you remember what portion control is, Nellie?	Portion control means giving a definite quantity of good food for a definite price.
Very Good. Last time, we had 3 cakes cut out of paper. Could you tell us how the cakes were sliced, Nena?	Cake no. 1 was sliced into 4 parts; cake no. 2 had 5 slices and cake no. 3 had 6 slices.
How much do our whole cakes sell for, Alex?	Our cakes sell for a dollar.
What is our selling price for each serving, Mely?	Each serving portion sells for twenty cents.
What cake was cut according to our cake portioning, Juanita?	Cake no. 2 with 5 slices was cut according to our cake portioning. At twenty

Dietitian	Employees
	cents a slice, we will be getting a dollar or the selling price of the whole cake.
Does portion control mean serving a smaller portion as from cake no. 3 or a bigger portion from cake no. 1, Romeo?	No. Portion control does not necessarily mean a smaller portion for the customer. On the other hand, if bigger portions are served as in cake no. 1, we would lose money.
Now that you know the importance of portion control, I am going to show you how to use this portion scale. This is an important tool for portion control if you know how to use it accurately. This scale has a capacity for weighing as much as 1000 grams.	
How many grams are there in a kilo, Sonia?	There are 1000 grams in a kilo.
Yes, since there are 1000 grams in a kilo, this scale may	

Dietitian	Employees
weigh as much as a kilo.	
As you see on the face of the scale, there are numbers from 0 to 1000 grams. Each small line indicates 2 grams.	
Before weighing anything, you check to see if the scale is clean and dry.	It is clean and dry.
Let me show you how to weigh this slice of cake. Put the empty dessert dish on the scale and turn dial to "0" because you do not need to know the weight of the dish. Now, put the slice of cake on the dish and notice that the dial points to 20 grams, indicating the weight of the cake.	
Is this the correct size for the cake slices, Alma?	Yes.
When you get the reading on the scale, be sure you are directly in front of the center of the scale, because your location will affect your reading. To show this, Juanita, Nellie,	

Dietitian	Employees
and Jose, come up and stand before the scale. Nellie stand directly in front of the scale. Juanita, stand on the left side, and Jose, stand on the right side of the scale. Read the weight silently. Now, Juanita, what is your reading?	22.
What is yours, Nellie?	20.
And, Jose, what is your reading?	17.
Now quickly I would like each of you to practice reading the weight of a slice of cake.	(They practice.)
Now everyone has had an opportunity to weigh. Do you have any questions?	

Lesson Three

Topic: Cutting cakes using cake marker.

Aim: To teach employees how to cut cakes into uniform portions with the aid of a cake marker.

Dietitian's Preparation: Have ready 2 whole cakes, 2 cake markers, 2 portion scales, dessert dishes, knives, forks, wax paper, paper towels, blackboard and chalk.

Dietitian	Employees
Last time we learned how to use the portion scale. Let us review the steps in weighing. Eddie, what is the first step?	First, check if the scale is clean and dry.
What is the next step, Alma?	Put empty dish on the scale and set pointer to "0".
Then what do you do next, Jose?	Put cake on dish and read accurately the number which indicates the exact weight of the cake.
Today, I want you to weigh these whole cakes. Who would like to volunteer to weigh cake no. 1? Eddie. What about cake no. 2? Juanita. Who would like	

Dietitian	Employees
to volunteer to record the weights on the board? Romeo.	Eddie and Juanita weigh cakes with the supervision of dietitian. Cake no. 1 weighs 100 grams and cake no. 2 weighs 110 grams.
If you look at the board, you will notice that cake no. 2 weighs 10 grams more than cake no. 1.	
What could be a reason for the difference in weights, Sonia?	I think cake no. 2 had more batter in the pan than cake no. 1.
Can you think of another reason, Alex?	There could be an error in our weighing. Maybe we did not read the scale the way it should be read.
That is true. Now we know from past lessons that the customer desires uniform portions. So, let me show you how to cut cake no. 1 into uniform portions with the aid of the cake marker. Put the marker on top of the	

Dietitian	Employees
cake and using the marker as a guide, make an outline of the serving portion with a knife. Now, I will remove marker and cut the cake along the marks.	
Who would like to cut cake no. 2, using the marker? Nellie?	Nellie cuts cake.
The rest of you will weigh each slice from cake no. 1 and cake no. 2. We will see if the cake slices have the same weights. (Suggested weights and following procedure will be adapted to these results.)	Employees weigh each slice and the following weights are recorded.

