



# ROAD TO USA GAMES

2022 CHALLENGE REPORT



Special Olympics  
**Health**

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# ACKNOWLEDGEMENTS

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# TABLE OF CONTENTS

Background and Purpose	4
Procedures	8
Evaluation	9
Reach	9
Total Steps across the Challenge	10
Athlete Characteristics	11
Physical Activity Across the Challenge	12
Health Education Usage	14
Post-Challenge Survey	15
SO FitNow App Focus Group Highlights	16
Conclusion	17
Next Steps	18
Reference List	19

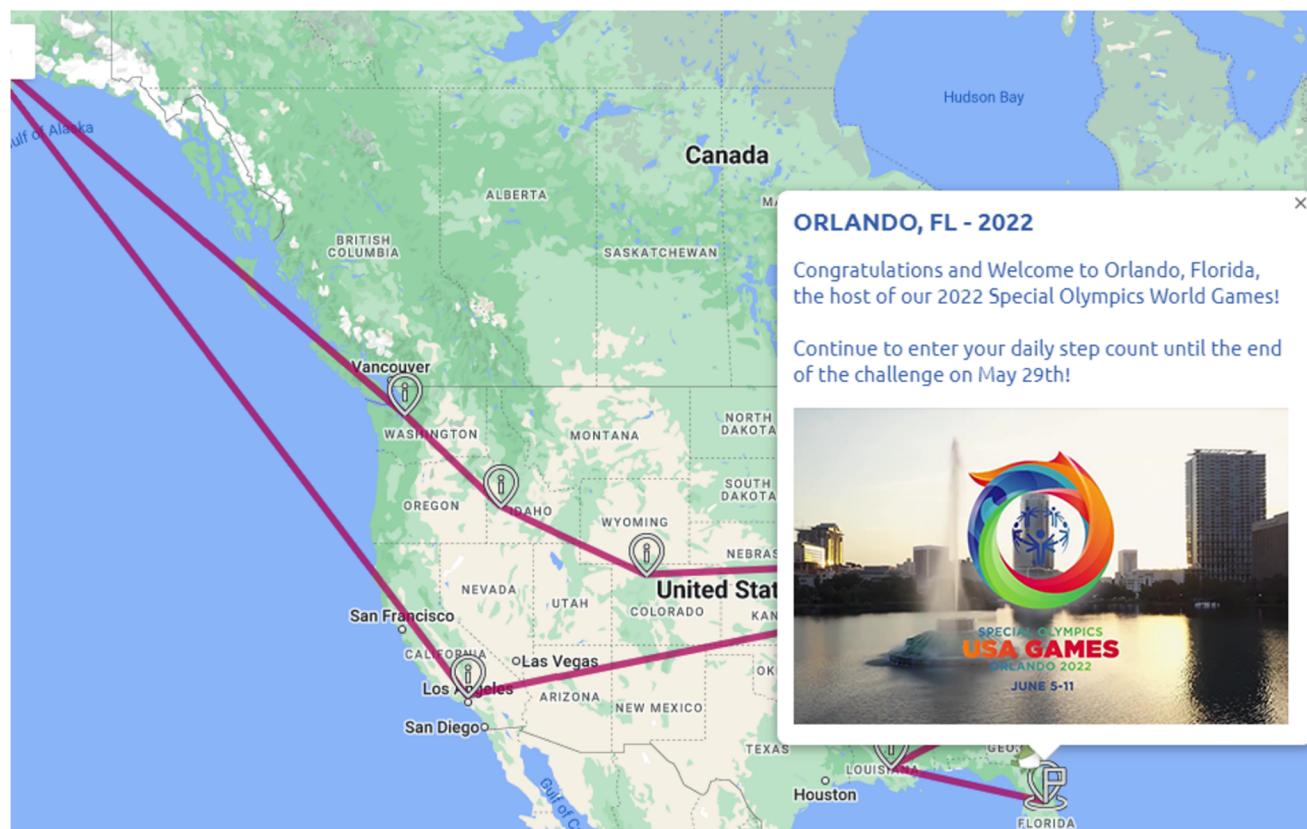
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# BACKGROUND AND PURPOSE

Beginning January 10, 2022, Special Olympics (SO) implemented “The Road to USA Games”: a 20-week fitness challenge for athletes and Unified partners competing in the 2022 USA Games to engage in physical activity and health education in preparation for USA Games. Participants were challenged to reach at least 1 million steps by May 29th as they took a virtual journey from Brookline, MA, the birthplace of SO founder Eunice Kennedy Shriver, to 2022 USA Games host city, Orlando, FL.

The Road to USA Games was rooted in research. The use of step tracking and social support, for people with intellectual disabilities (ID) has been found to be effective.<sup>1</sup> Further, research supports that more people with ID are using smart phones<sup>2</sup> and health interventions for people with ID have used smart phone applications and technology<sup>3,4</sup>, including a current clinical trial.<sup>5</sup> In addition to tracking physical activity, participants were also encouraged to track their fruit, vegetable, and water intake to monitor their health behaviors.





As participants tracked steps in the SO FitNow mobile application, they advanced from Massachusetts to location milestones around the United States, allowing them to visualize their progress on the map and learn about a location's significance to Special Olympics' history. At a cadence of 7,200 steps per day, participants would end in Orlando, FL on the final day of the challenge. In addition to tracking physical activity, participants were also encouraged to track their fruit, vegetable, and water intake to monitor their health behaviors.

