



EVALUATION OF A PRINTED NEWSLETTER TAILORED TO GRANDPARENT CAREGIVERS IN KANSAS

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OVERVIEW



Nourishing the Next Generation

Practical advice for caring for your young ones with food, fun and love



Kids Benefit when Offered a Variety of Foods

You can help your grandchild be more likely to try new foods, and to like more foods. How? Offer him or her a variety of healthful foods at meals and snacks. It will be easier to plan nutritious family meals, too, if your grandchild likes many types of foods.

You are the most important influence in helping your grandchild learn about food. Offer a new food at the beginning of a meal or snack. Then, let your grandchild choose how much of it to eat. This month, try some foods new to your family, or familiar foods served in new ways! Here are three ideas: a new kind of low-fat cheese, a new recipe for canned or frozen fish, and a new way to serve a vegetable. For instance, prepare the recipe below as a new veggie side dish to go with a favorite meal. Source: www.choosemyplate.gov

"Making meals and memories together"

Crunchy Baked Kale Chips ~ Makes 6 servings, each about 1 cup

Serve as an appetizer, a casserole topping, a side dish or a snack

Ingredients:

1 bunch of fresh kale, any kind (about 2/3 pound)
2 teaspoons cooking oil
1/8 teaspoon salt, some ground pepper, and some garlic powder



Directions:

1. Wash your hands and work area.
2. Remove the tough center ribs and stems of the kale pieces, using a sharp knife or clean kitchen scissors. Discard or refrigerate them for another use, if desired.
3. Tear the leaves into chip-sized pieces. (Can your grandchild help you do this?)
4. Fill a deep bowl with cool water. Place a handful of leaves at a time in the water and swish them around to remove any dirt and sand. Place leaves on a clean towel. Dry them very well with clean towels or in a salad spinner. (Can your grandchild help?)
5. Preheat oven to 350 degrees F.
6. Place kale in a large bowl. Add oil and seasonings, and stir gently until kale is coated.
7. Arrange some of the kale in a single layer on a baking sheet. Bake for about 10 minutes, or until dry and crisp. Transfer kale chips to a large plate to cool.
8. Repeat step 7 until all of the kale is baked. Serve.
9. Store leftovers in a sealed bag with the air pressed out of it for up to three days. Reheat chips briefly in the oven if they become limp.

Nutrition Facts per 1 cup: 30 calories, 2g fat, 0g saturated fat, 0g trans fat, 0mg cholesterol, 60mg sodium, 3g carbohydrate, 1g dietary fiber and 1g protein.
Daily Values: 60% vitamin A, 60% vitamin C, 4% calcium and 2% iron. No added sugars.

- Introduction
- Review of literature
- Background information
- Purpose of the study and objectives
- Methodology
- Results
- Conclusions
- Limitations



INTRODUCTION

In the U.S, 2.7 million grandparents (38%) are responsible for the basic needs of at least one grandchild (Grandparent caregivers)



In Kansas: 21,754 (45.8%) were responsible for at least one grandchild in 2015.

Challenges grandparent caregivers may face:

- Setting boundaries
- Emotional well-being
- Finances
- Education on alcohol, sex, and drugs
- Lack of support services in their community

REVIEW OF LITERATURE

Grandparents as role models for children's eating patterns

- Promote healthful or unhealthful eating habits
- Source of credibility
- May influence adiposity in young children



REVIEW OF LITERATURE

Written education materials

- Potential to decrease drop out rates
- Need to be noticed, read, understood, believed, and remembered
- Are widely used and are effective at increasing readers' knowledge and awareness
- Newsletters are minimal labor cost interventions that can deliver information to a wide proportion of society



REVIEW OF LITERATURE



Experiences using newsletters to promote healthful behaviors

- Effective in increasing knowledge and improving self-reported lifestyle and parenting techniques (Bahl & Francis, 2016; Garton et al., 2003).
- Improved fruit and vegetable consumption (Doerksen & Estabrooks, 2007)
- Promotes discussion among readers and their friends and family members, that helped promote behavior change (Walker & Riley, 2001)

