**IMPROVING THE CARDIOVASCULAR HEALTH OF PRESCHOOLERS IN A CHILDCARE SETTING**

**R. Natale**

University of Miami School of Medicine, Miami, FL, USA

**Background and Purpose.** One in four U.S. children under the age of 5 years old are either overweight or obese with ethnic-minority children being disproportionately affected. Therefore, the purpose of this project is to evaluate the effectiveness of a primary prevention program based in childcare centers called “Healthy Caregivers-Healthy Children” (HC2).

**Methods.** A total of 24 childcare centers were randomized to HC2 or an attention control arm. Treatment centers (n=12) are receiving the HC2 program that includes menu modifications, a child-centered curriculum for healthy eating and physical activity, and a parent-and teacher-centered curriculum for healthy meal preparation, reinforced through an adult role-modeling curriculum. Control centers (N=12) are receiving an injury prevention (safety) intervention.

**Results.**Over a quarter of the sample (27%) is overweight/obese (body mass index [BMI] > 85th %ile for age and sex). Analysis of the Health Environment Rating Scale (HERS) showed that at baseline 13% served vegetables 1xday (20% never), 40% always serve whole grain snacks, 38% spend at least 1.5 hours doing vigorous activity, and 60% spend < ½ hour/week on screen time. Child BMI was significantly correlated with more daily vegetable servings (R=-.55, p=0.04). At one year follow-up mean child BMI z score increased in control centers from .43 to .55 while they held relatively consistent (.46 to .47) in treatment centers. The HERS total nutrition score improved in the HC2 treatment centers over the school year (12.4 to 13.5) while no change was seen in control schools (12.5 to 12.6).

**Conclusions.**HERS baseline analysis showed that most centers are not meeting HC2 policy standards. Center level nutrition behavior, and serving more vegetables in particular, has a positive impact on child healthy weight. At one year follow-up, improvements in nutritional environment at childcare centers was noted. Implementing standardized nutrition and physical activity policies in childcare centers can have a significant impact on child healthy growth and development.