

# Engaging Parents of Pediatric Cancer Survivors with Obesity in a Healthy Lifestyle Intervention During the COVID-19 Pandemic: Implications for Trial Recruitment and Data Collection

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## Introduction

- Nearly half of pediatric cancer survivors (PCS) are overweight/obese (OW/OB) and are at an increased risk for metabolic syndrome and other negative long-term physical health complications.
- We are implementing a cluster randomized, controlled, repeated measures trial (NOURISH-T+, NCT04656496) across multiple pediatric oncology clinics to engage parents of PCS with OW/OB.
- The onset of the COVID-19 pandemic required significant restructuring of in-person study protocols and had significant implications for participant recruitment and engagement approaches.

## Methods

### Participants:

- As of September 2021, a total of 41 parent-child dyads have enrolled in the RCT.
- Eligible child participants are ages 5-14, off active cancer treatment at least 6 months, and are at the 85<sup>th</sup> BMI percentile or greater.

### Data Collection:

- Parents and PCS are assessed on anthropometric measures, physical activity (PA) and dietary behaviors at baseline, 3-, 6-, and 12-months post-intervention. Boosters/check-ins implemented at 2-, 4-, 8-, 10-months post-intervention.

### Description of the Intervention:

- NOURISH-T+ includes six parent sessions, two parent/child sessions, and one session with a pediatric oncology dietitian.
- Brief NOURISH-T+ includes a one-time information session followed by dissemination of nationally-available resources for 7 weeks to mirror the timeline of the full condition.



Figure 1. Revamped recruitment flyer in Spanish (left).



Figure 2. Accelerometer video instructions for children (center)

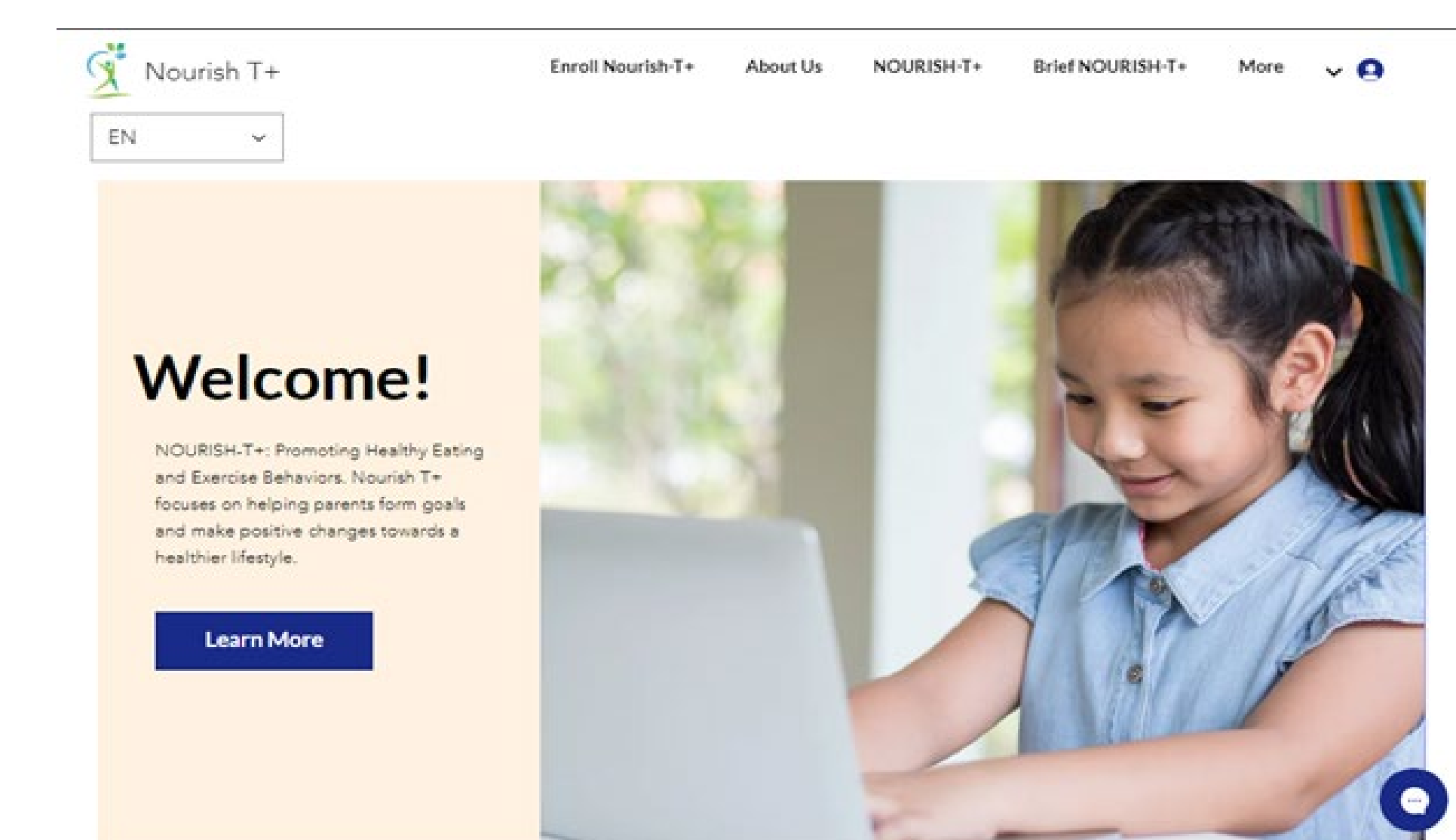


Figure 3. NOURISH-T+ website (bottom)

## Results

### Summary of Lessons Learned and Adaptations

#### Recruitment

- Expanded clinic site recruitment procedures to include a variety of mediums (e.g., social media, website, leveraging community partners, etc.) to supplement limited in-person recruitment efforts.
- Development and refinement of recruitment materials including a web-based resource hub, translation of all materials into Spanish, recruitment videos, etc.

#### Data Collection

- Adapted in-person tasks previously delegated to clinic sites; that is, the collection of anthropometric measurements as well as distribution and collection of accelerometers.
- Data collection occurs remotely and at the participant's own residence.
- Supplemental video instructions for data collection are provided to participants.
- Accelerometers are mailed to participants (results in additional costs).
- To collect anthropometric measures, participants receive standardized assessment tools for continuity and in vivo instruction on how to complete the measurements.

#### Intervention

- Delays in study implementation allowed for additional in-depth examination and refinement of the pilot R21 manual.

#### Maintenance

- Booster/check-in sessions supplemented with additional resource dissemination and reminders of SMART goals automated via REDCap.
- Continuous access to the study website's resource hub.

## Conclusions

The development and refinement of our recruitment materials have shown to be well-suited for remote use as well as in-person as the need for flexible recruitment approaches persist. Shifting to remote data collection has also had its advantages including allowing for tighter communication between the research team and participants as well as promoting engagement by alleviating the need for participant transportation and time spent at clinics and the use of flexible scheduling. We hope to explore additional opportunities for further supporting the recruitment and engagement of parents in virtually-based clinical trials.

