A model of historical development and future trends of Italian cuisine in America

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ABSTRACT

This study investigated both the historical development and future trends of restaurant cuisine in America. Italian cuisine is used as the basis of a prediction model. The study identifies the historical factors in menu trends in Italian–American cuisine; the factors that will influence culinary trends in the future, and whether the results can be applied to the development of a prediction model that will predict how restaurant cuisine in America may develop. This study used both qualitative (focus groups) and quantitative (online survey) methods. The growing popularity of Italian cuisine in the United States will continue to shape the evolution of America's restaurant cuisine.

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1. Introduction

1.1. Historical background and recent development

The search for food has always played an important role in the cultural evolution of mankind. Food consumption has been at the center of this evolution: eating culture, rituals, and food preferences based on environmental and social conditions emerged. Societies have adopted specific food preferences according to their tastes, their environments, and their economies. They have also chosen their foods and drinks that became symbol of individual culture and developed agricultural systems to produce them and methods to prepare them, and evolved eating habits reflecting their own taste.

These events have created food cultures, rituals, and symbols. With the birth of the restaurant in the Palais Royal in 1783, patrons became accustomed to generating demand; chefs responded by creating new dishes and menus (Kiefer, 2002) and by forecasting demand (Blake and Crewe, 1978). Now, in an evolving global environment, the cuisine of the world is produced almost everywhere, because of the efficiency of the food-supply chain. The agricultural industry has adapted to trends in the foodservice industry, and cuisine has become cyclical and subject to change just the same as the current unpredictable world economy. The restaurant industry benefited from the industrial revolution and from inventions such as the first commercial kitchen equipment (e.g., kitchen oven and pressure cooker) invented by Benjamin Thompson Rumford (Brown, 1981).

Clearly such historical trends have improved people's living standards, and eating habits. This paper analyzes the past and present of Italian cuisine in America. It also proposes a prediction model to predict future trends of restaurant cuisine. This model, it is hoped, will aid in predicting restaurant cuisines and dining trends in America.

1.2. Purpose of the study

This study explores the historical development and future trends of restaurant cuisine in America, using Italian cuisine as an example. The study identifies the historical factors of trends in Italian–American cuisine and the factors that will influence these trends in the future. Its objective is to determine if the results can be used to create conceptual model that will predict the evolution of restaurant cuisine in America. This analysis is integral to the development of a model that will predict cuisine trends across the foodservice industry.

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Two research questions have been formulated:

1. What historical factors have affected the development and popularity of Italian cuisine in America?
2. What factors will influence Italian and all other cuisines in America in the future?

According to Namvar (2000), accurate and timely information about what is likely to happen to the economy and society has always been of value to business decision makers. Predicting trends is critical to success in today's competitive restaurant landscape and enables restaurants to be proactive in sustaining their competitive position by improving the efficiency of front-of-the house and the productivity of back-of-the house operation, both of which contribute to greater market share and revenues.

1.3. Significance of the study

Research about food and cuisine is of wide academic interest because in eating, humans transform natural products into cultural ones through advancement of cooking practice and evolutions of food science and eating habits (Meigs, 1997). The scope of this research is to understand how cuisines have developed in the past and how they will develop in the future. Change in eating habits has been supported by the evolution of communication, improvement in infrastructure and new technologies in food production and preparation. These changes have enabled people to become more educated in their food consumption preferences according to their cultural identities and social networks (Harris and Ross, 1987). Because of globalization and the fact that any food is now available anywhere during any season, this study identifies the factors affecting people's food choices and how these choices affects their decision as to what makes "good" food *good*, (e.g., tasty, healthy, authentic, or ethical), thus leading to the preservation of traditional cuisines such as the Italian and to the creation of new ones (Petrini and Padovani, 2005). In order to narrow the perspective of historical development of cuisines and future cuisine trends, this study concentrates on Italian cuisine in America.

2. Literature review

There is abundant literature on food, food culture and cuisine across disciplines such as cooking, nutrition, food service and food marketing (Douglas, 1997). For the purpose of this study the authors consulted the copious literature on the influence of Italian cuisine in America (Scarpato, 2006). Special importance, however, has been given to the interdisciplinary literature (social science, food science, and marketing) with the intention of extrapolating valuable findings and to applying them to the proposed model.

2.1. Historical evolution of Italian cuisine and development of Italian restaurants in America

Italian food first pleased the palate of Americans from the "Little Italy" which thrived in almost every city with a large Italian population. The food culture was created from the strong network of face-to-face relations among Italian immigrant families and other communities. Food took center stage in Italian–American cultural integration. Italian immigrant entrepreneurs opened restaurants, and those involved in farming developed agricultural food products and their distribution and trade. One of the pioneers in the mass production of canned Italian food (spaghetti in tomato sauce) was Ettore Boiardi (1897–1985), better known as "Chef Boyardee". He created and marketed a variety of "heat and eat" products under the Chef Boyardee brand. However, it was not until the 1920s that middle-class Americans were truly exposed to the

Italian food culture (McLean and Janni, 2002). The real break-through for occurred in the 1930s. Among the first Americans to discover and appreciate Italian food were artists and politicians. Ralph's Restaurant in Philadelphia, which has been operating for over 100 years, was a favorite place of President Theodore Roosevelt, and since 1915, Ralphs has hosted many celebrities such as Frank Sinatra, Jimmy Durante, Tony Bennett, Rocky Marciano, Al Martino, and Sammy Davis Junior (Rubino, 2009).

