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## The Beanpot Game: An Educational Tool for Teaching Nutrition to Hispanic Populations in the United States

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# **THE BEANPOT GAME**

## **An Educational Tool for Teaching Nutrition To Hispanic Populations in the United States**

**Product Thesis Submitted in Partial Fulfillment of the Requirements for a Masters Degree in  
International Education, Department for Educational Policy, Research and Administration,  
School of Education, University of Massachusetts at Amherst.**

**BY ROJA AFFOLTER-ASCHARI**

DECEMBER 2000

**For My Parents**

**Nahid and Zabihollah Aschari**

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## **ABSTRACT**

### **THE BEANPOT GAME: AN EDUCATIONAL TOOL FOR TEACHING NUTRITION TO HISPANIC POPULATIONS IN THE UNITED STATES**

**DECEMBER 2000**

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**Chair: Professor Robert B. Miltz**

This Masters Project documents the process of the development of a game to teach nutritional behaviors as a strategy to address major health problems in the Hispanic populations in New England. The game can be easily adapted to meet diverse cultural requirements across the US.

After discussing the major issues that plague nutrition education programs for Hispanic populations, this paper discusses arguments that support the idea to attempt to teach nutritional issues through the use of games. The paper also discusses the use of culturally appropriate nutrition symbols, the choice of quiz questions, as well as the research process that led to the current game product.

A copy of the game board, as well as user instructions are included in the Appendix.

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## **1. Problem Statement:**

The Hispanic population of the United States is one of the subgroups that most desperately needs culturally-sensitive nutrition education. So far nutrition education efforts have mostly failed to have a deep impact, because health care policies have overall not been sensitive to the problems of the Latino population (Baezconde-Garbanati, Portillo and Garbanati, 1999; Castillo, 1996; Sanjur, 1995).

There are three issues that thus far have not been given the required attention:

First of all, health care policies need to take a deeper look at the underlying causes of diet-related diseases among the Hispanic population. Kent (cited in Sanjur) argues that "...malnutrition (both under and over-nutrition) is due to poverty, but even more fundamentally to powerlessness..." (1995, p.48). Other researchers have identified individual/family/aggregate relocation stress syndromes caused by cultural isolation and passed on to second and third. Bloch (cited in Pérez-Montijo, Ortiz, Méndez, and Santiago) states that: "...few [Puerto Ricans] escape the identity crisis that results from being in a society that depreciates their group" (1996, p.65). Experts argue that lack of identification and feelings of rejection directly lead to feelings of powerlessness among Latinos. Carpenito (1993) defines powerlessness as a state in which an individual or a group perceives a lack of personal control over certain events and situations (e.g. work, illness, care, and recovery) which negatively impact outlook, goals and lifestyle. When an individual does not expect to be able to control outcomes, attention to and retention of information is poor. These as well as many other issues lead to poor educational outcomes and health-behavior.

Sanjur suggests that the effective nutrition educator

opposes the unhealthy attitude of blaming the victim, helps community programs change any discriminatory rules, helps eliminate oppressive elements in a bureaucratic system, and creates partnership with Hispanic clients that are based on mutual respect and trust (1995, p. 292).

The second issue that relates to ineffective health care practice amongst Hispanics has to do with the fact that there is not enough research done to support policy strategizing. Writes Castillo:

[A]ccurate data about Hispanics – baselines for appropriate care, interventions and evaluation of care provided – are lacking and critically needed by ...health care providers (1996, p.5)

Thirdly, previous nutrition education efforts have often lacked sensitivity to the specific cultural and social needs of Hispanics (Pérez-Montijo, Ortiz, Méndez, and Santiago, 1996). Latino health care experts have criticized "... the ineffectiveness of monocultural/English models used by health care professionals" (Sanjur, 1999, p.199). Research conducted about the effectiveness of health care programs amongst Hispanic populations have revealed that health care initiatives did not really yield change in dietary behavior although knowledge about nutritional issues was found to be in general very high (Barnett and Johnson, 1996).

In order for nutrition education to be effective, one not only needs to convey information on what is nutritionally good or detrimental to health, but most of all health workers need to know *how* to facilitate nutrition education. They need to be given educational tools that are sensitive to the cultural and social environment they are

working with and that go beyond the pure imparting of knowledge to the actual creation of an emotional environment of growth that fosters a process of effective learning.