Cake no. 1	Cake no. 2
20 grams	21 grams
19	23
21	21
20	23
20	22
110	110

Each slice from cake no. 1 should weigh 20 grams. In cake no. 1, we have 3 slices weighing 20 grams each. One slice weighs 19 grams which is less by one gram and another slice weighs 21 grams which is a gram heavier

Dietitian	Employees
than the right weight.	
In cake no. 2 each slice should weigh 22 grams. We have a slice weighing 22 grams, 2 slices each weighing 23 grams and 2 slices each weighing 21 grams.	
Why do you think we have slight variations in the weights of each slice of cake, Nena?	Each slice was weighed by different persons and maybe some of us did not take the reading accurately.
That could be one reason. Can you observe 1 gram variation in these slices?	
(Discussion to indicate that this amount of variation is not critical.)	
Are there questions?	
Before we adjourn, let us sample the cakes and have our monthly birthday party.	

Lesson Four

Topic: Scoops.

Aim: To teach employees the various sizes and uses of scoops to emphasize portion control.

Dietitian's Preparation: Have ready various sizes of scoops and charts on blackboard.

Dietitian	Employees
Last time we weighed 2 cakes. Do you remember the difference in the weights of the whole cakes, Alma?	Cake no. 2 weighed 10 grams more than cake no. 1.
How did you account for the difference in weights, Alex?	Cake no. 2 probably had more batter than cake no. 1.
Can you think of another reason, Mely?	Maybe there were slight variations in our weighing since each cake was weighed by different persons.
We also cut the cakes with the aid of a marker and we weighed each slice and came out with slight differences in weights. What were possible reasons for the differences in the weights of each slice of	Each slice was weighed by different persons and maybe some of us did not take the reading accurately. The amount of crumbs along the sides of

Dietitian	Employees
cake, Nena?	each slice varied and this could be another reason for the differences.
Now you know that the art of cutting uniform serving portions of cakes depends upon your skill and accuracy in using the portion control tools such as the scale and cake marker.	
Those of you who are responsible for cutting cakes will eventually become experts in cutting uniform slices when you get accustomed to the practice of using the cake marker.	
Our lesson for today is to become acquainted with the different sizes of scoops and their various uses in portion control.	
When do you use a scoop, Mely?	I use a scoop in serving vegetables on the counter. (Have her pick out hers.)
Which one?	
Yes, Nellie?	I use a scoop in serving salads.

Dietitian	Employees
Pick out yours.	(She does.)
Juanita?	I use a scoop in serving desserts.
This is true. Pick out your scoop.	(She does.)
Are these scoops all of the same size, Jose?	No.
Scoops are not used only in serving foods, but they are also an important tool for portioning items of different sizes such as drop cookies, muffins, meat patties, and sandwich fillings.	
On the table, you can see the various sizes of scoops. The scoops are numbered (show location of number in bowl of scoop) and each number indicates a certain measure. Mely, did you select your scoop by a number?	No. By the color.
Yes, the colors are an easy way to identify the scoop to use.	

Dietitian

On the blackboard are the various scoop numbers with the corresponding level measures and colors.

Scoop Nos.	Level Measures	Colors
6	2/3 cup	(Will be
8	1/2 cup	listed as
10	2/5 cup	they are)
12	1/3 cup	
16	1/4 cup	
20	3 1/5 tbsp.	
24	2 2/3 tbsp.	
30	2 1/5 tbsp.	
40	1 3/4 tbsp.	

We will continue our study of scoops next time with more information and we will have time for any questions you may have.

Employees

(All will examine scoops and compare colors and numbers.)

Lesson Five

Topic and Aim: Continuation of Lesson No. IV.