2.2. Chronology of the oldest Italian restaurants and pizzerias in America

Italian restaurants reflect Italians's strong ethnic identity. Credit for the popularity of Italian cuisine and the proliferation of Italian restaurants in America ought to be given to the first owners of Italian restaurants. Pizza came to America with southern Italians in the latter half of the 19th century. Among the many Italian dishes brought to America, pizza is the only dish developed into a multibillion dollar industry (Stradley, 2004). Although the segment may still be classified as "Italian", it has acquired an identity of its own. Pizza is a $32 billion a year industry (CNBC, 2008). As of July 2007 there were 74,300 pizzerias in the U.S., representing approximately 8% of all restaurant operations in the country (PMQ, 2008). The pizza industry consists of 66.5% independent operators, 10.13% by Pizza Hut, 6.92% by Dominos, 3.75% by Papa John's, 2.72% by Little Caesar, and 10.12% by others (PMQ, 2008). Some of the oldest independent Italian restaurants and pizzerias in America are Fior D'Italia, Ralphs, Tortorici's, Barbetta's, and Frank Grisanti.

2.3. Critical success factors of Italian cuisine in America

According to the International Association of Italian Restaurants (ARDI, 2007), three factors have contributed to the fame of Italian cuisine in America: (1) the marriage of taste and simplicity, and a balance of nutrients used in the ingredients; (2) the high quality of products such as pasta, olive oil, prosciutto, cheese, and wine; (3) the image of authentic Italian restaurants. Cinotto (2001) investigated the depictions of Italian food in American popular magazines. He wanted to determine if such representations were evidence of the radical transformation of consumption that theorists of social change claimed occurred in the United States around. Cinotto's findings offer valuable contributions, in large part because American popular magazines have been writing about Italian food since 1950.

A search for the term "Italian Cooking" in *The Readers' Guide to Periodical Literature* in 2000, produced 635 articles, recipe columns, and restaurant reviews. It is important to note, however, that these sources did not reveal actual consumption patterns, and readers did not contribute recipes or visit the recommended restaurants. Nevertheless, the images, ideas and directions in food choice portrayed in such magazines were relevant to his investigation. Cinotto's findings suggest that the popularity of Italian food had established itself; however, specific dishes and entire menus from southern, central and northern Italy became part of American eating culture only after the 1970s (Cinotto, 2001). A content analysis of several articles revealed that what made the Italian cuisine so popular was its taste, simplicity and high-quality ingredients (ARDI, 2007).

2.4. The increasing demand for Italian food and dynamics of its popularity

Italian cuisine in America has undergone significant changes as a result of rapid and profound changes in lifestyle (Veraldo and Marbach, 1995). The involvement of industry in the food sector and the subsequent improvements in preparation, conservation and distribution, have led to modifications of old food system and

raised food production standards. Italian cuisine, because of its adaptability in preparation and the unparallel taste remains one of the most popular cuisines in the world, therefore we can assume that the Italian cuisine in America will continue to become more successful by maintaining its popularity. In the late-1970s and early-1980s, Tuscan restaurants emerged in California; Piedmontese and Bolognese cuisines were featured in more affluent gourmet cities, such as Chicago, New York, and Boston (Capatti and Montanari, 2003). This northern cuisine was indeed new to the U.S.; it was characterized by less olive oil and more butter, and tomato sauce was replaced by pesto sauce. The new cuisine consisted of dishes such as risotto and desserts like zabaglione, tiramisu and panna cotta (Evans et al., 2000). One of the most revolutionary new dishes, pasta primavera, designed for vegetarians, was created at the Italian restaurant Le Cirque in New York; it had no red sauce and no meatballs (Maccioni, 2002). In short, the new Italian cuisine forced spaghetti and meatballs from upper-class restaurants in America. And because everything around the food culture was undergoing change, and Italian cuisine was at center stage.

This evolutionary cuisines trend encouraged many Americans to seek careers in the culinary arts and to open "Italian style" restaurants. America is now the home of many chefs who own or manage some of the best restaurants in the world. This trend generated a demand for experienced chefs and contributed to the opening of hundreds of culinary schools in the U.S., many of which offer instruction in Italian cuisine (Culinary Institute of America, 2005). These events, with the support of television cooking shows, food lovers, and organizations such as the Slow Food movement have further reinforced the popularity of Italian cuisine in America (Petrini, 2004).

2.5. Dispersion and popularity of Italian restaurants in America

The following paragraphs briefly describes some components included in the analysis process of the data collected, i.e., statistics, content, frequency the analysis (see Table 1) of 10 popular cities on "City Search" directory web site. Table 1 shows that Italian restaurants have the highest representation (City Search, 2007) in the United States. For the purpose of this study, Italian ice cream parlors, espresso bars, Mediterranean restaurants, and Italian catering businesses have been omitted from the analysis. The table shows that Italian cuisine featured in Italian restaurants and pizza restaurants, appears to be the most popular type of cuisine in the U.S., with 16,783 operations, second only to fast food with 17,411 combined operations. It is more popular than the Mexican and Chinese cuisine combined represented by 8493 and 7102 operations, respectively. The table also shows the popularity of other ethnic cuisines, most of which were non-existent during the 1970s when the popularity of Italian cuisine was reaching its peak and sustainability.

Table 1
Dispersion and popularity of Italian cuisine in 10 U.S. popular cities.