Freire's (1993) argument about literacy meaning not only reading the word, but also the world can also be applied to 'nutritional literacy'. Nutrition education implies the examination of the world and the issues that generate nutrition problems, to the extent that proposed solutions becomes culturally and socially relevant and acceptable.

Nutrition education can and should profit immensely from non-formal education.

## **2. Purpose and Justification of the Project:**

The purpose of this project is to develop a fun game on nutrition that can be used by Hispanic families either within a nutrition education setting or at home, whenever people feel like playing it. It is not a replacement for an entire health project but should rather be seen as an *educational tool* that can be used by health professionals as a part of a health project for Hispanics.

The proposed game takes into consideration and responds to the issues mentioned in the problem-statement, and which policy-makers have ignored. Indeed, the game relates to the underlying causes of nutritional problems among Hispanics such as poverty, relocation stress syndrome, cultural and social isolation, to name just a few. By doing so, this game enhances the effectiveness of nutrition education efforts as an alternative to the time-wasting actions mentioned previously that actually disempower the Hispanic target populations.

Obviously, any nutritional game for Hispanic populations should refrain from making use of Anglo-Saxon models of nutrition education which so far have proven ineffective (Sanjur, 1996). Instead, it should incorporate and appreciate cultural and

social ways of life of the Hispanic population. This is important since traditional foods are deeply rooted in any culture and have important symbolic and emotional meanings. A nutritional game should also take into consideration the “cultural availability” of foods in the United States since availability or non-availability of food also conditions food habits (Sanjur, 1995).

This paper will also include a discussion about the effectiveness of games as an educational tool. As will be demonstrated below, the Bean Pot Game has been developed by inviting and observing Hispanic participants and by noting down their comments and feedback on how the game could be improved. In such a way, the development of the game becomes a highly participatory process.

#### 2.1. “Why a game?” The game from an educational standpoint of view:

It is common experience of people that games are fun. Games are entertaining and entertainment is a powerful motivator for learning that should not be overlooked as an important part of program design (Evans, 1979). It is a natural tendency of people to be curious about things they do not know especially if they are allowed to make mistakes on the path of inquiry. It can be generally observed in small children that experimental play is the way they learn and develop. A child trying to learn to walk, falls and stumbles, but despite of that is not discouraged to try again and again until it masters the task of walking. Play, games and social interaction have always been non-formal ways of active learning within any society. Seldom has their value been recognized. Learning has historically been linked to formal schooling, which usually is associated with a teacher standing in front of classroom and lecturing rather passive students. Adults usually identify positive experiences with playing games, often contrary to their experiences in

school and academia which historically has been impersonal and not related to peoples daily life experiences.

These issues are of importance when working with Hispanics in the United States, who tend to be poor, without a higher level of education and sometimes illiterate.

Learning through games can be empowering for people who otherwise would feel in a Freirean sense “under” the ‘licenciado’ (Spanish term for a person holding an academic degree) or health professional.

Games also foster the active participation of the players.

Educators have known for many years that the most effective learning is active learning. The goal of education, after all, is to enable the learners to use their knowledge to do something. ... Learning processes, which provide opportunities for learners to practice the use of skills, are much more likely to result in the ability to apply knowledge to life (Evans, 1979, p.3).

Access to good information alone is not good enough because it does not imply that the knowledge acquired is going to be put into practice. This has been confirmed by surveys carried out on health education (Parraga, 1990). As games stress active learning, there is a greater likelihood that the contents processed during the game will be later applied in real life.

Games involve participants actively and to a high degree into a process of learning by doing. Games take the attention away from the teacher and focus it on the learners themselves. Hence they create an interactive process between the learners that they perceive as non-threatening. The interpersonal dynamics of the game allow participants to learn something about themselves and how they work with other people, as well as how they impact others (Pfeiffer and Ballew, 1988).

