

Western Michigan University ScholarWorks

Capstone Projects

4-2025

Enhancing Health and Wellness Initiatives for Adults with Intellectual and Developmental Disabilities

Anna Cole Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/capstone_projects

Recommended Citation

Cole, Anna, "Enhancing Health and Wellness Initiatives for Adults with Intellectual and Developmental Disabilities" (2025). *Capstone Projects*. 148. https://scholarworks.wmich.edu/capstone_projects/148

This Capstone Project is brought to you for free and open access by ScholarWorks. It has been accepted for inclusion in Capstone Projects by an authorized administrator of ScholarWorks. For more information, please contact wmu-scholarworks@wmich.edu.



Enhancing Health and Wellness Initiatives for Adults with Intellectual and Developmental

Disabilities

Anna Cole

Doctoral Capstone Experience & Project Paper

Department of Occupational Therapy, Western Michigan University

April 2025

2

Abstract

Individuals with intellectual and developmental disabilities (IDD) often experience lower levels of physical activity and higher rates of obesity and sedentarism when compared to their neurotypical peers (Ferreira et al., 2022; Shin & Park et al., 2012). Research has shown that regular exercise and cooking programs can improve strength, aerobic capacity, emotional wellbeing and independent living skills among individuals with IDD (Bouzas et al., 2018; Pastula et al., 2012; Pestana et al., 2018). Ready for Life is a non-profit organization that offers inclusive post-secondary education and adult day programming to promote autonomy and well-being for individuals with IDD. While exercise and cooking are already integrated into the day program's weekly routine, a need was identified to expand and adapt these offerings to better support clients. In response to the unique health challenges faced by individuals with IDD, a collection of age-appropriate and adaptive resources was created to promote wellness and independence. These included seven personalized exercise plans, six adaptive recipes accompanied by a nutrition page and educational modules focused on safety, emotional regulation, healthy coping strategies, meal planning and exercise. This project aimed to build confidence, foster independence and promote enjoyment with each activity.

Introduction4
Literature Review
Background5
Exercise
Cooking7
Emotional Regulation8
OT's Role in Service Delivery to those with IDD9
Conclusion
Needs Assessment
Objectives Achieved During Capstone11
Implications of the Capstone17
Conclusion
References
Appendices

Contents

Introduction to Capstone Project

This program-development focused capstone project was completed at Ready for Life, a West Michigan non-profit that supports adults with IDD. Ready for Life offers inclusive postsecondary education at Hope College and Ferris State University, along with an adult skillbuilding day program. Their mission is to promote autonomy, belonging and independence through inclusive learning, life skills coaching, pre-vocational training, community involvement and leisure activities. This project primarily took place at their adult day program, where clients engage in community work and volunteer opportunities, such as helping at local food banks and churches, while also practicing essential life skills like cooking, cleaning, self-care and communication on a daily basis.

The aim of this project was to enhance the adult day program's offerings by developing age-appropriate and accessible interventions in exercise, cooking and emotional regulation. By creating adaptive recipes, personalized exercise plans and educational modules on safety, emotional regulation, healthy coping strategies, meal planning and physical activity, the project sought to empower clients to live healthier and more independent lives. The focus was on promoting independence, building confidence and fostering enjoyment in these activities, all of which contribute to a more fulfilling and autonomous lifestyle.

The mentor for this capstone was Toni Falk, the executive director of Ready for Life. With a background in special education, Toni provided valuable guidance through her expertise in adaptive curriculum, behavior management and person-centered programming. Her insights helped ensure that my project was feasible, beneficial and aligned with the mission of Ready for Life and the unique needs and strengths of the clients they serve.

4

Background

Literature Review

Intellectual and developmental disabilities (IDD) can be defined as "differences that are usually present at birth and that affect the trajectory of the individual's physical, intellectual or emotional development" (U.S. Department of Health and Human Services, n.d.). Individuals with IDD may experience difficulties in both intellectual functioning and adaptive behavior, which can impact their ability to learn, reason, problem solve, interact socially and complete daily living tasks. IDD encompasses a wide range of diagnoses, including autism spectrum disorder (ASD), cerebral palsy and down syndrome (U.S. Department of Health and Human Services, n.d.).

To support individuals with IDD in achieving greater independence and quality of life, a variety of supports and services are typically offered in educational and community-based settings (*Intellectual/Development Disabilities*, n.d.). For example, Ready for Life's adult skill building day program provides opportunities for socialization, recreation, community integration, and the development of life and work skills. These experiences promote personal growth and independence through meaningful daily activities such as cooking, exercise and practicing other essential life skills.

