Using Projective Techniques to
Consider the Societal Dimension of Healthy Practices:
An Exploratory Study

Dr Hélène Cherrier¹

Griffith University, Department of Marketing, Nathan, Brisbane QLD 4111.
h.cherrier@griffith.edu.au

¹ Dr. Cherrier (PhD University of Arkansas) is a senior lecturer at Griffith University.

Using Projective Techniques to
Consider the Societal Dimension of Healthy Practices:
An Exploratory Study

Abstract

A photo-elicitation and a collage construction technique provide insights on the Emirates' awareness of the negative effects of fast food consumption, the relationship between awareness and Emirates fast food consumption, and the discourses used by the Emirates when resisting fast food consumption. The study draws on two disciplinary backdrops: risk awareness and resistance to behavioral change. The findings show that risk awareness campaigns should not solely be linked to bodily concerns but need to develop messages that relate to the target audience within its social, political, and economic context. What this means conceptually is that health is no longer restricted to the individual micro-level dimension but rather emerge from the dialectical interplay between taking care of one's self and taking care of one's society.

Key Words: Risk awareness, Dubai, United Arab Emirates, Behavioral Change, Obesity, Fast food.

Introduction

The expanding “Globesity” and increasing incidences of diabetes are leading governments from emerging markets to actively participate in the battle against unhealthy consumption practices (Kim & Popkin, 2006; Bauwman, 2009; Musaiger, 1990; Musaiger, Lloyd, Al-Neyadi, & Bener, 2000). As a new player against obesity, the United Arab Emirates (UAE) government has advertised an anti-obesity day (November 26th) and launched two risk awareness campaigns: the ‘The Fat Truth’ in 2009 and the “anti-obesity” campaign in 2010. One main governmental objective is to raise the young Emirates’ awareness on the risks associated to fast food consumption (El Naggar, 2009; Jindal, 2010). Indeed, many experts in the country blame the soaring obesity rates to the growing affluence of the Gulf States over the last few years and the “large amounts of junk food at the countless fast food chains that have sprung up” (Bauwman, 2009). Particularly Dubai, where the current leadership’s desires for modernity and openness to Western ideals have resulted in embracing a culture of excess and convenience with unprecedented access to fast food options. In 2009, Dubai’s yellow pages list a total of 149 fast food outlets and 11 new entrants are set to open in Festival City by 2011. According to Trainer, the availability of fast food combined with the increasing pressure to welcome Western lifestyles is leading Emirates to adopt and even incorporate fast food consumption as markers of their modern identities (Trainer, 2010).

As the United Arab Emirates are considering ways to control Emirates’ fast food consumption, impact of risk awareness campaigns on behavioral change take a central stage. Can educating Emirates on the negative effects of fast food consumption on their health and body lead to behavioral change? Based in the context of Dubai, this manuscript examines Emirates’ perception of the negative aspects of fast food, the relationship between awareness and Emirates fast food consumption, and the discourses used by the Emirates when resisting fast food consumption. The study draws on two disciplinary backdrops: risk awareness and

resistance to behavioral change. The findings show that risk awareness campaigns should not solely be linked to bodily concerns but need to develop messages that relate to the target audience within its social, political, and economic context. What this means conceptually is that promoting healthy practices should not be restricted to the individual micro-level dimension but needs to incorporate societal macro considerations.

Risk Awareness

One key concern in social marketing is to influence behavioral changes that benefit the actor and its environment (Peattie & Peattie, 2009). To change individuals' behavior, social marketing programs often adopt a five stages process that consists of (1) precontemplation, (2) contemplation, (3) action, (4) maintenance, and (5) relapse (Andreassen 1995). During the precontemplation stage, individuals “are not thinking about the behavior as being appropriate for them at this point in their life” (Andreassen, 1995, p. 212) and need to be educated on the risks they face whilst performing such behavior.

