United States
IDDSI Reference Group
Newsletter for
February 2024

IDDSI really is a
global affair!

Meet IDDSI Inspirations.

We are beyond ecstatic to share that in conjunction with our partners in Canada, IDDSI is launching a group across North America to support the growth & development of future IDDSI leaders.

Thanks to the well-received Mentoring Moments created by the CIRG, the USIRG is joining in these efforts to roll out a program in time for the 2nd Canadian IDDSI Festival in October. Stay tuned for more inspiring creations from this group!

A True IDDSI Inspiration:
An Early Passion & the Application of IDDSI in Research
An interview by Andrea Charvet, PhD, RDN, LDN, and Sarai Logan
Prepared by the Research and Data Collection USIRG

This month’s research highlight does not review a formal research project. Rather,
we highlight here the story of Charlotte Cunningham, currently an undergraduate student majoring in psychology at Virginia Tech, who developed and interest in dysphagia before starting 8\textsuperscript{th} grade and learned the benefits of using the IDDSI flow test and framework in research.

Charlotte Cunningham is a student at Virginia Tech majoring in Psychology. Cunningham began her dysphagia research during the 8\textsuperscript{th} grade when learning from a speech pathologist at a local hospital about the challenges of helping dysphagia patients. Cunningham has always been interested in science and has participated in science fairs since elementary school. She started seriously presenting in middle school when her research papers were accepted to the Virginia Junior Academy of Science (VJAS) annual Symposium. During her last two years of high school, she served as Vice President of the VJAS. Her research has been selected to be presented at the Johns Hopkins annual Global Health Leaders Conference and at NURVA, the Network for Undergraduate Research in Virginia, where she was one out of four students selected from her university and the only freshman. In Winter 2024, she will present her research poster at the National Collegiate Research Conference at Harvard College.

Q: How did you become interested in dysphagia?
- My passion for health was ignited during the summer before 8\textsuperscript{th} grade when I participated in CampMed, a week-long program hosted by my local hospital for students interested in pursuing careers in medicine. Two experienced speech pathologists shared insights into their profession, focusing on their work in assisting individuals with swallowing disorders, including dysphagia. They emphasized their challenges in finding suitable products to aid their patients.

Q: Why did you pick Kefir as the product to study?
- During CampMed, two speech pathologists shared insights into their role in assisting individuals with swallowing disorders, such as dysphagia. I began considering a product I use daily. Kefir is a lactose-free fermented dairy beverage that is found in many grocery stores. My family consumes kefir because I am lactose intolerant. One advantage is that it doesn’t over-thicken over time, meaning the kefir won’t change thickness levels if you leave it out for about half an hour after pouring yourself a glass to drink. From this, I decided that kefir would be an exciting product to study.

Q: When did you first hear about IDDSI and the IDDSI flow test?
In the initial stages of conducting my kefir experiments, I used a turkey baster to determine the flow time of the liquid. I discovered I needed a more standardized measurement approach, so I searched for a more precise way to measure the liquids. After researching and discussing with my mentor, I transitioned to using the IDDSI Flow Test and Framework for improved measurement accuracy and consistency.

Q: Can you please tell us about your mentor?
- My mentor, Anne Hancock, is a speech-language pathologist in Northern Virginia. Hancock works in a PRN capacity at several hospitals, serving patients in acute care, inpatient rehab, and hospital-affiliated outpatient clinics. My mentor has been extremely helpful to me as I continuously pursued my research. She has not only generously provided her time and helpful resources, but also encouraged me every step of the way.

Cunningham is interested in networking with others about her research. To connect with her, please email charlottec2992@gmail.com.

Q: What are your plans for the future?
- I plan to work with commercial kefir companies to further implement the IDDSI Flow Test and Framework. A key step is to obtain approval from the FDA. My ultimate goal is to develop labels to aid persons with dysphagia in distinguishing the correct bottles of kefir to consume safely. I plan to continue presenting my research at state and national college science conferences.

Q: Can you please summarize your most important findings?
- Kefir has great potential as a thickened liquid for persons with swallowing disorders. Four out of five commercial kefir brands tested corresponded to 2-mildly thick or 3-moderately thick IDDSI levels. Preliminary experiments demonstrated a potential link between milkfat percentage and IDDSI levels. All kefir brands except one measured an IDDSI Level 2 or mildly thick. One brand was an IDDSI Level 3, or moderately thick, until the 20-minute mark when it became a 2- or mildly thick.

The Communications & Advocacy Committee would like to extend a huge thank you to the Research Committee and to Ms. Cunningham for this wonderful contribution!