Using an application for tracking athlete data reduces staff burden associated with data collection, allows for consistency of quality assurance, and can ensure greater data quality. As such, Special Olympics built the SO FitNow application in 2020 and piloted with four U.S. Programs in a six week fitness challenge. Among the survey responses from the pilot, 88% reported that they liked using the app, 93% felt that the challenge helped them learn about nutrition, hydration, and exercise, and 96% said the challenge was fun. Based on the aforementioned literature and feedback from pilots, SO chose to scale use of the SO FitNow mobile application for the 2022 USA Games Fitness Challenge and build upon the successes from the 2018 USA Games Fitness Challenge.

## KEY FRAMEWORKS

The Challenge incorporates two key frameworks commonly used in exercise: Social Determination Theory (SDT) and Social Cognitive Theory (SCT). SDT posits that human motivation is contingent upon the factors of competence, autonomy, and relatedness.<sup>6</sup> SCT promotes that learning is socially acquired and that people both influence- and are influenced- by their environments.<sup>7</sup> The Challenge encouraged athletes to choose when and where they engage in physical activity, fostered connection with other athletes through buddy challenge participation, offered a message board to post encouraging messages to other challenge participants, and provided education on how to perform physical activity and healthy behaviors through health education from peers.

## CHALLENGE COMPONENTS

### CHALLENGE LEADERS

Special Olympics Health Messengers and Athlete Leaders led the challenge activation, engagement, and health education for their delegation, as Challenge Leaders. A total of 52 athletes from 48 SO Programs took part in the monthly training. Training included discussions on the health education topics and how to share Health Tips.

## DAILY STEPS

Participants were encouraged to use a wearable activity device throughout the Challenge, and sync their device to the SO FitNow app for automatic data collection. Athletes and Unified partners going to the 2022 USA Games who did not already have a wearable device were provided a Fitbit Inspire 2.

Challenge participants who did not have a wearable device and were not competing in the 2022 USA Games could manually enter their activity data into the SO FitNow app. Using the app's physical activity tracker, participants could record the date of activity, activity type (ex: basketball) and duration. SO FitNow used metabolic equivalents to approximate steps completing during the activity period. Alternatively, participants could directly enter their daily step count if they had this information from a non-supported wearable device such as a pedometer.

The screenshot displays the SO FitNow app's manual entry interface. It is divided into two main sections. The left section includes a date picker set to 3/16/2023, a dropdown menu for activity type currently showing '- choose an activity -', and a field for minutes with a value of 0 and an 'ADD' button. The right section includes a date picker also set to 3/16/2023, a field for the number of steps with a value of 0 and an 'Add' button, and a small clock icon below it.

To meet the 1 million step goal, participants needed to average 7,200 steps per day. This average was considered an appropriate goal based on current literature, which suggests that adults with a disability or chronic illness should aim for a daily step count of 6,500-8,500 steps per day, with 3,000 of these steps performed at moderate to vigorous intensity.<sup>8</sup>

## HEALTH EDUCATION

Each week of the challenge had an associated health education lesson to keep participants active in the challenge, while learning about other ways they can stay healthy. Health education has successfully been used as a tool for health promotion in people with ID, with topics ranging from physical activity and diet to hygiene, diabetes and more.<sup>9</sup>

Importantly, several papers cite the importance of working with people with ID in the development of the educational intervention,<sup>10</sup> hence why SO utilized Challenge Leaders for promoting all aspects of health education from conception to delivery.



WEEK	DATE	TOPIC
Week 1	January 10 – January 16	Setting Personal Health Goals
Week 2	January 17 – January 23	Workout Readiness
Week 3	January 24 – January 30	Healthy Beverage Choices
Week 4	January 31 – February 6	Eat the Rainbow
Week 5	February 7 – February 13	Handwashing and Post-Workout Hygiene
Week 6	February 14 – February 20	Strong Breathing
Week 7	February 21 – February 27	Healthy Snack Ideas
Week 8	February 28 – March 6	Cool-Down and Post-Workout Routine
Week 9	March 7 – March 13	Sleep, Rest and Recovery
Week 10	March 14 – March 20	Strong Messaging and Progression
Week 11	March 21 – March 27	Weather Safety
Week 12	March 28 – April 3	Signs of Dehydration
Week 13	April 4 – April 10	Perfect Portions
Week 14	April 11 – April 17	Stress and You
Week 15	April 18 – April 24	Four Parts of Physical Activity
Week 16	April 25 – May 1	Strong Bones
Week 17	May 2 – May 8	Pre-Competition Meal
Week 18	May 9 – May 15	Strong Supporting
Week 19	May 16 – May 22	Sun Safety
Week 20	May 23 – May 29	Setting New Health Goals

# PROCEDURES

SO assessed license and Fitbit needs through a delegation survey conducted in October 2021. Distribution of licenses and Fitbit Inspire 2 devices were then distributed in December 2021. In the initial delegation survey, Programs listed their USA Games quota for athletes, Unified partners, coaches and staff. Additionally, Programs had the option to invite other athletes and Unified partners not attending USA Games to download the app and join the Challenge.

The SO FitNow app requires a two-step registration process in which SO creates an account for an individual, the individual receives an email with a link to the website, and then the user completes the registration process by updating their personal information (username, password, etc.). After completing the registration process, participants could connect a wearable device or manually enter their physical activity steps or minutes.

