

University of Vermont

ScholarWorks @ UVM

Family Medicine Clerkship Student Projects

Larner College of Medicine

2020

Easily Digestible: Addressing Food Literacy with Short Educational Videos

Kalle J. Fjeld

Follow this and additional works at: <https://scholarworks.uvm.edu/fmclerk>



Part of the [Community Health and Preventive Medicine Commons](#), [Medical Education Commons](#), and the [Primary Care Commons](#)

Recommended Citation

Fjeld, Kalle J., "Easily Digestible: Addressing Food Literacy with Short Educational Videos" (2020). *Family Medicine Clerkship Student Projects*. 568.

<https://scholarworks.uvm.edu/fmclerk/568>

This Book is brought to you for free and open access by the Larner College of Medicine at ScholarWorks @ UVM. It has been accepted for inclusion in Family Medicine Clerkship Student Projects by an authorized administrator of ScholarWorks @ UVM. For more information, please contact donna.omalley@uvm.edu.



**HUDSON
HEADWATERS**
HEALTH NETWORK



The University of Vermont
LARNER COLLEGE OF MEDICINE

Easily Digestible: Addressing Food Literacy with Short Educational Videos

Kalle Fjeld, MSIII Larner College of Medicine
HHN LIC 2019-2020



Here for life. Together we are building healthier communities.

www.hhn.org

Roadmap

- Why this project?
- Problem
- Community Need
- Intervention
- Strengths/Weaknesses
- Future Directions



The Problem: Addressing Food Literacy

Food literacy: “a collection of inter-related knowledge, skills and behaviors required to **plan, manage, select, prepare and eat** food to meet needs and determine intake”

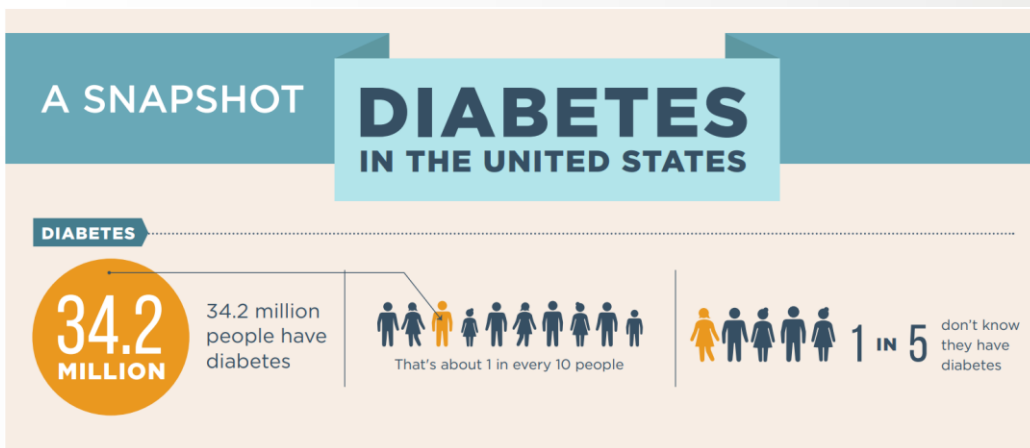
The Problem

Inadequate consumption of fruit and vegetables causes:

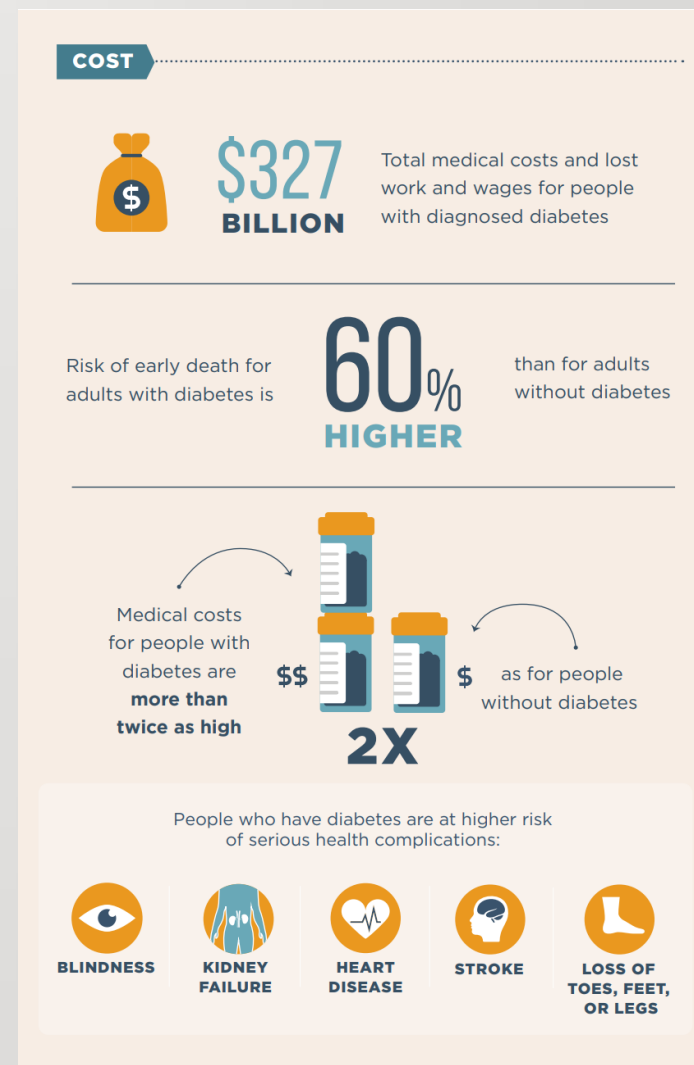
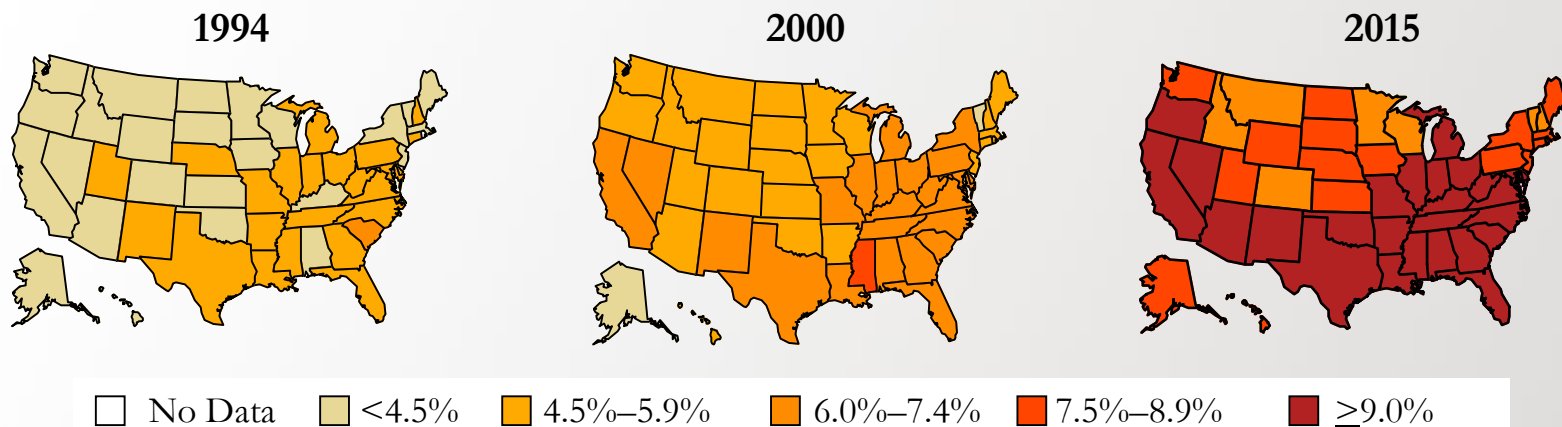
1.8% of the total burden of disease worldwide

2.6 million deaths worldwide and 31% of cardiovascular diseases

The Problem: National Trends & Public Health Cost



Age-adjusted Prevalence of Diagnosed Diabetes Among US Adults



WHAT CAN YOU DO?

