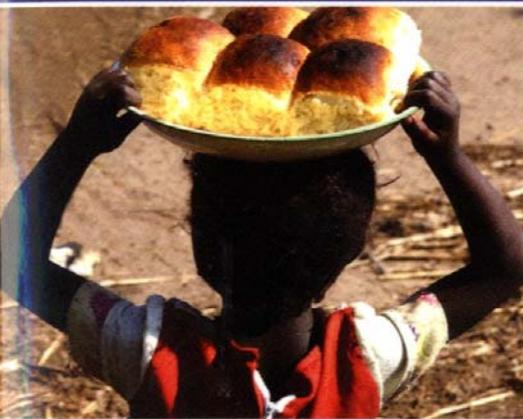


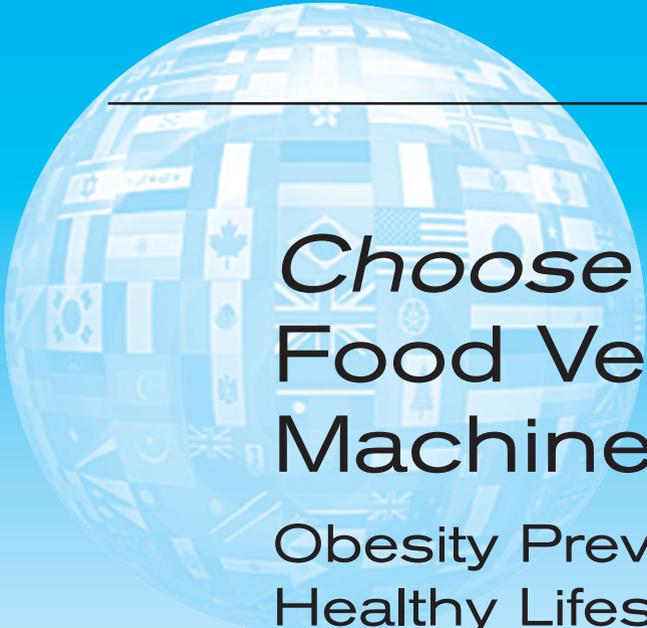


for **Social Marketing** **PUBLIC HEALTH**

GLOBAL TRENDS AND SUCCESS STORIES



Hong Cheng | Philip Kotler | Nancy R. Lee



Choose Health in Food Vending Machines

Obesity Prevention and Healthy Lifestyle Promotion in Italy

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ITALY: A COUNTRY OVERVIEW

General Information

Italy is a state in southern Europe. It is a peninsula in the central Mediterranean Sea, bordering France to the west, Switzerland and Austria to the north, and Slovenia to the east. Other neighboring countries are the Vatican City and the Republic of San Marino. On the whole, it covers an area of 30,133,601 hectares (301,336 square kilometers) with more than 59 million inhabitants (Istituto Nazionale di Statistica [ISTAT], 2007).

Since 1946, it has been a democratic republic, with Rome as its capital. The Constitution, the fundamental law that runs the republic, has been in force since 1948. Italy is a member of the European Union and of the North Atlantic Treaty Organization (NATO). It is known worldwide for its natural beauties, its history, and its art.

Major Public Health Issues

The life expectancy at birth in Italy is one of the longest in the world: it reaches 78 years for males and 84 for females, while the healthy life expectancy (HALE) at birth¹ is, respectively, 71 years and 75 years. Furthermore, the infant mortality rate—data traditionally linked to socioeconomic and environmental conditions, and to performance of health services—suggests that the health of the Italian population has reached a good level. In fact, this rate in Italy is low (4 per 1,000 live births), as compared to that of other countries (WHO, 2007).

Italian Health Service is founded on the principles of equity and of universal healthcare coverage: it guarantees everyone access to appropriate services. The right to safeguarding health is defended by the Constitution. Total expenditure on health is 8.7% of the gross domestic product; 75.1% is covered by the general government and 24.9% is private. In 2004, the per capita total expenditure on health at the international dollar rate was US\$2,414. In comparison, the average value of the entire European Region was US\$1,564 (WHO, 2007).

Similarly to other European countries, chronic diseases are one of the main public health issues. According to recent WHO statistics (2007), noncommunicable diseases cause 86% of years of life lost in Italy. It is also estimated that in 2004, tumors and cardiovascular illnesses caused almost 390,000 deaths, a total of 72% of overall deaths (ISTAT, 2007). It is widely recognized that unhealthy lifestyles are the major cause of chronic diseases. To reduce their spread, the WHO Regional Office for Europe (2006) launched *Gaining Health: The European Strategy for the Prevention and Control of Non-communicable Diseases*. In coherence with European strategy, the Italian government (*Decreto del Presidente del Consiglio dei Ministri 4 maggio 2007* [Decree of the President of the Council of Ministries, May 4, 2007]) has approved the national *Gaining Health: Making Healthy Choices Easier* program (*Guadagnare salute: Rendere facili le scelte salutari*, in Italian), whose focus is on diet, physical activity, smoke, and alcohol. Through communication and environmental interventions, this national program aims to create favorable conditions in adopting healthy habits. Its strength is the promotion of activities that involve different subjects of the society, such as public institutions, private business (production, distribution, management, etc.), and scientific associations, with the purpose of health promotion.

