





A Nutrition Education program for lower SES adults

SHE Academy November 6th 2020 Kathelijne Bessems, PhD













1.2 million poverty 9% of the children



Low SES families



2.5 million low literate and 29% low health literate

- https://digitaal.scp.nl/armoedeinkaart2019
- Christoffels, I.; Baay, P.; Bijlsma, I.; Levels, R. Over de relatie tussen laaggeletterdheid en armoede. Expertise Centre Vocational Education, Foundation for Reading & Writing: 's-Hertogenbosch, The Netherlands, 2016; 46.
- Greef de M (2019). Laaggeletterdheid: cijfers buitelen over elkaar heen. Onderdeel van artikelenserie Leren in de educatie, Lesgeven, begeleiden en faciliteren. Onder (eind)redactie van E. Bohnenn, I. Den Hollander, R. Thijssen en B. Vaske. Den Haag: Stichting Expertisecentrum Oefenen.nl, 2019.







Health literacy & nutrition literacy

 Knowledge, motivation and competencies to access, understand, appraise and apply health information in order to make judgements and take decisions in everyday life concerning health care, disease prevention and health promotion to maintain or improve quality of life during the life course

Nutrition literacy

- functional literacy: knowing what, declarative knowledge on factors that affect health.
- An example is knowing that frequent intake of products high in saturated fats is damaging for health
- interactive or critical nutrition literacy: knowing how, procedural knowledge on how to make positive dietary changes
- An example, knowing how to replace products high in saturated fat by products low in fat to prepare a healthy meal would be procedural knowledge
- Sorensen, K.; van den Broucke, S.; Fullam, J.; Doyle, G.; Pelikan, J.; Slonska, Z.; Brand, H. Health literacy and public health: a systematic review and integration of definitions and models. *BMC Public Health* **2012**, *12*, 80.
- Velardo, S. The Nuances of Health Literacy, Nutrition Literacy, and Food Literacy. J Nutr Educ Behav 2015, 47, 385-389.
- Carbone, E. T.; Zoellner, J. M. Nutrition and health literacy: a systematic review to inform nutrition research and practice. J Acad Nutr Diet 2012, 112, 254-265.
- Dickson-Spillmann, M.; Siegrist, M.; Keller, C. Development and validation of a short, consumer-oriented nutrition knowledge questionnaire. Appetite 2011, 56, 617-620.
- Worsley, A. Nutrition knowledge and food consumption: can nutrition knowledge change food behaviour? Asia Pac J Clin Nutr 2002, 11 S579-585.





Good Affordable Food

- · Adults with small income
- Goals: determinants of healthier food choices and save money on groceries
- Implementation
 - Part of obligated course "household budgeting"
 - Low SES communities
 - Parental component for example in schools
- Two 2-hour group sessions
- Determinants such as attitude, self-efficacy and knowledge





Bessems KMHH, Linssen E, Lomme M, van Assema P. The Effectiveness of the Good Affordable Food Intervention for Adults with Low Socioeconomic Status and Small Incomes. Int J Environ Res Public Health. 2020 Apr 7;17(7):2535. doi: 10.3390/ijerph17072535. PMID: 32272792; PMCID: PMC7178221.







Behavioral change techniques for low SES groups

- · plain language
- supported by photographs or relevant images, such as those depicting food products
- explain instructions in own words
- practical hands-on assignments, such as interactive discussions, demonstrations of simple uses
 of food labels

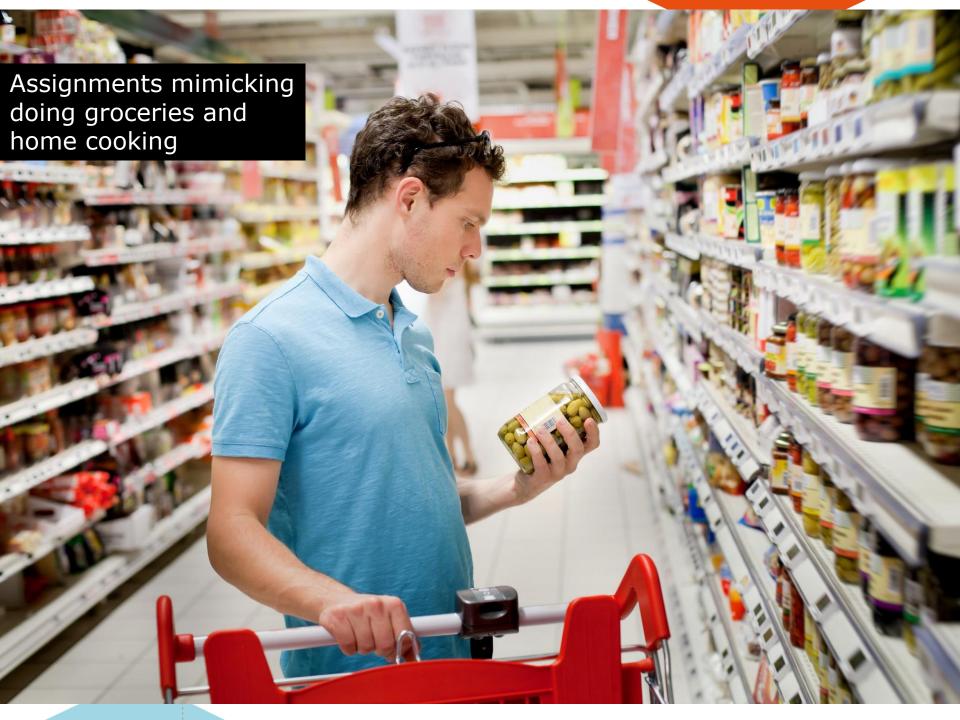
- Speirs, K. E.; Messina, L. A.; Munger, A. L.; Grutzmacher, S. K. Health literacy and nutrition behaviors among low-income adults. *J Health Care Poor Underserved* **2012**, *23*, 1082-1091.
- Visscher, B. B.; Steunenberg, B.; Heijmans, M.; Hofstede, J. M.; Deville, W.; van der Heide, I.; Rademakers, J. Evidence on the effectiveness of health literacy interventions in the EU: a systematic review. BMC Public Health 2018, 18, 1414.
- Ha Dinh, T. T.; Bonner, A.; Clark, R.; Ramsbotham, J.; Hines, S. The effectiveness of the teach-back method on adherence and self-management in health education for people with chronic disease: a systematic review. *JBI Database System Rev Implement Rep* **2016**, *14*, 210-247.
- Dollahite, J. S.; Pijai, È. I.; Scott-Pierce, M.; Parker, C.; Trochim, W. A randomized controlled trial of a community based nutrition education program for low-income parents. J Nutr Educ Behav 2014, 46, 102-109.

