



The Employment of Standardized Recipes, an Essential Prerequisite for Consistent Quality of the Culinary Product

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Received: August 25, 2023

Accepted: December 14, 2023

Published: March 16, 2024

Keywords:

Standardized recipes;
Food quality;
Food consistency;
Substantial gastronomic product



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Abstract: *A standardized recipe can be defined as guidance for the constant preparation of an assemblage of food or drink at an expected quality. The use of standardized recipes is justified for the reasons of inventory control, creativity, simplicity and consistency. The standard recipe or technical sheet includes certain irreplaceable elements: recipe name, yield, portion size, weight/amount, measure/unit, ingredients, instructions, and notes. The technical sheet is one of the most powerful documents in a food service operation. The benefits of the standardized recipes are vast. It is the basis for the planning of the kitchen and its inventory. It enables the chef to predict and control the quality, quantity and portion cost of the final product by stating all the ingredients and preparation details. There is an increase in consumer satisfaction due to the constant delivery of high-quality and consistent food. There is better control over the yield and the number of the produced portions. Standard recipes are important for faster training of food service employees because of the supply of relevant information and set standards ensuring logical flow of work and increasing labor efficiency. And finally, the risk of foodborne illnesses is limited if the instructions on technical sheets are accurately followed.*

1. INTRODUCTION

A recipe is a set of written instructions for producing a specific food or beverage, also known as a formula. A standardized recipe is a recipe producing a known quality and quantity of food for a specific operation (Labensky & Hause, 2011, p. 40). In recent decades, the demand for high-quality food has steadily increased, as has interest in the food quality issue, both in response to market pressure (such as requests from increasingly demanding and knowledgeable consumers) and in response to other factors, such as health and environmental concerns. The consumer of the twenty-first century is a demanding one, concerned with the quality and health benefits of the products he or she purchases. Food quality is a central issue in today's food economics, and the last few decades demonstrated that consumers' concerns for healthier lifestyles and environmental stewardship are driving forces in reshaping food purchasing intentions and food quality perceptions (Petrescu et al., 2019).

It is critical to understand these distinctions and be able to recognize them in the workplace. The use of standard recipes or technical sheets that list the kind and quantity of each item, the preparation and cooking methods, as well as the yield and portion size, is necessary for the restaurant industry to function professionally. These are only the basic elements of the standardized recipe.

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2. LITERATURE REVIEW

According to Aldrich (1953), the standardized recipe information must be precise in every way. The recommendations for a standardized recipe should include a thorough list of the ingredients in the right weights and measurements with a minimum of abbreviations, a description of each step used chronologically, a yield indication, the size of the utensils to be used, and comprehensive cooking instructions, including time and temperature. The benefits of employing weighed quantities over measured quantities are discussed. Weidlein (1962) asserts that since the beginning of time, the scope of standard development has been spectacular and extensive. Standards have a long history based on documentation or evidence, such as the system of weights and measures. Other standards, like recipe standardization, have fairly short histories. West and Wood (1955) define a "standardized recipe" as "one that has been tested several times and has been found consistently satisfactory in quantity, quality, and yield." According to Shugart (1962), a standardized recipe is one in which the amounts and proportions of ingredients, as well as the methods of procedure, consistently produce a high-quality product. It has been tailored to one's food service in terms of total yield, portion size, and cost.

A standardized recipe should include menu item name - the name of the given recipe, which should match the name on the menu; Total Yield - the number of servings or portions produced by a recipe, as well as the total weight or volume of the recipe; Portion size refers to the amount or size of an individual portion; Ingredient list/quantity - precise amounts of each ingredient (except for spices that may be added to taste); Preparation procedures - Specific instructions for the order and types of operations (for example, blend, fold, mix, sauté); Cooking temperatures and times, as well as HACCP critical control points and limits, are used to ensure that the dish is properly and safely cooked; Special instructions, in accordance with the operation's standard format; Mise en place – a list of small equipment and individual ingredient preparation; Service instructions, including hot/cold storage and plating/garnishing. Standardized recipes may also include cost, nutritional analysis, variants, garnishing and presentation advice, work-simplification advice, suggested side dishes or companion recipes, and images in addition to the items mentioned above.