Risk awareness campaigns occur during the precontemplation stage. The campaigns aim at bringing awareness by publicizing the negative consequences of consuming the wrong products (i.e.: drugs, alcohol) or practicing the bad behaviors (i.e.: overeating, smoking). For example, several healthcare institutions promote breast and cervical cancer screenings by informing consumers on the dreadful consequences associated with cancer (Talbert, 2008). Similarly, combating drug or alcohol consumption leads health organizations to use mass media educational programs to inform on the negative effects of drugs and alcohol on individuals' mental stability and health. Here, the consumer is understood as a rational individual who makes choices to fulfill his/her utilitarian needs; and the role of risk awareness campaigns is to educate on how to make the good choice and avoid the risks of making the wrong choices. In this perspective, promoting healthy choices focuses on a

central unit: the consumer, on the basis of which healthy practices are to be formed and to which the consumer is responsible for. It is as though promoting healthy lifestyles is enclosed in informed individuals and their bodily concerns.

Whilst social marketing builds on risk awareness campaigns in a number of scenarios that urge individuals to stop smoking, take more exercise, engage in safe sex, or abandon abuse practices, it is questionable as to whether risk awareness campaigns lead to behavioral changes and healthier practices.

Risk Awareness and its Impact on Behavioral Changes

Critically questioning the impact of risk awareness campaigns on consumers' knowledge and behavioral changes is not new (Milne, Sheeran, & Orbell, 2000). In 2008, Berger and Rand noted, "people who are aware of the risks still continue to engage in detrimental health behavior" (Berger & Rand, 2008, p. 508). Concrete examples include students' awareness of the dangers of binge drinking but continue to drink in excess, adolescents understanding the risks of AIDS transmission but do not modify their behaviors or undergraduates choosing junk food whilst understanding the negative consequences of an unhealthy diet. Even the cigarette warning "smoking kills" on packaging has not been as successful as expected in changing smoking behavior (Berger & Rand, 2008). Why would a consumer who is aware of the negative effects of tobacco and unhealthy food consumption continue to consume these products? Several explanations can clarify the propensity of consumers to engage in unhealthy behaviors even when they are aware of the opposition between bad/unhealthy versus good/healthy behavior. A review of these explanations helps identify two main streams of thinking: one directed toward individual matters and the other showing concerns for group acceptance.

First, issues at the individual level have been put forth in trying to explain the propensity for aware consumers to engage in unhealthy behaviours. For example, O'Donogue and Rabin (2000) note that consumers' desire for immediate gratification can lead to unhealthy behaviour, even at the expense of future health. Similarly, Bednarek, Jeitschko, and Pecchenino (2006) emphasize that, for some consumers, the behavioral adjustment costs may be too great for consumers to adjust their consumption and leisure toward healthier living. In health and economic literature, smoking, overeating, or sedentary lifestyles are often associated with personal financial situation (Wilkinson, 1996) and lack of self-control (Thaler & Shefrin, 1981; O'Donogue & Rabin, 2000). In behavioral studies, issues of credibility may lead consumers to resist healthy practices (Mazis & Raymond, 1997). Finally, consuming cigarettes or drinking alcohol often increases one's pleasure in life, i.e., more is always better (Bednarek, Pecchenino, & Stearns, 2008; Michalos, Thommasen, Read, Anderson, & Zumbo, 2005).

Second, in addition to immediate gratification, socio-economic status, or pleasure, that are issues located at the individual level, recent studies show the importance of group affiliation inducing consumers to practice unhealthy behavior (Bednarek & al., 2008; Berger & Rand, 2008). For example, Berger and Rand's (2008) experimental study shows that students' reference groups play a major role on individual's food and alcohol consumption and conclude that unhealthy behavior correlate to consumers' desired social grouping. Similarly, Bednarek, Pecchenino and Stearns (2008) note that consumers' preference for unhealthy consumption depends on how "we measure ourselves relative to our peers" (2008, p. 309). In their economic model to healthy consumption, the evaluation of friends' and neighbors' behavior is an important parameter to one's healthy practices. In this perspective, unhealthy practices are contagious and contaminate within groups of friends.