¹The World Health Organization (WHO) defines healthy life expectancy at birth as the “average number of years that a person can expect to live in ‘full health’ by taking into account years lived in less than full health due to disease and/or injury.” This definition has been retrieved February 10, 2009, from the WHO Web site at: www.who.int/whosis/indicators/compendium/2008/1hat/en/index.html.

Social Marketing and Health Communication in Italy

In 2000, a national law (*Legge No. 150 del 7 giugno 2000* [Law No. 150, June 7, 2000]) was approved that represents a milestone for the development of public communication in Italy because it regulates information and communication activities in public institutions and defines the educational training required of operators who work in these professional fields.

Since then, social marketing and communication have been acquiring importance and, in recent years, are becoming part of prevention and health promotion strategies, as was specified by recent national and regional planning documents discussed later.

The National Health Plan 2006–2008 (*Piano Sanitario Nazionale 2006–2008*, in Italian) states the importance “of developing strategies for coherent and effective communication, since this is a necessary and decisive instrument to reach the objectives of risk prevention and health promotion” (translation from the *Ministero della Salute* [Ministry of Health], 2006, p. 29). Coherently, the National Prevention Plan 2005–2007, *Piano Nazionale della Prevenzione 2005–2007*, in Italian (*Intesa Stato Regioni del 23 marzo 2005* [Regions State Agreement, March 23, 2005]), and the Italian *Gaining Health* program reaffirm the strategic and central role of communication for the development of prevention activities. In particular, the *Gaining Health* program states that it “favors health communication,” defining communication as “an integrated component of the prevention interventions regarding the *Gaining Health* program” and “an important instrument for information and knowledge” (translation from the *Decreto del Presidente del Consiglio dei Ministri 4 maggio 2007*, p. 8).

The Social and Health Plan 2008–2010 (*Piano Sociale e Sanitario 2008–2010*, in Italian) of the Emilia-Romagna Region (*Deliberazione dell'Assemblea Legislativa della Regione Emilia-Romagna 22 maggio 2008, No. 175* [Deliberation of the Legislative Assembly of the Emilia-Romagna Region No. 175, May 22, 2008]), along with communication activities, focuses its attention on social marketing as a tool to create partnership for the purpose of empowering citizens. Meanwhile, in the Prevention Plan of the Veneto Region (*Delibera della Giunta Regionale del Veneto No. 188 del 31 gennaio 2006* [Deliberation of the Regional Council of Veneto No. 188, January 31, 2006]), among the interventions to reduce obesity, there exists a specific recommendation for the development of a social marketing project to promote health through food vending machines.

To support the diffusion of effective communication and social marketing strategies for health promotion, the Italian Association of Public and Institutional Communication has activated the research area, Social Marketing and Health Communication, and a National Social Marketing Work Group, which gather the

contributions of Italian experts, professionals, and operators. The research area has developed two working tools—a Web site (www.marketingsociale.net) and a newsletter—and organizes periodical conventions, focusing on the following themes:

- Applying social marketing to health promotion activities.
- Enhancing public health communication.
- Organizational models.
- Impact of socioeconomic inequities on health status and the role of communication.
- Communication evaluation.
- Communication of social responsibility.
- Appropriate practices.

Moreover, to collect and enhance health promotion activities that use social marketing principles, the Italian Association of Public and Institutional Communication and the Local Health Unit of Modena organize an annual national competition, denominated “Health Marketing,” which reached its fourth edition in 2007. Overall, more than 220 projects took part in that initiative to give proof of the increasing interest toward this innovative strategy.

CASE STUDY *Choose Health*

This case study involves an experimental social marketing project, *Choose Health*, aimed at transforming vending machines into a tool for preventing obesity and promoting healthy lifestyles in schools, workplaces, and universities through the delivery of communication activities and the introduction of healthy products (see [Figure 7-1](#)).

CAMPAIGN BACKGROUND, PURPOSE, AND FOCUS

The WHO estimated that unhealthy habits—being overweight or underweight, not eating enough fruits and vegetables, physical inactivity, smoking, and drinking alcohol—account for almost 50% of all diseases in men and for 25% in women (measured as disability-adjusted life-years, or DALY) in developed European countries (WHO, 2002).



FIGURE 7-1 Structure of the “Choose Health” project
 Courtesy of Daem S.p.A.–Buonristoro Vending Group.