In the case of a Hispanic family playing a game on nutrition could mean that family members would become aware of the different needs of other family members. For example the caretakers would become aware about the impact of the kinds of food in their household on the health of their children, or the impact of nutrition on the yet-unborn infant. Professionals who have studied and worked with child nutrition confirm that

... because each family's culture affects a child's food preferences and eating patterns, caregivers and teachers should work with families to establish mutual understanding of each child's nutritional needs and how these needs can best be met (Fuhr and Barclay, 1998, p.75).

Games that create a real-life situation can foster a feeling of responsibility in participants. They draw them into problem-solving activity as they experience it in real-life situations, and raise concern about making sound decisions.

Gaming provides an opportunity for participants to apply and test what they have learned so far and to gain confidence in their ability to organize and analyze data, evaluate and make decisions, and work with others (Pfeiffer and Ballew, 1988, p.69).

Games also provide feedback that is timely and non-threatening. They give the learner the chance to immediately try again. Thus the connection between action and result becomes very clear to the participants.

A further advantage of games is that they are flexible. That is to say they can be easily adapted to a specific situation or to the specific needs of the learners. A small change of rules can have a tremendous impact on the learning process. In the case of Hispanic participants, questions can be altered and adapted to the specific age, gender, educational standard, or specific situation of the learners. There is even the possibility of

having two sets of game questions. One set that has appropriate questions for young children and one set for adults. Then again the game can be altered in a way that it is culturally sensitive. In the case of Hispanic learners this would mean for example using the image of a bean-pot instead of the common food pyramid.

The entertaining and fun aspect of games is conducive to the learning of adults who have been doing physically hard work during the day and come home exhausted and too tired to sit in a boring classroom. A game allows a Hispanic mother, who did not see her kids all day long, to spend quality time with them, while at the same time learning through play and fun.

Games are not bound to time or space. They can be played anytime and anywhere. Learners can have the game at home and play it whenever they feel like it. If it was fun for them, they will repeat the game and with it the learning process. Repetition is another advantage of games that leads to effective learning.

As already stated, it is important to note that the use of a game as an educational tool, though very effective, is only one aspect of an educational program. It does not replace the other educational initiatives that make programs successful and sustainable in the long run.

## 2.2. Games and Transformation/Dietary Change:

In order for a game to enhance understanding of quality nutrition it has to be empowering. In order to be empowered people must not only know but show their knowledge in action, which leads to transformation (Freire, 1993). A game does not rely on and require an 'outsider' to teach the participants what to think or what to do.

Family members, relatives, neighbors and friends are the primary support system for Hispanics. Family, in particular, confers a sense of identity and self-worth and provides social support” (Salgado and Padilla, cited in Sanjur, 1995, p. 290).

Hence it is empowering for learners to engage in a game with family-members and friends who can confirm and appreciate their identity while at the same time learn about the impact they have on each other (Pfeiffer and Ballew, 1988) in the choices of foods and cooking styles. In such a group they find the support- system they need in order to adhere to dietary change.

A game also enhances understanding for quality nutrition through cultural sensitivity. Minorities who feel marginalized and disrespected by the majority culture tend to cling even more to their traditional dietary values and practices (Sanjur, 1995). A nutritional game therefore ought to be designed in a way that shows appreciation for the Hispanic culture instead of demeaning it. For example, the US Department of Agriculture has used in its educational efforts a food pyramid to teach trainees about healthy food choices. Although scientifically appropriate, the food pyramid is nonetheless not a metaphor suitable for teaching Hispanics about nutrition. Yet, by replacing the common Food Pyramid with a bean-pot metaphor, it becomes culturally relevant while conveying nutritional messages. Traditional foods are deeply rooted in an indigenous culture and have important symbolic and emotional meanings. A bean pot depicting Latin American food items is culturally more appropriate for Hispanic participants than a food pyramid with food items commonly consumed in New England.

In order for the game to enhance understanding of quality nutrition it has to be based on respect for the learners’ values and customs while at the same time acting as an educational tool for dietary change. Dealing with dietary change involves values.

The ethics of helping individuals change food behaviors begins with an understanding of their culture, recognizing the good in it and the assumptions that underlie it (Sanjur, 1995, p. 282).

While respecting the Puerto Rican food ways, instead of imposing foreign values and food ways on the learners, the game simply demonstrates the interrelations between nutrition and health linking them also to the specific social issues that confront Hispanics who live in the United States.