What individual matters and social acceptance have in common is that both situate health as a rational and self-interested choice. On the hand, choosing between unhealthy and healthy practices is impacted by one's desire for pleasure and immediate gratification. On the other hand, healthy choices are influenced by one's desire to belong to a group and be accepted by friends. In both perspectives, health is a bodily concern and one is responsible for its own body / physical health. Beside the idea that health is a self-interested and bodily concept (I consume healthy for my own benefits), this research considers the social context and subjective understanding of the risks involved when consuming the "wrong" product. Can caring for others and/or for society have an impact on healthy practices?

Caring for Others and Health Choices

According to Bauman, individual choices, including making healthy choices, are contingent, not only on education and availability, but also on the social rules within society (Bauman, 1993; Bauman, 1995). For Bauman, "we are, so to speak, ineluctably - *existentially* -moral beings: that is, we are faced with the challenge of the Other, which is the challenge of responsibility for the Other, a condition of *being-for*" (Bauman, 1995, p. 1). Here, choices between good and evil, between moral or immoral or between healthy and unhealthy are made in relation to our care for others. It is our perception of others and our responsibility toward others that leads to healthy practices. In line with Bauman's emphasis on social responsibility, this study moves the concept of health beyond self and bodily concerns (individualization of health) to consider the importance of responsibility to others when making healthy choices. That is, health is conceptualized in relation to social arrangements as "a cheerful acceptance of the responsibilities that life puts on the individual" (Goldsmith, 1972, p. 13). This environmental model of health embraces the idea that health is not solely

confined within self and bodily matters but is also contingent on the social environment (Navarro, 1977; Goldsmith, 1972).

In the spirit of Bauman's (1995) advocacy to continually placing human biographies in the context of a greater whole (Bauman, 2004), this study considers health both in terms of individual matters (health as self and bodily confined) and in terms of societal matters (health included in the greater whole) and questions whether societal concerns are likely to impact healthy behavior. To illustrate, consider the way pregnancy influences most women to give up alcohol, caffeine, cigarettes, and adopt a healthy lifestyle. In most cases, pregnancy is lived as a shared experience between the individual, the community and society (Balin, 1988). For example, in some African cultures, families often perform sacred rituals so as to safeguard the pregnancy and in the United Arab Emirates, a pregnant woman must follow social norms such as resting and eating healthy (Balin, 1988). In these cases, healthy consumption practices are the responsibility of the mother not only toward her body and her baby (health as self and bodily confined) but also toward society to grow stronger (health as a greater whole). The choice to eat healthy impacts both the body and society at large. The social context and subjective understanding of pregnancy leads to adopting (or resisting) healthy behavior. This study looks at how bodily concerns and societal concerns impact adopting or resisting fast food consumption.

The Studies

Study 1: Photo-elicitation on "good" versus "bad" consumption

Fifty three students in two different principles of marketing classes located the United Arab Emirates were asked to take three pictures of "good" consumer goods or consumption activities and three pictures of "bad" consumer goods or consumption activities that are relevant to their life as a student. Under each pictures, the students were required to explain

the rationale behind classifying the products or consumption activities as good or bad.

Although most students completed the assignment, two students only provided images for “good” products or consumption activities and one student did not complete the assignment.

The data collection resulted in 306 images: 156 photos representing students’ perception of “good” products or consumption activities and 150 images representing students’ judgment of “bad” products or consumption activities.

Analysis

For the analysis, the photographs representing hamburger(s), French fries, hot dogs, crisps, pizzas, fish burgers, and fast food brands (McDonald, KFC, Burger King, Mex ChicInn, Jollibee, Hardee’s, Fatburger, Taco Bell) are viewed as indexical and reflexive resources of informants’ risk perception toward fast food consumption. Out of the 150 pictures representing “bad” products and consumption activities, 39 images illustrated fast food.