The screenshot shows the Special Olympics FitNow app registration page. At the top left is the Special Olympics logo, and at the top right is a red button labeled "ESPAÑOL". Below the header is a large banner image of a swimmer with the text "Welcome Athletes!". Under the banner, there are two registration options: "Is this your first time to this site?" with a "SIGN UP" button, and "Been here before?" with a "LOG IN" button. At the bottom, there is a "Follow us on" section with icons for Facebook, Twitter, Instagram, and YouTube, and a "Remember" section with a disclaimer about CDC support. The footer includes links for "License" and "Privacy Policy", a copyright notice for Corehealth Technologies Inc., and the Corehealth logo.

Special Olympics

ESPAÑOL

Welcome Athletes!

**Is this your first time to this site?**  
Click the **Sign Up** button, then enter your name and email address, complete the consent and set-up your Profile.

SIGN UP

**Been here before?**  
Click the **Login** button and sign in.

LOG IN

Follow us on

Remember

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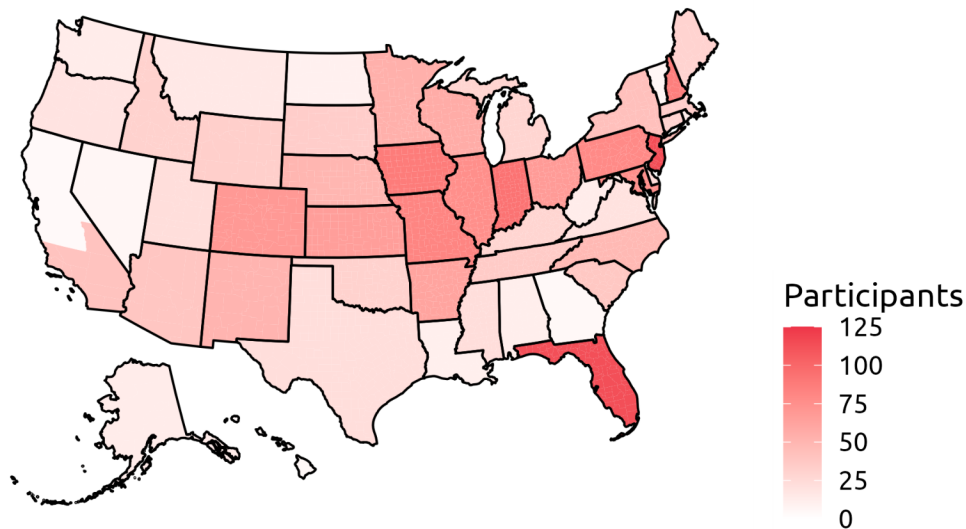
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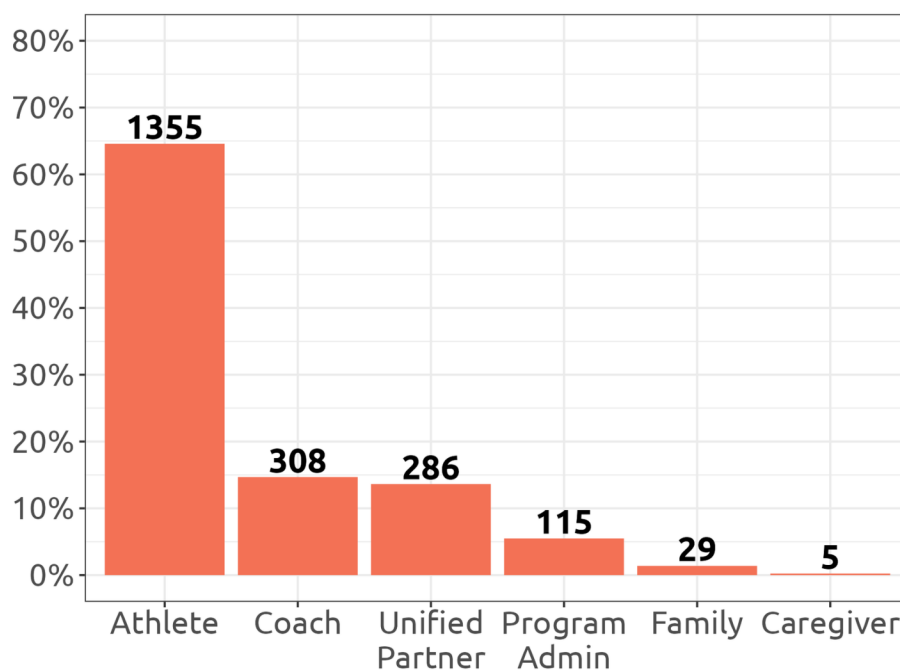
# EVALUATION

## REACH

A total of **55 Special Olympics Programs from the United States and Caribbean** participated in the Road to USA Games fitness challenge. Participant is defined by any person residing in the United States or Caribbean who entered steps on at least one day of the challenge. Below is a representation of United States participants. Caribbean Programs included: Antigua and Barbuda, Bahamas, and Trinidad and Tobago.



In total, **2,098 participants** were involved in the Challenge. Roles of these participants include Athlete, Coach, Unified Partner, Program Administrator, Family and Caregiver.



## TOTAL STEPS ACROSS THE CHALLENGE

Cumulatively, participants completed over **2.1 billion steps** across the Road to USA Games challenge. The five SO Programs listed below achieved the highest cumulative step counts by their challenge participants. A Program leaderboard was shared with participants bi-weekly in the challenge newsletter.

