7-23-2021

Designing Educational Newsletter Interventions: An Example That Supported Grandfamilies' Physical Wellness Needs

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Recommended Citation

Brenes, P., & Meck Higgins, M. (2021). Designing Educational Newsletter Interventions: An Example That Supported Grandfamilies' Physical Wellness Needs. *The Journal of Extension*, 59(3), Article 6.
<https://doi.org/10.34068/joe.59.03.06>

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Cover Page Footnote

Portions of this paper are based on a thesis submitted by the first author under the supervision of second author, in partial fulfillment of the requirements for a Master of Public Health degree in the Department of Food, Nutrition, Dietetics, and Health, College of Human Ecology, and the College of Veterinary Medicine, Kansas State University, Manhattan, Kansas, United States. The thesis was published at the following website: <https://krex.k-state.edu/dspace/handle/2097/35466>

Designing Educational Newsletter Interventions: An Example That Supported Grandfamilies' Physical Wellness Needs

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Abstract. Effective newsletters have theory-based content and designs tailored to their readers and offer limited-cost community-level approaches to providing helpful, relevant, and engaging information. In accordance with this, we offer an example of a newsletter intervention that supported grandfamilies' physical wellness needs. Six issues of a brief mail-delivered newsletter were sent yearly for up to 5 years to low-income custodial grandparents. In evaluating the newsletter, most respondents reported reading it, discussing its information, and having greater awareness, knowledge, and motivation or confidence regarding wellness recommendations. Furthermore, 91% described improving 1 or more of their grandfamilies' cooking, eating, or physical activity practices.

INTRODUCTION

Holding public meetings may pose financial, personnel, or other difficulties, and many people cannot consistently attend community-based meetings. Additionally, face-to-face program engagement has limited reach. As a result, many Extension professionals from all disciplines rely on newsletters as one of their educational delivery models.

In this article, we describe strategies for designing effective newsletter interventions, present results of perceived impacts of our newsletter on its readers, and highlight principles for strengthening educational newsletter outreach according to published literature.

Printed mail may be one of the most effective community-level methods with which to reach certain populations with at-home education. Reading newsletters over time, with no other intervention component, has led various populations to improve their awareness, knowledge, attitudes, motivation, and behaviors regarding gardening, healthful eating, marital enrichment, parenting, physical activity, and protection against sun exposure/sunburns (Bahl & Francis, 2016; Brotherson et al., 2012; Chipman & Litchfield, 2012; Coffin, 2007; Crane et al., 2012; Dworkin et al., 2011; Essery et al., 2008; Futris et al., 2005; Larsen et al., 2015; Peels et al., 2013; Walker et al., 2009).

Written information is the preferred communication strategy for some groups. Adults from a general population with a chronic health condition, or who were ages 55 years and older, preferred a print-based over a face-to-face

physical activity intervention (Short et al., 2014). Newsletters can be read at the reader's convenience. Some groups are not comfortable with, or have unreliable access to, online technology. About one-third of custodial Californian grandparents were interested in online educational programs, but two-thirds regularly read a quarterly newsletter delivered by mail (Ganthavorn, 2009). After 12 months, print-delivered interventions were responsible for a greater increase in physical activity in adults over age 50 than web-based interventions within the same time period (Peels et al., 2013). Print also outperformed telephone-based interventions among adults with an average age of 45 years (Marcus et al., 2007). Kansan grandparents raising grandchildren stated a preference for printed or video materials from trustworthy organizations rather than other methods of education (Higgins & Murray, 2010).

Grandparents raising grandchildren (GRGs) was the demographic segment addressed by our mailed newsletter intervention. The federal Supporting Grandparents Raising Grandchildren Act (2018) noted that grandparents would benefit from better dissemination of information and resources to support them in their caregiving responsibilities and that more than 2.5 million grandparents are primary caretakers for their grandchildren. Thirteen percent of GRGs live in poverty (U.S. Census Bureau, 2018).

Extension has focused on improving the lives of many GRGs (Dunn & Wamsley, 2018; Mammarella et al., 2013), which is appropriate for its mission to "translate science for practical application" and "prepare people to break the

cycle of poverty, encourage healthful lifestyles, and prepare youth for responsible adulthood” (National Institute of Food and Agriculture, n.d., para. 5). Extension professionals are well-positioned to support GRGs with resources about child development, family relations, finances, gardening, healthful eating, housing, parenting, physical activity, wellness, and youth development.

Most educational interventions for GRGs have not addressed their physical wellness needs and practices. Yet when grandfamilies cook, eat meals, and are physically active together, these activities offer frequent uncontrived opportunities for relaxed communication and emotional connections with each other, decrease the likelihood of risky behaviors by the younger generation, and develop more positive familial and social relationships (Higgins & Murray, 2010). Some small in-person nutrition and/or physical activity programs for grandfamilies have been reported (Duquin et al., 2004; Ganthavorn & Hughes, 2007; Hrostowski & Forster, 2010; Kelley et al., 2013; Kicklighter et al., 2009; Young, 2014). More interventions to improve grandfamilies’ physical health, including physical activity and nutrition, are needed (Chan et al., 2019; Sumo et al., 2018).

NEWSLETTER DESIGN

Nourishing the Next Generation (NNG), subtitled “*Practical advice for caring for your young ones with food, fun, and love*,” was a newsletter for grandparent caregivers. The name was chosen by a convenience sample of GRGs. Written by Kansas State University (KSU) Human Nutrition Extension faculty from May 2010 to March 2016, the publication ceased when its author retired.

The two intervention strategies used in *NNG* were research-based education (to increase awareness and knowledge) and persuasion (to stimulate action toward following recommendations for more healthful behaviors and to induce positive/negative feelings that affected readers’ attitudes and motivation or confidence).