You can **prevent** or **delay** type 2 diabetes



LOSE
WEIGHT
IF NEEDED



EAT
HEALTHY



BE MORE
ACTIVE

You can **manage** diabetes



WORK WITH A
HEALTH
PROFESSIONAL



EAT
HEALTHY



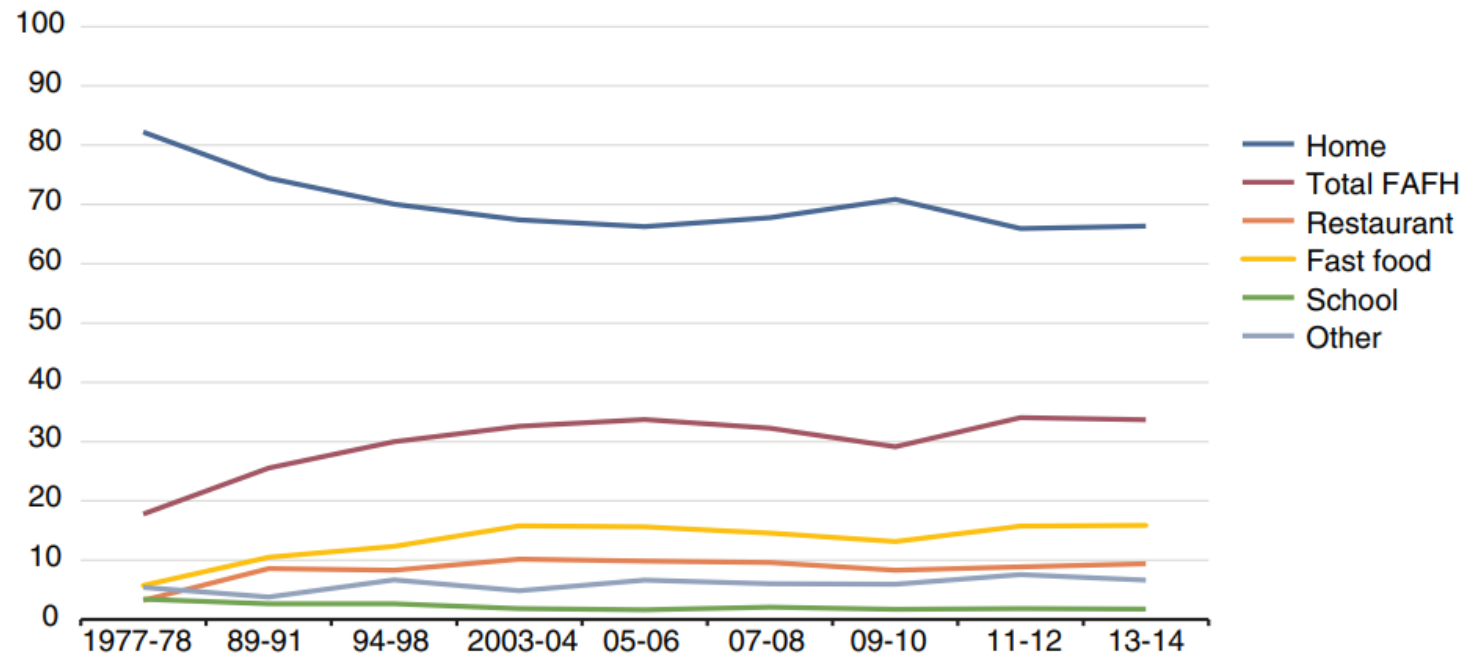
STAY
ACTIVE

Frequent consumption of meals prepared at home & higher consumption of fruits and green leafy vegetables are associated with a lower risk of developing type II diabetes

