

# Grooving our way to health: Nutrition counseling and physical fitness in adults with Down Syndrome

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## ABSTRACT

The Adult Down Syndrome Center of Western Pennsylvania has recently received grant funding through the Shadyside Hospital Foundation to implement nutrition services for a trial period. The Center serves adults with Down Syndrome and their families who have increased nutrition support needs due to higher risk for chronic disease and barriers to adequate care. Through the grant, a UPMC registered dietitian and a University of Pittsburgh dietetic intern have joined the Center to provide nutrition counseling and education. Overall, the aim of the program is to increase the health and wellness of patients through accessible, informed nutritional services

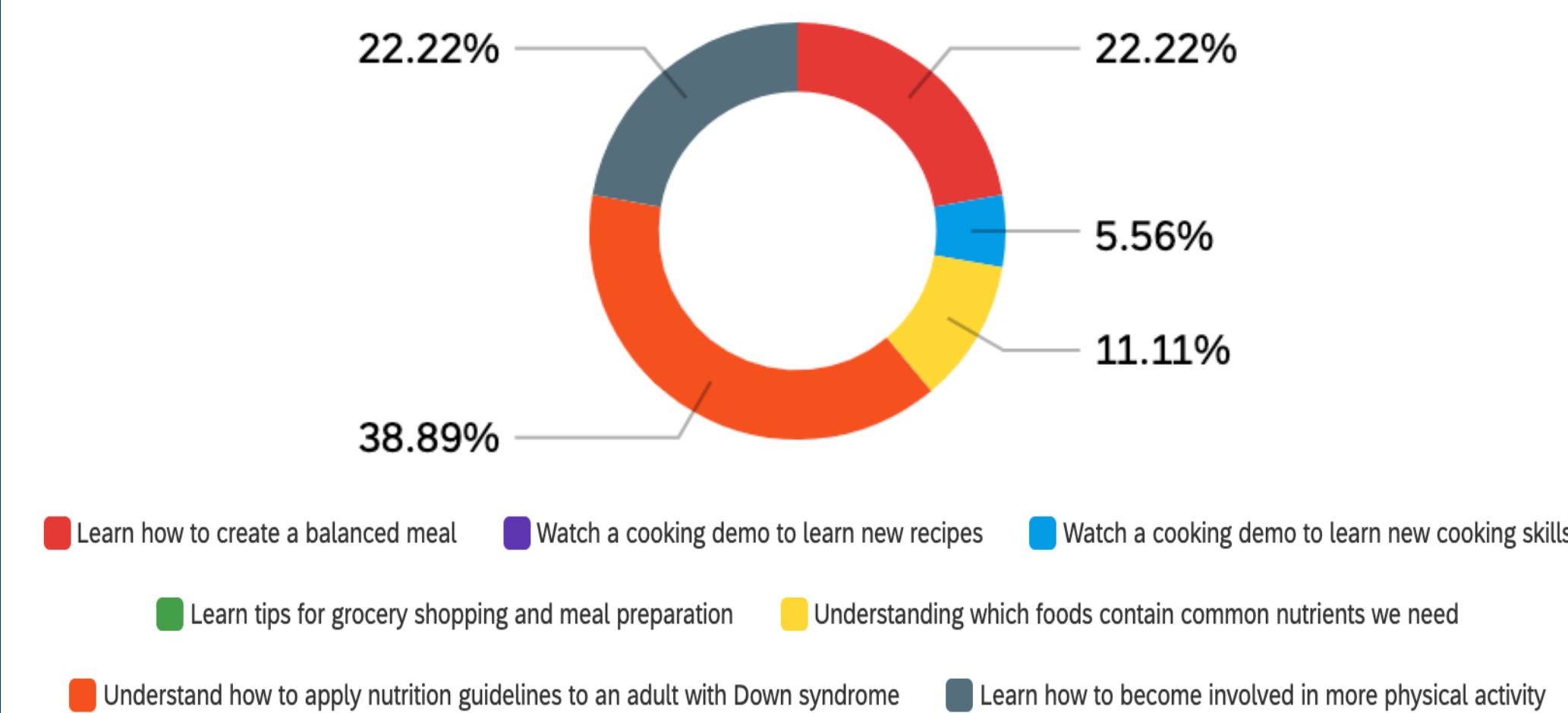
## OBJECTIVES

- Increase accessibility to nutrition services
- Identify nutrition needs of the community
- Participation goal of 30 patients
- Incorporate at least one group nutrition education session
- Encourage healthy lifestyle behaviors
- Increase cultural competence