BACKGROUND

2010

- Kansas State University Human Nutrition Cooperative Extension Service faculty launched a newsletter entitled *Nourishing the Next Generation*

- Financial support from the USDA and SNAP-Ed
- Mailed six times a year to all Kansan grandparent-headed households receiving SNAP benefits

2015

- Electronic version was emailed to:
 - Kansas State University Cooperative Extension Service Family and Consumer Science district and county agents
 - Cooperative Extension Service educators in other states
 - Other community educators

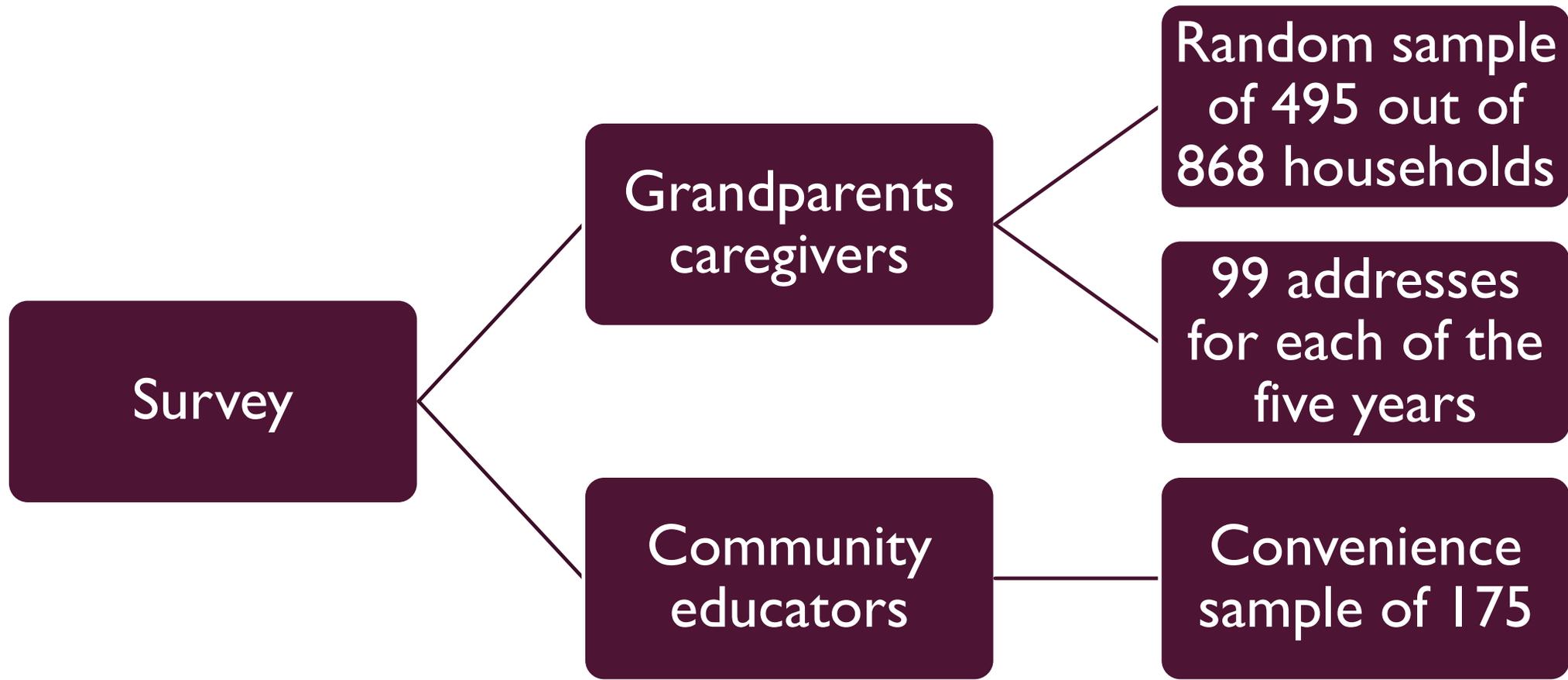
PURPOSE OF STUDY

Nourishing the Next Generation newsletter

- Two-sided, one-page with nutrition and wellness topics
- Based on adult learning theory, the Health Belief Model, and Social Cognitive Theory
- Some of the topics: “picky eaters”, sports nutrition, choosing more healthful packaged and fast foods, increasing physical activity and limiting sedentary time, benefits of family meals, food safety, cooking together as a family including a recipe in every other issue
- After five years of *Nourishing the Next Generation* being in circulation, we evaluated it in order to know the impact it had and to highlight its strengths

OBJECTIVES

- Evaluate how helpful the printed newsletter was perceived to be by low-income grandparents raising grandchildren and by community educators.
- Evaluate if the newsletter improved grandparent caregivers' nutrition and physical activity awareness, knowledge, motivation, and confidence to follow wellness recommendations.
- Demonstrate effectiveness of the newsletter in promoting wellness behaviors (especially more healthful nutrition and physical activity) by low-income grandparents raising their dependent grandchildren.
- Explore improvements for the newsletter.



METHODOLOGY

Survey

- Opinions on:
 - ⑩ The topical nutrition and wellness information
 - ⑩ Recipes
 - ⑩ Helpfulness
- Closed- and open-ended questions
- Demographic questions

Grandparent caregivers

- 25 questions
- Self-perceived changes in their practices
- Short article in a previous newsletter
- Mailed
- Drawing for 4 grocery gift cards

Community educators

- 39 questions
- Use of the information
- Similar questions from the survey of grandparent caregivers
- Emailed and follow-up reminder

Approval by the Kansas State University Institutional Review Board

METHODOLOGY

Data Analysis

- Descriptive statistics
- Average responses were calculated for questions answered along a 3-point or 5-point Likert scale.