Importantly, these 39 fast food images classified under ‘bad’ consumption were offered by 39 different students (see graph 1). This result indicates that young Emirates are aware of the negative aspects of fast food consumption. Thus, the increasing obesity rate in the United Arab Emirates may not be related to a lack of awareness on the negative effects of fast food consumption. Further studies support this perspective. For example, Musaiger et al. note that Emirates students’ lack of physical activity, family history of obesity, and smoking habits are factors associated to the prevalence of obesity in the United Arab Emirates (Musaiger & al. 2003). In 2010, Hazzaa and Musaiger confirmed that the Arab teens’ sedentary life with nannies, maids, and chauffeurs has a major effect on the rising obesity rate in the Gulf region (Hazzaa & Musaiger, 2010).

When analyzing the “photo-voice” (photo-elicited account) in conjunction with the students’ written text explaining their motives for classifying fast food under bad consumption, two main discourses emerged: individual health concerns and societal concerns.

The first and most prevalent theme that emerged in the data was an awareness of the physical risks affiliated to consuming fast food (see table 1 and graph 1). For example, Shana (19) took a picture of a hamburger as an illustration of bad consumption stating: *“it is not good for you. Hamburgers are full of bad ingredients; they can damage your body because it deteriorates the body and has future consequences which can be drastic,”* and Nora (19) explains in reference to a picture of French fries: *“fried foods are full of fat and really French fries are the worth, they keep all the fat and stuff, it is so bad for people.”* and Khalid (18) justifies his picture of burgers and crisps: *“Junk food and unhealthy food products is a bad consumption because it can lead to obesity which is not good for our appearance and health.”* Prevalent to this theme is the proliferation of medical terminology such as *“heart attacks,” “high blood pressure,” “high cholesterol,”* and *“obesity.”* For example, Ahmed (21) offers a picture of a McDonald sign to identify a type of bad consumption and explains: *“Mc Donalds food contains a lot of salt and oil and leads to high blood pressure, high cholesterol and obesity. It is probably one of the worst consumer goods on the market today,”* Zainad (19) writes: *“Fast food, like Mcdonalds, is unhealthy and may cause heart attacks and high blood pressure in the future,”* and Sara (18) notes: *“McDonald’s is not a good purchase because it is very unhealthy and its food can cause health problems like high cholesterol and high blood pressure.”* Out of 39 informants who mentioned fast food as a bad consumption, 32 referred to physical/bodily risks using a combination of medical (heart attacks, high blood pressure, high cholesterol, weight gain) and production discourses (artificial, processed food, lack of hygiene, grease, fat, sugar). Clear to these narratives is that the risks affiliated to fast food relates to physical and bodily concerns.

The second theme relates to societal risks and reflects the Emirates concerns with the proliferation of fast food retailers in their marketplace. Here, the risks affiliated to fast food consumption are not so much associated to physical health as they are to societal health.

Concerns toward societal health were expressed in terms of resistance to global influences. For example, Karim (21) explains his negative perception of fast food with a global perspective: *“the fast food industry is invading our country. The malls, our university and even Sheikh Zayed road, the fast food places are everywhere and I think having so many American food places is bad for our country and for us”* and Laila (18) notes that fast food invades her locality: *“McDonald is everywhere, I do not support that, and I think there are too many of them, all these global brands, I do not like to see them all the time. McDonald coming in the UAE is a very bad thing and that is why it is a bad consumption, it is a bad product and a bad brand for our country.”* Both Karim and Laila express a fear to global invasion. This perspective to societal health supports Veeck, Yu and Burns’ view that emerging markets express concerns linked to living in a risk society where the future is no longer predictable, safe and locally controlled (Veeck, Yu, & Burns, 2010). Another important element of this theme is the informants’ need to preserve local customs such as home cooking and cultural heritage. For example, Aysha (20) refers to McDonalds as *“At home, cooking is very important, I have learned to cook with my sisters and we do not go to places like McDonald. I know people like to eat there but I do not think it is good for my culture”* and Mourad (19) explains: *“In food courts, it is this image that you see, like in this picture there is KFC next to Burger King. Dubai changed a lot, it not like it used to be, it used to be calm and everybody knew how to respect others. Now, Dubai is fast, it is good for its people because now everybody knows about Dubai around the world but some things are bad and these food courts are not good for my country.”* Although not prominent in the sample, this theme shows a second order of consideration: placing health in the context of society.