Cuisine popularity by number of restaurant in 10 selected cities. Restaurant type with less than 10 operations in those cities have been excluded as they were not relevant to this comparison											Total by type of cuisine
Type of cuisine	Selected cities										
	Atlanta	Boston	Chicago	Houston	Las Vegas	Los Angeles	New York	New Orleans	San Francisco	Seattle	
American	892	606	1,322	585	376	501	1,236	167	576	500	6,761
Asian	83	178	171	64	40	284	255	11	156	46	1,288
BBQ	28	56	222	270	51	352	120	36	120	88	1,343
Cajun/Creole	31	7	28	63	4	34	25	110	20	8	330
Californian	9	12	21	14	19	228	12	22	91	6	434
Caribbean	33	3	21	10	3	32	109	3	3	3	220
Chinese	491	534	905	340	216	1,752	1,732	83	734	315	7,102
Coffee shop	10	163	301	162	60	551	458	31	187	146	2,069
Fast Food	2079	863	3,292	1929	668	4,147	1,551	382	1205	1295	17,411
French	52	10	123	44	46	240	313	44	194	49	1,115
Greek	25	39	146	19	23	126	73	10	92	52	605
Hamburgers	44	316	1,111	672	217	1,448	628	130	440	346	5,352
Health Food	4	15	45	12	5	119	37	1	55	10	303
Indian	44	78	54	40	14	162	226	11	154	75	858
Italian full menu	218	429	760	248	171	1,014	1,098	90	569	278	4,875
Japanese	121	134	184	71	94	960	507	27	443	497	3,038
Korean	11	35	22	4	13	179	49	2	49	19	383
Kosher	1	8	10	0	7	31	75	1	4	5	142
Latin American	9	12	15	12	1	60	52	1	28	6	196
Mediterranean	24	40	51	22	15	88	116	6	75	30	467
Mexican	560	154	1,027	1039	301	3,341	590	63	924	494	8,493
Middle Eastern	15	36	44	7	16	139	79	7	39	6	388
Pacific Rim	11	8	11	2	10	39	51	0	50	16	198
Pizza-Italian	764	1479	2,103	659	348	2,302	2,561	161	892	639	11,908
Seafood	231	246	316	363	88	684	493	144	290	209	3,064
Soups Shop	181	204	65	130	40	289	236	25	103	45	1,318
Southern/Soul	255	6	40	47	7	71	62	20	19	9	536
Southwestern	37	18	41	36	9	44	31	6	23	6	251
Spanish	4	32	17	6	10	11	172	4	20	5	281
Steakhouse	123	56	171	118	75	211	142	27	61	68	1,052
Sushi	39	81	64	37	24	263	103	15	169	33	828
Tapas	12	12	24	4	3	27	41	1	28	6	158
Thai	80	127	167	59	41	502	164	14	254	195	1,603
Vegetarian	30	45	76	23	15	91	117	10	49	23	479
Vietnamese	15	52	16	43	12	106	58	9	89	74	474
Total by cities	6567	6126	13,052	7165	3057	20,594	13,638	1676	8287	5621	85,783

Source: City Search, Ontario, Inc. Selected popular cities, October 2007.

2.6. Determinants of future cuisines' development

Previous literature reveals that several dimensions, which are driven by a subset of attributes, will determine the development of cuisine in America. The food industry will be driven by continuous innovation, new inventions, and revivals of cuisines. The rise of celebrity chefs has been pre-cursor to numerous events that continue to shape the future of cuisines. Science-based cooking makes new dishes possible because it requires the use of non-traditional ingredients or preparation techniques, which are often derived from those used in science-based industrial food production (Bruhn, 2008; Mikkelsen et al., 2005; Ottenbacher et al., 2007; Sarkar and Costa, 2008; Vega and Ubbink, 2008).

Demographic characteristics of consumers and food choice preferences will be major drivers of future cuisines. Food choice behavior and food consumption patterns involve cultural, socio-logical, and psychological factors that vary within individuals and have different strengths among various groups of people and for different foods (Koehler and Leonhaeuser, 2008; Scapp and Seitz, 1998). Kristensen and Holm (2006) argue that people have problems following an eating routine that satisfies their cultural and bodily needs simultaneously. These cultural changes, influenced by career, time availability to prepare and consume food, will continue to affect the food that will be available to accommodate consumers' eating patterns.

Technological changes will likewise play an important role in food preparation and preservation (Singh et al., 2006). New scientific discoveries will provide greater opportunities for the advancement of food processing with regard to food safety and quality, functionality and health, equipment and process innovation, and markets and commercialization (Roupas, 2007). Noticeably, while the demand for organic foods by consumers is rising rapidly, the industry is struggling to meet their demand (Defrancesco, 2003).

Marketing of food and food-related products will continue to influence consumer psychographics (Grunert et al., 2005). Marketing efforts are evident in all food markets, from influencing consumer meal choices, to low-cost advantage, to home-meal replacement and to claims for health benefits (Costa et al., 2007). Convenience and price are believed to be important determinants of food choice (McIntosh, 1996; Rappoport et al., 1993; Steptoe et al., 1995). In order for food service businesses, scientists, and policy makers to develop successful products, services and policies, they must understand food consumers and how they decide which products to buy. Food consumer behavior is the result of several intrinsic and extrinsic factors, including the motivations of different consumers, the attributes of specific foods, and the environment in which food choices are made. Recognizing diversity between individual consumers, different stages of life, and different cultural contexts is important as markets become more diverse and international (Frewer and Van Trijp, 2009).

Like any complex human behavior, food choice will undeniably be influenced by both intrinsic and extrinsic factors (Shepherd et al., 1995). Under the intrinsic factors identified in published literature that will determine what foods a person eats are personal preferences, food consumption patterns, cultural, social, religious, economic, environmental, and even political factors (Mackereth and Milner, 2007). While inherent intrinsic factors affecting food choices may be under the control of individual consumers, extrinsic factors are not. One extrinsic factor is the risk associated with a product such as "novel food". The risk may involve the consumer's trust in the production process, and trust in government regulations (as in the case of genetically modified and organically grown food) (Rosati and Saba, 2000; Shewfelt and Brückner, 2000). Additional significant factors such as innate and acquired taste, simplicity of cooking dishes, continuing education about cooking, dining and increased product knowledge contribute to predicting how cuisines may evolve. Acquired knowledge will be the predominant factor in consumers' appreciation of new foods; an example is the increase in knowledge about organic food, nutrients and their benefits (Onyango et al., 2007).

