

Optimizing Intervention Tools to Improve Nutrition and Physical Activity for Colorectal Cancer Survivors (Tools To Be Fit)

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BACKGROUND

- Over 1.3 million Americans currently live with colorectal cancer (CRC) - the **2nd leading cause of cancer death** in the US.

- Following the American Cancer Society (ACS) Nutrition and Physical Activity Guidelines has been associated with **longer survival**.

- However, few survivors report behaviors consistent with these guidelines.

METHODS

- Utilizing a Multiphase Optimization Strategy (MOST) framework, a full factorial design to optimize a 48-week diet/physical activity intervention.
- Participants (N=400) are randomly assigned to one of 16 possible combinations of four candidate intervention components: 1) text messaging (on/off); 2) self-monitoring modality (digital/paper); 3) health coaching (on/off); and 4) support person (on/off).

Primary outcome

- Adherence to ACS guidelines at 48 weeks

Secondary outcomes

- ACS score after 24 weeks and 48 weeks

RESULTS

- Of the 82 consented participants, 2 are in baseline procedures, 18 screen failed, and **62 have been randomized**.

DISCUSSION

- The Tools To Be Fit intervention is a novel approach to health promotion in CRC survivorship.

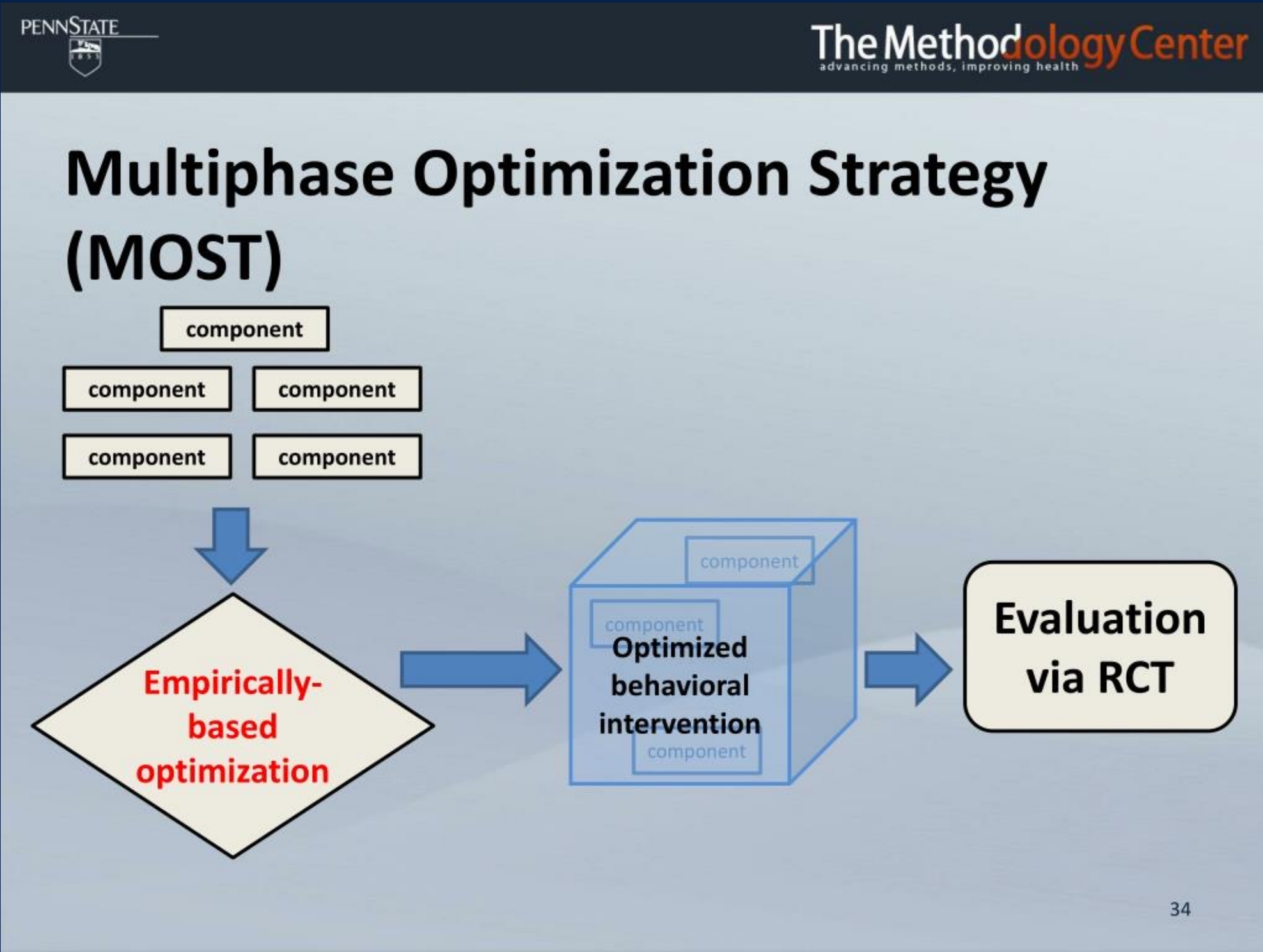
- An optimized, scalable, lifestyle-based intervention could have the potential to reduce the risk of recurrence and improve patient outcomes.

