



RUTGERS

School of Nursing

A Childhood Obesity Prevention Project: Implementation of the KidsFit Obesity Prevention Program Among School-aged Scouts to Increase Knowledge and Behaviors Related to Nutrition and Exercise: Cub Scouts

Tiffany Meng BSN, RN

Chair: Margaret Quinn DNP, CPNP, CNE; PI/Team Member: Ganga Mahat EdD, RN; Team Member: Jennifer Olas MSN, RN-BC

Background and Significance

- In the United States, childhood obesity currently affects nearly 1 in 5 school-aged children¹
- Obesity results from an imbalance between energy intake and expenditure – modifiable through diet and exercise⁶
- Obese children have higher risk of developing complications such as hypertension, diabetes, asthma, and depression³
- Lifetime health care costs for the obese 10-year-old population alone reaches \$14 billion US dollars²
- Current health education provided during time-restricted annual physicals and school curriculums are not adequate to initiate behavior change⁵
- Obesity prevention programs previously offered in doctor offices and afterschool programs had effective results, but has not been expanded to other community settings⁴

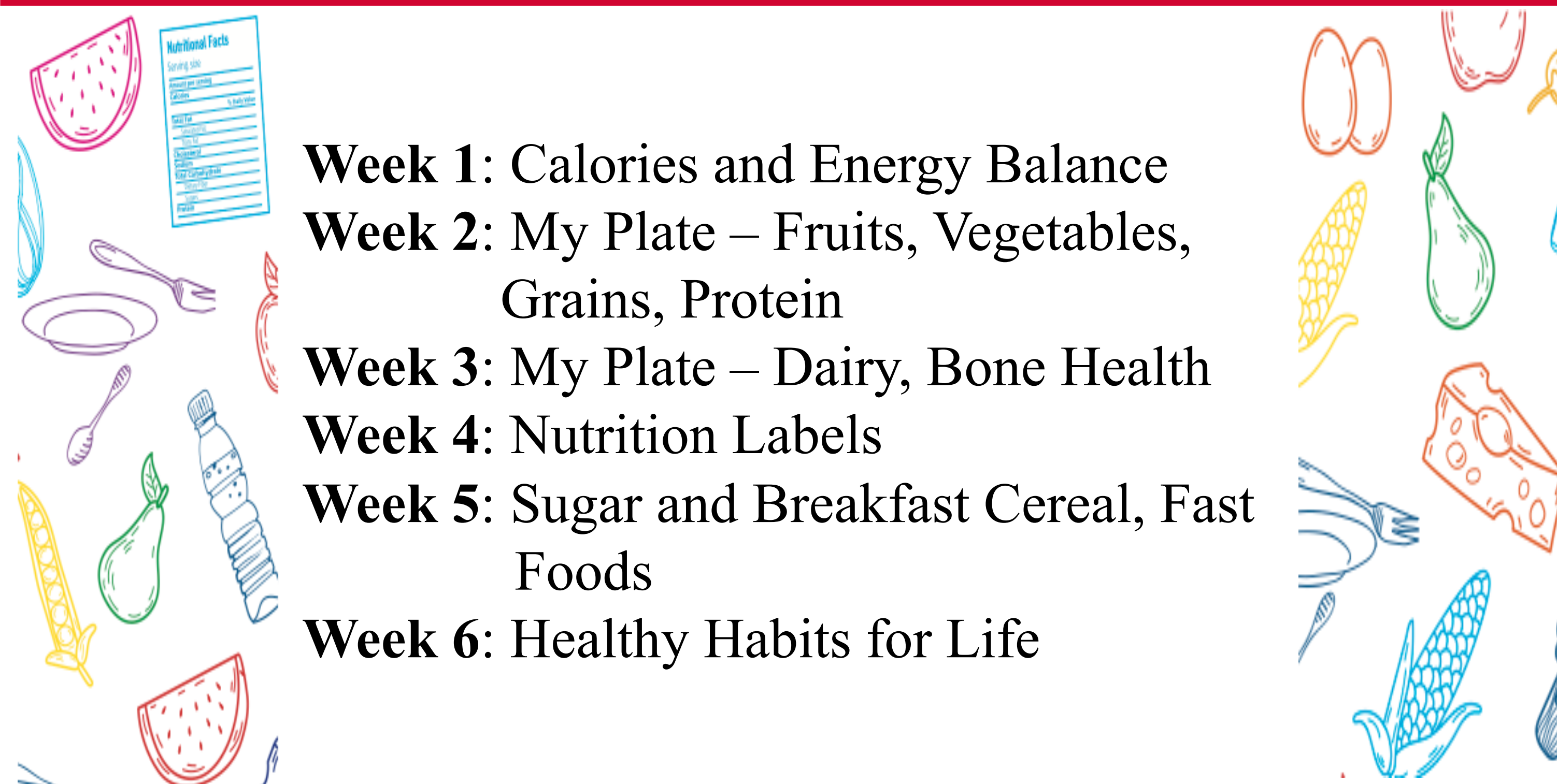
Purpose Statement

To evaluate the effectiveness of the KidsFit obesity prevention program among a Cub Scout Troop to increase health knowledge and behaviors related to nutrition and exercise.