- Summary of the responses for open-ended questions.



METHODOLOGY

RESULTS FROM GRANDPARENT CAREGIVERS



- 8 from at least the past year
- 9 from at least the past two years
- 11 from at least the past three years
- 12 from at least the past four years
- 14 from the past five years

RESULTS FROM GRANDPARENT CAREGIVERS

Demographics

- 58% were between the ages of 50-59 years
- 75% were white
- 52 were women
- 61% reported being the only adult in their household
- Range of children care



What do Recipients do with the Newsletters?

- 65% read them completely
- 24% glance through them
- 5% do not read them (3 people)

Opinions

- 96% thought it was visually appealing
- 100% thought the information was easy to understand

RESULTS FROM GRANDPARENT CAREGIVERS

Opinions

- 96% thought information was helpful or provided new ideas
- 61% talked about the newsletter with someone else
- 71% thought recipes were “very much” helpful

Awareness and motivations (average of responses, range = 1-3, low to high)

- Increased awareness on healthy eating: 2.6
- Increased awareness on physical activity: 2.5
- Increased motivation or confidence to follow recommendation: 2.2



RESULTS FROM GRANDPARENT CAREGIVERS

Reported behavior changes (average of responses, range = 1-3, low to high)

- Offer more healthful low-cost meals/snacks: 2.8
- Eat more meals together: 2.7
- Increase in physical activity time with grandchildren: 2.7
- Limit “screen” or sitting down time with grandchildren: 2.6



Cooking practices

- 98% reported preparing most meals at home except for school lunches
- 73% reported cooking from “scratch”

RESULTS FROM GRANDPARENT CAREGIVERS

Examples of lifestyle changes reported by participants

“join the YMCA to have more [indoor] exercise with the heat so high”

“I have utilized a lot of the healthy snack ideas and some of the tips on helping children try new foods”

“we [my husband and I] are teaching awareness of eating habits to the children like [they were] classes”

“sit down as a family, eat more healthy snacks”, “trying to eat together all the time”

“I am working on a weekly schedule for myself and the grandchildren with activities and meal planning”

RESULTS FROM COMMUNITY EDUCATORS

- 17% response rate (30 participants)
- 64% were from a Cooperative Extension Service
- 70% were from Kansas



Demographics

- 70% between ages 50-69 years
- 96% were women
- 100% had at least a college bachelor's degree

RESULTS FROM COMMUNITY EDUCATORS

How the information has been used?

