Applying a New Process for Local Food Menu Development in Gimpo

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ABSTRACT Recently, increasing interests in local foods have been highlighted along with active efforts and activities from autonomy organizations to develop local cultures and promote local economies by generating value added products and profits through the development of local foods. Subsequently, useful effects might result by making local foods attractive to tourists, such as by using indigenous Gimpo products to make menu items that incorporate the social, economic, and cultural aspects of the Gimpo area, and contributing to its food culture, the development and use of its indigenous products, and promoting local restaurant businesses, etc. The items of the survey used to select the local food menu items to be developed were limited to ideas offered by expert groups, and were implemented by a new menu development process. In order to derive the menu items to develop, the following method was applied: a brainstorming session with experts to generate and draft ideas, a questionnaire to chefs and cooks in special grade hotels is Seoul to select the menu items to develop from those drafted, and sensory evaluations by experts to evaluate the developed items. Frequency analysis and technical statistical analysis were performed using the SPSS 12.0 program package, where 13 kinds of local foods were ultimately developed using indigenous products of Gimpo. The developed local food menu items were rice & grape sujaebi, grape sikhae, fried rice embryo bud, grape yanggaeng, rice pancakes, rice spaghetti, grape seed oil dressing, grape sauce, rice pizza, grape pie, rice & grape ice cream, grape chocolate, and rice roll cakes.

KEYWORDS: Gimpo, local food, expert group, brainstorming, menu development process

INTRODUTION

while interests in local foods have been increasing recently, autonomies are aggressively making efforts to develop local cultures and vitalize local economies by generating value added products and profits such as through the developing local food items. An area's food culture can be a weight in developing its degree of local culture, which is recognized as an important resource to increase the competitiveness of a region (Ko and Kang 2004). Local food is referred to as food enjoyed by people in a region as a whole (Kim and Oh 1998), having strong regional characteristics, since in many cases, such local foods tend to contain the locality's unique dietary habits, ingredients, recipes, etc. As one of the ways in which to understand and develop a region, reviewing a region's food is optimal for enabling us to not only understand the natural environment

and products of the region, but also to express the adaptation style and character of its people (Han 2001).

Gimpo City is one of the garden cities surrounding the capital. It is a strategic place of traffic, having Gimpo Airport within 30 minutes distance from Incheon Airport (Jaen 2003), and secures excellent accessibility from other cities since it is connected by broad metropolitan traffic networks. Also, it is a traditional farming region that produces agricultural products such as grapes, ginseng, mushrooms, etc., as well as rice, which has a growing tradition of 5000 yr. In addition, since it has deep historical significance and provides an image of peaceful reunification, Gimpo is highly likely to be developed as a tourist region. Local foods in Gimpo are able to take advantage of a rich source of seafood, vegetables from the hills, and crops from fields, which are characterized as the local foods of Gyeonggi Province. Although Gimpo is adjacent to Seoul, the flavor of the food is plain and not salty, and moderately spicy. However, it has a disadvantage in that specialization is difficult because it has a great variety of kinds of food, as well as many foods in common with regions such as Seoul, Ganghwado, Paju, Goyang, and Hwanghaedo since Gimpo is located near those regions.

It is therefore necessary to develop new local menu items

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using indigenous materials produced in the Gimpo region rather than traditionally handed-down food items. And by making the local food menu items an attraction for tourists there would be profitable effects to Gimpo's social, economic, and cultural aspects, including the development and promotion of its regional indigenous products, vitalizing its restaurant businesses, etc. (Kwun and Lee 2004).

Due to the recent trend, there are now many studies on local food development, but most of these studies only consist of research and lack any further advancements. In addition, most studies on local food development primarily emphasize developing menu items in such a way that they just add indigenous products to existing items (Hwang and Oh 1996, Cha and Park 2003), and no systematic studies have been carried out thus far regarding the developmental process of local food items.

It is necessary to have a strategic way of thinking when developing new menu items in order for them to achieve successful entry into the market. This strategic way of thinking ultimately implies studying and examining in various aspects the basic things that are needed in order for new menu items to be developed and introduced to the market successfully (Kim and Lim 2005). It is therefore necessary to have specific studies on what process could enable us to develop such menu items in reality. And the need for systematic studies is also emerging to examine new process applications in the development of local foods (Chi and Yeon 1999, Han et al 2005).

Accordingly, this study attempts to systematically develop local menu items in Gimpo by utilizing expert groups and applying a new developmental process.