The *Choose Health* project was implemented in the province of Modena (in the Emilia-Romagna Region, in the northeast of Italy) with approximately 670,000 inhabitants and 47 municipalities. In this territory, according to the national behavioral risk factor surveillance system called *Passi*, 35.3% of citizens surveyed were reported as not being sufficiently active, 21.4% were completely inactive, and 40% were obese or overweight (Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della salute [National Center for Epidemiology, Surveillance, and Health Promotion], 2006).

To support the development of effective healthy lifestyle promotion activities in the province of Modena, the Local Health Unit (*Azienda USL di Modena*, in Italian) has activated the Health Promotion program that includes coordinated interventions in different settings, such as schools, workplaces, supermarkets/shopping centers, mass media, and fairs, in collaboration with several public and private partners in the context of the Local Health Plan. *Choose Health* was developed as a part of this program.

The project's purpose was to contribute to reducing the spread of obesity and of chronic diseases related to an unhealthy lifestyle. The focus was on accomplishing this through healthier and more appealing options at vending machines.

The rationale of the project was twofold. On the one hand, there was a growing request from citizens to improve the quality and the types of the products sold through vending machines. In fact, in Europe public opinions given believed that soft drinks, candies, and sweet snacks—often sold through vending machines—could be a cause of obesity. In recent years, this topic has become one of the priority actions affirmed by national and regional health planning documents. In particular, the *Gaining Health* program recommends the introduction of “fruit snacks, water, and low-calorie beverages with a good nutritional content” (translation from the *Decreto del Presidente del Consiglio dei Ministri 4 maggio 2007*, p. 22). The Prevention Plan of the Emilia-Romagna Region focuses its attention on schools and suggests increasing the use of “products that contain low simple carbohydrates, saturated fats, and additives,” while sustaining the consumption of fruits and vegetables (translation from the *Delibera della Giunta Regionale dell'Emilia-Romagna n. 426* [Deliberation of the Regional Council of the Emilia-Romagna Region No. 426], 2006, p. 83).

On the other hand, vending machines were the place where nutritional choices occurred: using them for health promotion meant offering correct information regarding a proper lifestyle when an individual decided which products to buy and eat. Vending machines also provided opportunities to reinforce the effectiveness of the messages, because communication activities could be integrated with the offer of healthy foods. Vending machines were widely distributed, partly as a consequence of new ways of life and of work organizations that had reduced the possibility to have lunch at home. This trend has recently been confirmed by Confida, the Italian Vending Association, which estimates that there are about 1.68 million vending machines in Italy and about 6 billion (6 thousand million) products (to eat or drink) sold through these machines (Confida, 2007). These statistics suggest that a great number of people can potentially benefit from the use of vending machines, which promote healthy lifestyles.

The SWOT analysis of micro- and macro-environments specified the following aspects.

Micro-Environment

- Internal strengths:
 - The Buonristoro Vending Group (a group of vending firms) contacted the Local Health Unit of Modena and offered its willingness to develop

a project for preventing obesity and promoting health as part of its cause-related marketing activities.

- The Local Health Unit of Modena had a staff with expertise in communication and health promotion (Communication and Social Marketing Department) and in nutrition (Office of Food Hygiene and Nutrition). Moreover, health promotion was part of the mission of the Local Health Unit.
- Internal weaknesses:
 - Funding sources for development of the project were limited, and the budget was low.
 - The Local Health Unit of Modena had no experience in working with the vending machine sector.

Macro-Environment

- External opportunities:
 - Because of the concerns of citizens toward this topic, the development of a project that related to health and vending machines could be perceived as interesting and remarkable.
 - New technological and organizational solutions had been developed, which made it possible to insert healthy food in vending machines: for example, fresh fruit or fruit salads that had to be kept cold or cooked.
- External threats:
 - Most citizens were skeptical about vending machines and thought they only sold products with low nutritional profiles.
 - The vending machine sector was a private sector, so its economic interests may influence the products that it sold.

At international levels, there had been some cases of vending machines being banned because of the types of products sold (e.g., candies and soft drinks). *Choose Health* was among the first projects developed in Italy aimed at promoting health through vending machines; other projects are now under way, also due to the development of the national *Gaining Health* program. The project, and its most recent developments, have gathered information on past and similar efforts documented by scientific literature and by the Web (Food Standards Agency, 2004; Higgs & Styles, 2006; Indiana State Department of Health, n.d.; San Diego & Imperial Nutritional Network, n.d.; Welsh Assembly Government, 2005). As a guide for the definition of the social marketing approach, Kotler, Roberto, and Lee's book, *Social Marketing—Improving the Quality of Life* (2002), was consulted.

TARGET AUDIENCES

According to the International Obesity Taskforce (2007), at the end of the 1990s and in 2000 the prevalence of obesity and excess weight in adolescents (aged 14 to 17) in Italy was among the highest in Europe. This suggested that adolescents should be considered a privileged target for healthy lifestyle promotion activities. Moreover, several experiences were described in the international context regarding the development of healthy vending machines in schools (Food Standards Agency, 2004; Higgs & Styles, 2006; Welsh Assembly Government, 2005).