Standardizing recipes can facilitate process simplicity and HACCP integration. Batch cooking is a common practice in facilities that prepare food in large amounts, so the directions for the standardized recipes will include this information. When drafting recipe instructions or directions, workers' skill levels should also be considered. Terminology within the standardized recipes should be at the skill level of employees, for example, instruct an employee to melt butter and whisk with flour instead of saying "make a roux", if more appropriate for a specific operation. Finally, cooking equipment, temperatures, time, etc. are adjusted for the facility (Egan, 2017).

A quick note on mise en place: having "everything in its place" is a key component to efficiently producing menu items from recipes. Many kitchens will have workstations with standard mise en place items such as a cutting board, salt and pepper, tasting spoons, composting containers, and so on. Standardized recipes can help employees produce menu items more efficiently if they include mise en place for small equipment such as measuring tools, preparation tools (knives, peelers), holding pans, cooking utensils, and so on. Before beginning to prepare a recipe, employees can gather everything they need, decreasing the need to move around the kitchen, kitchen congestion, loss of concentration due to frequent starting and stopping, and mistakes due to interruptions. The clarity and effectiveness of recipe preparation can also be enhanced by providing information about the mise en place for specific ingredients, such as peeling and cutting, with each item.

A standardized recipe is always tailored to a particular operation. It produces a known quantity of a desired quality of food including the cooking time, temperature and utensils that should be chosen, based on the quality of the equipment at hand (Miller & Aldrich, 1963). For example, a different final result will be achieved if the same meal is cooked in a simple furnace or a convection oven. Convection ovens provide a more even and rapid cooking compared to conventional ovens. A real standardized recipe should provide information about meal preparation in different types of cookery devices. They are neither contained in cookbooks nor offered by manufacturers. Yield should be adjusted to the appropriate amount for the required operation. Before a recipe can be considered standardized, it must be tested repeatedly and adjusted to fit the facility's and the chef's needs. Standardized recipes are a useful tool for both chefs and managers. The written forms aid in the training of cooks, the education of service personnel, and the management of financial matters. They contribute to ensuring that clients obtain products of constant quality and quantity. Additionally, they are necessary for precise recipe costing and menu pricing. Each recipe should be thorough, consistent, and easy to read and follow. After writing a recipe into a standardized format, it can be modified. Changing the recipe's scale is one of the most common modifications. Maybe the recipe only makes ten servings and the intention is to make fifty, or vice versa (Gielisse, 2011).

2.1. The Value of Standardized Recipes

Standardized recipes are important because they predetermine the cost of the recipe, nutritional value, which everyone is concerned about, and customer satisfaction for repeat business. Cost: Standardized recipes include a list of ingredients and their quantities. Occasionally, the quality of the ingredients is also mentioned (Punitharaj, 2022). It is very simple to calculate the cost of the recipe once the quantity and quality of the ingredients are known. As the quantity increases, so does the cost of the recipe. Although the menu determines what is sold and at what price, the standardized recipe controls both the quantity and quality of what is produced in the kitchen. A standardized recipe specifies the steps to be taken in preparing and serving each menu item. It ensures that every time a customer orders something from the menu, they get exactly what they ordered. Cooking times and serving sizes, for example, must remain constant in a standardized recipe to ensure that the menu items produced are always consistent. Guests anticipate receiving what they pay for. The standardized recipe assists you in ensuring that they do. Any high-quality food service operation must avoid inconsistency. It will make little difference to the dissatisfied customer if you tell him or her that, while the menu item he or she purchased today is not up to your usual standard, it will be tomorrow or the last time the guest visited your establishment (Dopson & Hayes, 2010, p. 59).

The restaurant concept should not be heterogenetic, it should be consistent, and remain constant. Standardized recipes are the foundation of any serious effort to produce consistent, high-quality food at a predictable cost. Without them, cost-cutting efforts are reduced to raising selling prices, reducing portion sizes, or lowering quality. Any recipe can be made more uniform. However, the process can be complicated at times, particularly in the areas of baking and sauce production. It is always best to start with a tried-and-true recipe. Standardized recipes produce a consistent quality and yield whenever the exact procedures, equipment, and ingredients are used and help ensure that the best possible food items are produced every time (Hussain, 2017).

2.2. The Stages of Standardizing Recipes

The three stages of recipe standardization are amount modification, product evaluation, and recipe verification. The recipe must be thoroughly examined before being made, its yield must be

verified, and any modifications made during the verification process must be recorded. During the product evaluation step, the acceptability of the final product created from the recipe is examined. At this step, the product is sensory evaluated and its acceptability is determined based on factors including appearance, texture, and ultimately taste. If the product doesn't live up to expectations, the ingredient's quantity is altered. These are all lab studies in which the product goes through many stages. To achieve the specified product quality, various raw materials of varying quality and quantity are used. Even a small amount of a component can alter a product's look.