Figure 7.1

**Share of mean daily energy intake from food prepared at home and away from home,
U.S. population age 2 and older**

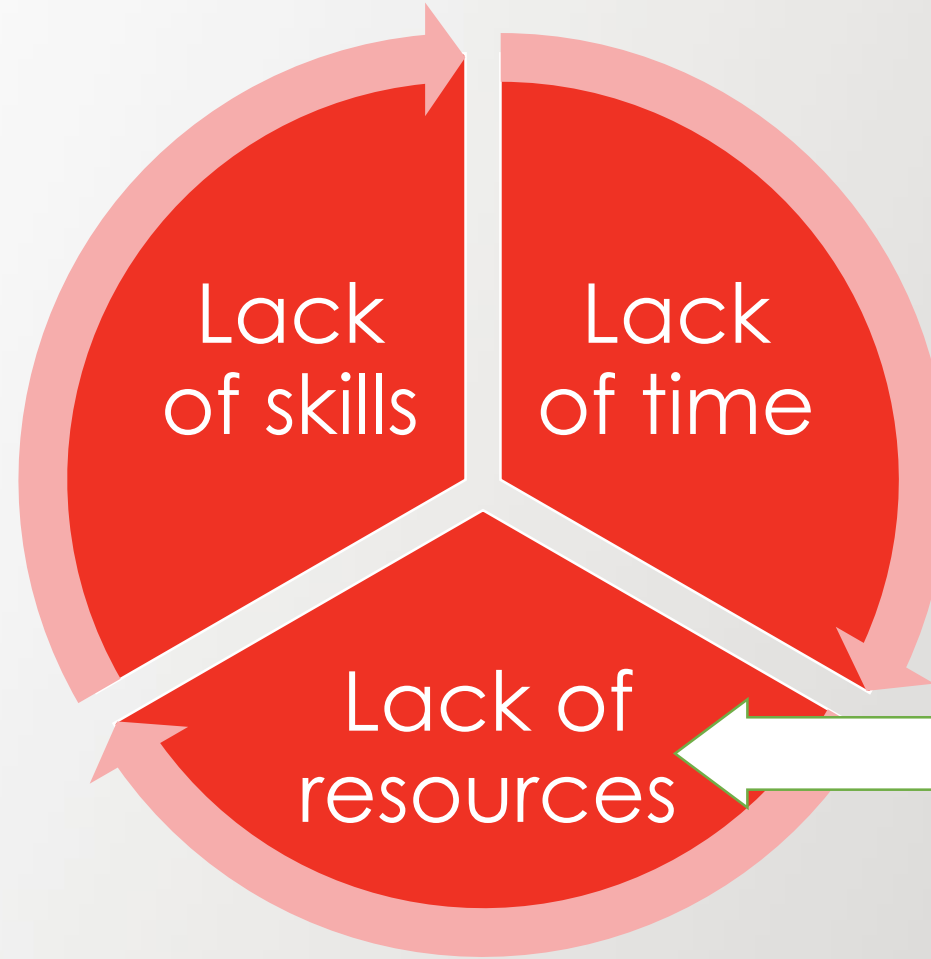
Percent of total daily calories (kcal)