- Distribution of printed copies of the newsletter
- Use some or all of the newsletter information in their own publications
- Teach it in their group and individual educational sessions
- Forwarded electronic copies to others they knew

“Give copies to a health clinic that is free for those who are uninsured”

“We have 'Parent Corners' set up at our after-school sites and the newsletter is one of the many resources we provide to parents/guardians”

“With older adult meals program participants during noon meals”

RESULTS FROM COMMUNITY EDUCATORS

Opinions (average of responses, range = 1-5, low to high)

- A good nutrition education method to reach grandparent caregivers: 4.1
- Content of the newsletter is appropriate: 4.3
- Targets the needs of grandparent caregivers: 4.1
- Ingredients used in recipes in the newsletter are of easy access to grandparent caregivers: 4.0
- Focuses on behaviors to include rather than those to exclude: 3.9
- Information in the newsletter is practical and relevant: 4.0
- Motivates readers to make nutrition-related changes: 4.0
- Motivates readers to make physical activity-related changes: 3.7
- Motivates readers to make food safety-related changes: 3.8

RESULTS



Newsletter recommendations from both groups

Grandparents caregivers:

- “More daily or weekly menu ideas with basic food groups, so I gain confidence that they are getting all the nutrition needed”
- “More recipes for low-cost healthy meals (not snacks)”, and “more summer healthy recipes”

Community educators:

- Wanted to keep this newsletter in circulation because they thought that it was a valuable resource and that the information was helpful to people in their communities who often are unaware about how to be or stay healthy

Was the newsletter helpful?

- Yes, for most of the grandparent caregivers, it helped them learn new wellness-related ideas and new ways to do everyday tasks.
- Yes, for community educators, the newsletter was helpful because its information was useful, provided new ideas, and encouraged readers to take action.

CONCLUSIONS

Did the newsletter improve awareness, knowledge, motivation, or confidence to follow recommendations about nutrition and physical activity in grandparent caregivers?

- Yes, they were more aware and knowledgeable about wellness recommendations, and they felt supported and confident in their practices, after reading *Nourishing the Next Generation*
- Most (78 percent) of the grandparent caregivers described feeling more motivated or confident to follow recommendations for healthy eating or physical activity, enhancing self-efficacy

CONCLUSIONS

Was the newsletter effective in promoting more healthful nutrition, physical activity, and other wellness behavior changes among grandparent caregivers?

- Yes, 91 percent of responding grandparent caregivers reported improving one or more wellness practice
- More than two-thirds of responding grandparent caregivers identified the newsletter as a tool that led them eat more meals together with their family, spend more time in the kitchen together with their grandchildren preparing healthful meals and snacks, and improve their food safety practices.

CONCLUSIONS

LIMITATIONS



- Lack of a control or comparison group
- Majority of participants were women
- Low response rate
- Self-reported answers

REMARK

An appropriately designed newsletter can effectively improve the health of a large number of people, yet has limited costs, and thus, is an excellent public health method.