3. Methodology

3.1. Research design

This study used both qualitative and quantitative methods. The mixed methods in this study included focus groups and an online survey (Barrett, 2005; Greene et al., 1989). Mixed method research is a means of collecting and analyzing both qualitative and quantitative data in a single study or in a series of studies, based on priority and sequence of information (Creswell, 2003; Tashakkori and Teddlie, 2003). By using more than one method to study the same phenomenon, the validity of results is strengthened.

3.2. Sample

The target population for this study consisted of members of the American Culinary Federation, American Dietetic Association, Association for the Study of Food and Society, Foodservice Consultants Society International, Global Hotelier Association, Institute of Food Technologists, International Food Service Executive Association, the Research Chefs Association, and National Restaurant Association. This sample was selected based on convenience and the researcher's access to the members of these organizations. The researcher's membership in some of these associations allowed access to the email addresses of active members. The aggregate associations' membership likely exceeds 50,000. In order to achieve a sample, the researchers attempted to collect email addresses from the membership directories of ten associations. Because some associations do not allow direct access to the members' directories, the authors requested each chapter president to e-mail the online survey link to his/her members. Approximately 10,000 samples were emailed.

3.3. Instrument development and data collection procedure

A focus group consisting of six food service industry experts was created. A pool of participants was identified through the chapter of the National Restaurant Association of a Midwestern city. A shortlist of 15 potential participants was created. The participants had to meet the criteria of food service professionals, food production, be familiar with American cuisine, ethnic cuisines and particularly with Italian cuisines in America. Following the qualifying interviews the list was reduced to 10 participants who accepted the invitation to participate. On the day the focus group session took place, six people actually participated in the session.

A set of four open-ended questions were formulated for the focus group interview. The goal of the interview was to acquire an in-depth understanding of Italian cuisine in America. The interview took place in a private room in a city in the Midwest. The group members met the assumption of homogeneity, similarity, and commonality and had similar demographic characteristics (Kvale, 1996). A moderator asked the questions, encouraged discussion, generated interest, and produced useful, qualitative data. The interview was audio recorded, and manual notes were taken by one observer and by the moderator. After all data collected had been transcribed and synthesized, a content analysis applying coding, frequencies, and pattern techniques was used to analyze the focus group report in order to check for duplication and possible missing components. The results of the analysis were used to formulate the web-based survey instruments.

Table 2
Attributes that have had influence in the popularity of Italian cuisine in America ($N = 1008$).

Items	Mean	Std. deviation	Cronbach's alpha	Rank
A multi-item scale			.79	
Taste	4.60	.646	.78	1
It is varied and appeals to almost anyone	4.07	.767	.76	2
Readily available ingredients	4.00	.831	.77	3
It is recognized as part of the American dining culture	3.98	.853	.78	4
It can be easily reproduced in every household	3.96	.906	.77	5
Media influence such as cooking shows on television	3.94	.899	.72	6
Italian dishes being featured in many non-Italian restaurants	3.83	.908	.78	7
Low cost of ingredients	3.79	.870	.77	8
It is considered "comfort food"	3.76	.902	.77	9
Work related factors force people to eat away from home	3.61	1.007	.78	10
It is an integral part of the curriculum in culinary schools	3.41	.955	.77	11
Consumer education	3.33	.936	.76	12
Health benefits claims	3.26	.990	.78	13
Chefs' training	3.18	1.076	.76	14
People became familiar with it by traveling to Italy	2.72	1.106	.77	15

Table 3
Attributes that will influence the *future* of Italian cuisine in America ($N = 1008$).

Items	Mean	Std. Deviation	Cronbach's Alpha	Rank
A multi-item scale			.74	
Taste	4.54	.651	.72	1
Simplicity	4.11	.842	.71	2
Variety of Italian cuisine, North-South	4.07	.867	.71	3
Italian style quality ingredients being produced in America are readily available	4.00	.833	.71	4
Italian cuisine is not viewed as exotic, it is accessible	3.98	.892	.73	5
Classic Italian cuisine	3.91	.875	.72	6
Expectation of young diners on price, service, quality, convenience	3.86	.847	.72	7
Fusion into other cuisines	3.82	1.007	.74	8
Specialized local food cuisines (e.g., Neapolitan, Piedmontes, Sicilian)	3.78	.924	.71	9
Italian "regional" cuisine concept development, e.g., North, Central, Southern	3.77	.919	.73	10

The web-based survey was designed to assess respondents' attitudes to specific foods and to investigate the history and future of cuisines, particularly Italian cuisine (Smith and Leigh, 1997). The survey was emailed to about 400 associations' chapter representatives and the email with the link to the survey was distributed to approximately 10,000 participants selected from a convenience sampling. For the pilot test, a survey was launched and an email was sent to about 500 recipients. Within a day of the launch, 56 responses has been received, a response rate of 11.2%. The data was analyzed to establish its usability. A validity test was performed to assess if the survey was in fact testing what the researchers intended to test. A reliability test was performed to assess if the survey results from the pilot test yielded the same measure results on repeated trials. Tables 2 and 3 demonstrate that all items' Cronbach's alphas were above .6 of cutoff, indicating an acceptable reliability level.

The pilot test showed that a minor modification to the wording of items in the instrument was necessary and the actual survey was then launched. Three days subsequent to the launch, 275 responses out of a possible total of 9500 emails sent had been received. In order to raise the response rate, follow-up emails were sent to all participants 5 days after the first email. Within 10 days of the initial email, a total of 1177 responses had been received, yielding a response rate of 12.39% from the remaining sample of 9500. The relatively low response rate was attributed to the large number of questions and the lack of monetary incentives (Dillman, 2006). Since the online survey was designed to protect anonymity of respondents, there is no way to distinguish respondents from non-respondents. Therefore, we adopted an approach suggested by Armstrong and Overton (1977) based on the assumption that the late respondents well represent the non-respondents. In case of low response rate, Armstrong and Overton recommend testing non-response bias by comparing the socio-demographic char-

acteristics of the first 10% of early respondents and the last 10% of late respondents (Reynolds et al., 2007). The chi-square test disclosed no significant differences at the level of 5% in the socio-demographic profiles between early and late respondents. Thus, non-response bias may not be a serious problem in sample representation. From the 1177 responses received, 69 were non-usable and 1108 were used in the analysis.