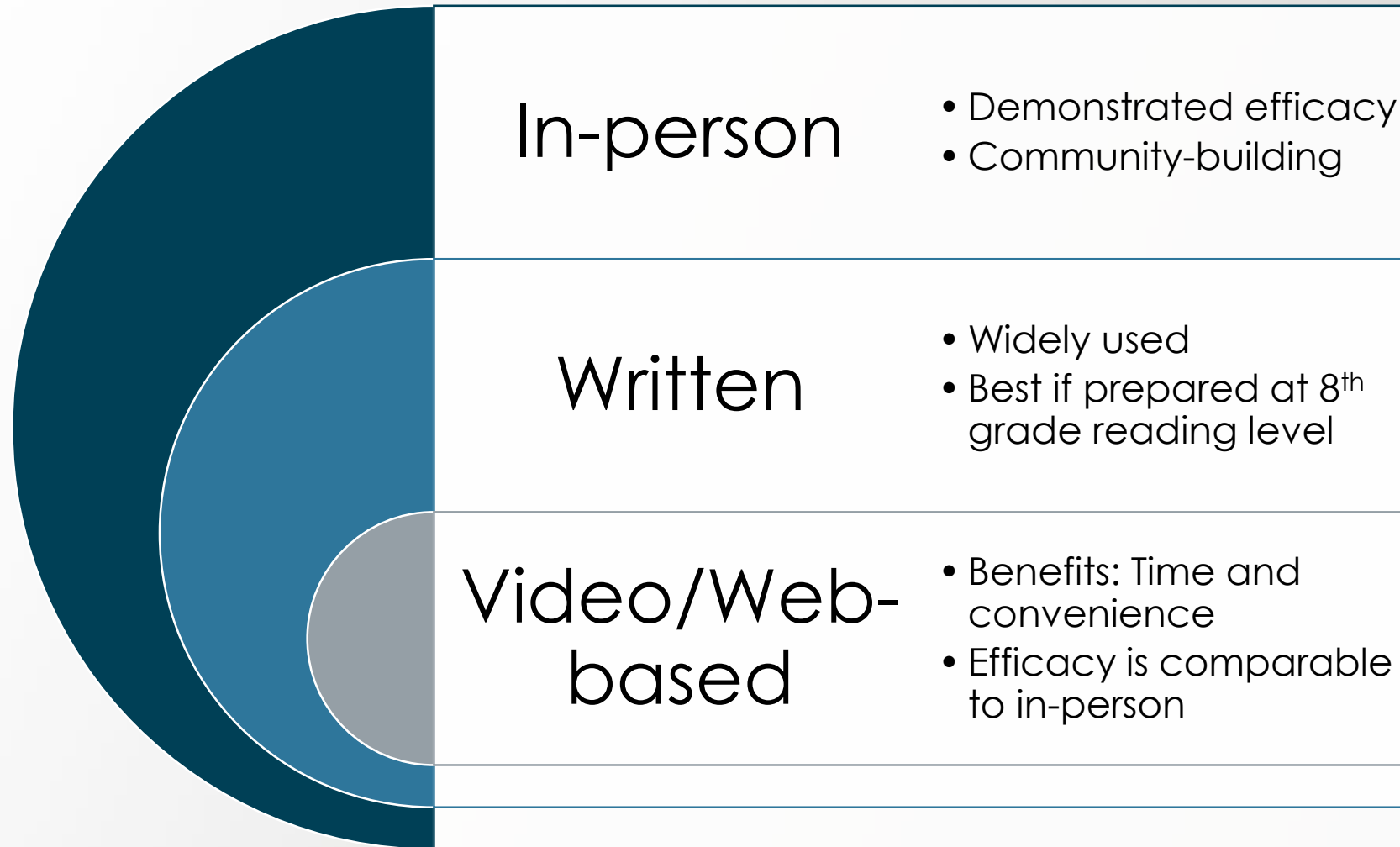
Note: FAFH = food away from home.

Source: USDA, Economic Research Service using data from the USDA Nationwide Food Consumption Survey (NFCS), 1977-78; USDA Continuing Survey of Food Intakes by Individuals (CSFII), 1989-91 and 1994-98; and the National Health and Nutrition Examination Survey (NHANES), 2003-04, 2005-06, 2007-08, 2009-10, 2011-12, 2013-14.

Barriers to Home Cooking



Methods of Nutrition education delivery



Community Perspective: The Need



“Patients sometimes don’t want vegetables that they are afraid of, like eggplant.”

Amelia Gelnett,
Community Health
Coordinator Comfort
Food Community



“The basics of steaming, pureeing, types of cuts, shredding, and how to prepare certain vegetables....would be especially helpful.”

Kate Ormsby,
Prevention
Coordinator
HHHN

Amy
Wahl,
Dietician



In-person classes had low attendance

- 3 classes offered, 8 unique participants (40 in program)
- 1 person attended 2 classes; 8 people attended the third

Linda Spokane,
Vice President
Population Health
Management

Community Perspective: Patient Reflections

“I was afraid of some of the stuff”