### **3. Research History**

In order to compensate for the lack of current research and outdated data on Hispanics in the United States, this author has chosen to generate her own data by using alternative research strategies. By triangulating different approaches such observation, interviews and records about nutritional issues in the North America, it was possible to generate updated information. Outsider and insider perspectives about nutrition problems in Hispanic populations were taken into consideration. The following sources have been consulted:

- The author's adviser at the Center for International Education
- A Professor at the Department for Public Health
- Different Literature written by Insiders and Outsiders
- Journals, Web sites (USDA)
- The Office for Public Health in Boston
- The 'Mauricio Gaston' Institute (Doing research on Hispanics in Massachusetts)
- The Survival Center in Amherst

- The 'Casa Latina' in Northhampton
- The WIC-Office in Amherst
- A nutritionist working with Hispanics at the Springfield Health Center
- A Brazilian mother, nurse and educator who has worked with Hispanics in the U.S.
- Sandra; an Insider, married woman and mother of four children
- Linda; an Insider and single teenage mother with sixteen
- Orlando; an Insider, married man and waiter at a restaurant

In order to determine its effectiveness, the game has been pretested at various occasions. In particular, open-ended quiz questions were tested again and again, in order to determine whether they were understood, accurate and made sense.

Some of the symbols used in the game also needed pretesting, for example:

- Check whether they like the game board
- Check whether they are used to the abstraction of ideas
- Do they understand the symbols used in the game?
- Do they relate the messages of the game to their own life situation?

#### **4. Game Description**

In light of the need to develop alternative educational methods that address the true causes of malnutrition amongst Hispanic populations, this author proposes a game

that enables Hispanics to acquire relevant knowledge about healthy nutritional habits, and which motivates them to apply that knowledge in real life. The proposed game will

- Use cultural symbols and metaphors that reflect food traditions of Puerto Rican culture.
- The game uses open-ended quiz questions which do generate knowledge about healthy nutrition, but which, at the same time, also encourage participants to think critically about the deeper causes related to the poverty and malnutrition amongst Hispanics in North America.
- (3) The game encourages participants to work within their own social support systems to promote new attitudes about nutrition amongst members of their families and neighborhoods.

### 3.1. Description of Game Process:

The game is thought to be for 2 to 4 persons. More persons can easily participate if they share the roles within the game. The game consists of a game board and plates and different food items that have to go through a street of fields. The purpose of the game is to have the participants to answer game questions that enhance her or his understanding of healthy nutrition and some related social issues. The game also provides the opportunity to learn about the right mix of different food categories that in combination would produce a choice of different foods thought to be components of a healthy food plan.

If participants answer the game questions correctly, they are allowed to move forward. The winner of the game is the person who gets her or his food items first into the bean pot. The bean pot itself is divided into 6 different food categories.

As participants struggle to achieve that goal, they have to answer questions that relate to the nutritional and social problems of the Hispanic population of North America. The only way to advance in the game is by answering questions about nutritional and social questions correctly. A detailed instruction guide for the players is included in the Appendix.

### 3.2. Game Questions:

As explained earlier, nutrition- and health problems of Hispanic populations in North America are not just the result of a lack of nutritional knowledge, but the consequence of social stress factors that impede healthy food choices in the first place. One of the main issues that lead to nutritional inadequacies among Hispanics in the United States is the economic situation they are in. There has been substantial research on a low socio-economic status and diet-related diseases like obesity (Sanjur, 1995, p.239). Most poor Hispanics, many of them single mothers with three or more children, rely exclusively on public assistance. With only 200 U\$ a month they have to feed their family (Paula Serafino, personal communication, December 2000). For an educational game on nutrition to be effective, it has to incorporate nutritional and/or critical questions that take into consideration the economic possibilities of its learners.