Furthermore, existing data referred to the province of Modena (Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della salute 2006) demonstrated that physical inactivity and prevailing obesity/excess weight increased with age: sedentary individuals reached 14.8% between the ages of 18 and 34 and 17.6% between ages 35 and 49; the data for obesity/excess weight were 23.8% in the 18-to-24 age group, 22.5% in the 25-to-34 age group, and 34.3% in the 35-to-49 age group. Recent data also indicated that about 40% of 25- to 44-year-olds in Italy were more likely to eat away from home (ISTAT, 2007) and buy food from vending machines.

Given these data, the population groups that would enjoy the greatest advantages from a project that promoted health through vending machines were young and middle-aged adults, including students.

Choose Health was conceived as an experiment with the intention of defining an intervention strategy that promoted health through vending machines and that could be repeated in various settings by adapting the communication activities and the choice of products for different targets.

In conjunction with these remarks and considering the project's experimental approach, the main targets were:

- students aged 14 to 19;
- People who were studying or teaching in universities;
- Those who were working in some firms in the province of Modena.

CAMPAIGN OBJECTIVES AND GOALS

The project's objectives were as follows:

- Behavior objectives:
 - To choose healthy products (foods and beverages) available at vending machines during breaks at school, university, and work.

- Knowledge objectives:
 - To know what a healthy lifestyle is and how to put it into practice.
 - To know the health advantages of having a good lifestyle.
- Belief objectives:
 - To believe that a balanced diet, regular physical activity, and, in general, a good lifestyle can aid in preventing diseases and in feeling good.
 - To believe that having a healthy lifestyle does not necessarily require a great effort and can be achieved through simple everyday actions.

Indirectly, the project also had affective objectives aiming to reinforce the trust of citizens toward the Local Health Unit of Modena and to improve the Unit's reputation and reliability.

The goal was that at least 25% of all products that target audiences purchased through the project's vending machines were healthy (considering that there were no healthy choices before the campaign, the vending machines were new, and they offered both traditional and healthy products).

TARGET AUDIENCE BARRIERS, MOTIVATORS (BENEFITS), AND COMPETITION

Two focus groups were run with samples of the target audiences in order to explore their points of view regarding the project and collect important information regarding how to develop customer-oriented marketing mix strategies. These groups were led by a trained psychologist; the first involved school students between the ages of 18 and 19, and the second involved university students and working people. Several subjects were discussed during the focus groups: how often the target audiences bought certain groups of products and their perception regarding these products, their proposals about how to increase healthy products consumption (instead of traditional consumption), and how to realize health communication activities through vending machines.

In addition, several meetings were held with representatives of the Local Health Unit and of the Buonristoro Vending Group to discuss the characteristics of the target audiences. Their consumption habits, for example, could be inferred from data regarding the products sold through traditional vending machines found in locations similar to the project settings.

In synthesis, the following aspects were highlighted:

- Perceived and real barriers related to eating healthy products from vending machines:
 - The cost of fruit snacks, which were often expensive.
 - The practical difficulties of consuming healthy foods, like yogurt and fruit salads, which require, for example, a spoon.

- Factors that could act as motivators or could be perceived as benefits:
 - The availability of fresh food instead of prepackaged food.
 - A correct and reliable communication regarding healthy lifestyles, with positive, appealing, and easy-to-read messages, instead of negative warnings.
 - A clear identification of healthy products.
- Competition:
 - Vending machines selling fatty and sweet foods and beverages.
 - Attractive pictures on vending machines aimed at promoting traditional product consumption.
 - Nearby snack bars that offered a wider variety of products.

POSITIONING STATEMENT

The positioning statement of the project can be summarized as follows: we wanted our target audiences to see consuming healthy foods and beverages from vending machines, instead of sweet and fatty products, as an important, motivational, and pleasant everyday life activity, which could positively influence their health.

CAMPAIGN STRATEGIES (4PS)

Figure 7-2 synthesizes the 4P strategies developed for the project.

Product Strategies

- Core product (benefits of desired behavior): healthier life and reduction in the risk of becoming obese/overweight.
- Actual product (behavior, service, or program being promoted): eat and drink healthy foods and beverages during breaks at school, university, or work; have a balanced diet; practice regular physical activity; and think of the value of donating (blood, tissue, or organs to those in needy situations).
- Augmented product (ancillary goods and services): introduction of healthy products in vending machines, selected through the following steps:
 - Analysis of the products that the Buonristoro Vending Group could introduce in the vending machine distribution chain.



FIGURE 7-2 Scheme of the project marketing mix
 Courtesy of Daem S.p.A.–Buonristoro Vending Group.

- Technical judgments expressed by nutritionists of the Local Health Unit of Modena, which took into account the nutritional contents and the portion sizes available for introduction in vending machines.
- Opinions and needs expressed by the target audiences during the focus groups.