TOP STATE PROGRAMS		
1	SO Maryland	172,492,651 steps
2	SO New Hampshire	127,526,197 steps
3	SO Indiana	123,968,922 steps
4	SO New Jersey	103,426,331 steps
5	SO New York	95,356,861 steps



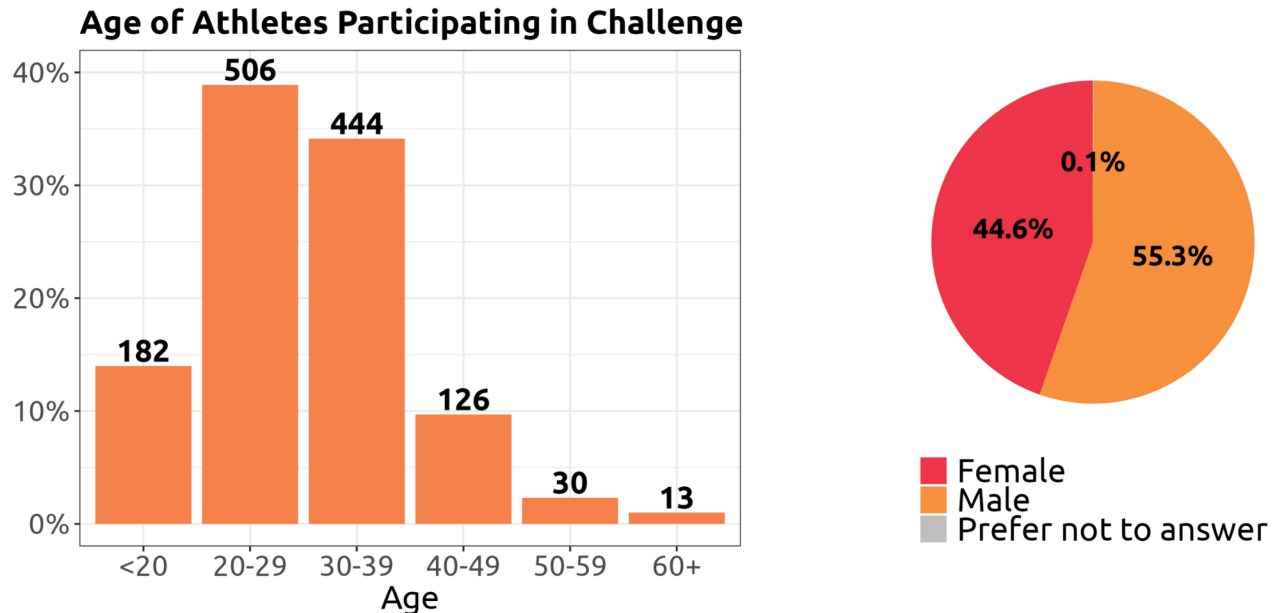
Every week I do several things to get my 7,000 steps. **One way that I get my steps in is trying to incorporate fitness in my everyday life.** I get about half of my steps in school, and for the second half of my steps I try to go to the gym. At the gym I usually start with the elliptical before I lift weights and play basketball. **My pants fit better** along with working hard.

**MARTIN MORAN**  
SO NEW HAMPSHIRE ATHLETE

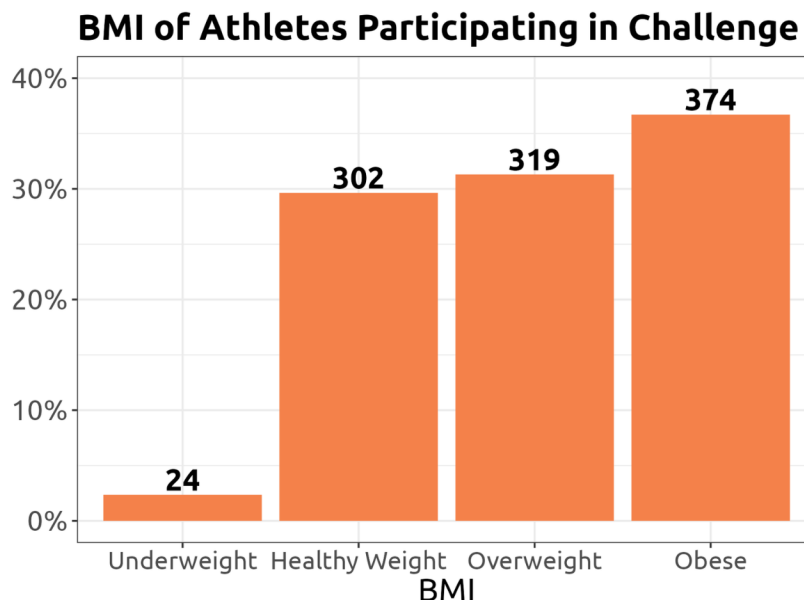


## ATHLETE CHARACTERISTICS

The average age of athletes who participated in the 2022 USA Games Fitness Challenge (n=1355) was **30 years old**. The majority of the athletes were between the age of 20-40 years (74%), **55.3% identified as male**.