Dietitian's Preparation: 1 1/2 cups of sandwich filling, 3 slices of bread, a set of graduated measuring cups, scoops numbered 6, 8, and 10, 2 knives, and chart on blackboard showing scoop numbers with corresponding measures.

Dietitian	Employees
Today, we will continue our lesson on scoops.	
What scoops do you use in making sandwiches, Nellie?	I use the scoop with the red handle.
Do you know what number and size portion?	I looked at it last time, but I do not remember it.
(Have her read scoop number.)	I see no. 8 in the bowl of scoop.
If you look at the blackboard, you will see that scoop no. 8 measures 1/2 cup. So what is our serving portion for sandwich filling, Nellie?	Half a cup.
Yes. Our serving portion is half a cup. You are right in using the scoop with the red handle or scoop no. 8.	

Dietitian	Employees
Let me show you how to use a scoop. I will use scoop no. 8. Hold scoop by the handle, then dip it in the sandwich filling and level measure with a knife.	
I will repeat the same process but this time, I will use scoop no. 6 or the scoop with the brown handle and later, scoop no. 10 or the scoop with the white handle. Nellie will help me.	In the meantime, Nellie will measure the filling into a cup after dietitian dips the scoop.
The sandwich fillings from scoop no. 8 measures half a cup, the one from scoop no. 6 measures 2/3 cup and the fillings from scoop no. 10 measures 2/5 cup.	
Do the measures correspond with the scoop numbers, Alma?	Yes.
I would like 3 of you to spread the sandwich filling on each of these 3 slices of bread. Mely, will you spread bread 1 with filling from scoop no. 6 (place scoop by each); Nena, spread bread 2 from scoop	

Dietitian	Employees
no. 8; and Juanita, spread bread 3 from scoop no. 10?	
Now, you can actually see the fillings from scoops numbered 6, 8, and 10 as spread on each slice of bread.	
Which bread has the right measure of filling, Romeo?	Bread 2, with filling from scoop no. 8 which measures half a cup, has the right amount of filling.
How would you compare the filling on bread 2 with that of bread 1, Eddie?	Bread 1 has more filling than bread 2.
What about the fillings on bread 2 and bread 3, Sonia?	Bread 3 has less filling than bread 2.
Now you know that if you use scoop no. 6 or the scoop with the brown handle, you will be serving more than if you use scoop no. 8 or the scoop with the red handle.	
That might not seem to be a big difference if you just think of a sandwich serving,	

Dietitian	Employees
but if you spread 50 sandwiches, then you will have used 8 more cups of sandwich filling. This is giving that much to the customers for free.	
On the other hand, Sonia, if you use scoop no. 10 or the scoop with the white handle, your servings will be <u>what</u> than our serving portions? We will be gaining profit, but our customers will not be getting what they are paying for.	Less.
The chart on the board gives us another information. These figures, no. 6 and no. 8 also tell us that in every quart, there are 6 - 2/3 cup portions and 8 - 1/2 cup portions and so on.	
Do you remember what portion control is, Alex?	Portion control means giving a definite quantity of good food for a definite price.
Very good. Now you	

Dietitian	Employees
realize the importance of using the right scoop in relation to portion control.	
Are there questions?	

CHAPTER IV

SUMMARY AND CONCLUSION

Portion control is an instrument used in a food cost control program. Since similarity of portions is important in the operation of food establishments, serving uniform portions aids in guests' satisfaction as well as controlling costs.

The important factors and valuable tools that promote portion control have been discussed and illustrated. As employees play an important role in the preparation, portioning and serving of foods, the author proposes a training program for employees. Training in the proper use of portioning equipment can be done either individually or as a group. But since more can be accomplished by group instruction, the author proposes a regular 15 to 20 minute meeting of the dietitian and employees for discussing portion control.

Some training procedures have been developed to serve as guides for teaching employees the importance of portion control and uses of portion control equipment. These sessions will include demonstrations and group participation. It is important that the dietitian follow up on the performance of the employees.

The author feels that after the series of lessons, the employees will be better acquainted with the various sizes and uses of tools for portion control. They should have a better understanding of the importance of portion control and utilization of portion control equipment. This should motivate interest in serving more uniform portions, and pride in the operation.

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