Promoting healthy eating habits through the game Monster Appetite

Monster Appetite is a web-based health education game, modeled on a previously developed card game by the same name. In Monster Appetite, a player is presented with a number of food items and tries to select the superlative card, measured by the calories per serving. The player must select the highest caloric food card before another player does, resulting in a race to identify the best (i.e., highest in calories) card first. The subversive approach (i.e., making one player's monster avatar as fat as possible) fast decision making and competitive gameplay keep players engaged and encourage them to rethink their daily food choices. A flexible backend implementation allows the game mechanics to be easily modified and rolled out to subsets of the user base to run control-treatment gameplay testing.

Monster Appetite is designed to collect anonymized user data to build a dataset of health food awareness in relation to demographics.

The obesity epidemic is one of America’s largest public health challenges and a growing concern in the rest of the world that creates disparities among race, ethnicity, region and income (F as in Fat, 2010). Currently, there are over 12 million obese American children and adolescents and there has been an 82 percent increase of obesity in the last 20 years worldwide (Nair, 2012). Acknowledging the severity of the issue, in 2013 American Medical Association decided that obesity be recognized as a disease so that appropriate measures are taken for treatment and prevention (Frellick, 2013).

Much research has been done on genetics and physiology on appetite control and consequently individual treatments such as calorie prescriptions have been introduced to the market. However, there is still a great concern over a lack of research on preventative care programs to avoid obesity and other related diseases (Han, 2010).

BACKGROUND

The goal of the game

Feed your monster avatar over 7 days (in game time) the monster who accumulated the highest calories wins.

HOW TO PLAY

Step 1: Fight for the highest caloric food card
Step 2: Repeat step 1 to consume three meals
Step 3: Calculate your total calories
Step 4: Monster with lowest calories throw dice to determine others' fate
Step 5: Every monster draws a token (chance card) to change their fate, once again.
Step 6: These tokens can fatten you up or slim you down. So choose wisely!
Step 7: Repeat all the above for seven days in game time. May the fattest take all.

Goal of the game

Feed your monster avatar over 7 days (in game time) the monster who accumulated the highest calories wins.