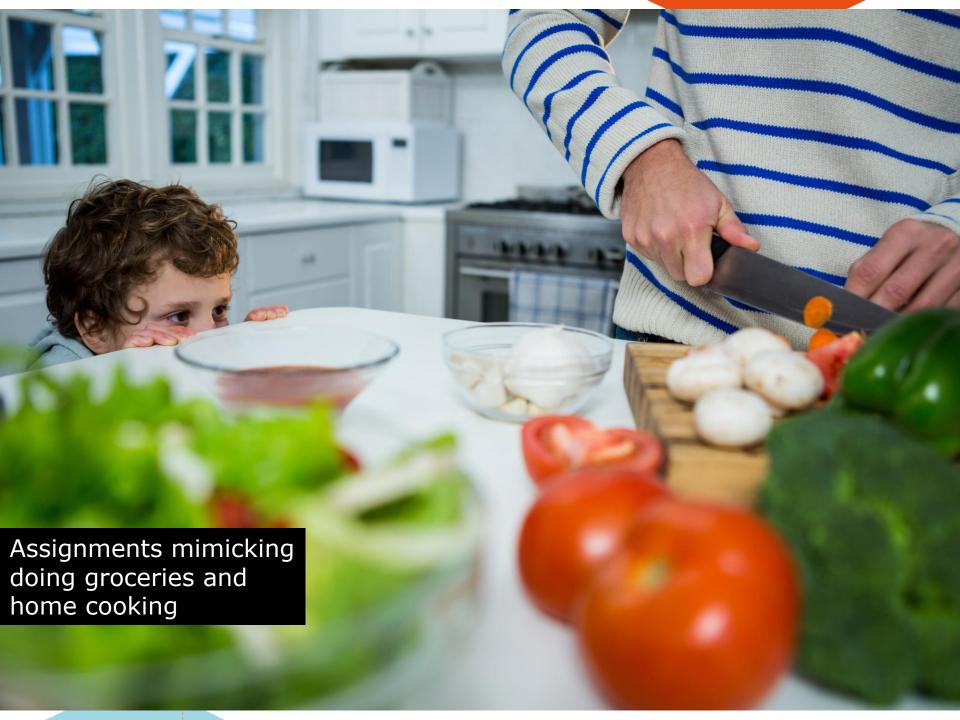




Good Affordable Food

Session 1		Session 2	
А	Cut back on costs for groceries	J	Experiences
В	Prejudices, pros and examples		Rotation game (groups)
С	Daily menu	K	Fat intake in snacks
D	Fat consumption	L	Fat intake in meals
Е	Fruit and vegetable consumption	М	Advertising tricks
FG	Tasting and exposure	N	Shopping baskets
Н	Emotional eating	О	F&V Quiz
I	Action plan		

















Evaluation methods

- Quasi-experimental design
- Control group (n=106)
- Intervention group (n=131)
- Baseline post-test after 2 weeks follow up after 6 months
- Telephone interviews





Effectiveness

Directly after the intervention

- Procedural knowledge (saving money; i.e. do you know how to save money on groceries)
- self-efficacy (healthy eating)
- portion size awareness
- mindful eating

Maintained effects after 6 months

- Attitude (saving money)
- Food label use
- Use of oil

Only longer term effects

• procedural knowledge (healthy eating; i.e. do you know what you can do to consume healthier diets?)

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Core components of Good Affordable Food

- Two sessions a trained course leader
- Reaching hard to get low SES group
- Theory-based methods translated into practical program materials
- Health & costs
- Relates to: poverty, health, (health) literacy, loneliness, raising children
- Peers









Discussion of findings

- Limited effects on procedural knowledge
- Small successful changes
- Comprehensive approach
 - Cooking skills
 - Environmental changes





Contact



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