

**Title:** Is Telenutrition a Feasible Method of Teaching Nutrition to Students in Rural and Urban Schools?

**Authors:** Charlotte Crotte\*, BS, Marilyn Laken<sup>‡</sup>, PhD, RN, Kelley Martin, MPH, RD<sup>#</sup>, Medical University of South Carolina, \*Dietetic Internship Program, <sup>‡</sup>College of Nursing, <sup>#</sup>Digestive Disease Center

The intent of this study is to determine the feasibility of telenutrition in urban and rural schools. Since approximately 17 percent of the US pediatric population between 2-19 years is overweight, more students can have access to a registered dietitian by implementing nutrition education programs in schools through modern means of technology. In a previous study involving two rural middle schools, telenutrition lesson plans taught via the internet were compared to “in-person” lesson plan instruction. This study found that students who received telenutrition enjoyed the method of teaching, expressed desire for more internet-based classes, and remained interested during the entire class period. Furthermore, this preliminary study noted that teachers who are accustomed to using technology can effectively use telenutrition as a feasible way to teach nutrition education. A second phase study is now underway to assess telenutrition’s feasibility in an urban setting. Four sixth-grade classes (two rural/two urban) will receive the same nutrition lesson. Two lessons each will be taught via the internet to one rural and one urban class whereas an “in-person” lesson will be taught to the other urban and rural class. Student comprehension will be evaluated using an interactive game. A food frequency questionnaire and nutrition quiz will be administered before and after the lesson to measure changes in dietary intake and knowledge gained. Finally, an observer in each class will measure acceptance by judging and recording student participation and remarks. Based on preliminary findings, our hypothesis predicts that the rural and urban classes will enjoy the telenutrition lessons equally. Furthermore, the telenutrition students will appear more interested than the non-telenutrition students based on the observer judgment. Finally, all students will acquire the same amount of knowledge and comprehension. Future studies should involve more grade levels and socioeconomic populations.