2.3. The Advantages of Standardized Recipes

Although the use of the standardized recipe has advantages for staff and supervisors, it is frequently met with opposition. Even though standardized recipe implementation takes time, it is possible to save time, eliminate guesswork, and reduce quality variance in the long run. It also reduces reliance on cooks or chefs, even if some cooks claim their recipes are kept secret. Two other advantages of using SR are consistency in quality and quantity served. The measurement pattern, however, must be consistent, and all foods must be weighed. For greater precision, a volume measurement must be used with liquids (Silvestre et al., 2022).

Standardized recipes offer numerous advantages that are necessary for a variety of reasons:

- Allow more time and money for skill in food preparation, serving, and merchandising by saving time for both the cook and the manager.
- Reduce guesswork and waste caused by poor quantity estimation and cooking failures.
- Eliminate variation in product quality and quantity, eliminating the need for frequent sampling and “doctoring”;
- Avoid being reliant on any cook or chef.
- Aid in portion control and food cost control by
- Figuring the accurate cost of the food used.
- Estimating yield to be expected.
- Checking losses and making necessary adjustments by use of fewer or cheaper materials.
- Maintaining quality and preventing leftovers.
- Checking for losses and making necessary adjustments by using fewer or less expensive materials (Ericson, 2016).

Consistency of food quality: The first advantage of standardized recipes is that the food quality is consistent when it is made and served to customers. A standardized recipe can only produce a consistent product if it has been tried and tasted several times before being declared as a standardized recipe.

Yield predictability: Using a regular recipe, the yield of the finished product can be predicted before it is prepared. The benefits of a predictable yield include the ability to prevent recipe overproduction or underproduction, which saves money by preventing food waste or customer unhappiness. Customer satisfaction is increased as a result of the consistent quality of food items provided. A standardized recipe yields consistent and good results every time. Customers are happier when their expectations are met and they recommend you to their colleagues. Standardized recipes ensure the nutritional values of the produced food due to the quantity specification of each ingredient. Customers nowadays are very conscious of the nutritional content of food items, and their preference is for healthy products with other characteristics.

3. METHODOLOGY

Ten gastronomy students from the faculty of Tourism and Hospitality-Ohrid were involved in the research of the utilization of standardized recipes (pastry cream case). The research was conducted in the faculty's culinary cabinet in a controlled environment. Five students were given short written instructions on how to prepare pastry cream and the other five were given a detailed standardized recipe. During the previous week, both groups of students watched a video about pastry cream preparation, and afterward, a demonstration by their professor was conducted in the culinary cabinet. The students had the liberty to use the entire inventory available in the faculty's kitchen. The preparation of the crème pâtissier was done separately by the 2 groups of students. Immediately after the completion of the preparation of the pastry cream by each group, a sensory analysis was conducted using the hedonic scale. A control sample was prepared by the gastronomy professor using the recipe of the famous pastry chef [Conticini \(2014\)](#) in order to achieve a maximal comparison effect.

3.1. Sensory Analysis

The sensory evaluation of the pastry cream samples was done with 10 untrained consumers with ages ranging from 18 to 59 years old (50% women and 50% men). An orientation session was provided to the panelists before the sensory analysis. The 9-point Hedonic assessment was used with scores from 1 (very dislike) to 9 (very like), as described by [Peryam \(1957\)](#). Consumers evaluated the appearance, color, consistency, taste, aroma, and smell of the cream samples prepared with the guidance of a standardized recipe and without, respectively. The samples were served at room temperature. For each sample, panelists scored their liking of these characteristics using the 9-point Hedonic Scale (1 – dislike extremely, 2 – dislike very much, 3 – dislike moderately, 4 – dislike slightly, 5 – neither like nor dislike, 6 – like slightly, 7 – like moderately, 8 – like very much, and 9 – like extremely)

3.2. The Simple Pastry Cream Recipe

Pastry cream is one of the simplest but at the same time a very complicated culinary product. It requires very high precision and time management as well as the utilization of specific equipment. One will say it is very simple: In a jug, mix the egg yolks, corn flour, sugar and vanilla extract. Pour the hot cream/milk over the egg mixture, slowly, whilst stirring constantly, then pour back into the pan and heat gently while stirring with the whist, until thick and creamy. And voila the crème pâtissier is ready. But is it as simple as that?