METHODS

Subjects

Groups of experts were chosen for the study and were composed of different experts depending on the characteristics of each stage. The expert group used to draft the menu items for the questionnaire was composed of eight individuals within the field of foodservice, who had over 10 years of menu development experience; it excluded individuals in their 20s for their lack of experience and those over the age of 50, who despite have experience, may have difficulty connecting with the newest trends. A group of chefs and cooks having full-time or greater employment status, and working for special class hotels in Seoul, was constructed to review and select the local food menu items for Gimpo; it excluded those with part-time or contractual employment status as well as apprentices for their lack of specialties. Finally, the primary menu item evaluation was composed of an expert group having over 10 years experience in the field of foodservice, while the secondary evaluation consisted of in-house researchers.

Study method

Brainstorming (Osborn 1938) was applied to provide essential qualitative data for the study. In addition, two questionnaires were used to provide numeric values for evaluating the validity and sensory qualities of the developed menu items.

The brainstorming session was carried out with a group of experts at a restaurant in Jamsil, Seoul on July 7, 2006, to gather basic data required for developing the Gimpo local food menu items. A lead researcher presided over the session and the head of research retained all records. The session proceeded (Higgins 1994) as follows: the lead researcher described the goal of developing local menu items using indigenous Gimpo products. The group members were then asked what kinds of items would be appropriate for such a project and were given 10-15 min to consider and come up with individual ideas. Then, each person was asked to suggest the same number of ideas in a certain order. Here, various kinds of processed foods were eliminated first as potential items since they were viewed as inappropriate to the project. Finally, the menu ideas agreed as being appropriate for development were drafted, and any menu items that already existed or were not proper to our sentiments were removed.

The two questionnaires used in this study consisted of one for selecting the local food items and another for completing the sensory evaluations of the items.

The food selection questionnaire investigated the possibility of developing the local food items drafted in the brainstorming process. The questionnaire focused on the respondent's degree of cognition towards indigenous Gimpo products, which included products by type, and as basic research also addressed the possibility of developing menu items using such types of products. The potential menu items were rated by the respondents using a five-point Likert scale, with a score of five as most positive and one as most negative. The survey was performed with cooks by visiting hotels from July 22 through 26, 2006, and 169 questionnaires were returned from a total 200 copies distributed.

The sensory evaluation questionnaire examined the practicality of developing the selected local foods as well as the general sensory characteristics of those items. Thirteen items were evaluated over three hours using a five-point Likert scale in the Seminar Room of Kyeonggi University on October 6, 2006.

Data analysis & statistics

This study applied frequency analysis and technical statistical analysis using the software package SPSS 12.0 for Windows.

Table 1. General Characteristics of the subjects

		Expert Groups 1	Expert Group 2	Chef & Cook		
Gender	Female	5(50.0)	5(37.5)		34(20.1)	
	Male	5(50.0)	5(62.5)		135(79.9)	
Age	20-29	0	0		68(40.2)	
	30-39	7(87.5)	7(70.0)		82(48.5)	
	40-49	1(12.5)	3(30.0)		17(10.1)	
	50 over	0	0		2(1.2)	
Occupation	Cook	5(62.5)	3(30.0)	Western kitchen	73(43.2)	
	Professor	1(12.5)	2(20.0)	Oriental kitchen	38(22.5)	
	Food stylist	1(12.5)	0	Korean kitchen	27(16.0)	
	Work in food industry	1(12.5)	3(30.0)	Bakery	23(13.6)	
	Others	0	2(20.0)	Others	8(4.7)	
Career	1-4	1(12.5)	2(20.0)		71(42.0)	
(for cooking)	5-9	3(37.5)	2(20.0)		53(31.4)	
	10-19	4(50.0)	45(50.0)		41(24.3)	
	20 over	0	1(10.0)		4(2.4)	
Education	High school graduates	0	0		13(7.7)	
level	College graduates	0	1(10.0)		52(30.8)	
	University over	8(100.0)	9(90.0)		104(61.5)	
Total		8(100.0)	10(100.0)	169(10	0.0)	

RESULTS

General characteristics

The general characteristics of expert group 1 are as follows. There were three women and five men by gender. Seven were in their 30s and one was in his/her 40s by age. Among them, five were cooks, making up the majority; in addition, one was a full-time professor, one a food illustrator, and one worked in a dining-out business unit. In terms of cooking experience, only those who worked entirely as cooks were included, excluding lecturers or researchers, who although knowledgeable, were not cooking professionals. Four, the majority, had over 10 years of career experience, and all had an education level of college graduate or above.