3.4. Data analysis

Qualitative data from the focus group discussion was analyzed by applying content analysis techniques coding, frequencies, trends, and patterns analysis. The data was then transcribed, sorted and prioritized, coded for content extraction and usability and then synthesized and included in the results. Quantitative data obtained from the survey was statistically analyzed using SPSS 16.0 software.

4. Results

4.1. Demographic and employment profile of respondents

The respondents consisted of 63% males and 27% females. Their age ranged from 25 to 65 years; 570 (about 52%) of the respondents were between the ages of 36 and 55. About 85% of the respondents were not of Italian heritage. About 64% of respondents were actively involved in food service production or operations. The largest percentage (23.5%) was educators, followed by executive chefs and employees in R&D department (8.9% and 8.6%, respectively). These results are consistent with our prediction that the respondents were either actively involved in the foodservice industry or in related industries.

Table 4
Answers to the research questions.

From the focus group	From literature review	From the survey
1. What are the *historical influence factors* that have contributed to popularity of Italian cuisine in America?		
• Taste	• Italian immigrants preserved the Italian eating culture	• Taste
• Simplicity	• The evolution of Italian restaurants supported the determination of Americans to continue the Italian way of eating	• It is varied and appeals to almost anyone
• Other cuisines, include Italian food products	• Fusion of cuisines included Italian cuisines	• Readily available ingredients
• Variety of Italian cuisine: changes in every region	• The variety of Italian cuisine: north-south menus	• It is recognized as part of the American dining culture
• Italian cuisine is not exotic; it is accessible	• Combination of taste and simplicity of preparation	• It can be easily reproduced in every household
• Italian food products can be found at any supermarket	• Low-cost factor	• Media influence, cooking shows
2. What are *the factors that will influence* Italian cuisine in America in the future?		
• Health benefits claims	• Commercialization of Italian products in America may stay constant	• Taste
• Low-cost factor	• Marriage of taste and simplicity of preparation	• It is varied and appeals to almost anyone
• The choice of products available is as varied as in Italy	• Low cost to purchase the raw product	• Readily available ingredients
• Cooking shows on television will generate demand	• Fusion of cuisines included Italian cuisines	• It is recognized as part of the American dining culture
• Publishing of Italian cookbooks and audiovisual material will educate and generate more demand	• Easy to reproduce in any households	• It can be easily reproduced in every household
• Travel writers will greatly influence future demand	• Italian eating culture has become an integral part of American dining	

4.2. Internal consistency

A Cronbach's alpha reliability test was performed to assess if the survey results yielded the same measure results on repeated trials. Tables 2 and 3 demonstrate that the scale of 15 items in Table 2 and the scale of 10 items in Table 3 showed Cronbach's alphas of .79 and .74, respectively, which were above Nunnally's (1978) recommended .70 threshold. Overall, the measures are internally consistent. Tables 2 and 3 also report the scale's Cronbach's alpha if the individual item is removed from the scale. For example, the scale's Cronbach's alpha would be .78 in Table 2 if item 1 (taste) were removed for the scale. Cronbach's coefficient alpha does not increase with the deletion of any items for both Tables 2 and 3 and thus it is not necessary to remove any items from the scales.

4.3. Influencing attributes in the popularity of Italian cuisine in America

Table 2 summarizes the attributes that contributed most to the popularity and development of Italian cuisine in America. The popularity of Italian cuisine was identified through the historical

data available from the literature review, through the expert opinion of the focus group and through the responses of the participants. On the one hand, the top four attributes cited by respondents were taste, variety, appeal to the public and availability of ingredients. On the other hand, the least popular attributes were health benefits claims, chefs' training, and travel to Italy.

4.4. Attributes that will influence Italian cuisine in America in the future

Table 4 shows the attributes that will influence Italian cuisine in America. In descending order, these are taste, simplicity, variety, and availability of ingredients. Taste and variety of cuisines ranked high in Tables 2 and 3. The findings provide valuable primary data which can be used for future investigations of other ethnic cuisines in America.

4.5. Reasons of becoming familiar with Italian cuisine and appreciating the cuisine

Fig. 1 shows that respondents became familiar with Italian cuisine through eating out and through their profession. These

Familiarity with Italian Cuisine

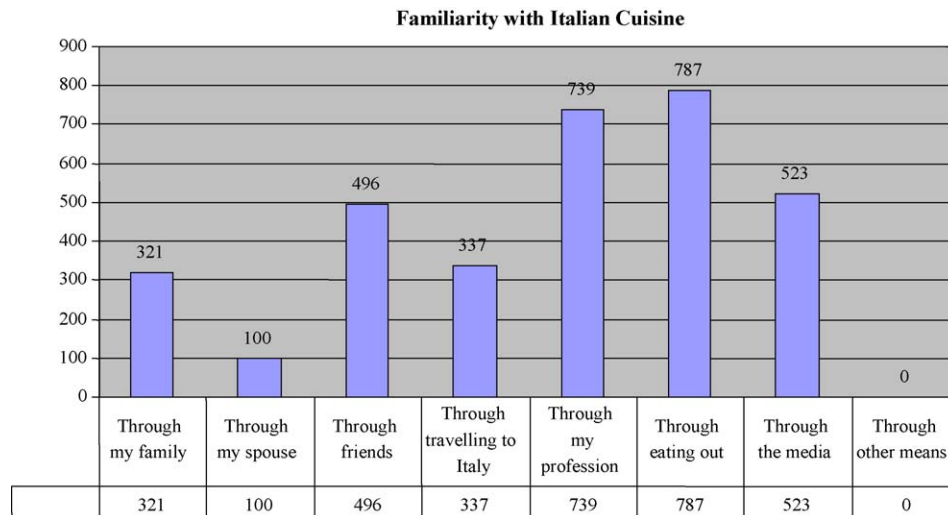|	Through my family	Through my spouse	Through friends	Through travelling to Italy	Through my profession	Through eating out	Through the media	Through other means
	321	100	496	337	739	787	523	0

