## DIGITAL PRINCIPLES FOR HEALTH RELATED BEHAVIOR CHANGE

**Drazen Gasic**, Dr. Linda Underhill Ph.D., R.D Program Chair of Health Systems Administration, dxg9341@rit.edu, lmuism@rit.edu

The overall aim of the project is to investigate and characterize the use of a digitized game concept used not only for introducing educational knowledge of nutrition to the human population, but to actually have a targeted cluster consume more nutritional substances through the use of this concept. We wish to achieve this through extensive player involvement or manipulation of human senses into cognitively adapting and accepting new forms of nourishment in the hopes of reducing the population's obesity rate. Innovative methodologies are needed to reach children and even adolescents that offer promise of prompting substantial health related behavior changes. One such new channel is the digital revolution in gaming concepts. A digital game is any game played on a digital device; arcades, over the internet, on personal computers, game consoles, handheld units, and even an up and coming concept the, mobile unit, which I am focusing to be the leading choice for this research. As wireless networks, phones capable of multimedia, and quality game content reached the market. The mobile game segment skyrocketed between 2002 and 2005, moving from \$5 million in 2002 to estimates of over \$350 million in 2005. 65% of the U.S. population subscribed to a mobile phone service in 2005, and over 112 million download-capable phones were in the hands of subscribers. The United States' sales of mobile games increased by 7,246% in a matter of just 3 years. My research will be a ground breaking endeavor in categorizing all possible digital devices to a particular target age market as well as economic class standing, and then through enough evidence, to provide proficient proof to my selection of a market and concept. Current research has guided me towards an age group between 6 and 11, also known as the Matrix Generation, with a conceptual and adaptable use of mobile phones. We aim to reach this market due to their likeliness to continue the trend toward increased individualism, and their already exposed knowledge to technology developed by Generation X (age 29-40) to meet the demand of the fast paced Echo Boom Generation (age 11-28). We want to not only educate but also change the cognitive behavior when it comes to nutrition of the Matrix Generation, with the results being a decrease in the current and future global obesity rate.