The general characteristics of expert group 2 were as follows. There were five women and five men by gender. Seven were in their 30s and three were in their 40s by age. Among them, three were cooks, two were full-time professors, two were food illustrators, and three worked in a foodservice business unit. There were six with over 10 years of career experience, whose education levels represented college graduate and above, with nine having education beyond college.

The general characteristics of the surveyed chefs and cooks were as follows. There were 34 women and 135 men. A greater representation of men was due to the fact that hotels, in general, have more men cooks than women cooks. Most were in their 30s by age. Seventy-three (the majority)

worked in Western-style restaurants. Seventy-one had five years of cooking experience (the majority) and most (n=104) had an education level of college graduate or above. The hotels for the survey consisted of five hotels, including W Hotel, Walkerhill Hotel, Intercontinental Hotel, Coex Intercontinental Hotel, and Chosun Hotel.

Basic research to develop and draft gimpo local food menu items

Among those in the expert groups, 62.5% had a moderate degree of cognition for Gimpo's indigenous products, while 37.5% had responses indicating less knowledge and awareness. Regarding the cognitive degree (multiple responses) for the types of indigenous Gimpo products, rice was highest at 50%, sequentially followed by grapes (25%), ginseng (16.7%), and agaric (8.3%). Regarding the possibility of developing menu items using indigenous products, 12.5% indicated very positive, 62.5% positive, and 25% moderate, which demonstrated an overall positive response.

A brainstorming session was carried out to draft local food menu items for Gimpo. A lead researcher presided over those sessions and the head of research retained all records. The session proceeded (Higgins, 1994) as follows: the lead researcher described the goal of developing local food menu items using indigenous Gimpo products. The group members were then asked what kind of items would be appropriate for such a project and were given 10-15 minutes to consider and come up with individual ideas. Then, each person was asked

Table 2. Menu Items using Local Gimpo Foods by Expert Group 1

	Menu items suggested	Drafted Menu Items
Grape	Grape noodle, Grape Leaf ssam, Grape Sichae, Jongkha, Grape Yanggaeng, Grape Seed oil Dressing, Grape Sauce, Grape Chocolate, Grape Pie, Raisin Croissant, Grape Focaccia, Grape Whachae, Cold Vegetable souse, Grape Sherbet, Grape Jelly	Grape noodle, Grape Leafssam, Grape Sichae, Jongkha, Grape Yanggaeng, Grape Seed oil Dressing, Grape Sauce, Grape Chocolate, Grape Pie, Raisin Croissant, Grape Focaccia
Rice	Gangjung, Jean, Ssaljook, Joomuckbob, Vegetable Jook, Rice Gaedduk, Fried Embryo bud of Rice, Rice Pancake, Rice Burger, Rice Spaghetti, Rice Pizza, Rice Crouton, Rice Pudding, Rice Roll cake, Rice Brownie, Tangsooyoyck, Roroonggytang, Risotto, Joomuckbob, Soondea, Rice Roddle, Sesi	Joomuckbob, Vegetable Jook, Rice Gaedduk, Fried Embryo bud of Rice, Rice Pancake, Rice Burger, Rice Spaghetti, Rice Pizza, Rice Crouton, Rice Pudding, Rice Roll cake, Rice Brownie
Rice & Grape	Rice & Grape Sujebe, Grape Garegguk, Grape S irudduk, Color Sesi, Raisin Risotto, Rice & Grape Ice cream, Rice & Grape Bread	Rice & Grape Sujebe, Grape Garegguk, Grape Sirudduk, Color Sesi, Raisin Risotto, Rice & Grape Ice cream, Rice & Grape Bread
Others	Grape marmalade, Rice Junbyung, Grape Jam, Grape Juice, Rice Crisp, Rice Flake, rape	

to suggest the same number of ideas in a certain order, and 57 menu items were proposed after excluding duplicated suggestions. Various kinds of processed foods were the first to be eliminated from the list since they were viewed as inappropriate to the project. Finally, 30 different menu items that were agreed upon as being appropriate for development were drafted, and menu items already existing or not proper to our sentiments were removed.