Exercise

The benefits of engagement in regular physical activity are plentiful for individuals with and without disabilities including improved cardiovascular health, decreased anxiety and depression, and enhanced well-being and quality of life (Shin & Park et al., 2012). Individuals with IDD experience high rates of sedentarism and low levels of engagement in physical activity, putting them at high risk for various health-related concerns (Ferreira et al., 2022). Specifically, individuals with disabilities have a higher prevalence of both high blood pressure and obesity when compared to the general population. In addition, individuals with IDD have lower levels of cardiovascular fitness, muscle strength and physical fitness performance when compared to their peers (Shin & Park et al., 2012) This negatively impacts their capacity to complete daily activities and thus independently function throughout their day-to-day lives. This highlights the necessity of creating personalized exercise interventions to encourage engagement in physical activity for individuals with IDD to improve health outcomes.

Several studies have demonstrated the effectiveness of exercise interventions in improving health-related factors for individuals with IDD. A meta-analysis conducted by Pestana and colleagues (2018) examined the effectiveness of eight research studies on exercise interventions for individuals with IDD. After analysis, authors concluded that systematized exercise programs for individuals with IDD promoted consistent and significant benefits such as improved muscle strength, aerobic capacity, balance, anxiety, blood pressure and quality of life. The most highly recommended form of physical activity for this population included exercise two to three times a week for 40 minutes involving aerobic exercise, sports specialization, and a combination of muscular and aerobic exercises. In addition, another meta-analysis conducted by Bouzas et al. (2018) reviewed 44 studies and found significant positive effects of exercise on both cardiorespiratory and muscular fitness, with some studies suggesting improvement in body composition. Lastly, a study conducted by Pastula and colleagues (2012) examined the effects of exercise intervention on cognitive functioning in young adults with ID. Fourteen participants completed an eight-week comprehensive exercise intervention including circuit training, dancing, and adapted sports for 45 minutes. Following intervention, researchers found significant increases on all three cognitive tests, as well as a significant improvement in aerobic fitness. These findings support the undeniable benefits of exercise, and the potential it has to enhance

cognitive functioning for this population, thus supporting the acquisition of essential life skills, such as cooking.

Cooking

Individuals with IDD are less likely to eat a balanced diet when compared to their peers (Bennett & Cunningham, 2014). Given the prevalence of obesity within the IDD population, instruction on healthy cooking practices is vital to encourage healthier eating habits. In addition, education on adaptive cooking practices is crucial to ensuring confidence, independence, and self-determination in the kitchen. Various studies have highlighted the effectiveness of cooking groups for individuals with IDD in enhancing cooking skills of participants to support independent living skills, as well as increasing healthy eating behaviors through nutrition education (Barnhart et al., 2019; Lappa & Mantzikos, 2023; Bennett & Cunningham, 2014).

Specifically, a study completed by Barnhart and colleagues (2019) implemented a sixweek cooking-based nutrition education program for individuals with developmental disabilities and their direct support professionals entitled *Cooking Matters*. This program consisted of education on safe cooking practices, including using knives and stoves and nutrition education to inform participants on how to select healthy beverages and foods on a budget. Intervention sessions included grocery shopping, food budgeting, meal preparation and nutrition education (Barnhart, 2019). Upon completion of the program, participants reported greater confidence with cooking skills and increased understanding of nutrition. Similarly, a study completed Bennett and Cunningham (2014), conducted focus groups to analyze the perceived effectiveness of a nutrition education course entitled *Able 2 Cook 4 Health* by individuals with mild to moderate disabilities. Results found that most individuals took the course to advance their skillset to cook for themselves and their families, improve their independence with practical skills and to maintain good health (Bennett and Cunningham, 2014). One suggestion made to the course was providing participants with a hard copy of course content, highlighting the potential benefit of an adaptive cookbook and how-to guide for this population. Participants recalled various healthy eating practices during the focus groups, including limiting salt intake and drinking water rather than soda, suggesting an increase in understanding of nutrition following intervention (Bennett and Cunningham, 2014).

Finally, a study conducted by Lappa and Mantzikos (2023), implemented a cooking skills educational program for seven adults with developmental disabilities to support their functional living skills. Throughout the program, the leader provided visual supports in the form of picture directions, modeling and positive reinforcement given the strong effectiveness of each in skill acquisition for individuals learning with ID. At the end of intervention, participants were able to independently recall all or parts of the recipe without visual support, indicating greater independence. Cooking interventions show a wide variety of benefits for individuals with IDD including increased cognitive function, opportunities for social interaction and improvement in quality of life, highlighting their value in adult programming for individuals with IDD (Lappa & Mantzikos, 2023).