As a result, the healthy products selected were:

- Fresh fruit salads.
- Fresh fruits and vegetables.
- Ham sandwiches (prepared each morning).
- Yogurt with active milk enzymes.

- Fruit juices with 70% fruit content.
- Snacks with crackers and Parmigiano Reggiano (a typical Italian cheese).

To guarantee free choices to target audiences, the vending machines, where the project was implemented, sold both traditional and healthy products.

Pricing Strategies

- The costs associated with the behavior being promoted were:
 - Monetary costs, which included the economic costs for buying healthy products.
 - Nonmonetary costs, which were mainly psychological and consisted of renouncing good-tasting foods and beverages; not feeling completely full; feeling guilty with oneself, or feeling annoyed, or bored, while reading health promoting advices,
- To manage costs, and counterbalance them, the following strategies were adopted:
 - The healthy products of the vending machines were priced less than those sold in the cafés and snack bars where workers and students often had their breaks and/or lunches.
 - Stickers with the slogan, “Choose Health,” were used to signal healthy products in vending machines; they were a nonmonetary incentive since people were encouraged to prefer healthy products by the fact that they could see others choosing something with a healthy label.

Place Strategies

- As specified in the section regarding the project rationale, the same vending machines were the point of the decision-making process aimed at nutritional choices and where the target audiences carried out their behavior.
- To make the area convenient for the target groups, the vending machines were located inside some schools, firms, and in two locations in the university—in positions that were easy to reach and that the audiences already knew as places where they could have a break.
- The refreshment areas, where the vending machines with healthy foods and beverages were located, were made pleasant through the use of bright graphic presentations.
- To make the locations easy to identify, the project’s vending machines stood out through a green sticker placed on the floor with images of footprints and the invitation to approach through the writing, “Welcome to health.”

Promotion Strategies

- The main key messages of the project were that “you can choose to have a healthy life” and “you can achieve it through a good diet, through practicing regular physical activity, and through active attention towards the value of donation.”
- Based on the characteristics of the target groups (mainly young individuals), the message delivery strategy was developed through the use of an emotional style, which should solicit the association of positive feelings—such as wellness, joy, and happiness—to the concept of health. In coherence with the project’s slogan, “Choose Health” (*Scegli la salute*, in Italian), three slogans were created: “Healthy diet, a good daily choice”; “Regular physical activity is a healthy choice”; and “Giving to others is giving to ourselves.” Short and straightforward, these slogans were mainly based on two words—*health* and *choice*—repeated in each one.

Pictures were key elements of the communication strategy, and they were coherent with the idea of choosing health in that they, respectively, represented the actions of healthy lifestyles being promoted: a smiling girl with an apple in her hand, a young boy exercising, or a hand chain for solidarity. Bright colors (such as yellow, green, and light blue) were largely employed both in the images and in the text of the slogans. [Figure 7-3](#) illustrates the image used to present the project.

- Original, innovative, and appealing communication channels were used to give



FIGURE 7-3 Image used to present the “Choose Health” project

Courtesy of Daem S.p.A.—Buonristoro Vending Group.

advice regarding healthy habits: the three slogans were written on 900,000 plastic cups and were repeated on posters (positioned nearby the vending machines), where they were associated with the images described earlier. Practically, the vending machines themselves became a communication channel.

Other Important Strategies

- *Partnership strategy*: the development of a collaboration between public and private partners was a key element of the project, because the contribution of each of them was fundamental for its realization and success. The partnership strategy could be specified as follows:
 - The Local Health Unit of Modena was responsible for the scientific validity of the health message contents and of the types of healthy foods chosen (but not of the specific brands).
 - The Buonristoro Vending Group found the technological solutions, which allowed the introduction of healthy products (in fact, they had to be kept at different temperatures).
 - Confida promoted the project in Italy and toward associated vending firms.
 - Confindustria–Modena contacted the firms where the project was implemented and collected their agreements.
- *Supporting strategy*: there were several additional activities carried out to support the project and to create favorable conditions for its future development. In this case, the strategy was aimed at increasing community's interest and attention toward experimentation issues and at increasing the number of partners that could contribute to health promotion through vending machines.

To promote *Choose Health*:

- A folder was realized to present the project, its activities, and its results.
- A specific area within the Modena Health Plan Web site was created to collect information and materials.
- Numerous articles were published in local and national newspapers, and specialized magazines.
- The project was presented during meetings, public conferences, and national exhibitions.

CAMPAIGN BUDGET

The total project budget amounted to approximately €50,000 (euro) (about US\$63,700 based on 2004 rate). Costs were divided into the following:

- Approximately €5,500 for the staff involved (including the psychologist heading the focus groups).
- Approximately €11,500 for the design and creation of the health communication and project promotion materials (e.g., posters, slogans on plastic cups, and stickers on floors and healthy foods).
- About €33,000 for the 13 vending machines (including a change-giver mechanism, a system that stopped fresh products delivery after their date of expiration, and the supports for the health-promoting posters).