Study 2: Collage construction of students’ identity

Six weeks after the photo-elicited account on good versus bad consumption, the same students were required to construct a collage on “what are the things you do as a college student?” and write a three-page report explaining the different pictures portrayed on the collage. The instructor did not refer to the previous project on good versus bad consumption and advised the students to use any material they required for their collage construction. The primary goal of this two-step data collection was to investigate whether fast food consumption is an explicit activity amongst the Emirates student population. The second aim was to combine the photo-elicited account on good versus bad consumption with the students’ identity collage and analyze the relation between risks perception of fast food and actual fast food consumption. Out of the 53 collages submitted, 50 collages had been constructed by students who had completed the photo-elicitation assignment. The analysis considered these 50 collages.

Analysis

Each collage was classified into two representations: unhealthy identities and healthy identities. Whilst the unhealthy identities collages illustrate representations of alcohol, junk food (fast food, ice cream or candies), caffeinated drinks (tea, coffee or energy drinks), and cigarette consumption as important aspects of students’ identities; the healthy identity collage did not show images of unhealthy behavior. Out of the 50 collages, 27 showed unhealthy behavior in terms of fast food consumption (representation of hamburgers, French fried, and brands of fast food restaurants: McDonald, KFC, Burger King, Hardee’s, and Fatburger). The remaining 23 collages did not show any representation of fast food consumption, practices, products or brands.

The 27 collages that represented fast food consumption (unhealthy identity collages in terms of fast food consumption) were analyzed in association with the subject’s photo-elicited account on good versus bad consumptions. Interestingly, 21 unhealthy identity collages had

been constructed by students who had identified fast food under bad consumption activities (see graph 1). For example, Shana (19) placed a picture of a hamburger with French fries close to high-heals shoes, sunglasses and the beach; Nora (19) offered a picture of McDonald, Khalid uses photos of McDonald, KFC and Subway at diverse places, Ahmed (21) represented the brand KFC and a burgers close to cigarettes, friends, and cars, Zainab (19) used the brand KFC, and Sara (18) and Abdul (21) placed a picture of French fries on their identity collage. Yet, each of these informants had classified fast food as a “bad” consumption during the photo-elicitation assignment. Hence, whilst the discourse of health and bodily matters resonates in the informants’ narratives when classifying fast food as bad consumption; their risks awareness does not lead to resisting the consumption activity. Such finding supports that risk awareness does not necessarily lead to healthy behaviors (Berger & Rand, 2008; Milne, Sheeran, & Orbell, 2000; Wilkinson, 1996; Thaler & Shefrin, 1981; O'Donogue & Rabin, 2000; Bednarek & al., 2008; Michalos & al., 2005). As Berger and Rand note, “people who are aware of the risks still continue to engage in detrimental health behavior” (Berger & Rand, 2008, p. 508). Based on the written report attached to each collage, college students who are aware of the physical risks associated to fast food consumption may continue to eat French fries because it tastes good, consume hamburgers to feel a sense of belonging or appear cool and strong. In these examples, students’ awareness of the negative effects of fast food on their physical health does not stop them from consuming. The last analytical step was to consider the collages that did not show fast food as a student activity in conjunction with the students’ respective photo-elicitation account on bad versus good consumption. Of the 23 students who did not represent fast food in their identity collage, 18 had identified fast food as a bad consumption activity and 5 had not mentioned fast food during the photo-elicitation exercise. It is attention-grabbing to note that the seven students who affiliated fast food as bad consumption due to societal concerns (globalization

or Americanization of the UAE and loss of cultural heritage) during the photo-elicitation exercise did not represent fast food in their identity collage (see graph 1).

