



# Coaching Fidelity in a Lifestyle Intervention for Ovarian Cancer Survivors



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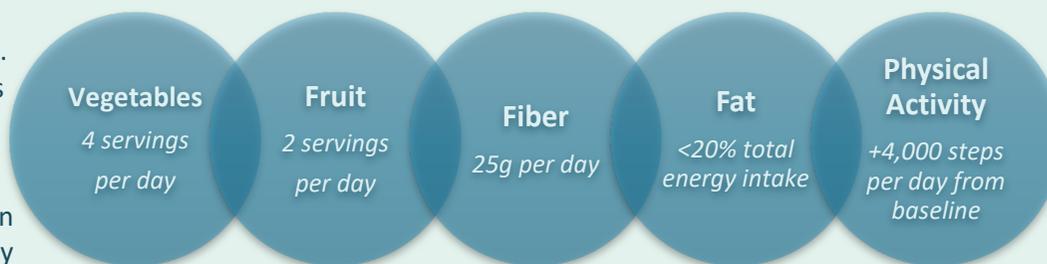
## Background

- Telehealth coaching, which utilizes text-messaging and phone calls to promote lifestyle behavior change, is a cost-effective way to deliver interventions remotely.
- Quality fidelity assessment strategies are essential to assuring rigor in lifestyle behavior change interventions.
- Treatment fidelity of the student health coaching model is evaluated here for the Lifestyle Intervention for Ovarian Cancer Survivors (LIVES) study.

## Methods

- LIVES (n=1205) is a 1:1 randomized, controlled trial with 601 ovarian cancer survivors assigned to the diet and physical activity intervention.
- Intervention participants engaged in structured, Motivational Interviewing telephone coaching calls with trained nutrition science students over 24-months.
- Coaching fidelity was evaluated for a random sample of 259 audio-recorded calls. Calls were sampled from 1 to 6 months on study (calls 4-18), where greatest behavior change is anticipated.
- An *a-priori* 14-item fidelity checklist was used to evaluate coaching fidelity. Two independent trained reviewers followed an internal protocol for call review.
- A score of  $\geq 11$  out of 14 points (80%) was considered fidelity adherent.

Figure 1. Lifestyle intervention goals for the LIVES study



## Results

- 173 participants were represented in the calls scored.
- 87.3% of calls were fidelity adherent.
- The average fidelity score was  $12.4 \pm 1.4$  out of 14 possible points, with a range of 6 to 14.
- Self-efficacy was the most frequently missed construct.
- Analysis of fidelity drift showed no significant difference in fidelity scores for early (calls 4-9), mid (calls 10-11), and late (calls 12-18) calls in the subset, evaluated through one-way analysis of variance.

Fidelity Item Construct	n (%)
Goal identification	253 (97.7)
Goal Progress	250 (96.5)
Goal recall/self-regulation	189 (73.0)
Intervention specific goal-setting	228 (88.0)
Assessment of self-efficacy	120 (46.3)
Assessment of barriers and/or facilitators to change	251 (96.9)

Table 1. Percent of calls demonstrating behavior change techniques and constructs (n=259)

Study Goal	n (%)
Physical Activity	155 (90)
Fat	26 (15)
Fruit	144 (66)
Fiber	64 (37)
Vegetables	95 (55)
$\geq 3$ of 5	136 (79)

Table 2. Percent of participants in fidelity evaluation sample meeting study goals after 6-month follow-up (n=173)

## Conclusions

- High fidelity is demonstrated in the delivery of the LIVES student telehealth coaching.
- This approach is valid for remote delivery of lifestyle behavior change interventions in cancer survivors.
- Student telehealth coaching could be considered as a cost-effective method to utilize for future interventions.
- The influence of treatment fidelity on behavior change will be further explored upon trial completion.

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