Methods

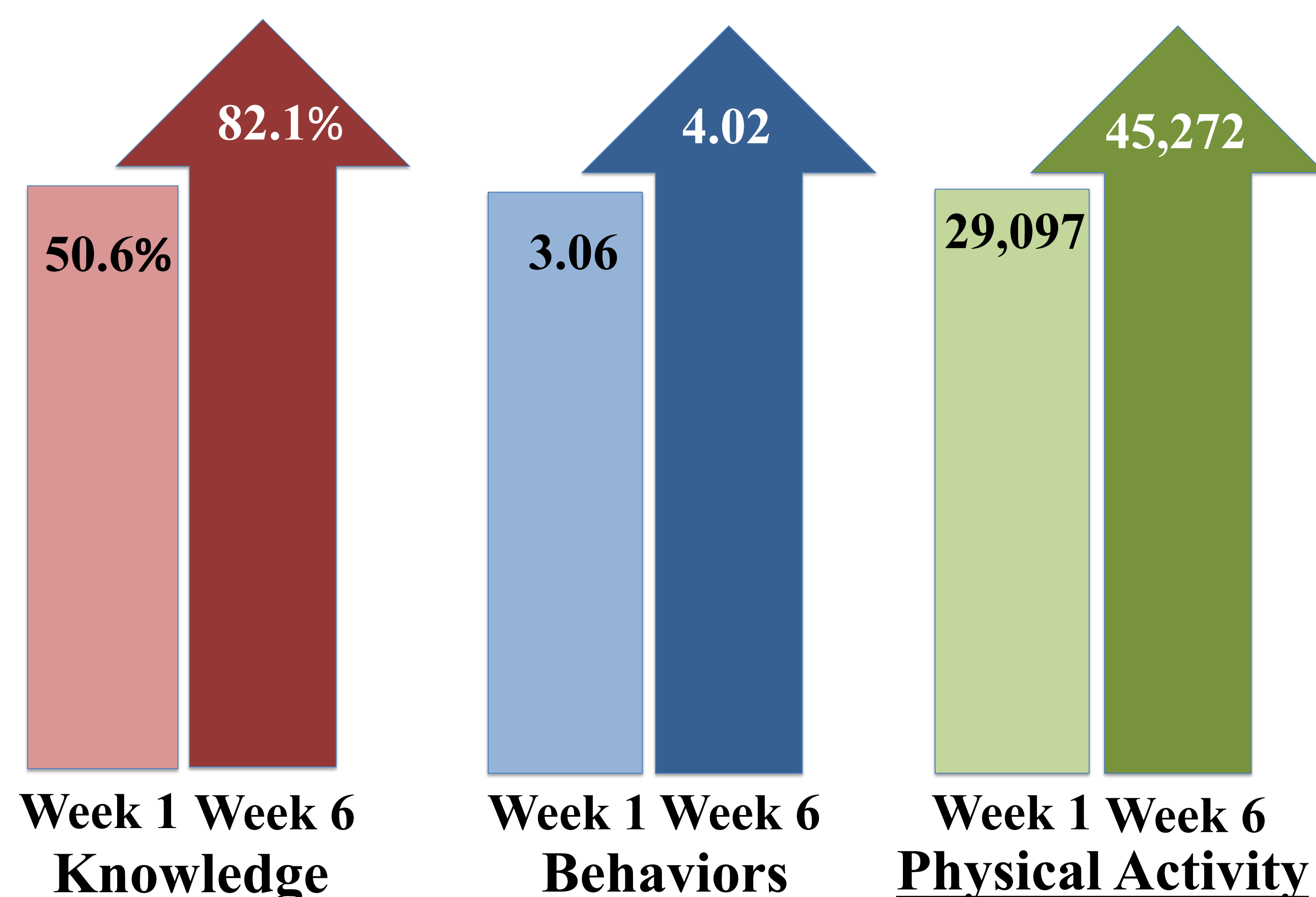
- **Design:** Pre-/post-test
- **Intervention:** Weekly 1-hour meetings using the KidsFit curriculum delivered over 6 weeks
- **Setting:** Community center in Newark, NJ
- **Sample:**
 - 8 Cub Scout Troop boys from local troop
 - Mean age: 9.5 years old
- **Measures:** instruments completed on Week 1 and Week 6
 - Health Knowledge: “Nutrition and Physical Activity Pre & Post Test”
 - Health Behavior: “Food Frequency and Lifestyle Habits Questionnaire”
 - Physical Activity: Weekly fitness tracker steps
- **Analysis:**
 - Descriptive statistics used to evaluate the aggregate mean scores on measure instruments completed on Week 1 compared to Week 6

Weekly Topics



The KidsFit program was created and approved by RWJBarnabas Health System (2019). Permission was granted to use and modify the curriculum for project purposes.

Results



- The maximum score on the knowledge test is 100%. Knowledge test scores increased by 31.5% after the intervention.
- Questionnaire items coded as “5” being the highest frequency of healthy behaviors and “1” being the lowest. The aggregate mean frequency of healthy behaviors practiced by troop members increased by 0.96 after the intervention.
- The aggregate weekly steps reported during Week 1 increased by 16,175 steps when compared to the same measure on Week 6

Discussion

- Childhood obesity prevention programs in community settings have the potential to increase health knowledge and behaviors and decrease the prevalence of obesity
- Effectiveness of multifactor education strategy that addresses diet, physical exercise, and family involvement
- Importance of early obesity prevention prior to establishment of behavioral pattern in children
- Children are motivated to initiate behavior change with a supportive social environment and peer modeling
- Limitations: small sample size, language barriers for parental handouts, inconsistent use of fitness trackers, short follow-up time to assess sustained behavior change

Implications

- Advocate for the expanded use of prevention programs
- Community members can be taught to implement prevention programs, making population health a community initiative
- Prevention programs can be used as a resource by providers to refer patients at-risk for being overweight
- New health care policies should allocate funding for prevention initiatives and impose governmental limitations on promotion of unhealthy behaviors



References and Contact Information

References and additional information available by scanning the QR code!