The costs were covered by the project partners.

The strength of the *Choose Health* campaign was its capacity to autonomously finance its activities. This meant that it had the possibility of being long-lasting and of being extended to other locations, because it did not depend on the availability of external funds.

CAMPAIGN TIME FRAME

1. Plan and preparation of the project (beginning from November 2004):
 - a. Definition of the target audiences, campaign objectives, goals, and strategy through meetings between representatives of the Local Health Unit of Modena, Buonristoro Vending Group, and Confindustria–Modena.
 - b. Realization of two focus groups with samples of the target audiences.
2. Presentation and promotion of the project (beginning from November 2004).
3. Realization of the project (from May 2005 to November 2005), through the creation of the refreshment areas and its implementation for six months.
4. Evaluation (during the development of the experiment and after its end).

CAMPAIGN EVALUATION

From the 13 vending machines where the experiment was initially implemented, about 30% of all products sold were healthy ones: on the whole, 25,000 healthy foods/beverages were purchased during the six months of experimentation.

A survey about opinion, satisfaction, and intention to buy was implemented in collaboration with the Communication and Marketing degree course taught at the University of Modena and Reggio Emilia in order to evaluate the consumer attitude about healthy food consumption and purchasing from vending machines. Items and questions from the questionnaires were evaluated according to a seven-point Likert scale. The period selected was the first month, just at the beginning of the *Choose Health* campaign, and the assigned locations were university and firms. Respondents were 144 students and 75 workers.

In general, beliefs about healthy food from both students and workers were similar, even if their purchasing and consumption habits differed somewhat. Students used this alternative quite often, as a reasonable option to lunchtime, while workers chose vending machines mainly as an alternative to break-time or during other moments, if strictly necessary, due to lack of time. Concerning the traditional products delivered through the vending machines, quality as well as taste and freshness were perceived to be just acceptable, prices not really moderate, and the variety of products offered not satisfactory. These opinions were tested both at the beginning of the experiment and at the end (as described later).

The “intention to buy” healthy products, measured during the first month, showed a moderately higher value for students (an average of 5.3) than for workers (an average of 4.8). Among students, 64.6% noticed the new healthy products, and 51.6% bought them at least once.

Among workers, a higher percentage (81.3%) noticed the healthy products. In this case, 54.7% of workers combined their purchase, buying both healthy and traditional products.

Both students and workers tested the new products, even if they did not necessarily notice the special sticker. They were satisfied with the healthy options but hoped to have a wider variety to select from. When choices were directed toward more conventional alternatives, brand names still played a relevant role. Because purchasing behavior at vending machines could be considered as a low-involvement action, the selection of known brands or categories of food resembled more the application of default choice heuristics instead of real preferences. Past behavior appeared to be a relevant reference point of how individuals tended to behave.

Six months later, a new survey to verify habits changes was conducted. Beliefs about the goodness of the *Choose Health* project reflected a different level of attention. First, beliefs about quality, taste, and freshness of healthy food were higher compared to the beliefs expressed toward products at the beginning of the experimentation. It was found that 41.7% of students, as compared to 62.9% of workers, said they were very familiar with the project and, moreover, that they were aware that colleagues bought healthy products, too. Information about healthy products

was thought to be extensive, even if only a few believe this information could be a relevant strategy to change individual nutritional styles. Higher brand knowledge, awareness, loyalty, and a clearer product identity probably fostered a more traditional approach to product selection through vending machines.

The project could be considered successful because the results exceeded the initial goal (that at least 25% of the products that target audiences purchased through campaign's vending machines were healthy). The project has been able to develop a great interest in its goal and its activities. In fact, interest has been lasting and continuous, even after the six-month trial period: the number of participating vending machines increased from the initial 13 to approximately 175 by the end of 2007, upon citizens' requests.

In 2007, a similar project was developed in some secondary schools in the city of Modena. In this case, vending machines offered children aged 11 to 13 only healthy products, together with information on healthy habits and health education activities in the classrooms. Health education and communication interventions have been studied according to the characteristics of the young targets.

Based on this experience, a proposal of healthy public procurement for vending machines has been realized by a national network composed of representatives of the Social Marketing National Work Group, Health Plan–Modena Local Health Unit, FARE (an association of public purchasers), the Institute of Nutritional Science–University of Rome “La Sapienza,” Confida, the Italian Association of Local Agenda 21, and Federconsumatori (a national consumer association). The objective of the proposal was to spread health promotion values through public procurement for vending machines. In particular, the proposal supported the following activities:

- Increase the availability (and therefore the access) of fresh, local, biological, and fair trade products.
- Enhance local, typical, and traditional foods and beverages (fruits, vegetables, and water).
- Introduce guarantees for environmental protection among the selection criteria—for example, a short supply chain (to reduce distances from place of production to point of purchase).