Emotional Regulation

Emotional regulation can be defined as "the ability to exert control over one's own emotional state" (Sussex Publishers, n.d.). Individuals with IDD are more likely to experience difficulty regulating their mood and emotions, causing symptoms of anxiety and depression (Noel, 2018). Individuals with IDD may experience challenges with emotional awareness, such as identifying and labeling emotions, understanding what causes different feelings and recognizing the potential outcomes of these emotions (Hernandez et al., 2023). Emotional regulation is a skill that promotes positive social functioning and relationships. Therefore, it is vital that individuals are educated and equipped with the skills necessary to regulate their emotions. Common interventions to promote emotional regulation within the context of occupational therapy (OT) include sensory-based interventions, coping skills training, and mindfulness-based exercises.

OT's Role in Service Delivery to those with IDD

OT can be defined as "the therapeutic use of everyday life occupations with persons, groups or populations (clients) to support occupational performance and participation (American Occupational Therapy Association, n.d.). Health management and promotion are integral components of the scope of OT. OT practitioners are dedicated to promoting healthy lifestyles through personalized and comprehensive interventions. With a strong understanding of the profound impact of occupation-based interventions on physical, emotional and mental health, OT clinicians serve as valuable members of the interdisciplinary team in promoting health and wellness for all people, including individuals with IDD. OTs have extensive training in assessing individual needs as they relate to everyday functioning and providing specialized intervention and supports in order to enhance client well-being. OTs empower individuals to achieve greater independence and engagement in their daily lives, thereby supporting both health and wellness.

Conclusion

Numerous studies support the effectiveness of adaptive and nutritious cooking, exercise and emotional regulation strategies on enhancing the quality of life, well-being and independence of individuals with IDD. The goal of this capstone project was to design an adaptive cookbook with a nutrition page, personalized exercise interventions and educational modules on safety, emotional regulation, healthy coping strategies, meal planning and exercise to strengthen health and wellness initiatives at Ready for Life's day program to holistically serve participants.

Needs Assessment

A needs assessment was completed through a group interview with Ready for Life staff at each program to better understand gaps in services and interventions, helping shape the overall scope of the health and wellness program. Staff were asked questions regarding their perceptions of the strengths, weaknesses, opportunities and threats at Ready for Life.

Strengths

Strengths included the value Ready for Life places on inclusion, autonomy and fostering independence across all programs. Reported strengths of the day program was the emphasis placed on community integration and involvement. The day program has various sites they visit weekly, including Kids' Food Basket, Feeding America and Beer City Dog Biscuits to increase client connections and normalize inclusivity. During their time at the day program, clients are able to learn various work and life skills. Client's exercise at the YMCA, cook meals and complete jobs skills such as packaging food items, sorting clothes, and cleaning. Strengths mentioned from academy staff at Hope College and Ferris State University include personalized supports and services to set clients up for success with academics and independent living. Staff assume competence of their students and educate students on the importance of self-determination and advocacy.

Weaknesses

Reported weaknesses included an overall lack of age-appropriate books and educational materials for adults with disabilities, limited access to integrated clinical support services—such as occupational therapy and social work—and notable difficultly helping clients regulate their

emotions in the moment. Weaknesses specific to the day program were a lack of personalized exercise supports and adaptive recipes when cooking. Academy staff reported difficulties advocating for accommodations and inclusivity for their students.

Opportunities

Ready for Life is always looking for ways to holistically benefit and support their clients and students. Current areas of opportunity include an overall need for an occupational therapy perspective and interventions in the areas of health and wellness, fine motor skills, emotional regulation, safety, communication, conflict resolution and social relationships.

Threats

Working towards inclusion continues to be a complex undertaking with a multitude of barriers including funding, accessibility, accommodations and societal attitudes. Ready for Life would also benefit from increased marketing efforts to ensure more individuals and families are aware of the valuable opportunities they offer.

Objectives Achieved during Capstone

Objectives achieved during this capstone project included both pre-determined and standardized objectives that all students were required to achieve, as well as individually created objectives. Individually created objectives are listed and explained below.

Objective 1: Student will research best practices related to health and wellness and adaptive cooking for individuals with intellectual and developmental disabilities (IDD) for a minimum of 12 hours by the end of the capstone experience.

This objective was achieved through reading the book "Teaching Authentic Cooking Skills to Adults with Intellectual and Developmental Disabilities: Active Engagement", where I was able to learn and understand the process of creating adaptive recipes. In addition, I read five articles on evidence-based exercise and its benefits for this population as well as educated myself on CDC guidelines in regard to physical activity.

Objective 2: Student will attend Ready for Life's (RFL) day program job sites for 40 or more hours to provide assistance from an OT lens by the end of the capstone experience.

Throughout my time at the day program, I attended various volunteer and job sites with clients including Ronald McDonald House, several churches, Feeding America and Kids' Food Basket for over 90 hours. I looked at each volunteer site from an occupational therapy lens and determined ways to increase client independence and success. One site involves baking cookies, so I created a "finding ingredients and tools" visual aid to support clients' efficiency with the baking process. Each reference photo was taken directly from the ingredients at the site to increase clients' visual recognition of each product. I was then able to use the visual aid with several clients throughout my project.