ACKNOWLEDGEMENTS

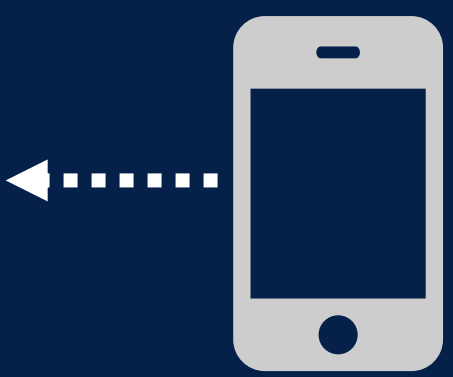
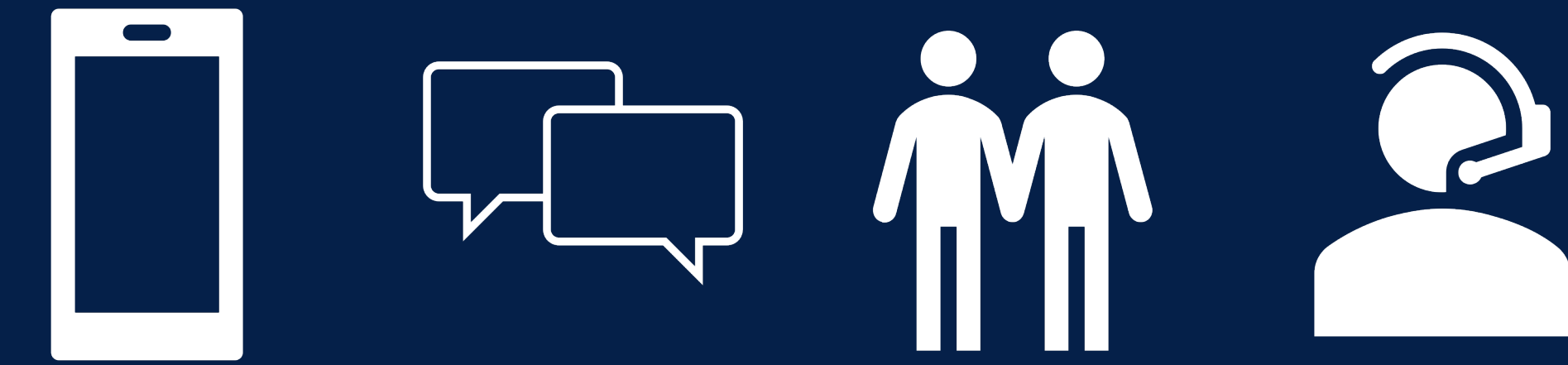
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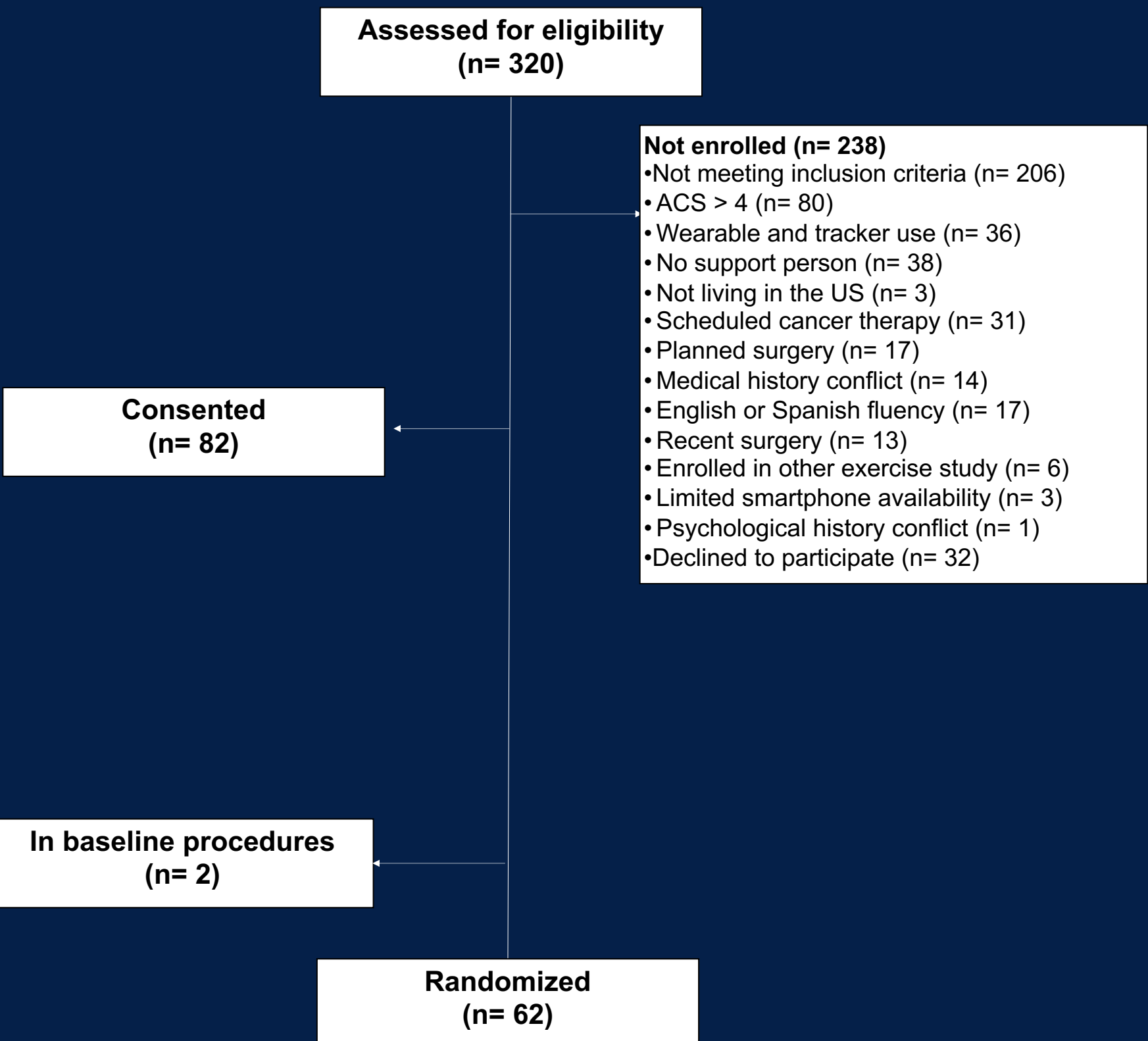
The findings from the proposed study will inform a randomized controlled trial to determine whether the optimized intervention reduces the risk of recurrence among CRC survivors.