Hence, on the one hand, some informants expressed their awareness to biological and physical risks affiliated to fast food consumption. For these informants, fast food consumption is risky to the individual, the body and its physical health. Although aware of the negative effects of fast food consumption on the body, most of these informants depicted fast food consumption as part of their identity collage. On the other hand, some informants referred to the negative aspects of fast food using discourses of globalization, Americanization or homogenization of cultural spaces. These discourses, although not directly related to personal physical health, were expressed by informants who *do* resist purchasing and consuming fast food. At this level, the societal impact of fast food consumption shows consumer resistance to unhealthy behaviors as a collectivist rather than an individualistic choice. This perception fuses together issues of health with notions of community, membership and national affiliation (Jenkins, 1996). This finding has the potential to inform on the importance of consumers' perception of risks and its impact of health behavior.

Discussion

Risk awareness campaigns such as 'smoking kills' or 'Sugar The Gateway Drug' publicize the negative consequences of consuming the wrong versus the right products or behaving as a bad versus a good individual. This binary perspective on promoting healthy behavior relies on fixed and rational normative standards of judgment in relation to what is good or bad for the consumer and the body. Here, health is a bodily concern that individuals are responsible for. While this manuscript supports a self-interested and normative construction of health, for it is necessary to inform consumers on the effects of "good" and "bad" consumption

practices on their body, this study shows a second order of consideration: placing health in the context of “a greater whole” (Bauman, 2004).

In line with the notion that pregnant women may stop smoking with the aim of offering a healthy baby to society or that smokers may stop smoking for environmental preservation, this study shows that resistance to fast food consumption may emerge from concerns gathered around rubrics of community participation and societal responsibility. Such finding adds to existing literature by highlighting new ways of promoting healthy behaviors. Risk awareness campaigns should not solely be linked to bodily concerns but need to develop messages that relate to the target audience within its social, political, and economic context. In this study, few of the informants were concerned with the rapid transformation of the food system in the United Arab Emirates. The 1970’s oil boom and the vision of his Highness Mohammed bin Rashid Al Maktoum have shifted Dubai from a tribal system to a global city in less than 30 years. In line with this rapid transformation and the proliferation of fast food restaurants in the UAE, Emirates have expressed apprehension regarding the benefits of globalizing Dubai. Particularly, expressions of uncertainty and suspicion concerning the quality of fast food options have emerged along with a rising obesity rate (Kim & Popkin, 2006; Bauwman, 2009; Musaiger, 1990; Musaiger & al., 2000). Emirates’ concerns gathered around themes of globalization, Americanization or homogenization of cultural spaces may have the potential to influence their consumption choices and their resistance to unhealthy practices such as fast food consumption. Here, resistance to fast food consumption (health choice) is seen as instrumental within discursive space of national identity. What this means conceptually is that health is no longer restricted to the individual micro-level dimension but incorporates a societal macro-level. This approach adds a societal dimension to the commonly used individual lifestyle approach to risk awareness campaigns and health promotions.

In terms of the inadequacy of risk awareness campaign to change individual behavior, this study notes that the issue may lie behind the strong focus on individualistic, self-health issues and an absent representation of collective identity claims.