Objective 3: Student will conduct interviews or surveys with RFL clients and staff to identify health and wellness related goals and program needs to support creation of client-centered health and wellness initiatives by the end of week four of the capstone experience.

Five surveys were developed to fulfill this objective. The first survey, a general health and wellness survey, was created for staff to identify which interventions they perceived as most needed and beneficial. Staff were asked to select the interventions they found to be most valuable from a provided list. Safety modules, personal space and boundary education, fine motor interventions and healthy coping strategies were viewed as the most desirable interventions. These insights helped guide the development of the program and its focus areas.

The second survey focused on exercise and was designed for seven participants with fitness goals. It included eight questions: five yes/no/sometimes questions, one multiple choice

question and two open ended questions. The first five questions assessed the participants' ability to safely use exercise equipment, whether they have a structed fitness plan, their knowledge of different exercises, and their understanding of warm up and cool down routines. The multiplechoice question asked participants what aspects of fitness they wanted to focus on, with options including strength, endurance, flexibility, fitness for life, and balance, each accompanied by a brief definition. The two open-ended questions invited participants to share what they enjoyed about exercise and their fitness goals, shaping the focus of each of their personalized exercise plans.

The third survey centered on cooking and included ten questions: seven yes/no/sometimes questions, one multiple choice question and two open-ended questions. The first seven questions assessed the participants' confidence with cooking, ability to follow a recipe and use kitchen equipment safely, desire to cook more, and interest in adaptive recipes. The multiple-choice question invited the participant to share their favorite part of cooking with options such as chopping and preparing ingredients, stirring or mixing, cooking on the stove, following a recipe, tasting the food, or sharing with others. The open-ended questions asked participants to share what they like about cooking and what they would like to work on. This survey helped me gain valuable insights on what meals to make adaptive recipes for and what skills they should target.

Each survey used emojis to visually represent the answer choices to increase participants understanding of how to respond. A happy face was used for "yes", a slight smile was used for "sometimes" and a small frown for "no".

Two post-surveys were also created—one for cooking and one for exercise. Both included five yes/no/sometimes questions. The cooking survey asked about participants'

confidence in using the adaptive recipe, ability to follow it, excitement about using the recipe, understanding of the nutrition page and plans for future use. The exercise survey asked clients about their knowledge of new exercises, willingness to try them, confidence at the gym, understanding of warm-up and cool down routines and their fitness goals.

Objective 4: Student will create five or more adaptive recipes to support RFL client independence and success with cooking by the end of the capstone experience.

This objective was achieved through making six adaptive recipes. Each recipe was color coded and included an ingredients page with visuals, a tools page with visuals, and a step-by-step guide with visuals. The last page of each recipe included ways to make the meal gluten free, dairy free and healthier to support client knowledge of nutrition. Most recipes were adapted from the *Making Life Easy Meals* program at Ready for Life, as participants oftentimes wanted to recreate these meals at home but did not have recipes to follow. Adaptive recipes created included a pizza pasta bake, beef enchiladas, homemade pizzas, trail mix bites, tacos, and chicken pot pie casserole. Each recipe was printed off and given to each participant that expressed interest, as well as given to RFL Academy at Hope College for their cooking class. Due to diverse sensory preferences and individual food tolerances, recipes pivoted from a strong nutritional emphasis to a more inclusive approach. A dedicated nutrition page was added to ensure the recipes remained accessible and enjoyable for all clients.

Objective 5: Student will create and implement personalized and adaptive exercise plans for five or more clients with self-identified fitness goals to improve client-perceived competence with exercise by the end of the capstone experience.

This objective was achieved by making seven personalized and adaptive exercise plans. Each plan was tailored to the client's unique goals, which were listed at the top of the page. A chart outlined the exercises to complete with visual directions on how to perform them, the duration of each activity and a checkbox section to track completion.

Each exercise plan followed CDC guidelines for physical activity and included a warmup, stretching routine, aerobic exercises aligned with the client's interests (basketball, nu-step, treadmill, rower, bike), muscle-strengthening activities using resistance bands and a cool-down.

To support follow-through and sustainability, each client was given a hard copy of their plan, a timer and a resistance band, supporting their ability to complete exercises at home or with their Community Living Support (CLS) workers.

Objective 6: Student will create and run two or more group interventions related to healthy coping and emotional regulation strategies to increase RFL student ability to manage their emotions and behaviors by the end of the capstone experience.