There is a significant increase of households headed by Hispanic women that live below the poverty levels, which leads to a “ feminization of poverty”. Statistic show that the

majority of Puerto Rican female-headed households (57%) rely solely on public assistance to cope with their difficult economic situation. Comparable figures for White and African-American female-headed households are 9% and 28% respectively (Sanjur, 1995, p.57). Many of the increasing number of poor, single, Hispanic mothers are women who experience stress, such as desertion, divorce or separation. This may result in unhealthy outcomes for them or their children. Often these women are not only threatened by poverty but also are deprived of former family support systems. The economic and mental stress then causes diet-related and diseases such as diabetes, depression, isolation mental health diseases and obesity. Women who cope with emotional stress do not tend to consider nutrition as an urgent priority in their lives (Paula Serafino, personal communication, December 2000). An educational game has to relate to their situation and raise questions that help them to reflect critically on how they could, for example, create or strengthen their own support-systems.

Hence, in order to be effective, the game needs to increase not only participants' nutritional knowledge, but also their social awareness and critical thinking skills. The game questions that are listed in continuation are culturally sensitive and pay attention to the issues that have been so far neglected by policy makers. They have emerged from literature on Hispanics in the United States as well as from conversations held with nutritional experts, social activists who work with Hispanics in Western Massachusetts. The questions have been altered by going through several processes of pretesting and by the feedback provided by the 'insiders' which are the Latinos living in the United States.

There are three types of questions in the game: Nutritional questions, critical questions and interactive questions. Background information to the question has been included for the reader's convenience.

### 3.2.1. *Questions for Enhancing Nutritional Knowledge*<sup>1</sup>

Question #1:

- Imagine! You have a glass of whole milk and another glass of 1 %-fat milk. Which glass are you going to offer your child and which one are you going to offer your adult partner? And why?
- Answer: Children should drink whole milk, because 1 %-fat milk is better for adults, because it has less fat and thus protects the heart and prevents obesity.

Question #2:

- What gives you more energy?  
A: To eat one piece of whole wheat bread or  
B: To eat two pieces of white bread.  
Why?
- Answer: Whole wheat bread; because it has more important nutrients (Vitamins and minerals).

Question #3:

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<sup>1</sup> See Alters and Schiff (in press), Donatelle and Davis (1998), as well as Edlin, Golanti and McCormack Brown (1997).

- What is more expensive?

A: A piece of whole wheat bread or

B: Two pieces of white bread.

- Answer: Two pieces of white bread are more expensive than one piece of whole wheat bread.

Question #4:

- Which vegetables are the cheapest of the season we are in right now?

(Latinos tend to buy vegetables they were used to from their countries of origin.

However these are sometimes very expensive. The ‘non-availability’ of foods is a stress factor, and it takes time to adjust to the fact that preferred foods are not available throughout the year).

Question #5:

- Which fruits are the cheapest of the season we are in right now?

(Cultural availability of fruits)

Question #6:

- How can we lose weight without eating less?
- And why?

- Answer: a) Eat regularly. Do not omit breakfast!

b) Have a diet less in fat and sweets (more vegetables, more fruits, water instead of juices, whole grains instead of refined grains)

c) Exercise. Physical activity is important to maintain or improve your weight.

Question #7:

- Which food groups provide us with proteins?
- Answer: Milk, cheese, eggs, meats, fish, nuts, beans.

Question #8:

- Why do we need proteins?
- Answer: We need a lesser amount, because they help to renew our body-tissues

Question #9:

- Which kind of grain has protein?
- Answer: Go and look for it! You can find it in the name of the game: The 'bean pot'.

Question #10:

- What is one of the cheapest sources of protein?
- Answer: Beans.

Question #11:

- Which food group is more important?
- Answer: No food group is more important than another. For good health you need them all. Go easy on fats and sweets.

Question #12:

- Close your eyes and name all the food groups that exist in the 'bean pot'.

Question #13:

- Close your eyes and name all the food groups in their right order, beginning with the largest one and continuing to the smallest one.

Question #14:

- How many glasses of water should we drink every day?
- And why?
- Answer: Eight glasses of water every day. Water washes out toxic substances that are in our body.

Question #15:

- Why does sugar 'steal'? Why is sugar so dangerous?
- Answer: Sugar depletes ('steals') vitamins from our body, especially B-complex vitamins. These and other vitamins are necessary for the optimal function of the nerves. Sugar steals vitamins from our body, which leads to fatigue, anxiety, headaches and general irritability. Sugar makes your skin and hair look ugly.