Method: Stirred custard ([Naumov, 2022](#))

Yield:		(1440 g)
Milk	1qt	1 lt
Vanilla bean, split	1	1
Granulated sugar		225 g
Egg yolks	10 yolks	180 g
Cornstarch		75 g

Table 1. Pastry cream recipe

Title Pastry cream	Base 3 cups	DATE 15.11.2022.	Prepared by	Portions	
Description Creamy filling, while delicious as is, can also be flavored in an almost infinite number of ways to create the perfect complement to your cake, pie, or pastry. Make sure you have all of your ingredients and equipment on hand before you begin; once the egg yolks begin to cook, they won't wait for you to find your strainer.	Ingredients			Photo	
Phases of preparation	Ingredients				Value
	TYPE	Units	1	2	Total
Instructions In a medium-sized saucepan, stir together 1 liter of the milk, the sugar, salt, and the vanilla bean. (If you're using vanilla extract or Vanilla Bean Crush, add it at the end.) Bring to a simmer over medium heat, stirring to dissolve the sugar. Meanwhile, whisk the cornstarch, flour, and egg yolks with the remaining 1/2 cup (113g) milk. Whisk some of the hot milk mixture with the egg yolks to temper them. This keeps the yolks from turning to scrambled eggs when you add them to the simmering milk. Pour the egg/milk mixture back into the remaining simmering milk. Doing this through a strainer will help prevent lumps later. Bring to a boil, stirring constantly with a whisk, until the mixture thickens and you see the boiling bubbles reach the center of the saucepan. Remove from the heat and strain through a fine strainer into a bowl set in an ice bath. Stir in the butter and vanilla extract. If you're going to flavor the pastry cream with chocolate or some other flavor, this is the time to do it (see variations below). Rub a piece of butter over the surface of the cream, top with a piece of plastic wrap (make sure it touches the top of the pastry cream so it doesn't develop a skin), then refrigerate until cool. Use chilled pastry cream as is for a sliceable cream pie, or a stiff filling for éclairs. Fold in the whipped cream, just before using, for a softer filling. Pastry cream will keep, covered in the refrigerator, for up to 5 days. After that, it may start to weep.	MILK, whole preferred, divided Eggs Butter All-purpose Flour Cornstarch Granulated Sugar Vanilla bean Salt	L piece Kg Tbs Kg Kg piece Tsp	1 8 egg yolks 0,11 0,12 0,16 1 1/2	0,02	1 8 0,13 2 0,12 0,16 1 1/2
Serving:					

Source: Own research

4. RESULTS AND DISCUSSION

The sample marked as F1 is the control sample and it was prepared for a comparison model. F2 is the sample prepared by the students using a simple recipe for the preparation of the pastry cream. F3 is the sample prepared by the students who used a standardized recipe for the cooking of crème pâtissier. The results of sensory analysis on the hedonic scale regarding the F2 sample are very negative. The students failed to meet the requirements and probably missed certain phases in the

process of preparation of the custard. Only the smell of the pastry cream met the sensorial test conducted by the panelists and this is due to the use of original vanilla bean. On the contrary, the students who prepared the cream, following the instructions of the standardized recipe achieved excellent results even though it was the first time for them to prepare custard. All the marks on the sensorial analysis on the hedonic scale were positive and with values above 8, on a scale from 1 to 9. The statistical analysis of this research was conducted by using the SPSS (Statistical Package for the Social Sciences), also known as IBM SPSS Statistics. The statistical tool used in this case was Analysis of variance (ANOVA), an analysis tool used in statistics that splits an observed aggregate variability found inside a data set into two parts: systematic factors and random factors. The systematic factors have a statistical influence on the given data set, while the random factors do not. Analysts use the ANOVA test to determine the influence that independent variables have on the dependent variable in a regression study. More specifically for this research a one-way ANOVA was used for three groups of data (3 different pastry cream batches), to gain information about the relationship between the dependent and independent variables.