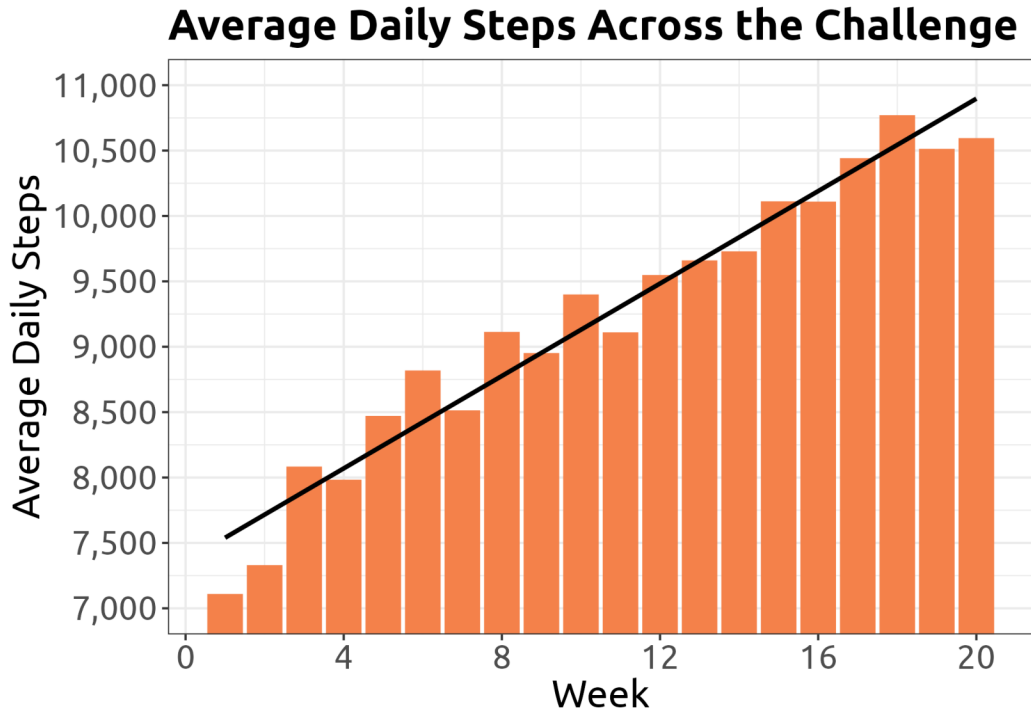


**68%** of athletes 20+ years old were considered **overweight or obese**. This was determined by their self-reported height and weight in SO FitNow, which uses the Centers for Disease Control's adult BMI categorization.

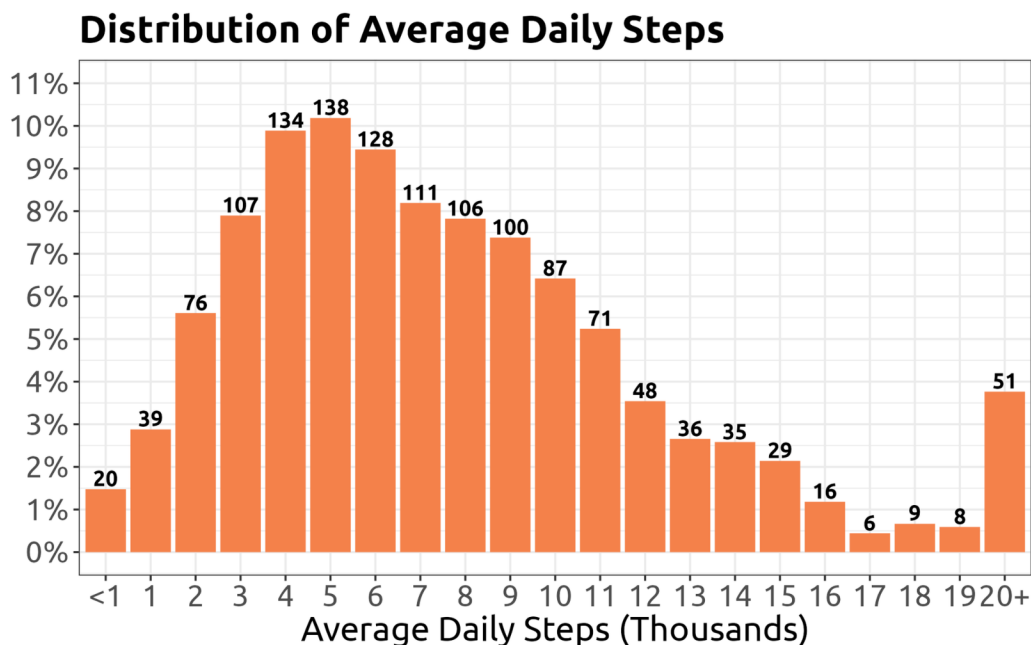


## PHYSICAL ACTIVITY ACROSS THE CHALLENGE

Over the course of the Challenge, the **average daily step count from athletes increased** from 7,100 steps (Week 1) to 10,600 steps (Week 20).



51% of participants and **53% of athletes achieved at least 7,000 steps per day**. 41% of participants and **44% of athletes reached 1 million steps** by the end of the challenge.