REFERENCES

- U.S. Census Bureau. (2015a). *Grandparents 2011-2015 American community survey 5-year estimates*. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_S1002&prodType=table
- U.S. Census Bureau. (2015b). *Grandparents living with own grandchildren under 18 years by responsibility for own grandchildren by length of time responsible for own grandchildren for the population 30 years and over*. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_B10050&prodType=table
- Bundy-Fazioli, K., Fruhauf, C., & Miller, J. (2013). Grandparents caregivers' perceptions of emotional distress and well-being. *Journal of Family Social Work, 16*(5), 447-462. doi:10.1080/10522158.2013.832461
- Rubin, M. (2013). Grandparents as caregivers: Emerging issues for the profession. *Journal of Human Behavior in the Social Environment, 23*(3), 330-344. doi:10.1080/10911359.2013.763711
- Fruhauf, C., Pevney, B., & Bundy-Fazioli, K. (2015). The needs and use of programs by service providers working with grandparents raising grandchildren. *Journal of Applied Gerontology, 34*(2), 138-157. doi:10.1177/0733464812463983
- Swanson, M., Studts, C., Bardach, S., Bersamin, A., & Schoenberg, N. (2011). Intergenerational energy balance interventions: A systematic literature review. *Health Education & Behavior, 38*(2), 171-197. doi:10.1177/1090198110378973
- Bahl, M., & Francis, S. L. (2016). Promoting nutrition and wellness statewide through an electronic newsletter. *Journal of Extension, 54*(3), TOT.
- Doerksen, S. E., & Estabrooks, P.A. (2007). Brief fruit and vegetable messages integrated within a community physical activity program successfully change behaviour. *International Journal of Behavioral Nutrition and Physical Activity, 4*, 12. doi:10.1186/1479-5868-4-12
- Walker, S. K., & Riley, D.A. (2001). Involvement of the personal social network as a factor in parent education effectiveness. *Family Relations, 50*(2), 186-193. doi:10.1111/j.1741-3729.2001.00186.x

REFERENCES

- Garton, M., Hicks, K., Leatherman, M., Miltenberger, M., Mulkeen, P., Nelson-Mitchell, L., & Winland, C. (2003). Newsletters: Treasures or trash? Parenting newsletter series results in positive behavior changes. *Journal of Extension*, 41(1), 1RIB5.
- Lindberg, L., Ek, A., Nyman, J., Marcus, C., Ulijaszek, S., & Nowicka, P. (2015). Low grandparental social support combined with low parental socioeconomic status is closely associated with obesity in preschool-aged children: A pilot study. *Pediatric Obesity*, 11(4), 313-316. doi:10.1111/ijpo.12049
- Hemar-Nicolas, V., Ezan, P., Gollety, M., Guichard, N., & Leroy, J. (2013). How do children learn eating practices? Beyond the nutritional information, the importance of social eating. *Young Consumers*, 14(1), 5-18. doi:10.1108/17473611311305458
- Higgins, M. M., & Murray, B. J. (2010). Nutrition-related practices and attitudes of Kansas skipped-generation(s) caregivers and their grandchildren. *Nutrients*, 2(12), 1188-1211.
- Hoffmann, T., & Worrall, L. (2004). Designing effective written health education materials: Considerations for health professionals. *Disability and Rehabilitation*, 26(19), 1166-1173. doi:10.1080/09638280410001724816
- Duvinage, K., Ibrügger, S., Kreichauf, S., Wildgruber, A., De Craemer, M., & De Decker, E., et al. (2014). Developing the intervention material to increase physical activity levels of European preschool children: The ToyBox-study. *Obesity Reviews*, 15(Suppl 3), 27-39. doi:10.1111/obr.12176
- Higgins, M. M., & Barkley, M. C. (2003b). Tailoring nutrition education intervention programs to meet needs and interests of older adults. *Journal of Nutrition for the Elderly*, 23(1), 59-79.
- Clayton, L. (2010). Strategies for selecting effective patient nutrition education materials. *Nutrition in Clinical Practice*, 25(5), 436-442. doi:10.1177/0884533610379605
- McKinney, C. O. (2015). Early childhood overweight and obesity in multigenerational households. *GrandFamilies: The Contemporary Journal of Research, Practice and Policy*, 2(1), Article 2.