Table 2. Descriptive results of the sensory analysis of the 3 batches of pastry cream

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Appearance of pastry cream	F1	10	9.00	.000	.000	9.00	9.00	9	9
	F2	10	4.40	1.713	.542	3.17	5.63	2	7
	F3	10	8.10	.738	.233	7.57	8.63	7	9
Color of pastry cream	F1	10	9.00	.000	.000	9.00	9.00	9	9
	F2	10	4.20	1.229	.389	3.32	5.08	2	6
	F3	10	8.50	.527	.167	8.12	8.88	8	9
Consistency of pastry cream	F1	10	9.00	.000	.000	9.00	9.00	9	9
	F2	10	4.10	1.524	.482	3.01	5.19	2	6
	F3	10	8.10	.568	.180	7.69	8.51	7	9
Taste of pastry cream	F1	10	9.00	.000	.000	9.00	9.00	9	9
	F2	10	4.00	1.333	.422	3.05	4.95	2	6
	F3	10	8.80	.422	.133	8.50	9.10	8	9
Flavor of pastry cream	F1	10	9.00	.000	.000	9.00	9.00	9	9
	F2	10	3.90	1.197	.379	3.04	4.76	2	5
	F3	10	8.70	.483	.153	8.35	9.05	8	9
Smell of pastry cream	F1	10	9.00	.000	.000	9.00	9.00	9	9
	F2	10	6.10	.738	.233	5.57	6.63	5	7
	F3	10	8.70	.483	.153	8.35	9.05	8	9
Overall acceptance of pastry cream	F1	10	9.00	.000	.000	9.00	9.00	9	9
	F2	10	4.30	1.059	.335	3.54	5.06	3	6
	F3	10	8.60	.516	.163	8.23	8.97	8	9

Source: Own research

4.1. Tukey HSD

If you take a look at the Multiple Comparisons table below you'll see that significance values have been generated for the mean differences between pairs of the various levels of the variables (formulation of pastry cream-1; Formulation of pastry cream-2; and Formulation of pastry cream-3).

In our example, the Tukey HSD (Honest Significant Difference) shows that it is only the mean difference between the (F1, F3) groups and the F2 group that reaches significance. The p-value is the standard .05 alpha level, so the 0 hypothesis is rejected. The hypothesis that the utilization

of standardized recipes is a strong precondition for the quality of a culinary product is proved. Two batches of pastry cream were made using technical sheets with precise instructions and they were accepted by the panelists as very high in quality whether in appearance, color, texture, flavor, taste, or smell. The batch that was prepared following the simple instructions for crème patisserie received very low grades on the hedonic scale from 1 to 9, with an average of 4.5, and can be set between 4 – dislike slightly and 5 – neither like nor dislike. The utilization of standardized recipes gives a better chance for professional progress to novice cooks, who see their future as chefs. The standardized recipes are the real precursor for the proper training of high-quality kitchen staff. The comprehension of the standardized recipes demands at least a basic knowledge of the main postulates of gastronomy.

Table 3. Multiple Comparisons

Appearance of pastry cream			
Tukey HSD ^a			
Formulation of pastry cream	N	Subset for alpha = 0.05	
		1	2
F2	10	4.40	
F3	10		8.10
F1	10		9.00
Sig.		1.000	.167

Consistency of pastry cream			
Tukey HSD ^a			
Formulation of pastry cream	N	Subset for alpha = 0.05	
		1	2
F2	10	4.10	
F3	10		8.10
F1	10		9.00
Sig.		1.000	.100

Color of pastry cream			
Tukey HSD ^a			
Formulation of pastry cream	N	Subset for alpha = 0.05	
		1	2
F2	10	4.20	
F3	10		8.50
F1	10		9.00
Sig.		1.000	.331

Smell of pastry cream			
Tukey HSD ^a			
Formulation of pastry cream	N	Subset for alpha = 0.05	
		1	2
F2	10	6.10	
F3	10		8.70
F1	10		9.00
Sig.		1.000	.398

Flavor of pastry cream			
Tukey HSD ^a			
Formulation of pastry cream	N	Subset for alpha = 0.05	
		1	2
F2	10	3.90	
F3	10		8.70
F1	10		9.00
Sig.		1.000	.645

Overall acceptance of pastry cream			
Tukey HSD ^a			
Formulation of pastry cream	N	Subset for alpha = 0.05	
		1	2
F2	10	4.30	
F3	10		8.60
F1	10		9.00
Sig.		1.000	.400

Means for groups in homogeneous subsets are displayed.

Uses harmonic mean sample size = 10000

Source: Own research

5. CONCLUSION

The significance of standardized recipes in ensuring the consistent quality of culinary products cannot be overstated. This paper has illuminated the diverse and unique nature of individual cooking knowledge, emphasizing the combination of theoretical understanding and practical skill acquisition that underpins the successful execution of cooking methods toward the creation of optimal-quality dishes. The mastering of the culinary techniques varies from person to person, spanning from a few months to several years, with each cook possessing a distinct skill set.