Question #16:

- Many of us Latinos do not like cold weather. However we need to do physical exercise in order to keep healthy. What kind of physical activities can we do that do not cost money?
- Answer: How about meeting with friends for Latin American dancing?

Question #17:

- Give an example of a lunch or dinner that uses food items from three different food groups. A vegetable should be one of the three food groups.

Question #18:

- Give an example of a cheap lunch or dinner that uses food items from three different food groups. A vegetable should be one of the food groups. However the whole meal should not cost more than 3 \$ 50 cents for four people.
- Answer: For example per person: One cup of cooked brown rice, half a cup of cooked beans, One cup of green or mixed salad. A minimum of canola oil, vinegar, salt and pepper. Costs for four people: One and a half cups of uncooked brown rice: 1 \$

One cup of dried beans: 50 cents

One head of green salad: 1 \$ 60 cents

40 cents for oil, vinegar and salt

Question #19:

- Imagine you get help from the WIC- program and they help you out with certain foods every week. These are milk, eggs, cheese, peanut butter, beans, cereals, fruit juices. In which food groups do these food items belong?

Question #20:

- It seems that the WIC program does not give you help to buy foods from two very important food groups. Which ones?
- Answer: The vegetable group and the fruit group.

Question #21:

- A girl has skin problems. Which food group would you recommend her to eat twice a day in order to better her skin?
- Answer: Vegetable group  
(Vegetables and fruits are very much lacking in the diets of poor Hispanics. Culturally is an important part of the identity of Hispanic women to be beautiful. Whether this is good or bad is a different issue.)

Question 22:

- A friend has problems with his/her hair. Which food group do you recommend him/her to eat twice a day in order to better his/her hair?
- Answer: Vegetable group

Question #23:

- What happens to the baby of a mother who does not quit smoking during her pregnancy?
- Answer: Low birth weight, Infant mortality rates, SIDS, miscarriage

Question #24:

- What happens to the baby of a mother who does not quit alcoholic drinks during her pregnancy?
- Answer: FAS, mental retardation, physical retardation, tremors, low birth rate, central nervous system abnormalities of face, limbs, heart and brain

Question #25:

- What food group do you have to avoid in order to protect yourself from obesity?
- Answer: Sweets and fats (and fried foods)

Question #26:

- Which food group can you eat that helps you to protect yourself from obesity?
- Answer: vegetables, because they have lots of minerals and vitamins and little fat and because they have fibers that help the digestion to function better.

Question #27:

- Somebody wants to protect his friend from developing diabetes. Which two food groups would he give preference?
- Answer: vegetable group, fruit group.

Question #28:

- A bad person wants to make another person die from diabetes. Which kind of foods will he offer him?
- Answer: sugar, sweets, juices, refined grains (white flour, white rice).

### 3.2.2. *Questions for Enhancing Critical Awareness:*

Question #1:

- Who in your local Latin community fights for the interests of Hispanic families? (community mobilization, democracy, civil rights). How do they fight for Hispanic interests?

Question #2 (focuses on availability of community resources):

- Which local organizations give help to Hispanic families?

Question #3 (addresses issues of poverty).:

- Why are many Latinos poor?

Question #4 (focuses on the feminization of poverty):

- How could single mothers, who do not have relatives around, help each other in order to spent less money?

Question #5-8 (focuses on underlying social causes of health problems):

- Are many people in our community obese? If yes, why?
- Do we have people with diabetes in our community? If yes, why?
- Do we have heart disease in our community? If yes, why?

3.2.3. *Participatory Questions*<sup>2</sup>:

- Ask your neighbor on your right to ask you a question about healthy nutrition.

If you answer his/her question correctly you may move forward.

- Ask your neighbor on your left to ask you a question about healthy nutrition.

If you answer the question correctly you may move forward.

#### **4. Game Adaptability**

The advantage of this game is that it is adaptable to the different needs of its participants. Within the Hispanic population of the United States there are many different ethnic groups. They each have their unique situation and they each have different social and nutritional problems.

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<sup>2</sup> By requesting participants to come up with their own game questions, participants are required to search for questions that are meaningful and have not been asked before. In order to do so, the participants are cognitively challenged as they have to engage in an evaluative analysis of nutritional issues. To ask participants to formulate questions is an effective learning strategy (Hernández, Schrom, Berest, Hanks and Montaña, 1998).