This objective was achieved through creating two slide presentations related to emotional regulation. The first presentation was entitled "Using the Sensory Room" and included information on what a sensory room is, why it is important, when you can use it and what you can do in it such as movement breaks, playing music, or using a weighted blanket. Following the presentation, clients then collaborated on making two tactile boards with fur, glitter, sequins, puffy paint and pom-poms for their sensory room.

The second slide presentation was entitled "Change, Conflict and Coping" and included information on how to handle and cope with both change and conflict and how to practice mindfulness. This was an interactive presentation where clients were able to share their experiences with the group and talk about what coping strategies help them in the moment. Students then completed a group activity where they were able to match a coping strategy to different emotions. Afterwards, a group of clients collaborated on making sensory bags with hair gel, mini erasers, beads and foam balls to serve as a regulation tool and coping strategy.

Objective 7: Student will create and implement seven or more occupational therapy-based interventions to support student health and wellness, fine motor skills or life skill acquisition by the end of the capstone experience.

Throughout my DCE, staff or clients would come up to me seeking advice, intervention ideas or support. Therefore, I included this objective to ensure I was able to meet clients' needs in the moment from an OT perspective. I created three slide presentations based on the staff survey responses of their most desired interventions. The presentations were entitled "Social Safety", "Cooking Safety" and "Exercises You Can Do at the Gym". I presented each to a large group of students. A safe versus unsafe game was played with the large group after the social and cooking safety modules were presented. A food jeopardy focused on meal ideas, healthy snack ideas and using MyPlate to guide your meal choices was played with a large group.

Three social stories were created for different clients to address personal space and boundaries, being respectful at the day program, and listening and following directions. Two social stories were printed off and given to the client for at home-use to promote consistency and understanding.

Several miscellaneous interventions were created throughout my DCE to support client independence, occupational engagement and everyday functioning. Two sets of 25 exercise cards were created and included stretches, muscular strengthening exercises and aerobic exercises to help clients plan their routine before going to the gym. Other examples include a weather and clothing choice matching game for a client struggling to dress appropriately for the weather, a hygiene checklist, a behavior chart, and a sleep strategies handout. **Objective 8:** Student will write a capstone paper to disseminate their capstone project and process by the end of the experience.

This paper fulfills my final objective. My project was also disseminated through a live presentation at WMU, a video presentation and an in-person presentation for staff at Ready for Life.

Implications of the Capstone

This capstone experience demonstrated the role occupational therapy can play in promoting and enhancing health and wellness initiatives for individuals with IDD. It resulted in the development of six adaptive recipes, seven personalized and adaptive exercise plans and a slide presentation series focused on safety, emotional regulation, healthy coping strategies, meal planning and exercise. Each of these resources enhanced existing health and wellness initiatives at Ready for Life, thus empowering individuals to engage in activities that support their overall well-being, such as exercise, cooking and mindfulness. This project highlighted the ability OT has to address health promotion and holistic wellness through client-centered interventions and accessible and adaptive resources.

A lack of age-appropriate adaptive resources for adults with IDD was found to be a weakness and opportunity when completing my needs assessment with Ready for Life staff. This project worked to bridge this gap and highlighted the power adaptive resources have to increase client success, independence, engagement in meaningful activities and self-determination. Specifically, multiple individuals reported using the adaptive recipes at home to make dinner for their families or friends. In addition, each client with a personalized exercise plan was able to take control of their fitness journey, showing increased comfortability with the gym and gym equipment. In the post-survey regarding exercise, clients reported increased knowledge about gym exercises, warm-up and cool-down routines, a willingness to try new exercises, greater confidence at the gym and an improved ability to reach their fitness goals. Similarly, post-survey results for the cooking program showed that clients felt confident and excited about cooking, were able to follow the recipes more easily, and understood how to make the recipe healthier if desired.

To promote sustainability, each recipe was printed and given to all clients expressing interest in making the meal. Each client received a hard copy of their personalized exercise plan. All recipes, educational modules, adaptive resources and interventions were placed into a shared digital file with Ready for Life staff, as well as printed and placed into a container in their day program, to ensure they could continue to be used in the future.

Conclusion

This project aimed to strengthen health and wellness initiatives at Ready for Life's adult day program through the development of adaptive recipes, individualized exercise plans and a series of slide presentations focused on safety, emotional regulation, healthy coping strategies, meal planning and exercise—all of which can be found in the appendices section below. Given the health disparities often experienced by individuals with IDD, this work highlights the vital role OT can play in health promotion across the lifespan. Adaptive resources can significantly improve client engagement, independence and enjoyment in wellness activities—outcomes that align closely with the core values of OT. Occupational therapists are uniquely equipped to create these kinds of resources due to their strong foundation in task analysis, activity adaptation and understanding of client-centered care. This project demonstrates how OT can be a powerful force in promoting long-term health and meaningful participation for individuals with IDD. To further support health and wellness in transition programs, Ready for Life would benefit from future capstone projects that focus on adaptive sports and inclusive group fitness initiatives.