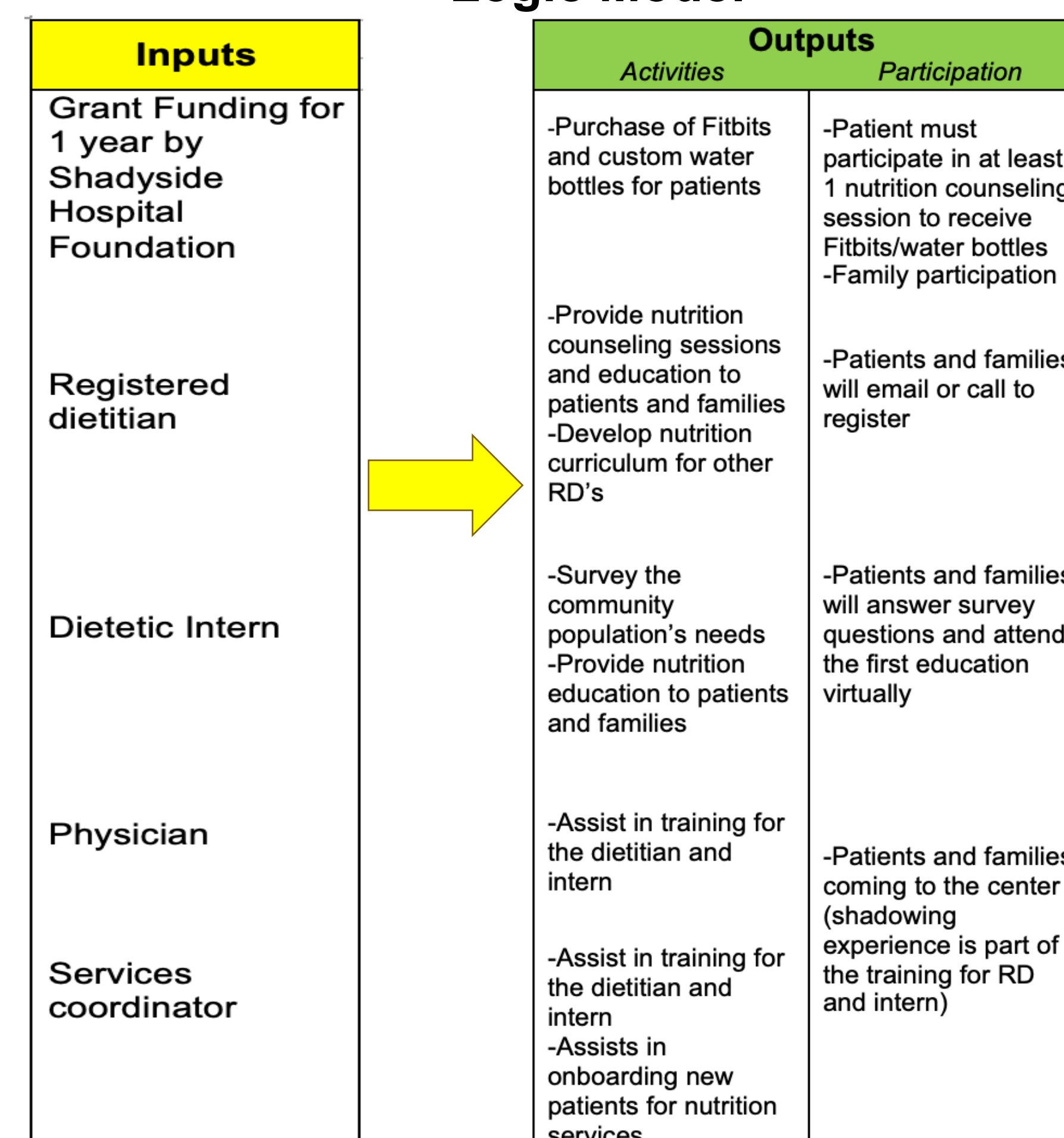
## MATERIALS & METHODS

### Population Needs Survey<sup>1</sup>

• Question 4: Please rank the categories from the above question to indicate which you would be most interested in (1) to least interested in (7). The graph shown below represents the percentage of participants who were most interested in the respective categories.



### Logic Model



Outcomes -- Impact		
Short	Medium	Long
-Increased awareness of physical activity and hydration level	-Increased physical activity level and hydration	-Sustained routine of physical activity, met increased hydration needs (with higher needs due to activity)
-Increased knowledge/awareness of individual needs, goal setting of at least 1-2 goals after 1 session	-Individual goals are met and evaluated during at least one follow up with the dietitian	-Chronic disease symptoms or nutritionally-related issues begin to improve
-Education sessions help encourage patients and families to increase nutrition knowledge or schedule nutrition counseling	-Encourage and motivate patients to meet their nutrition goals	-Future sessions should continue to be centered around patient/family concerns and goals (increased counseling sessions may help determine future educational needs)
-Intern and RD can ask questions during training to help develop their care and education sessions	-Training helps inform how the RD will counsel patients in the center and how the intern will educate	-RD and intern use this informed care to help improve future sessions with populations that apply

## RESULTS

First year of the program will terminate when funding term is over (summer 2022). Success will be determined by the following:

- Number of patients who completed at least 1 nutrition counseling session (at least 30 to meet goal)
  - 20 patients total, 2 follow-ups
- Scheduled and completed follow-ups with the dietitian
- Progress with individual patient goals
