**INTRODUCTION**

The Flying Carrot (FC), a community outreach food literacy project, has brought nutrition education to the Pikes Peak region based on a dual literacy framework emerging when sustainability and health are addressed in concert and using Diffusion of Innovation Theory. The purpose of this project was to develop a valid and reliable survey assessing food and sustainability knowledge; 2) test the efficacy of the FC at the Colorado Farm and Art Market (CFAM). It was hypothesized that the more frequently market patrons visit the FC, the greater their food literacy. **METHODS:** 40 volunteers (18M, male n=27; female n=13) were recruited at CFAM. Subjects were asked to complete a baseline survey with follow-up at visit 4 and 8. They were also asked to be interviewed upon follow-up. This study had three phases: 1) development and validation of a sustainable food literacy survey; 2) data collection of subjects’ food literacy, and 3) conducting interviews. The survey was developed and tested for content and criterion validity and test-retest reliability. **RESULTS:** The mean criterion food literacy survey score, as assessed by experts in sustainable food literacy (n=10), was 28.8±2.2. Comparatively, FC farmers market patrons scored 24.9±1.6, 26.9±2.2 (n=18), and 27.9±3.0 (n=7), at baseline, 4th, and 8th visit, respectively. Measured means ANOVA revealed no significant difference (p=0.934, n=7) in food literacy scores over time. Higher ratings on importance of healthy food (p=0.001), skill (p=0.004) with cooking showed positive associations with food literacy scores. Interviews (n=3) were analyzed quantitatively and themes (knowledge, senses, attitude, emotions, and actions and behaviors) were identified. Average ICC (0.936). Criterion validity implies that there is significant difference between average program patrons to “trained persons” (p<0.002), and the criterion benchmark is 29 points out of 33 points (87% correction). **CONCLUSION:** Despite a small sample size of recurring customers and interviewees, this program expressed itself being inspired to eat healthily, and sustainable food when visiting FC more often. It is possible that subjects were already knowledgeable at baseline, with little room for improvement in knowledge. Food and Sustainability Literacy survey is a valid and reliable tool. Future research is needed to evaluate a demographic with lower baseline food literacy and skill level.

**ABSTRACT**

The Impact of The Flying Carrot, Food Literacy Project on Food Knowledge, Skills and Attitude at The Colorado Farm and Art Market

**CONCLUSIONS & FUTURE DIRECTIONS**

**Conclusions:**

- There is no significant difference in literacy scores over time.
- Literacy level is related to healthier food, cooking skills and enjoyment.
- Qualitative analysis from interviews revealed the FC is inspiring and gives ideas to cook more local produce, which influences eating habits.
- The survey developed is a valid and reliable tool to capture and evaluate people’s sustainability and food knowledge of farmers market goers.

**Future Directions:**

- This is the first study to evaluate the Flying Carrot’s Food Literacy program in the community. The Flying Carrot is needed in areas with low access to both food and literacy. Thus, future research is planned to evaluate this program in a low income population with expected lower literacy, cooking skills and healthy eating.

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**REFERENCES**