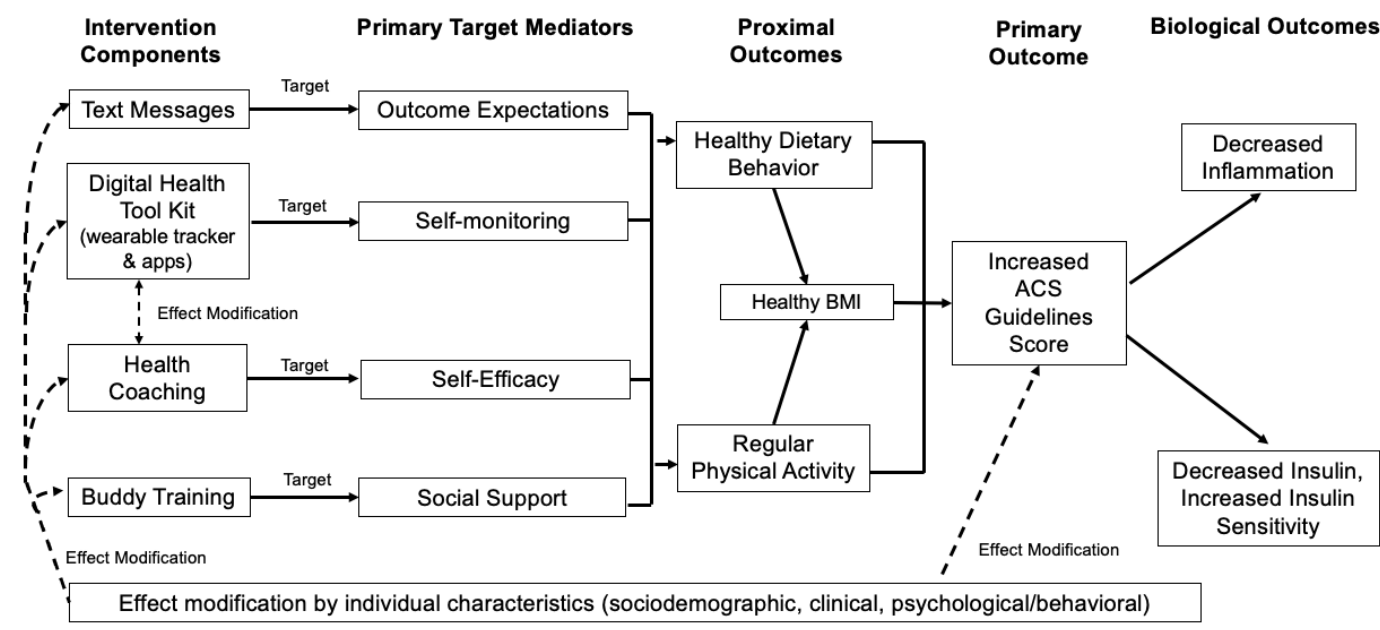
Condition	Study Booklet	Text Messages	Digital Health Tool Kit*	Health Coaching	Support Person Training
1	Yes	Yes	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	No
3	Yes	Yes	Yes	No	Yes
4	Yes	Yes	Yes	No	No
5	Yes	Yes	No	Yes	Yes
6	Yes	Yes	No	Yes	No
7	Yes	Yes	No	No	Yes
8	Yes	Yes	No	No	No
9	Yes	No	Yes	Yes	Yes
10	Yes	No	Yes	Yes	No
11	Yes	No	Yes	No	Yes
12	Yes	No	Yes	No	No
13	Yes	No	No	Yes	Yes
14	Yes	No	No	Yes	No
15	Yes	No	No	No	Yes
16	Yes	No	No	No	No



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≥18 years of age
Diagnosis of stage I-III colon or rectal cancer
Undergone curative-intent complete surgical resection
Completed neoadjuvant/adjuvant therapy
Able to speak and read English or Spanish
Have a support person ≥18 years of age who can speak English or Spanish and is willing to consent to participate
No contraindications to moderate physical activity, or provider approval
ACS score 4 or less (out of 6) at screening

Outcomes	Recommendation	Possible Points
Primary outcome Change in ACS score at 48 weeks	Achieve and maintain a healthy body weight	0: BMI ≥30 or <18.5 kg/m ² 2: BMI 18.5 - <30 kg/m ²
Secondary outcomes - Change in ACS score after 24 weeks - Change in ACS components at 24 and 48 weeks	Engage in regular physical activity	0: <75 min/wk MVPA 1: 75 - <150 min/wk MVPA 2: ≥150 min/wk MVPA
Exploratory outcomes - Adherence - Change in theoretical constructs - Insulin, insulin sensitivity, inflammation, gut microbiome structure, fatigue, depression, and sleep disturbance	Consume a healthy diet, with an emphasis on plant foods	0-2 points for 3 diet factors Fruits & Vegetables 0: <3 servings/day 1/3: 3 to <5 servings/day 2/3: ≥5 servings/day % Grains that are Whole 0: <50% 1/3: 50 - <75% 2/3: ≥75% Red and Processed Meat 0: >2 serv/wk red OR ≥1 serv/wk proc. meat 1/3: ≤2 serv/wk red & 1-3 serv/mo. proc. meat 2/3: ≤2 serv/wk red & <1/mo. proc. meat