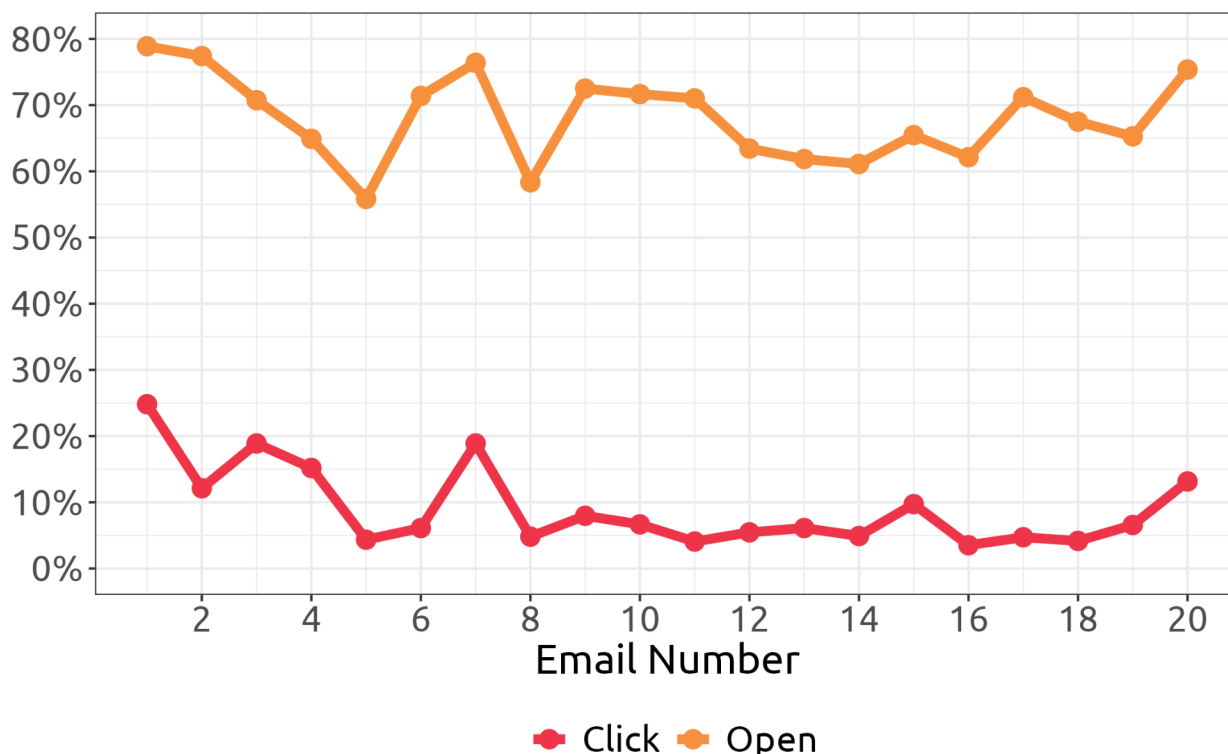
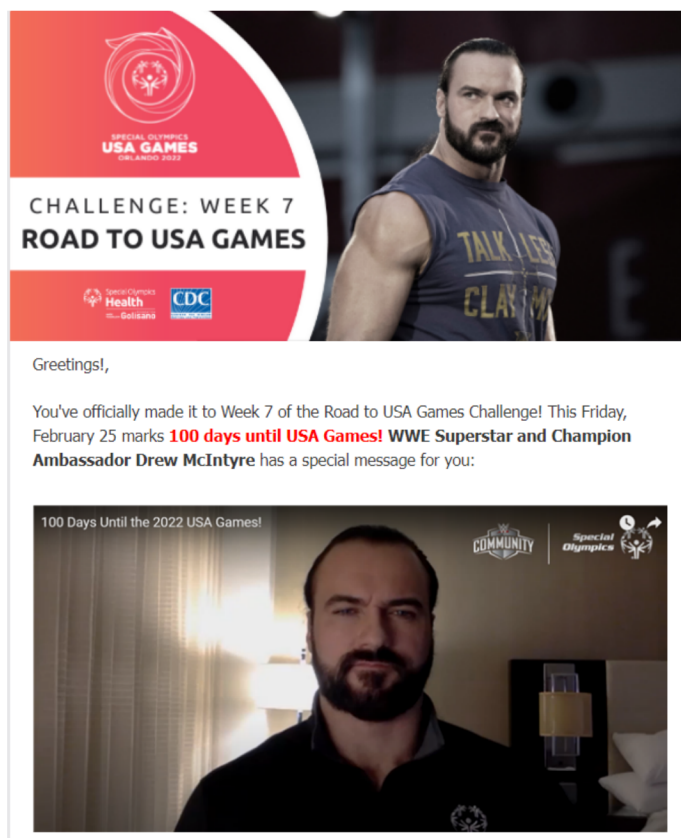




## HEALTH EDUCATION USAGE

On average, 68% of the weekly newsletter emails containing the health education content were opened by athletes across the duration of the challenge. On average, 9% of emails were engaged with by athletes clicking on newsletter links to additional content.

The emails sent in Weeks 1, 7, and 20 were opened and engaged by the highest percentage of athletes. Week 7 was the "100 Days until USA Games" newsletter which was an exciting source of information for athletes. In this newsletter, WWE Superstar and Special Olympics Champion Ambassador, Drew McIntyre, left a video message for challenge participants.