References

- Barnhart, W. R., Havercamp, S. M., Lorenz, A., & Yang, E. A. (2019). Better together: A pilot study on *cooking matters* for adults with developmental disabilities and direct support professionals. *Nutrition and Metabolic Insights*, *12*, 117863881984003. https://doi.org/10.1177/1178638819840036
- Bennett, A. E., & Cunningham, C. (2014). A qualitative evaluation of a healthy cookery course in Ireland designed for adults with mild to moderate intellectual disability. *Journal of Intellectual Disabilities*, 18(3), 270–281. https://doi.org/10.1177/1744629514544074
- Bouzas, S., Martínez-Lemos, R. I., & Ayán, C. (2018). Effects of exercise on the physical fitness level of adults with intellectual disability: A systematic review. *Disability and Rehabilitation*, 41(26), 3118–3140. https://doi.org/10.1080/09638288.2018.1491646
- Ferreira, J. P., Matos, R., Campos, M. J., Monteiro, D., Antunes, R., & Jacinto, M. (2022). Effects of Physical Exercise Program in Adults with Intellectual and Developmental Disabilities-A Study Protocol. *Journal of clinical medicine*, *11*(24), 7485. https://doi.org/10.3390/jcm11247485
- Hernández Lara, M., Caro, K., & Martínez-García, A. I. (2023). Technology for supporting emotion regulation of individuals with developmental disabilities: A scoping review. *Research in Developmental Disabilities*, 136, 104467.

https://doi.org/10.1016/j.ridd.2023.104467

Intellectual/Development Disabilities. Detroit Wayne Integrated Health Network. (n.d.). https://www.dwihn.org/intellectual-and-development-disabilities

Lappa, C. S., & Mantzikos, C. N. (2023). Teaching individuals with developmental disabilities

basic cooking skills: A single case research. *International Journal of Autism & Related Disabilities*, 6(1). https://doi.org/10.29011/2642-3227.100064

Noel J. (2018). Recognition and treatment of mood dysregulation in adults with intellectual disability. *The mental health clinician*, 8(6), 264–274. https://doi.org/10.9740/mhc.2018.11.264

Pastula, R. M., Stopka, C. B., Delisle, A. T., & Hass, C. J. (2012). Effect of moderate-intensity exercise training on the cognitive function of young adults with intellectual disabilities. *Journal of Strength and Conditioning Research*, 26(12), 3441–3448. https://doi.org/10.1519/jsc.0b013e318270fc83

- Pestana, M. B., Barbieri, F. A., Vitório, R., Figueiredo, G. A., & Mauerberg de Castro, E. (2018). Effects of physical exercise for adults with intellectual disabilities. *Journal of Physical Education*, 29(1). https://doi.org/10.4025/jphyseduc.v29i1.2920
- Shin, I.-S., & Park, E.-Y. (2012). Meta-analysis of the effect of exercise programs for individuals with intellectual disabilities. *Research in Developmental Disabilities*, 33(6), 1937–1947. https://doi.org/10.1016/j.ridd.2012.05.019

Sussex Publishers. (n.d.). *Emotion regulation*. Psychology Today. https://www.psychologytoday.com/us/basics/emotion-regulation

- U.S. Department of Health and Human Services. (n.d.). *About intellectual and developmental disabilities (idds)*. Eunice Kennedy Shriver National Institute of Child Health and Human Development. https://www.nichd.nih.gov/health/topics/idds/conditioninfo
- American Occupational Therapy Association. *What is occupational therapy?*. Aota.org. (n.d.). https://www.aota.org/about/what-is-ot

Appendices

22

- Appendix A: Adaptive Recipes
- Appendix B: Personalized Exercise Plan Examples
- Appendix C: PowerPoint 1: Using the Sensory Room with Activity
- Appendix D: PowerPoint 2: Change, Conflict and Coping with Activity
- Appendix E: PowerPoint 3: Cooking Safety
- Appendix F: PowerPoint 4: Social Safety
- Appendix G: PowerPoint 5: Food Jeopardy
- Appendix H: PowerPoint 6: Exercises You Can Do at the Gym
- Appendix I: Social Story: Personal Space
- Appendix J: Social Story: Listening and Following Directions
- Appendix K: Chocolate Chip Cookie Visual Aid
- Appendix L: Hygiene Checklist
- Appendix M: Sleep Strategies
- Appendix N: Exercise Cards
- Appendix O: Weather Matching Game

Appendix A

A. Pizza Pasta Bake





24

B. Beef Enchiladas



C. Tacos



26

D. No-Bake Monster Trail Mix Bites



Dairy free chocolate
 Dairy free chocolate
 Deairy free chocolate
 Deairy free chocolate
 enguined fait/natural peant butter
 Dried berries instead of M&M's
 Dark chocolate chips
 Add almonds, walnuts or sunflower
 seeds