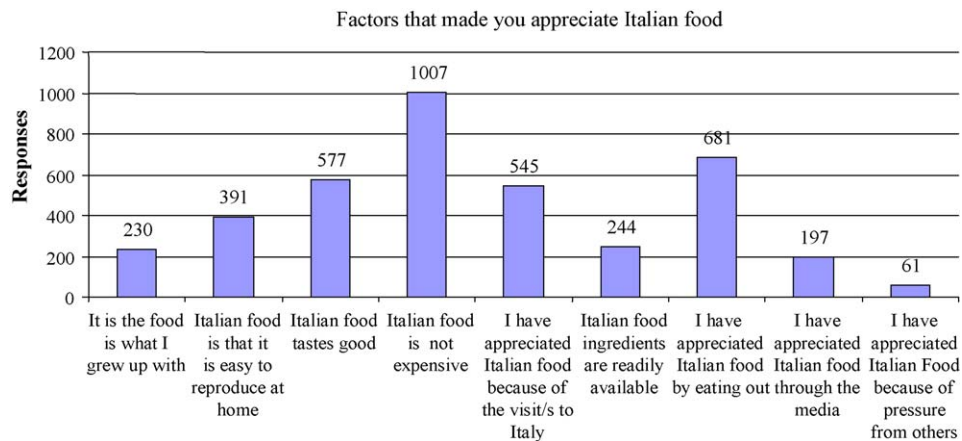**Fig. 1.** Familiarity with Italian cuisine.

Fig. 2. Factors that made you appreciate Italian food.

findings will help marketers develop strategies to market future cuisines, and anything related to food, from production to processing, distribution, cooking and consumption. The findings could provide useful insights to restaurant operators when promoting new cuisines and new restaurants. The researchers had expected the respondents to be either actively involved in the industry or involved in a foodservice-related industry. The respondents would therefore be assumed to be familiar with Italian cuisine.

Fig. 2 shows the respondents' reasons for their appreciation of Italian cuisine: (1) it was inexpensive to buy and prepare it; (2) they appreciated Italian food over other foods while eating out; (3) it tasted good. Although the majority of respondents had become familiar with the Italian cuisine through their profession, they appreciated it for different reasons as well (see Fig. 2).

5. Summary of findings

In searching the literature we found that articles predicting food trends are published mainly in trade magazines. Since they were not based on scientific research but rather on opinion, we argue that such predictions are more confirmatory about present restaurant features than they are indicative of future trends. Furthermore, such articles do not consider the food and restaurant concepts that fail and thus may not necessarily sustain the "intended–predicted trends". The results of our exploratory study support the development of a model which could be refined to reflect past culinary trends and to allow predicting cuisine trends, enabling present operators and new entrants to predict future culinary trends.

The results from the focus group and the survey show that the most popular attributes of Italian cuisine were taste, variety, appeal to the public and available ingredients. The least popular attributes were health benefits claims, chefs' training, and becoming familiar with it by traveling to Italy. History was found to be predictive of the future and factors such as taste, simplicity, and the variety of Italian regional cuisines may remain constant (see Tables 2 and 4). However, respondents indicated that with the Internet and food shows, additional factors may come to increase the popularity of Italian cuisine.

People are more educated due to the unprecedented access to information and because of increases in disposable income, they travel more. The appearance of private non-accredited cooking schools will have an influence on how people can learn how to prepare an original dish at home. People know more about the originality of Italian cuisine, its staple ingredients (like olive oil) and have a different expectation of its quality. An additional factor is that many Italian menu items such as pizza, mozzarella cheese,

and salami products have been commercialized and are no longer considered exotic, because they are readily available anywhere, including as a staple in households. This trend may continue as the discovery of new dishes and the availability of technology enables entrepreneurs to commercialize more products. According to these results, Italian cuisine has become and will remain an integral part of American eating culture. Italian dishes have become very popular in restaurants and foodservice institutions. The respondents indicated that Italian cuisine is also served in hotels, hospitals, cafeterias, and other dining facilities.

5.1. Answer to the research questions

Research question 1: What historical factors have affected the development and popularity of Italian cuisine in America?

The answers to research question 1 show that several factors were cited by the focus group, the literature review and the survey results. Displayed in chronological order the results were (see Table 4):

1. Taste
2. Simplicity
3. Low cost
4. Easy to reproduce
5. Italian cuisine is varied as it different in every region
6. Raw products and related ingredients are readily available
7. It appeals to almost anyone

Research question 2: What factors will influence Italian cuisine in America in the future? "Taste" is the dominant factor. Italian cuisine is no longer considered exotic, according to the focus group, it is readily available, and it is served in every household. Two other central factors are simplicity of preparation and its low cost. Italian cuisine calls for more vegetables and pasta and less meat or fish, therefore the cost factor is lower than for protein-based dishes. The answer to question 2 resembles that of question 1; these factors are indeed the building block for a prediction model. Table 4 shows the data extrapolated from the triangulation of the literature review, the focus group, and the survey. The results provided usable data to answer the two research question and can be applied to the proposed model.