- Feedback form participants

Due to the fact that Institutional Review Board paperwork was not completed, the program was prevented from conducting research. In the future, we hope to be able to collect data on the following outcomes:

- Weight and/or BMI
- Physical activity from Fitbits
- Reported hydration
- Specific patient feedback

## CONCLUSIONS

### Important takeaways:

- Increased accessibility through virtual services at no cost to the patients and families
- Free Fitbits and water bottles to the patients create motivators for healthy-habit forming.
- The dietitian and dietetic intern will gain cultural competence through working with the resource coordinator and MD who specializes in caring for adults with Down Syndrome

### Limitations:

- Grant only funds one year at a time (services are contingent upon proposal approval)
- Measurable outcomes are limited which makes it more difficult to prove various aspects of success
- Workload for dietitian has been determined to be more than time allotted for in grant proposal

### Future Considerations:

- Expansion of community partnerships to improve continuity of care
- Increase group education sessions
- Addition of a second casual RD to manage workload
- Incorporation of increased visual methods to teach individuals with Down Syndrome, ex: virtual cooking demos

## REFERENCES

1. Adult Down Syndrome Clinic Nutrition Education Survey. Qualtrics. [https://pitt.co1.qualtrics.com/results/?surveyId=SV\\_3C4FQVxQcKsbNDE#/surveys/SV\\_3C4FQVxQcKsbNDE/containers/6164a33a91c66f001160e981/pages/Page\\_087eded3-951d-4075-a167-8d4d79b6a546](https://pitt.co1.qualtrics.com/results/?surveyId=SV_3C4FQVxQcKsbNDE#/surveys/SV_3C4FQVxQcKsbNDE/containers/6164a33a91c66f001160e981/pages/Page_087eded3-951d-4075-a167-8d4d79b6a546). Published September 29, 2021. Accessed October 23, 2021.

## ACKNOWLEDGEMENTS

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