E. Chicken Pot Pie Casserole



F. Homemade Pizzas



Appendix B

A. Personalized Exercise Plan Example 1





Stretch #2 Shoulder stretch	30 seconds 2 times
Stretch #4 Knee to chest	30 seconds 2 times Both legs
Stretch #5 Side stretch	30 seconds 2 times Both sides
Stretch #6 Calf stretch	30 seconds 2 times Both legs

Stretch #7 Cat/Cow stretch	n.h.	10 times doing cat, 10 times doing cow
Stretch #8 Butterfly stretch		30 seconds
Elliptical / Bike		15 minutes
Treadmill		15 minutes
Resistance band #1 Pull aparts	+	10 times Take breaks
GO SLOW!	л	



	End:		
Resistance band #5 Forearm Pull Aparts Go SLOW!	Start: End:	10 times Take breaks	



X's Exercise Plan X's Goals: • Learn how to warm up and cool down • More strength and endurance • Get better at basketball

B. Personalized Exercise Plan Example 2















Resistance band #1 Bicep curl	1-1	15 times Take breaks	
Use your band! GO SLOW!			
Resistance band #2		15 times Take breaks	
Pull aparts GO SLOWI	Stand OR Sit		

	Start	End		
Resistance band #3 Diagonal pull aparts GO SLOW!	Start:	1	15 times Take breaks Both arms	
	End:			

Resistance band #4	Start:	15 times Take breaks
Straight arm raise	P	Both arms
GO SLOW!	End:	
Resistance band #S	Start:	15 times Take breaks
Forearm Pull Aparts Go SLOW!	Endi	



Appendix C

A. PowerPoint 1: Using the Sensory Room Using the Sensory Room Wat is a Sensory Room Wat is a Sensory room offers a safe space to stimulat your sensor through visuals counds, textures, smells, and movement. *O* (*D*) (*D*

31

	Examples of way	s to use th	he Se	ensory Room	When feeling overwhelmed.	PROPERTY AND ADDRESS OF	Now let's make something for the Sensory Room	
What are some things you would do in the sensory room to help	01 Movement Breaks these under to sold and furth movies can be caltering, writinging help for any sold to be caltering.	vor back nerita faster		Using music Playing slow and light music can be relianing and regulating and load music can help wake your body up	frustrated, anxious, tired, stressed out or just need a break the sensory room is a safe	1-20		
your stress levels?	O3 Using a we blanket A weighted bla hele your body through deep e	sket can relax	04	Using objects Fidgets, tactile experiences, stress balls, and lights can help increase self regulation	and comfortable place to enter before rejoining the group.	Descriveng a sensory more. Reserved for monorchectory	Sensory Tactile	Boards



B. Activity 1: Tactile boards



Appendix D





Appendix E	
What we are learning about today! What we are learning about today! Why is this important? Fire Safety: Preventing 01 Fire Safety 02 Food Safety 02 Food Safety To keep ourselves safe To keep ourselves safe Use a timer so your food doesn't burn 03 General Safety 03 General Safety Image: Construction of the safety <t< th=""><th></th></t<>	
Fire Safety: Preventing • Naver valk out of the kitchen when you are cooking • Make sure the stove and oven are off once you're done! • The safety: Handling Hot Items • Dong touch a hot stove or oven • Use oven mitts when picking up hot items • With two hands • The safety: Handling Hot Items • Dong touch a hot stove or oven • Use oven mitts when picking up hot items • Wash your hands before touching food for 20 • Separate variables before eating • Created and the same wast • Created and the same same same same same same same sam	r
Food Safety: Safe Food Handling Adways make sure to check expiration dates before eating food Refrigerate your food after cooking It is so important to ask for help if you feel unsafe! It is always a good idea to cook with friends Stay calm and focused Wine unsafe! It is new into the ways a good idea to cook with friends Stay calm and focused Wine unsafe! It is new into the ways a good idea to cook with friends Stay calm and focused Wine unsafe! It is new into the ways a good idea to cook with friends Stay calm and focused Wine unsafe! It is new into the ways a good idea to cook with friends Stay calm and focused Wine unsafe! Wine u	
Emergency Situation The smoke detector goes off What should we do? Universe to a structure of the structu	
Cooking with a friend or family member Rinsing your fruit before taking a bite Putting your cleaning rag by the store when it's on Rolling up your sleeves 0 points 10 points 0	
Leaving a spill on the floor Cooking in a kitchen with bright lights Leaving the store on and walking away Watching a show or video while chopp 20 ports	ing