6. Toward the construction of a prediction model for future culinary trends

The literature review shows that several historical factors explain the popularity of Italian cuisine in America: taste,

| Future cuisine trend prediction model | | | | | | | |

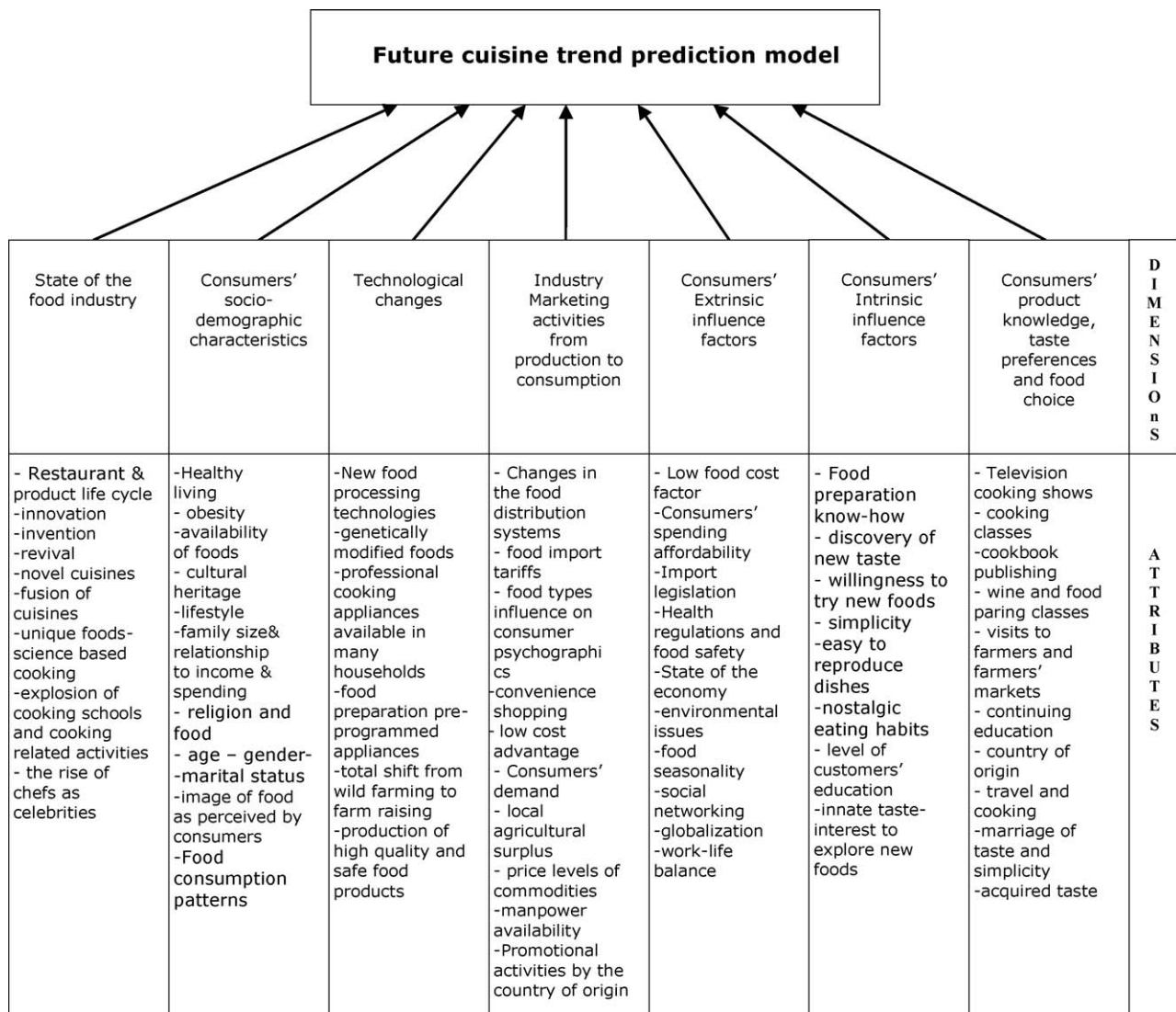| State of the food industry	Consumers' socio-demographic characteristics	Technological changes	Industry Marketing activities from production to consumption	Consumers' Extrinsic influence factors	Consumers' Intrinsic influence factors	Consumers' product knowledge, taste preferences and food choice	D I M E N S I O n S
- Restaurant & product life cycle -innovation -invention -revival -novel cuisines -fusion of cuisines -unique foods- science based cooking -explosion of cooking schools and cooking related activities - the rise of chefs as celebrities	-Healthy living - obesity -availability of foods - cultural heritage -lifestyle -family size& relationship to income & spending - religion and food - age – gender- -marital status -image of food as perceived by consumers -Food consumption patterns	-New food processing technologies -genetically modified foods -professional cooking appliances available in many households -food preparation pre-programmed appliances -total shift from wild farming to farm raising -production of high quality and safe food products	- Changes in the food distribution systems - food import tariffs - food types influence on consumer psychographics -convenience shopping - low cost advantage - Consumers' demand - local agricultural surplus - price levels of commodities -manpower availability -Promotional activities by the country of origin	- Low food cost factor -Consumers' spending affordability -Import legislation -Health regulations and food safety -State of the economy -environmental issues -food seasonality -social networking -globalization -work-life balance	- Food preparation know-how - discovery of new taste - willingness to try new foods - simplicity -easy to reproduce dishes -nostalgic eating habits - level of customers' education -innate taste- interest to explore new foods	- Television cooking shows - cooking classes -cookbook publishing - wine and food paring classes - visits to farmers and farmers' markets - continuing education - country of origin - travel and cooking -marriage of taste and simplicity -acquired taste	A T T R I B U T E S

Fig. 3. Proposed future cuisine trend prediction model.