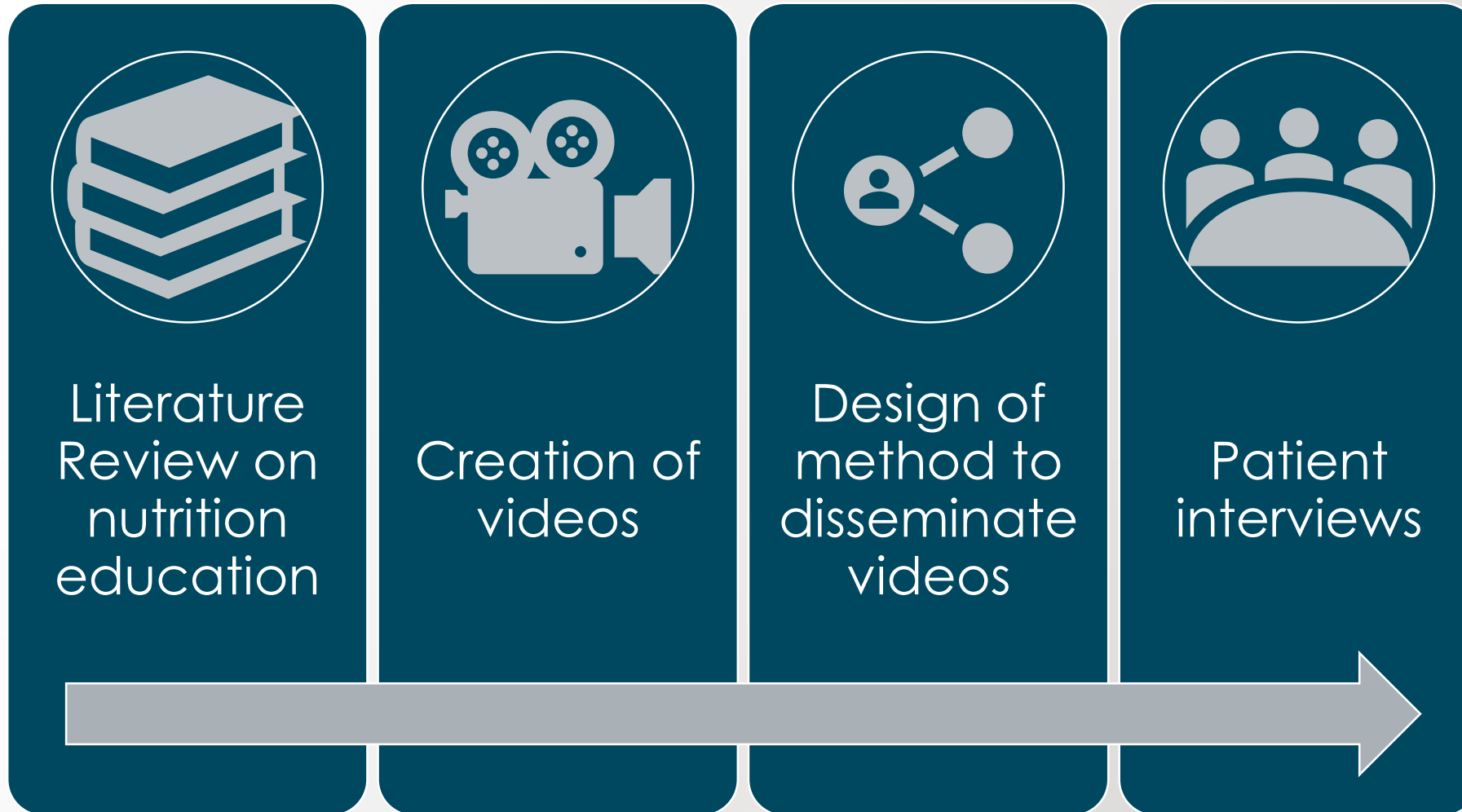
“When I was growing up in our house the only vegetables I knew came out of a can and we only had four kinds of vegetables that we ate.”

“Quite a bit of the food that I had gotten from them I didn’t know how to prepare until they told me”

“There was a few things that were kind of weird. Like kohlrabi, probably a lot of the people had no idea what to do with it”

“I got a list but I couldn’t match the food up to the name”

Intervention and Methodology



Preparing Spaghetti Squash



Fresh Food FARMACY



Check out our YouTube page for some quick and helpful videos on fruit and vegetable prep!



bit.ly/HHHNfoodfarmacy

Response

“I watched some of the videos. They helped me understand--Do I skin it? What part of it do I use? The basic preparation was helpful.”