Reviewing and Selecting Gimpo Local Menu Items to Develop

The results of the preference survey, which indicated individual preferences for the 30 menu items drafted by the expert groups, showed that the preference for rice & grape sujebi was highest (3.86) for Korean menu items. Most of the other menu items had scores of 3.0 or higher as well, which was thought to be a moderate level. However, the preference for grape noodles was very low at 2.86. Fried rice embryo bud showed the highest preference of 3.63 for oriental menu items, while all others presented preferences of 3.0 or higher as well. Grape seed oil dressing was the most preferred (3.84) for Western-style menu items, while grape sauce and rice pancakes also showed high preferences at 3.82 and 3.68, respectively. On the other hand, risotto showed the lowest preference at 3.31. Grape pie showed the highest preference at 3.66 for bakery items, while rice & grape ice cream and grape chocolate also showed high preference scores at 3.64 and 3.60, respectively. Among the 30 Gimpo local foods derived from the expert groups, 13 menu items with preference scores of 3.5 or above, by survey of the chefs and cooks, were selected for development. The local food menu items chosen for development were rice & grape sujaebi, grape sikhae, fried rice embryo bud, grape yanggaeng, rice pancakes, rice spaghetti, grape seed oil dressing, grape sauce, rice pizza, grape pie, rice & grape ice cream, grape chocolate, and rice roll cakes.

Developing Local Food Menu Items for Gimpo

Recipes were collected and standard recipes were created through experimental cooking sessions in order to develop the selected local food menu items for Gimpo. The recipes to be developed were collected from the experts participating in the brainstorming sessions, as well as from special class hotels, the Internet, and literature such as cookbooks, etc. The recipes used for testing during development were prepared based on the aforementioned information, and standardized recipes were created by skilled personnel through 3-5 rounds of experimental cooking and were put into a neat and clean format for use.

Sensory evaluations

The sensory evaluation results showed that the degree of satisfaction for color was highest for the fried rice embryo buds (3.0) and grape sauce (3.0), sequentially. The ice cream had a score of 2.9, implying that its color needed to be improved through more experimentation. For sweetness, The rice & grape sujaebi had a degree of satisfaction of 2.9, especially implying a need to shorten the boiling time since the sweet taste of the grape came out more intensely while boiling. The scores for salty taste represented the saltiness of the food items. The pancakes had a score of 3.9, the best for the saltiness. The ice cream's score was 2.4, and most replied the taste was too flat. Regarding the content amount of the items, it was implied that the grape yanggaeng needed to be supplemented.

According to the overall sensory evaluation results, the ice cream and spaghetti seemed to need considerable improvements as they generally showed low scores. The scores, however,

Table 3. Preference for Gimpo Local Food Menu Items by Chefs & Cooks

	Menu	Mean±SD		Menu	Mean±SD
	Grape noodle	2.86 ± 1.82		Joomuckbob	3.40±0.95
	Grape Leaf ssam	3.39 ± 1.03		Vegetable Jook	3.35 ± 0.99
	Grape Sichae	3.73 ± 1.02		Rice Gaedduk	3.38 ± 0.98
	Jongkha	3.36 ± 0.90		Fried Rice Embryo bud	3.63 ± 0.93
	Grape Yanggaeng	3.53 ± 0.90		Rice Pancake	3.68 ± 0.94
Using	GrapeSeed oil Dressing	3.84 ± 0.91	Using	Rice Burger	3.49 ± 0.94
Grape	Grape Sauce	3.82 ± 0.84	Rice	Rice Spaghetti	3.64 ± 0.94
	Grape Chocolate	3.60 ± 0.96		Rice Pizza	3.50 ± 0.89
	Grape Pie	3.66 ± 0.91		Rice Crouton	$3.36 {\pm} 0.87$
	Raisin Croissant	$3.44 {\pm} 0.96$		Rice Pudding	3.35 ± 0.99
	Grape Focaccia	3.44 ± 0.91		Rice Roll cake	3.56 ± 0.93
	Rice & Grape Sujebe	3.86±0.94	•	Rice Brownie	3.46 ± 0.92
	Grape Gredduk	3.39 ± 0.97			
Using Rice&	Grape Siruduk	3.43 ± 0.90			
	Color Sesi	$3.35 \!\pm\! 1.00$			
Grape	Raisin Risotto	3.31 ± 0.95			
	Rice& Grape Ice cream	3.64 ± 1.00			
	Rice& Grape Bread	3.44 ± 0.93			

Table 4. Standard Recipe for Rice & Grape Sujaebi

Method of preparation

Portion size: 12g Temperature: 18~20°C	Ingredients	Rice sujebe dough Rice powder 1/4C	Rice Sujebe Soup Base 2C
Cooking Time: 60 min		Flour 1/4C	Pumpkin 50 g
Utensil: Steam kettle		Salt 1/3ts	Shellfish 80 g
		Grape seed oil 1/2ts	Potato 40 g
		Grape juice 2Ts	Salt 1/2ts