simplicity, variety, general appeal, affordability, and availability. The results from the focus group and survey about historical influence factors confirm those of the literature review. The factors that will influence the popularity of Italian cuisine are, to a certain extent, very similar to historical pattern; however, additional factors such as health benefit claims, fusions of other cuisines with Italian cuisine, life style changes, changes in technology and factors such as marketing activities, intrinsic and extrinsic factors can predict how cuisines will evolve. Accordingly, a model is proposed to summarize the findings. The proposed model in Fig. 3 shows the most relevant attributes that were derived from the literature review, focus group interview, and survey. These attributes are incorporated into seven dimensions: "state of the food industry, consumers' socio-demographic characteristics, technological changes, industry marketing activities from production to consumption, consumers' extrinsic influence factors, consumers' intrinsic influence factors, and consumers' product knowledge, taste and food choices". These dimensions were extrapolated, summarized and synthesized from the literature. The model serves several purposes but not limited to: identifying the historical factors that have contributed to the development of the popularity of Italian cuisine; indentifying the factors that will influence the popularity of Italian cuisine in the future; serving as a catalyst in

the decision making process in the investment of new venture creation; becoming a valuable tool for the practitioner who needs to implement marketing changes in the pursuit of sustainable competitiveness and stimulating scholars to conduct future research to eventually test the model for its applicability across other ethnic cuisines.

7. Discussion and managerial implications

The results of the study suggest that ethnic foods in America are becoming an integral part of the American diet and dining culture. The authors find that Italian cuisine is no longer exotic, meaning that it is no longer a novelty due to its overwhelming popularity; its ingredients are readily imported into or produced in the U.S. without constraints and the popularity of Italian restaurants in America will continue to have an impact on the country's culinary evolution. This is supported by the attributes presented in Tables 2 and 3 which have been extrapolated from the results of the focus group and the survey. Table 4 shows, compares, and contrasts the most salient attributes to emphasize their past and future influence on cuisines in America. In Fig. 3 these attributes are linked to seven dimensions. When synthesizing the findings, the factors of utmost influential significance were taste, simplicity, low cost and ease of preparation.

According to the results from the focus group, forecasting cuisine trends will be of vital importance to professionals responsible for investment, creating new markets, increasing company market shares and bringing innovation and investing into new ventures, thus responding to consumer demands in a global environment. Accurate and timely information about what is likely to happen to the economy and society has always been of value to business decision makers.

Although food trends affect all food-related businesses, they affect restaurateurs the most. Restaurateurs are catalysts for change; they promote menu innovation and respond to trends such as the low-carb, organic and molecular cuisine. They are the first to identify and respond to consumers' demands. Often new products and new recipes (like pasta primavera) are launched and promoted by popular chefs or restaurants.

The results suggest that respondents generally share a vision that ethnic foods have become popular and the fusion of such cuisines has led to the creation of novel dishes which are becoming part of American eating culture. At the microlevel, restaurants are promoting more regional, local-emotional with pride of place of origin, and nostalgic cuisine. The authors emphasize that the cuisine restaurant patrons may appreciate in the future will be indeed influenced by the factors described in Fig. 3 and will undoubtedly influence the food chain and related industries. Predicting the trend cycle of a cuisine will help culinary professional in all and those involved in related industries plan and budget supplies to meet the anticipated demand.

One implication is that new entrants to the restaurant business should pay attention to past trends and be alert to future ones. Another implication is the need to follow trends in related industries and to respond to changing demands for more healthful and nutritious food. As America continues to welcome immigrants who will introduce new cuisines, restaurateurs should learn from past trends and apply the information to their present or future ventures. Future research may determine if other ethnic cuisines have similarities and if a predictive model for all cuisines can be designed.

The results of this exploratory study will be helpful to marketers, investors, food service operators, suppliers, and other businesses in the food service industry. Because socioeconomic conditions and global economies constantly change, with the help of predictive indicators, present and future restaurateurs can follow trends in related industries, such as the current rise in demand for more nutritious, natural, and organic foods.

The purpose of this study was to collect information about the historical development of Italian cuisines in America, in order to use this as a model for other cuisines. Data about past developments, trends and activities, when applied to a theoretical framework, provide some of the more reliable information.

8. Limitations and future research recommendations

The study had several limitations. The sample of trade professionals was drawn from the aggregate databases of professional associations cited in Section 3. As a result, the generalizability of the study results and conclusions are limited to those respondents. The majority of the respondents worked in food service fields, and therefore, the sample is likely to be overly representative of the food and beverage industry. The results therefore may not be generalized to all consumers. A larger sample population which would have included an equal number of consumers could have avoided that the bias of unilateral point of view and could have influenced and provided more strength and support to the research findings. To conduct this study, a self-report instrument was used. There could have been some reporting bias in the data collected. It is possible that the subjects' responses

did not match their behavior. Researchers have always been skeptical about the validity of self-reports. The survey was launched on a Friday. Most of the respondents worked out of an office and did not work on the weekend. As a result, approximately 4000 emails of approximately 10,000 were returned by email auto responders. Future surveys should be launched on a Monday; respondents are more likely to be in the office on a Tuesday and the probability of receiving a higher response rate is greater.

Being able to predict what culinary trends may flourish will be helpful to investors, food service operators, suppliers and other businesses in the food service industry. The results of this study will make a valuable contribution to future researchers. This study should be replicated with all cuisines to determine if other ethnic cuisines have similarities to the Italian and if a model can be applied to forecast the development of future cuisines in America. Future studies should investigate if other popular cuisines, such as Chinese, Japanese, Thai and the Mexican, will continue to have an impact on the evolution of America's restaurant cuisine. Future research should also identify if innovation and/or invention of new dishes such as molecular gastronomy can be a pre-cursor of future dining trends and if new menu items may become popular, sustainable and thus as much a part of the American eating culture as Italian cuisine has become. Future research should also attempt to identify trends in Italian restaurants over time, the growing differentiation of Italian food, e.g., Tuscan, Sicily, Umbria, Sardinia, Piedmont, and differentiation between low and high end restaurants.

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