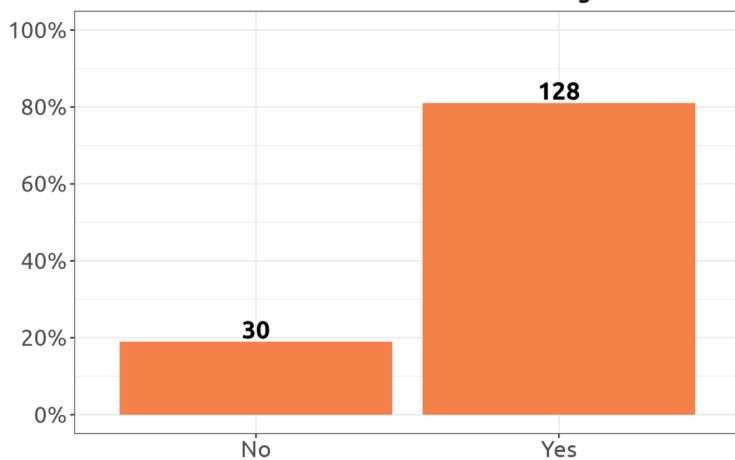


## POST-CHALLENGE SURVEY

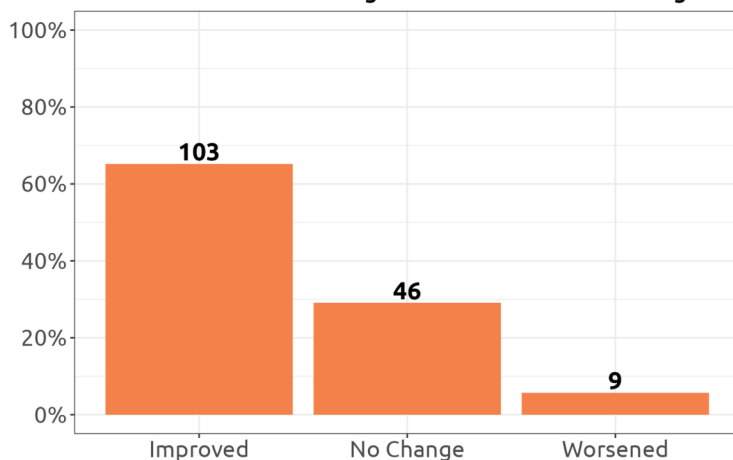
Athletes completed a post-challenge survey to describe their efforts and satisfaction with the Road to USA Games Fitness Challenge. The survey was distributed in-person at the 2022 USA Games and via email after the Games. **Survey highlights from 158 athletes** are described below.

Overall, **81% of athletes reported that they were more active and 65% said their health improved** because of the Challenge.

Were You More Active Because of the Challenge?



How Did Your Health Change Before and After Challenge?



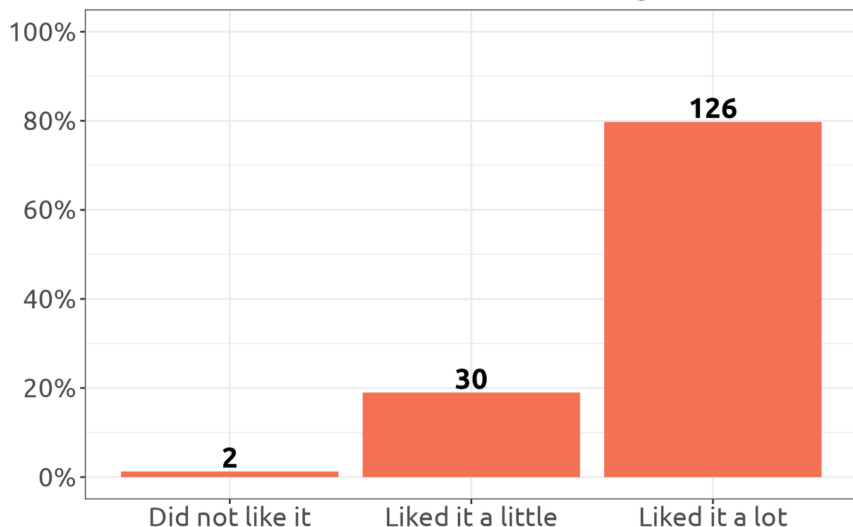
**"I reached my goal of weighing under 200 lbs. I'm learning more about healthy eating and ways to stick to my healthy eating plan! My friend and I workout at the gym with our trainer. I also do rock climbing with my family. I made videos for Team TN for the health tip each week."**

**ERIC MASSEY**  
SO TENNESSEE ATHLETE AND  
HEALTH MESSENGER

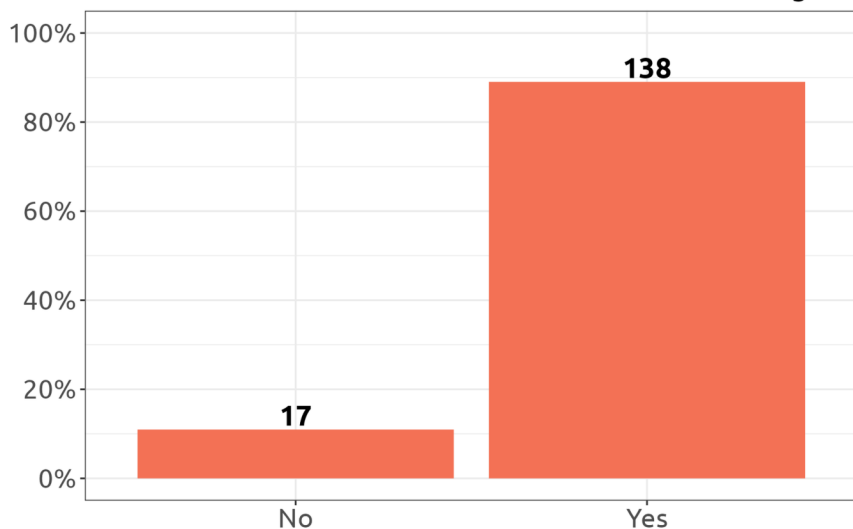
**Most athletes were very satisfied with their effort during the Challenge** (72%). Athletes felt the length of Challenge (82%) and step goal (72%) were 'just right'.