This study also notes the importance of understanding consumers' perception of the risks involved when consuming the "wrong" products. Just like a smoker will perceive the risks associated to smoking differently than a non-smoker, an individual can perceive the risk associated to fast food at the local / body / individual level and/or at the global / mind / societal level. For some, the risks are mainly physical and biological, and for others, the risks are societal. Yet, a cessation of fast food consumption offer solution to both types of concerns and the actions, no matter how justified, lead to healthier consumers. Hence, providing information and educating consumers on the risks affiliated to particular consumption activities requires recognizing that different consumers will process the same risk awareness campaign differently. Under this lens, developing risk awareness campaigns commences with studying consumers' risk perception.

On the methodological side, this manuscript shows the benefits of using projective techniques in health studies. Photo-elicitation is an approach that can be adapted to diverse consumer affairs and allows the researcher to learn about the nature of the informants' reactivity to health issues. For this study, the "photo-voices" were produced by the participants themselves. This process, also called "native image-making", aims to describe others' experience by asking them to take photographs on their beliefs, feelings or opinions (Wagner, 1979; Scott, 1999). One main advantage is that the photographs allows participants to express and represents multiple voices, voices that marketers and health practitioners may not have thought of. In addition, the collage technique allows gathering informants' inner representations of experiences as ideas, imagery, and consumption practices. This method

permits to move beyond the individual lifestyle approach to health issues and accepts health practices as identity marker.

Finally, this study calls for further research on the dialectical relationship between the domain of everyday life and the larger social context within which healthy practices are lived and experiences. A better understanding of the interaction between the individual and the societal level within health practices may help social marketers to promote health as a positive social marker of consumer identity and ultimately improve consumer health. These positive social markers can be promoted using concepts of empowerment and community participation. It means framing health within its social, political, and economic context. One's participation in healthy activities can represent an empowered political stand at the individual level and an engagement to a societal struggle at the communal level. As such, healthy consumption activities emerge from the dialectical relation between taking care of one's self and taking care of one's society.

REFERENCES

- Andreasen, A. R. (1995). *Marketing Social Change: Changing behaviour to promote health, social development and the environment*. San Francisco: Jossey Bass.
- Balin, J. (1988). 'The Scared Dimensions of Pregnancy and Birth.' *Qualitative Sociology*, 11(4), 275-302.
- Bauman, Z. (1993). *Postmodern ethics*. Oxford, UK ; Cambridge, Mass.: Blackwell.
- Bauman, Z. (1995). *Life in fragments : essays in postmodern morality*. Oxford ; Cambridge, Mass.: Blackwell.
- Bauman, Z. (2004). *Identity*. Cambridge, UK: Polity Press.
- Bauwman (2009). 'UAE, Laureus to tackle obesity among kids', *Maktoob*.
- Bednarek, H. L., Pecchenino, R. A. & Stearns, S. C. (2008). 'Do Your Neighbors Influence Your Health.' *Journal of Public Economic Theory*, 10(2), 301-15.
- Berger, J. & Rand, L. (2008). 'Shifting Signals to Health: Using Identity Signaling to reduce Risky Health Behaviors.' *Journal of Consumer Research*, 35(October), 509-18.
- El Naggar, M. (2009). 'Diabetes, a killer disease in the Gulf ', *The Palestine Telegraph Real News*. Retrieved from <http://www.middle-east-online.com/english/?id=31769>.
- Goldsmith, S. (1972). 'The Status of Health Indicators.' *Health Service Reports*:87, 212-20.
- Hazzaa, A. M. & Musaiger, A. O. (2010). 'Arab Teens Lifestyle Study Research Group Physical activity patterns and eating habits of adolescents living in major Arab cities. The Arab Teens Lifestyle Study.' *Saudi Medical Journal*, 31(2), 210-11.
- Jenkins, R. (1996). *Social Identity*. London: Routledge.
- Jindal, N. (2010). 'UAE health ministry's anti-obesity programme targets teens', *The Med Guru*. Retrieved from <http://www.themedguru.com/20100712/newsfeature/uae-health-ministrys-anti-obesity-programme-targets-teens-86137133.html>.
- Kim, S. & Popkin, B. M. (2006). 'Understanding the epidemiology of Overweight and Obesity: A real Global Public Health concern.' *International Journal of Epidemiology*, 35(1), 60-67.
- Mazis, M. B. & Raymond, M. A. (1997). 'Consumer Perceptions of Health Claims in Advertisements and on Food Labels.' *The Journal of Consumer Affairs*, 31(1), 10-26.
- Michalos, A., Thommasen, H., Read, R., Anderson, N. & Zumbo, B. (2005). 'Determinants of Health and the Quality of Life in the Bella Cooola Valley.' *Social Indicators Research*, 72(1), 1-50.
- Milne, S., Sheeran, P. & Orbell, S. (2000). 'prediction and intervention in health-related behavior: A Metaanalytic review of protection motivation theory.' *Journal of Applied Social Psychology*, 30(1), 106-43.
- Musaiger, A. O. (1990). 'Nutritional status of mothers and children in the Arab Gulf countries.' *Health Promotion International*, 5(4), 259-68.
- Musaiger, A. O., Abu-Aladeeb, N. & Qazaq, H. (2000). 'Nutritional Status of Emirati Women in Al-Ain City, United Arab Emirates.' *Bahrain Medical Bulletin*, 22(3), 1-3.
- Musaiger, A. O., Lloyd, O. L., Al-Neyadi, S. M. & Bener, A. B. (2003). 'Lifestyle factors associated with obesity among male university students in the United Arab Emirates.' *Nutrition & Food Science*, 33(4), 145-47.
- Navarro, V. (1977). *Health and Medical Care in the U.S.: A Critical Analysis*. Farmingdale, NY: Baywood.
- O'Donogue, T. & Rabin, M. (2000). 'The economic of Immediate Gratification.' *Journal of Behavioral Decision Making*, 12, 233-50.
- Peattie, K. & Peattie, S. (2009). 'Social marketing: A pathway to consumption reduction?' *Journal of Business Research*, 62(2), 260-68.
- Scott, C. (1999). *The Spoken Image: Photography and Language*. London, UK.