- After mixing the rice flour, wheat flour, salt, grape seed oil, and grape juice the dough is kneaded until it becomes elastic.
- 2. After the kneading is complete, the dough is wrapped in a plastic bag to prevent drying, and kept in a refrigerator until later use.
- 1. The pumpkin and potato are sliced thinly.
- 2. The soup, pumpkin, and potato are put into a pot and boiled for a while.
- 3. The kneaded dough flakes prepared in advance are kneaded and thinly spread and then the pieces are put into the pot and boiled with stirring so the flakes do not stick to each other.
- 4. After the dough pieces are cooked and floating on top, the thin-shelled surf clams are place into the pot and boiled again.
- 5. Salt is added.
- * Base soup: 20g of dry shrimp, 5C of water, and a sheet of kelp (20 cm) are put into a pot and boiled for about 30 minutes, and then filtered with a sieve.
- -Tip-
- 1. Attention should be paid to not to boiling the dish too long, which makes the sweat taste of the grape come out.
- 2. The kneading of dough flakes should be done in a way of rubbing to make it sticky upon boiling.

reflected the fact that the ice cream was served in a considerably melted state due to the weather conditions, and the rice spaghetti was lacking stickiness as the kneaded rice dough was rolled out thickly by hand, which lead us to consider the need for more recipe experimentation and methods to improve these aspects. On the other hand, the rice pancakes and grape sauce received much interest from

the specialists who participated in the sensory evaluation, with high scores of 4.0 or above in the practicality category in particular, as well as high degrees of satisfaction as a whole.

Exhibition of Menu Items using Local Gimpo Foods

Exhibitions and food-tasting parties were held to create

Table 5. Sensory Evaluation by Expert Group 2

	Color	Flavor	Sweet	Salty	Sour/ Texture	Feeling	Appearance	Balance	Satisfaction Practicality
Rice & grape sujaebi	3.10±0.74	3.30±0.48	2.90±0.88	3.30±0.95	3.40±0.52	3.10±0.74	3.00±0.82	2.90±0.74	2.80±0.63 3.30±0.68
Grape sikhae	3.60±0.70	3.20 ± 0.42	3.40 ± 0.70	3.40 ± 0.52	3.10 ± 0.57	3.30±0.82	3.50 ± 0.85	3.10 ± 0.74	3.20 ± 0.79 3.70 ± 0.68
Friedrice embryo bud	3.80 ± 0.42	3.60 ± 0.70	3.70 ± 0.48	3.70 ± 0.48	3.60 ± 0.68	3.70±0.84	4.00 ± 0.47	3.90 ± 0.78	3.80 ± 0.63 3.90 ± 0.57
Grape yanggaeng	3.00±0.94	3.20 ± 0.42	3.40 ± 0.70	3.40±0.52	3.10 ± 0.57	2.80±1.03	2.90 ± 1.10	3.00 ± 0.82	3.00±0.67 3.70±0.82
Ricepancake	3.80±0.63	3.40 ± 0.84	3.80 ± 0.42	3.90 ± 0.32	3.60 ± 0.52	3.80±0.79	4.10±0.57	3.70±0.48	3.90±0.57 4.00±0.47
Ricespaghetti	3.40±0.70	3.10±0.57	3.20 ± 0.42	3.10±0.74	2.00 ± 0.47	2.90±0.88	2.50 ± 0.85	2.80 ± 0.63	2.50 ± 0.53 2.90 ± 0.99
Grape seed oil dressing	3.50±0.71	3.50±0.70	3.30 ± 1.06	3.60±0.52	3.60±0.84	3.70±0.44	3.70 ± 0.95	3.80 ± 0.79	$3.90\pm0.74\ 4.20\pm0.42$
Grapesauce	3.80±0.42	3.90±0.32	3.80 ± 0.63	3.70 ± 0.48	3.50 ± 0.85	3.50±0.70	3.80 ± 0.79	3.70 ± 0.82	3.80 ± 0.79 3.70 ± 0.82
Ricepizza	3.40±0.52	3.20±0.63	3.30±0.68	3.20±0.63	3.20±0.42	3.70±0.48	3.10±0.74	3.30 ± 0.68	3.20 ± 0.63 3.50 ± 0.53
Grapepie	3.60±0.70	3.70±0.68	3.70 ± 0.82	3.20±0.79	3.10 ± 0.88	3.70±0.82	3.90±1.10	3.90±1.06	3.50 ± 0.97 3.90 ± 0.74
Rice & grape ice cream	2.90±0.71	3.00±0.52	2.60±0.48	2.40±0.52	2.70 ± 0.52	3.00±0.92	3.40 ± 0.92	2.70±0.68	2.70 ± 0.70 3.20 ± 0.88
Grape chocolate	3.80±0.79	3.20±0.92	3.50±0.53	3.50±0.53	3.50±0.53	3.10±0.88	3.70±0.82	3.40±0.70	3.20±0.63 3.60±0.70
Ricerollcake	3.80±0.42	3.50±0.71	3.05±0.70	3.50 ± 0.53	3.80 ± 0.48	3.70±0.42	3.90±0.74	3.70±0.68	3.70±0.68 3.90±0.74