Athletes **liked the Challenge 'a lot'** (80%) and would participate in a future Special Olympics fitness challenge (89%).

**How Much Did You Like the Fitness Challenge?**



**Would You Be Interested in Another SO Fitness Challenge?**



"This challenge has been one of the hardest challenges I've had through Special Olympics, but it's also been **one of the most beneficial for me**. I've been working hard in hopes to be ready for the USA Games and to represent Colorado the best I can. I love Special Olympics because it **gives me a chance to better myself with a healthier body and lifestyle** and Special Olympics has been wonderful for my mental health as well. Joining Special Olympics has taught me that I can achieve anything, that I'm not alone and I matter."

**KIMBERLY HENRY**  
SO COLORADO ATHLETE

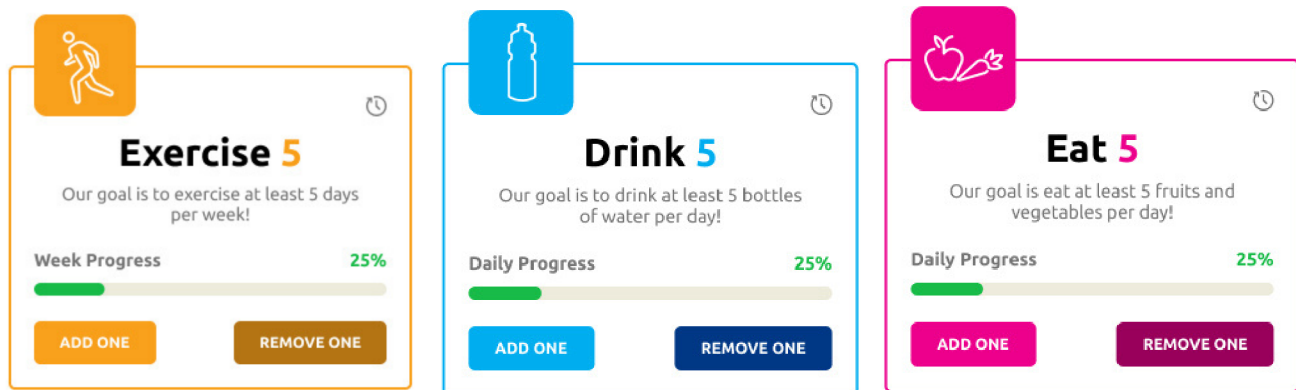


# SO FITNOW FOCUS GROUP HIGHLIGHTS

Special Olympics Program staff, coaches, caregivers, and athletes met with the SO Fitness team to discuss their experiences using the SO FitNow app. **Representatives from 20 Programs provided feedback** in a 60-minute focus group discussion. There were six focus groups consisting of four coaches, 15 program staff, 10 athletes, and four caregivers.

## KEY THEMES AMONG ALL USERS

- Improve app syncing and registration processes
- Better engage coaches in using the app
- Desire to continue using the app



## KEY THEMES AMONG ATHLETES

- Desire more fitness challenges, such as challenges against other states or other teams
- Fit 5 trackers were helpful in building awareness of daily health habits
- Need more training, resources, and support on learning all the app features
- Include vigorous activity components, not just moderate, in challenges

## KEY THEMES AMONG COACHES & PROGRAM STAFF

- Athletes enjoyed using the Fit 5 trackers
- Provide more training and planning time for future challenges
- Difficulty teaching others how to use and sync a wearable device
- Program-led "office hours" helped athletes to get started in the app and challenge
- Create coach capability to view their athlete's progress (steps, Fit 5 trackers), along with visual trends, such as average daily step count

# CONCLUSION

Special Olympics sponsored fitness programming has the capacity to influence health behaviors broadly. The Road to USA Games Challenge had athletes participating across 55 US and Caribbean Programs. The use of fitness challenges are an effective tool to achieve physical activity goals, as demonstrated by the increase of average daily step counts among athletes increased over the 20-week Challenge. Furthermore, over half of the athletes achieved the 7,200 steps per day goal.

Based on the health education usage data, athletes had low rates of engagement. The use of influential persons increased engagement. Further data to better understand how athletes utilize health education is needed to disseminate health knowledge among athletes.

Overall, athletes expressed that they enjoyed the Road to USA Games Fitness Challenge and want to participate in future Special Olympics fitness challenges.



# NEXT STEPS

Special Olympics Fitness will improve app usability and accessibility through instructional videos and resources to help promote on-going athlete tracking of health behaviors and Program-led fitness challenges. Special Olympics Fitness will build specific strategies and resources for engaging caregivers, group home staff, and coaches with the app, as these are key support persons to athletes.

In response to this feedback, Special Olympics Fitness integrated the following changes:

- Created a “gamification of Fit 5” resource built into the app to earn fitness points
- Established a free support services contract so Programs to enroll new users, receive support, enroll users in challenges, and receive support for app difficulties (ex: lost passwords or log-in trouble). This will reduce the time burden on staff. Email [support@konnected.ca](mailto:support@konnected.ca) to learn more about any of these services.
- Added a sleep tracker to support awareness of sleep behavior

Special Olympics will make the following changes over the next year:

- Create new video-based resources, including how to sync devices to the app
- Address device syncing challenges by working with our developer
- Develop Program, Coach, and Caregiver Guides to guide use of the app to promote fitness in home and sport settings
- Offer more technical assistance calls and virtual trainings





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