- Talbert, P. Y. (2008). 'Using Social marketing to increase breast cancer screening among African American women: perspectives from African American breast survivors.' *International Journal of nonprofit and voluntary sector marketing*, 13, 347–62.
- Thaler, R. H. & Shefrin, H. M. (1981). 'An economic theory of self-control.' *Journal of Political Economy*, 89, 392-406.
- Trainer, S. S. (2010). 'Body Image, Health, and Modernity: Women's Perspectives and Experiences in the United Arab Emirates.' *Asia-Pacific Journal of Public Health*, 22(3), 60-67.
- Veeck, A., Yu, H. & Burns, A. C. (2010). 'Consumer Risks and New Food Systems in Urban China.' *Journal of Macromarketing*, 30(3), 222-37.
- Wagner, J. (1979). *Images of Information*. London, UK.
- Wilkinson, R. G. (1996). *Unhealthy Societies: The Afflictions of Inequality*. London, UK: Routledge.

Table 1: Students' rational on the negative aspects of Fast Food

PHOTO ELICITATION 50 Students	Classified Fast food as a BAD consumption	
	39 Students	
Rationales behinds classifying fast food as "BAD"	<i>"It is not good for you"</i> <i>"Burgers are not healthy"</i> <i>Fried foods are full of fat and really</i> <i>French fries are the worth, they keep</i> <i>all the fat and stuff, it is so bad for</i> <i>people."</i>	<i>"McDonald is everywhere, I do not support that"</i> <i>"The fast food industry is invading our country"</i> <i>"having so many American food places is bad for</i> <i>our country and for us"</i> <i>"I do not think it is good for my culture"</i> <i>"some things are bad and these food courts are</i> <i>not good for my country"</i>
Discourse	32 Students Individual Level Physical concerns	7 Students Societal Level Social Responsibility

Graph 1: Repartition from the photo-elicitation and collage assignments