By law, public administrations in Italy must develop public procurement if they want to purchase goods or services, and usually a point system is used to compare the different offers. One of the main strengths of the proposal was that it recommended paying more attention to the characteristics of the products. In fact, it recommended giving 50 points to the economic offer and 50 to the qualitative offer. Among these, 40 points should be attributed to the choice of the products. [Table 7-1](#) summarizes the proposed score attribution.

TABLE 7-1 Proposal of Healthy Public Procurement for Vending Machines: Synthesis of Evaluation Criteria and Score Attribution

Criteria for Evaluation	Best Score
Economic Offer	
a.1 Annual fee	A.1*
a.2 Prices for consumers	A.2*
Total	50
Qualitative Offer	
b.1 Characteristics of the products	
Fresh foods	
• Fruit salad	
• Fruits/vegetables	
• Sandwich with ham	
• Yogurt with active milk enzymes	
Fruit juices with 70% fruit content	
Local products (fruits, vegetables, and water)	
Biological products	
Fair trade foods	40
b.2 Service utilities	6
b.3 Quality certifications	4
Total	50

*The proposal described earlier was one of the first attempts to include in public procurements the quality of the products sold through vending machines between the criteria requested to the service. Note that a.1 refers to the amount of the rent that vending firms can pay to the public administration for the installation of vending machines; a.2 refers to the prices for the consumers of the products sold through the vending machines. The attribution of single scores to the a.1 and a.2 criteria (called A.1 and A.2 in the table) is decided by the public administration taking into account the economic and geographical characteristics of context.

Great efforts have been made to promote the proposal of healthy public procurement for vending machines: it has been presented in national conferences; published in a specialized national health magazine (mainly addressed to Italian Local Health Services and to health professionals); and sent to some ministries, the Emilia-Romagna regional administration, and some Italian provincial and municipal administrations.

SUMMARY

After two years, it can be said that the main success of the *Choose Health* project has been its capacity to increase community's interest and attention, as demonstrated by its developments. An analysis of the experimentation specifies some aspects that must be taken into consideration when developing such a project:

- Creation of an easy-to-recognize healthy product identity is necessary, because customers are more attracted by brand-name foods.
- Choice of a healthy food portfolio is crucial to the success of the project. In fact, the traditional food portfolio appears too often to be a dominant alternative.
- Pricing strategies should lower healthy product costs: because traditional brand-name foods have a great appeal to customers, economic advantages should be offered to favor healthy product purchases.
- Coherence of health communication activities is needed. Health messages should be specific and suitable to the vending machine context. In this case, nutrition and physical activity appear to be the best theme for the objective of the project.
- The position of healthy products, and of the stickers used to illustrate them, should be rigorously defined and should be the same in all vending machines, in order to make healthy foods easier to find.
- A good definition of habits and purchasing behavior for vending machines is requested in order to face the lack of information regarding behavioral patterns and contextual preferences.

For more information regarding the project, see www.ppsmodena.it/vending.

QUESTIONS FOR DISCUSSION

1. What kind of health communication activities are suitable for a setting such as vending machines? How would you use the refreshment area, around the vending machines, to develop health communication activities?
2. What kind of packaging would you develop for non-brand-name healthy foods? In your opinion, what is the value of a project such as *Choose Health*?
3. How important is partner involvement for the development of an experiment like *Choose Health*?

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REFERENCES

- Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della salute—Profea & Azienda USL di Modena. (2006). *Studio Passi per l'Italia—Progressi nelle Aziende Sanitarie per la Salute in Italia, Azienda Unità Sanitaria Locale di Modena*. Retrieved July 28, 2009, from the Azienda USL di Modena Web site: www.ausl.mo.it/dsp/epi/pdf/pubblicazioni/2006/rapporto_passi_mo_05/Passi_Modena_2005.pdf
- Confida. (2007, September 21). *La distribuzione automatica aiuta a “Guadagnare Salute”* (press release). Retrieved July 28, 2009, from the Azienda USL di Modena—“Piano per la Salute” Web site: www.ausl.mo.it/pps/iniziative/buoris/2006/download/01_10/Comunicato%20confida.pdf
- Decreto del Presidente del Consiglio dei Ministri 4 maggio 2007. Documento programmatico “Guadagnare salute.” Published in *Gazzetta Ufficiale della Repubblica Italiana*, 22 maggio 2007, No. 117. Retrieved July 28, 2009, from the Ministero della Salute Web site: www.ministerosalute.it/imgs/C_17_normativa_1435_allegato.pdf
- Delibera della Giunta Regionale dell'Emilia-Romagna n. 426 del 27 marzo 2006. *Approvazione del Piano Regionale della Prevenzione 2006–2008 relativamente a: prevenzione dell'obesità, prevenzione delle recidive nei soggetti che già hanno avuto accidenti cardiovascolari, prevenzione degli incidenti nei luoghi di lavoro, stradali e domestici*. Retrieved July 28, 2009, from the Regione Emilia-Romagna—Servizio Sanitario Regionale Web site: www.saluter.it/wcm/saluter/sanitaer/ssr/assistenza_territoriale/Dipartimento_sanita_pubblica/documentazione/lk_prevenzione/page/p_prevenzione/pagina_piano_prevenzione/allegati_parte2/prev_2.pdf