“I like that it gave more breadth, background information”

“If I had known about the videos, I think they would have been helpful”

Evaluation of Effectiveness

Strengths



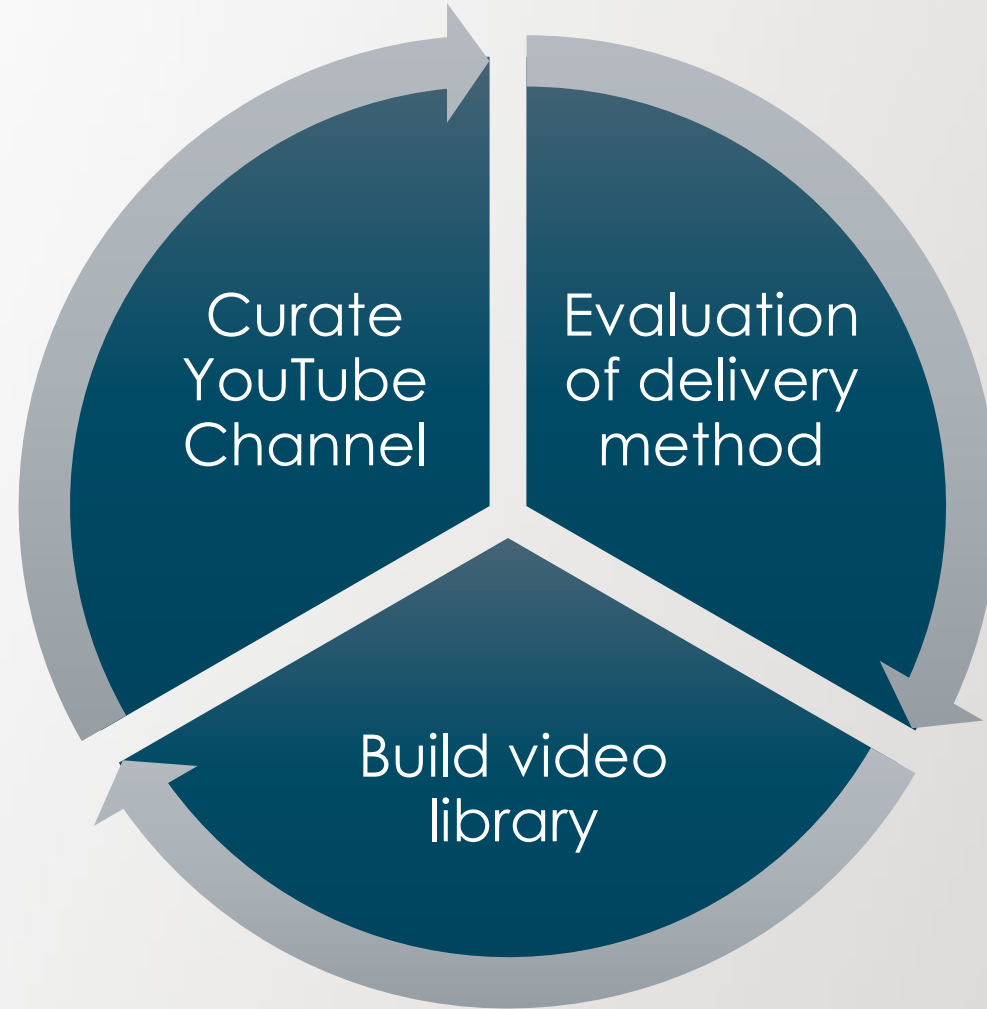
- Low cost
- Lowers or removes some barriers
- Accessible
- Adaptable

Limitations



- Timeline
- Time investment
- Internet access
- Lack of community-building

Recommendations for Future Direction



Thank You!