Amidst this variation and individuality, the culinary community widely acknowledges the pivotal role that standardized recipes play in achieving excellence in gastronomy. While the verification of yield stands out as a critical step in the standardization process, it is imperative to recognize that other steps in the process are equally indispensable. The challenges of standardizing recipes, particularly the intricacies of recording them accurately, emerge as a substantial obstacle in this pursuit, while the financial aspects surrounding meal costs present comparatively lesser difficulties.

In the complex landscape of culinary artistry, taste emerges as the foremost factor that influences a customer's decision to engage with a dish. This reality underscores the value of standardized recipes as a means to consistently replicate the desired taste and quality across various instances of food preparation. It dispels the myth that culinary creations are solely born out of emotion-driven artistic expression, illustrating that even the most skilled chefs rely on meticulous measurements and clear instructions to achieve desired outcomes.

It is essential to dispel the misconception that standardized recipes diminish the creativity of chefs or restrain their artistic prowess. Rather, standardized recipes serve as a foundational framework that empowers chefs to bring their creativity to life while maintaining the expected quality and consistency. In essence, this paper underscores that even the most accomplished chef can falter without the guidance of a standardized recipe, while a less experienced cook can produce impressive results by adhering to one.

In conclusion, the adoption of standardized recipes emerges as an essential prerequisite for ensuring the consistent quality and quantity of culinary products. This comprehensive approach safeguards against variations arising from individual skill levels and interpretations, ultimately guaranteeing a satisfying and uniform gastronomic experience for consumers.

References

- Aldrich, P. J. (1953). Quality food means more than recipes. *Journal of American Dietetic Association*, 29.
- Conticini, P. T. (2014). *La Pâtisserie Des Rêves*. Paris: Grub Street Publishing.
- Dopson, L. R., & Hayes, D. K. (2010). *Food and Beverage Cost Control*. New York: John Wiley & Sons.
- Egan, B. M. (2017). *INTRODUCTION TO FOOD PRODUCTION AND SERVICE*. The Pennsylvania State University.
- Ericson, M. H. (2016). Recipe. *Journals.sagepub.com was first indexed by Google in November 2016*, 55-56.
- Gielisse, V. A. (2011). RECIPES for the Modern Batch Kitchen. *Chef Educator Today*, 8.
- Hussain, Z. (2017). Importance of Standardized Recipes in Food Service Settings. *Mathews Journal of Diabetes & Obesity*, 1.
- Labensky, S. R., & Hause, A. M. (2011). *On cooking, A textbook of culinary fundamentals*. New Jersey: Prentice Hall.
- Miller, G., & Aldrich, P. (1963). Standardizing recipes for. *Michigan State University Agricultural Expt. Station Bulletin No. 233*.
- Naumov, K. (2022). ÉCLAIRS AS TOP PASTRY DELICACIES AND THEIR COMPREHENSION BY THE MACEDONIAN GASTRONOMIC AUDIENCE. *Horizons (XXXI)*.
- Peryam, D. A. (1957). *Hedonic Scale method of measuring food preferences*. *Food technology*.

- Petrescu, D. C., Vermeir, I., & Petrescu-Mag, R. M. (2019). Consumer Understanding of Food Quality, Healthiness, and Environmental Impact: A Cross-National Perspective. *International Journal of Environmental Research and Public Health*, 17(1), 169. <https://doi.org/10.3390/ijerph17010169>
- Punitharaj, A. B. (2022). *A STUDY ON EFFECTS OF STANDARDIZED RECIPES OF LOCAL. Tianjin: Journal of Tianjin University Science and Technology.*
- Shugart, G. (1962). Standardized recipes. *School Lunch Journal*.
- Silvestre, D., Serra, M., Afonso, C. M., Pinto, E., & de Almeida, C. M. (2022). Development of an Online Holistic Standardized Recipe: A Design Science Approach. *Sustainability*, 14(9), 5330. <https://doi.org/10.3390/su14095330>
- Weidlein, A. S. (1962). *National Standards in a Modern Economy.* Harper and Brothers Publishers.
- West, B., & Wood, L. V. (1955). *Food Service in Institutions.* New York: John Wiley and Sons, Inc.