Resources Manual Statistics and the second statistics and make the second second statistics and the second statistics and the second statistics and the resource of the second statistics and the second sta

	Appen	ıdix G	
	MyPlate Review	Examples Grains: Rise, bread, parts, tortilles, correal, popcorn, ostmeal, parcelles, bapais	MyPlate Food Funt Meal Ideas Simple Q's? Snack Attack
Food	Fruits Crains Dairy	vrana: roce, presa, passa, torsmas, orrea, popcort, oatmea, pancaxes, bages Fruits: Blueberries, bananas, strawberries, apple, pineapple	100 100 100 100 200 200 200 200 200
- Jeopardy Ready For Life	Vegetables Protein	Vegetables: Carrots, breccoil, cauliflower, green beans, peas, potstoes Protein: Chicken, beef, turkey, fish, eggs	300 300 300 300 300 J
		Dairy: Hilk, yogurt, cheese, smoothies, cream cheese, sour cream	500 500 500 500
MyPlate- 100	MyPlate- 200	MyPlate- 300	MyPlate- 400
NAME 2 FRUITS	NAME 2 VEGETABLES	NAME 2 GRAINS	NAME 2 DAIRY FOODS
1	t, t		t, t
	4		+
MyPlate- 500 NAME 2 PROTEINS	Food Fun- 100	Food Fun- 200	Food Fun- 300
NAME Z PRUTEINS	You see me in the summer big and round. I'm red inside with	I'm small, blue and round as can be. Put me in your muffin or	I'm yellow and shaped like a moon. Monkeys love me and you
	seeds all around!	smoothie!	can eat me without a spoon!
Food Fun- 400	Food Fun- 500	Meal Ideas- 100	Meal Ideas- 200
l look like a tree but I am small	I have layers but I'm not a cake.	Share a breakfast meal idea with	Share a lunch meal idea with the
and green. Taste me! I'm as yummy as can be.	Sometimes, I make people's eves ache!	the group	group
	1 t		14
Meal Ideas- 300	Meal Ideas- 400	Meal Ideas- 500	Simple Questions- 100
Share a dinner meal idea with the group	e Share a meal idea with a protein, fruit and veggie	Share a meal idea with a protein, dairy and grain	Where should you keep your meat after cooking it?
Simple Questions- 200 What should you do with food	Simple Questions- 300 What should you always do	Simple Questions- 400 What should you use to put food	Simple Questions- 500 How long should you wash your
that smells bad?	before eating or cooking with	into and take food out of the oven?	hands for?
	soap and water?		17
Snack Attack- 100	Snack Attack- 200	Snack Attack- 300	Snack Attack- 400
Name a healthy crunchy snack!	Is it okay to eat sweet snacks?	What are two things you can dip	Name a snack that helps you
•	t, t	veggies in?	feel good!
	4		4
	_		
Snack Attack- 500			
Name a snack you make at home!			
	T		





Appendix H



38





Appendix L

Before leaving my house have I...

- 1. Washed my face and armpits with soap and water?
- 2. Put on deodorant? [
- 3. Brushed my teeth?
- 4. Put on a clean shirt and pants?

I will make sure to do these before leaving the house!

Appendix M

Sleep Strategies

- Keep your blinds open a little bit to let the light in in the morning
- Limit naps
- Eat dinner early
- Regular bed-time and wake up call
 Bed time: 9:30 pm (whatever works best for schedule)
 - Wake up: 8:15 am (whatever works best for schedule)
- Winding down:
 - Stop screen time an hour before you go to sleep
 - Read a book, listen to music, take a hot shower
- Alarm Ideas:
 - Circadian rhythm alarm clock (gets lighter closer to wake up time)
 - Amazon Alexa (can play favorite music, shout your name & encourage bed time)
 - Clocky (rolls aways & you have to chase it)
 - Alarmy (makes you scan a barcode like toothpaste or solve a puzzle before turning off)
 - Sleep Cycle App (tracks sleep and wakes you up when you are in lightest sleep)
 - Set alarm on phone & alarm clock all over room
- Habitica app: Turns waking up on time into a video game where she can create a character and earn points to level up or win gold to buu certain items in the app
- Increasing Motivation:
 - Creating a "first to text" game with a friend
 Sticker chart with incentive (wake up at 8:15 am and rise
 - within 5 minutes to work towards a movie night, hobby item, picking a fun outing, (anything motivating to her))
 - $\circ~$ Get a plant that she needs to water every morning





Appendix O:

Getting Dressed:

1. Look out the window

- 2. What is the weather?
 - a. Warm and sunny
 - b. Rainy
 - c. Cold and snowy
 - d. Windy
 - e. Cloudy and cool
- 3. Pick the matching outfit to the weather!

Cold and Snowy:



Winter coat, snow boots, hat, gloves