- Delibera della Giunta Regionale del Veneto No. 188 del 31 gennaio 2006. *Piano nazionale per la prevenzione 2005–2007—Integrazione DGR 2031 del 26 luglio 2005. Approvazione progetti regionali*. Retrieved July 28, 2009, from the Centro Nazionale per la Prevenzione e il Controllo delle Malattie—Ministero della Salute Web site: www.ccm-network.it/Pnp_Prj_Veneto
- Deliberazione dell'Assemblea Legislativa della Regione Emilia-Romagna 22 maggio 2008, No. 175. *Piano Sociale e Sanitario 2008–2010. Published in Bollettino Ufficiale della Regione Emilia-Romagna*, 3 giugno 2008, No. 71. Retrieved July 28, 2009, from the Regione Emilia-Romagna Web site: http://burer.regione.emilia-romagna.it/BUR/servlet/LeggiPdfServlet.pdf?ANNO=2008&NUM_BOLL=92
- Food Standards Agency, The Dairy Council & the Health Education Trust. (2004, October 7). Vending healthy drinks. A guide for schools. Retrieved July 28, 2009, from the Food Standards Agency Web site: www.food.gov.uk/multimedia/pdfs/vendingmachinebooklet.pdf
- Higgs, J., & K. Styles. (2006). Principles and practical aspects of healthful school vending. *Nutrition Bulletin* 31, no. 3: 225–232.
- Indiana State Department of Health. (n.d.). Healthy vending. Retrieved July 28, 2009, from the Indiana State Web site: www.in.gov/isdh/20062.htm
- International Obesity Taskforce. (2007, December 10). Childhood and adolescent overweight in Europe. Retrieved July 28, 2009, from the International Association for the Study of Obesity Web site: www.iotf.org/database/Childhoodandadolescentoverweightineurope.htm
- Intesa Stato Regioni del 23 marzo 2005. *Il Piano Nazionale della Prevenzione 2005–2007* (allegato 2). Retrieved July 28, 2009, from the Centro Nazionale per la Prevenzione e il Controllo delle Malattie—Ministero della Salute Web site: www.ccm-network.it/documenti_Ccm/normativa/Intesa_23-3-2005.pdf
- Istituto Nazionale di Statistica. (2007). *Annuario statistico italiano 2007*. Roma (Italy): C.S.R. Centro stampa e riproduzione S.r.l. Retrieved July 28, 2009, from the Istituto Nazionale di Statistica Web site: www.istat.it/dati/catalogo/20071212_00/contenuti.html
- Kotler, P., Roberto, N., & Lee N. (2002). *Social Marketing—Improving the Quality of Life*. Thousand Oaks, CA: Sage Publications.
- Legge No. 150 del 7 giugno 2000. Disciplina delle attività di informazione e di comunicazione delle pubbliche amministrazioni. Published in *Gazzetta Ufficiale della Repubblica Italiana*, 13 giugno 2000, No. 136. Retrieved July 28, 2009, from the Senato della Repubblica Web site: www.senato.it/parlam/leggi/00150l.htm
- Ministero della Salute. (2006). *Piano Sanitario Nazionale 2006–2008*. Retrieved July 28, 2009, from the Ministero della Salute Web site: www.ministerosalute.it/resources/static/primopiano/316/PSN_2006_08_28_marzo.pdf
- San Diego & Imperial Nutritional Network. (n.d.). San Diego and Imperial/Bay Area regional nutrition network vending machine toolkit. Retrieved July 28, 2009, from San Diego & Imperial Nutritional Network Web site: www.sdnonline.org/tools_vending_machine_toolkit.htm
- Welsh Assembly Government. (2005, May). Think healthy vending. Guidance on vending machines in schools. Retrieved July 28, 2009, from Welsh Assembly Government Web site: <http://new.wales.gov.uk/topics/health/improvement/children/schools/food/vending/?lang=en>
- WHO. (2002). *The World Health Report 2002*. Retrieved July 28, 2009, from World Health Organization Web site: www.who.int/whr/2002/en/index.html

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WHO, Regional Office for Europe. (2006). Gaining health: The European strategy for the prevention and control of non-communicable diseases. Retrieved July 28, 2009, from World Health Organization—Regional Office for Europe Web site: www.euro.who.int/document/E89306.pdf

WHO. (2007). *World Health Statistics 2007*. Retrieved July 28, 2009, from World Health Organization Web site: www.who.int/whosis/whostat2007/en/index.html