The heart of the game is the open-ended quiz questions. These can be easily altered and adapted to the different needs of the participants. Although this game tries to reach the wider audience of Hispanics in the United States, there might be situations where it is absolutely necessary to adapt the game to the needs of a specific participant group. For example, if the game is used for a group of single Hispanic mothers who have no support system, a health professional would have change the social and nutritional questions and make a decision as to which kind of nutritional questions would need to be elaborated even further, and which ones could actually be eliminated. In order to reach a decision, thorough research as well as renewed pretesting will be necessary.

The game concept is also adaptable to a totally different. Again the adequacy of the game questions needs to be examined. But also other aspects of the game question might need to be altered. For example issues like the appropriateness of some kind of questions. Each culture has rules on how and which questions can be asked in what kind of situation. What's rude in one culture, does not need to be considered rude in another. There may be questions that can be brought forth to individuals, but should not be asked in a group setting. Topics that spark discussions in one culture may not cause any reaction in another. Different household roles and responsibilities need also to be considered when preparing questions for groups from culturally different backgrounds. In addition, cultural symbols most likely need to be exchanged. This includes simple things like, for example, the cultural meaning of colors. For example red is associated with danger in the Western cultures. However in China the color red symbols happiness. And the bean pot, as a symbol, may not be appropriate for teaching nutrition to Chinese people.

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# APPENDIX A

## The 'Bean Pot Game'

The bean pot game is a fun game for Hispanics living in the United States. It is a game for family and friends. It is for any age.

Through this game you will learn a lot about healthy nutrition and things connected to it.

### In this box you will find:

A board, two dices, four plates, 5 food chips in blue, 5 food chips in red, 5 food chips in yellow, 5 food chips in green, a bunch of game question cards.

- This game is for two to four persons but if you are more you can of course share it.
- Put the board in the middle, the dices on the board and the game cards on the side.
- On the game board you see a bean pot in the middle. Around it is a street of fields. On this street there are four arrows in the four colors of the game: red, blue, green and yellow. Put a plate behind each arrow.
- Each person chooses a color. Sit behind the plate with the arrow that has your color. Put in your plate the food chips that have your color.
- On the game board you see a bean pot. The goal is that you get your food chips into the bean pot first.
- There are pictures of different food items in the pot. These belong to different food groups. The names of the food groups are written on the sides of the pot. Each food group has numbers written under it. These are the numbers of portions one should eat every day to maintain health. Study the food groups for a while.
- The arrow in front of your plate is where you start. Every person throws the dice and the person who gets the highest number is allowed to start.
- You start by dicing again. Then you have to put the food chip on the arrow that belongs to the food group that has the same number as you diced. On the second round you can either dice another food chip out of your plate or move the one you have already out along the street of fields.

### Symbols:

On the street of fields you can see different symbols.

- When you get on a field with a question mark (?) you have to take from the pile of game questions. If you answer the question correctly you can move one field forward.
- When you get on a field with a vegetable or fruit you are allowed to dice again in order to move forward.
- If you get on a field with sweets or fat you have to dice and move the number of fields backward which you diced.
- Once your food chip has gone through the round of the street of fields and reached the field that contains the 'face', it is allowed to enter the bean pot. You have to place it on the food group it belongs to. In order to enter the bean pot, you have to dice the number of portions that the food group of your food chip has. For example if your food chip has the symbol of a vegetable, it belongs in the vegetable food group. Look at the bean pot at the center of the game board and you will realize that the vegetable group requires 2, 3 or 4 portions. So you have to dice either 2,3 or 4 in order to enter the bean pot. If you get a right number you can place your food chip on the bean pot and in the food group it belongs to, and you have achieved your goal. If not you have to keep playing with your other food chips or if you have none left, you have to wait until it is your turn again.

If you do not dice the right number of portions you have to wait until it is your turn again or you can move one of your other food chips in the meanwhile. The person who gets all his food chips first into the bean pot has won.

HAVE FUN AND GOOD LUCK!

## **APPENDIX B**

Copy of the Bean Pot Game