awareness of the developed local menu items. The exhibitions were held during a Gimpo food culture festival in order to promote the local food items to numerous Gimpo citizens and tourists. However, framed pictures and photographs of the menu items and recipes had to be displayed for reasons of weather and space. The recipes were described in detail to enable those who were seeing them for the first time to understand the cooking process, and attendants were present to describe the menu items.

Food-tasting parties were carried out for tasting and evaluating the developed local food items. They were performed for 50 people who were invited in advance, and for Gimpo citizens and tourists who visited the food culture festival. The menu items were divided into cold and hot categories. The cold items were prepared in advance and served as a buffet, whereas the hot items such as the rice spaghetti, grape flavor soup with dough flakes, fried rice embryo bud, etc. were served on location using a demonstration per menu item by a cook at an appropriate temperature.

Books were developed and published to promote the developed Gimpo local menu items. Photographs of the menu items were taken in advance and a design draft of the cookbook was completed based on photographs and standard recipes. The book content consisted of a section for the developed local menu items and another section promoting Gimpo. The section on Gimpo's local foods consisted of photographs, materials, cooking methods, and tips for cooking. The section for Gimpo public relations and promotion was composed of a published address by the mayor of Gimpo, historical aspects of Gimpo, indigenous products, and exemplary restaurants. Five-hundred copies of the book were printed for draft review and editorial correction and were distributed to each city, province, and county, as well as citizens interested in Gimpo's local foods and restaurants in Gimpo City.

DISCUSSION

This study attempted to develop Gimpo local food menu items in a systematic way by applying a new process utilizing expert groups.

In order to achieve the goal of this study, five steps were carried out, including basic research for developing and drafting a list of Gimpo local menu items, reviewing and selecting the proposed menu items, recipe development and testing, sensory evaluations, and food-tasting parties and exhibitions for promoting the developed items. The results by each step are summarized as follows. From the results of our basic research, the degree of cognition for Gimpo indigenous products was not as high as expected, but the proposal to develop local food menu items using indigenous Gimpo products was responded to positively. Thirty different menu items were drafted through a brainstorming session with an expert group. Thirteen of those items, with preference scores of 3.5 or higher by surveys with chefs and cooks, were selected for development. Standard recipes were developed by collecting recipes and then performing 3-5 experimental cooking rounds, and the standard recipes were modified and supplemented through sensory evaluations. Exhibitions and food-tasting parties were held to promote the developed menu items, and finally, a cookbook was published.

The developed local menu items consisted of rice & grape sujaebi, grape sikhae, fried rice embryo bud, grape yanggaeng, rice pancakes, rice spaghetti, grape seed oil dressing, grape sauce, rice pizza, grape pie, rice & grape ice cream, grape chocolate, and rice roll cakes.

With stronger competition in every region as well as a need to cope with the varied and complicated demands of consumers, it is necessary to develop systematic menus that are diverse and capable of creating local connections, rather than responding with existing stereotyped menu items. Brainstorming, one of the most widely used techniques among creative problem solving, is widely recognized in various fields including new product development (Park and Kim 1998). However, it has been used at a limited level in the area of menu development.

Unlike existing studies that have developed menu items around questionnaires (Hwang and Oh 1996; Cha and Park 2003), this study has suggested a systematic method to develop menu items by applying a new process for product development in which menu items were drafted through brainstorming and experts were utilized. However, the present study has the limitation that it did not have preceding research focusing on consumers during the idea-generating stage. Accordingly, more efficient menu development should be performed in the future by carrying out systematic studies for developing menu items in a systematic way and that reflect the needs of consumers. Also, systematic connections should be made by making products for tourism as well as planning menu distribution and promotion in order to utilize the developed local food menu. Finally, the developed menu items should be evaluated.

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