References

1. Bensley, R. J., Bruski, J. J., Anderson, J. V., Mercer, N., Rivas, J., & Broadbent, L. N. (2006). wichealth.org: Impact of a Stages of Change-Based Internet Nutrition Education Program. *Journal of Nutrition Education and Behavior*, 38(4), 222–229. doi: 10.1016/j.jneb.2006.03.008
2. Bensley, R. J., Anderson, J. V., Bruski, J. J., Mercer, N., & Rivas, J. (2011). Impact of Internet vs Traditional Special Supplemental Nutrition Program for Women, Infants, and Children Nutrition Education on Fruit and Vegetable Intake. *Journal of the American Dietetic Association*, 111(5), 749–755. doi: 10.1016/j.jada.2011.02.010
3. CDC Diabetes Data & Statistics Slides. (2018, October 31). Retrieved February 25, 2020, from <https://www.cdc.gov/diabetes/data/center/slides.html>
4. Dexter, A. S., Pope, J. F., Erickson, D., Fontenot, C., Ollendike, E., & Walker, E. (2019). Cooking Education Improves Cooking Confidence and Dietary Habits in Veterans. *The Diabetes Educator*, 45(4), 442–449. doi: 10.1177/0145721719848429
5. Edwards, P., Felix, L., Harris, J., Ferguson, E., Free, C., Landon, J., ... Murray, E. (2010). Assessing the effectiveness and cost effectiveness of adaptive e-Learning to improve dietary behaviour: protocol for a systematic review. *BMC Public Health*, 10(1). doi: 10.1186/1471-2458-10-200
6. Li, M., Fan, Y., Zhang, X., Hou, W., & Tang, Z. (2014). Fruit and vegetable intake and risk of type 2 diabetes mellitus: meta-analysis of prospective cohort studies. *BMJ Open*, 4(11). doi: 10.1136/bmjopen-2014-005497
7. Lock, K., Pomerleau, J., Causer, L., Altmann, D. R., & McKee, M. (2005). *The global burden of disease attributable to low consumption of fruit and vegetables: implications for the global strategy on diet* (2nd ed., Vol. 83). Bulletin of the WHO.
8. Neuenschwander, L. M., Abbott, A., & Mobley, A. R. (2013). Comparison of a Web-Based vs In-Person Nutrition Education Program for Low-Income Adults. *Journal of the Academy of Nutrition and Dietetics*, 113(1), 120–126. doi: 10.1016/j.jand.2012.07.034
9. Reicks, M., Trofholz, A. C., Stang, J. S., & Laska, M. N. (2014). Impact of Cooking and Home Food Preparation Interventions Among Adults: Outcomes and Implications for Future Programs. *Journal of Nutrition Education and Behavior*, 46(4), 259–276. doi: 10.1016/j.jneb.2014.02.001
10. Rijn, S. V., Foley, E., Benavente, T., & Jones, L. (2016). Social Media Videos Enhance Face-to-Face Interactions With EFNEP Audiences. *Journal of Nutrition Education and Behavior*, 48(7). doi: 10.1016/j.jneb.2016.04.223
11. Saksena, M. J., Okrent, A. M., Anekwe, T. D., Cho, C., Dicken, C., Effland, A., ... Tuttle, C. (2018). *America's Eating Habits: Food Away From Home* (Vol. EIB-196). USDA Economic Research Service.
12. Statistics About Diabetes. (2018, March 22). Retrieved February 25, 2020, from <https://www.diabetes.org/resources/statistics/statistics-about-diabetes>
13. Stead, M., Caraher, M., Wrieden, W., Longbottom, P., Valentine, K., & Anderson, A. (2004). Confident, fearful and hopeless cooks. *British Food Journal*, 106(4), 274–287. doi: 10.1108/00070700410529546
14. Velardo, S. (2015). The Nuances of Health Literacy, Nutrition Literacy, and Food Literacy. *Journal of Nutrition Education and Behavior*, 47(4). doi: 10.1016/j.jneb.2015.04.328
15. Vidgen, H. A., & Gallegos, D. (2014). Defining food literacy and its components. *Appetite*, 76, 50–59. doi: 10.1016/j.appet.2014.01.010
16. Wolfson, J. A., Ramsing, R., Richardson, C. R., & Palmer, A. (2019). Barriers to healthy food access: Associations with household income and cooking behavior. *Preventive Medicine Reports*, 13, 298–305. doi: 10.1016/j.pmedr.2019.01.023
17. Wrieden, W. L., Anderson, A. S., Longbottom, P. J., Valentine, K., Stead, M., Caraher, M., ... Dowler, E. (2007). The impact of a community-based food skills intervention on cooking confidence, food preparation methods and dietary choices – an exploratory trial. *Public Health Nutrition*, 10(2), 203–211. doi: 10.1017/s1368980007246658
18. Zong, G., Eisenberg, D. M., Hu, F. B., & Sun, Q. (2016). Consumption of Meals Prepared at Home and Risk of Type 2 Diabetes: An Analysis of Two Prospective Cohort Studies. *PLOS Medicine*, 13(7). doi: 10.1371/journal.pmed.1002052