To promote learning by *NNG*’s readers, three components of andragogy from adult learning theory (Corley, 2011) were incorporated: messages addressing real-life nutrition- and wellness-related problems that many grandfamilies face; messages explaining reasons for giving advice so readers would know why certain recommendations were made; and messages offering information that had immediate usefulness to grandparent caregivers that focused on practical, specific behaviors that readers could do that day to promote healthful behaviors in their grandfamilies, which is the “So what?”

The following four components of social cognitive theory (Bandura, 2001) and the health belief model (Skinner et al., 2015) were used to promote behavior change: positive gain-

frame messages for increasing readers’ knowledge and their motivation to increase intentions to adopt more healthful grandfamily practices; outcome expectation messages regarding benefits, or their positive expectations of taking action; cues-to-action messages addressing specific actions readers could take, using doable terms so as to help readers be able to incorporate the knowledge into their everyday lives and make personal behavior changes that would improve their own and their grandfamilies’ well-being and reduce their health risks; and messages providing readers with clear step-by-step tips for how to realistically incorporate various nutrition and other grandfamily wellness behaviors as one method of increasing their skills to perform various health behaviors and their perceptions of self-efficacy.

Educational themes regarding eating healthfully and being physically active that were featured in *NNG* throughout the years of its publication because they are of concern to grandparents raising grandchildren (as identified by Higgins & Murray, 2010) were: quick, healthful, and inexpensive meal and snack recipes; intergenerational cooking; nutritional needs of infants, children, and adolescents; benefits of eating meals together as a family; feeding “picky eaters;” choosing more healthful packaged and fast foods; sports nutrition; food safety; limiting screen and other sedentary time; increasing children’s physical activity; and intergenerational gardening.

Cooking with grandchildren was promoted. Alternating issues had recipes that required only low-cost ingredients and simple culinary techniques and equipment. They were “kid-friendly,” quick to make, tasty, healthful, and tested multiple times in a home kitchen. Recipes yielded just two to four servings unless leftovers could be frozen or were not perishable, and included nutrition facts and safe food handling tips in the directions.

Each issue of *NNG* contained three articles and was one page double-sided and had jargon-free language, an active conversational voice, and full-color pictures that were relevant to the topics for grandparents of varying ethnicities and races. Information sources, which were shown in a small font size, and the return address and logo of KSU Extension were included to lend credibility.

NNG was written at Grade levels 7 to 10 according to Microsoft Word’s readability statistics application. The formula does not account for readability factors of visual appeal, layout, use of graphics, text density, and use of bulleted text but relies on sentence length and polysyllabic word count. Polysyllabic words result in higher reading level estimates even if they are common and widely understood (Thomas et al., 2018). To improve readability, end-of-line words were not hyphenated.

KSU staff mailed a new issue of *NNG* six times yearly for 5 years to the homes of all Kansan grandparent-headed households receiving Supplemental Nutrition Assistance

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Program (SNAP) benefits. Newsletter mailings were not based on a voluntary sign-up. Printing and mailing costs were funded by the U.S. Department of Agriculture's SNAP Nutrition Education.

Each newsletter issue was also emailed to KSU Extension Family and Consumer Sciences professionals and to Extension professionals in other states and community outreach educators who had asked to receive it.

Appendix 1 shows one issue of *NNG*. All issues were posted online at (https://www.ksre.k-state.edu/humannutrition/archived_newsletters/nourishing-the-next-generation/index.html).

METHODS

To gather newsletter feedback, KSU staff mailed a one-page, double-sided evaluation survey (Appendix 2) with 25 questions (11 of which provided options for additional comments) to 495 of the 868 SNAP-enrolled Kansan grandfamily households that had received *NNG* continually for at least the preceding year and who had self-identified English as their preferred language. An optional form to win one of four \$25 gift cards at a grocery store of the participant's choice and a postage-paid self-addressed return envelope accompanied the survey. A notice in *NNG* had indicated that surveys would be mailed to some households. Responses were voluntary, and participants were considered to have given informed consent upon returning the survey.

RESULTS

Fifty-seven GRG surveys were returned. Three were excluded because either no responses were marked or all possible answers to all quantitative questions were marked. Of the 54 included surveys, eight were from GRGs who had received *NNG* continually for at least the preceding year (i.e., they had been sent at least six issues), nine continually for at least the past 2 years, 11 continually for at least the past 3 years, 12 continually for at least the past 4 years, and 14 continually for 5 years. A newsletter dose-response differentiating these groups could not be tested statistically because of the small sample sizes. But of GRGs who had received *NNG* for 5 years, 93% responded to the open-ended questions, with an average of 2.9 comments. Of those who had received the newsletter for less than 2 years, 63% responded to the open-ended questions, with an average of 1.4 comments.

CUSTODIAL GRANDPARENT CHARACTERISTICS

Survey respondents reported caring for one to five grandchildren ages 0-17 years and living in 27 of the 93 counties in Kansas that had grandparent-headed households enrolled in SNAP at the time of the survey. Table 1 shows demographics of respondents, all grandparent-headed

households enrolled in Kansas SNAP, and Kansas GRGs. SNAP-enrolled GRGs were younger, more likely to be female, and had been responsible for grandchildren longer than the average for all Kansan GRGs. Survey respondents were similar in age and gender distribution to other Kansan SNAP-enrolled GRGs.

Eating attitudes of all survey respondents were positive toward their own healthful eating, and 98% also encouraged their grandchildren to eat healthfully. Nearly three-fourths (73%) of these GRGs, all of whom received SNAP benefits, noted that buying healthful foods on their budgets was challenging. Others have found that a common food attitude among grandparent caregivers is that eating nutritiously is expensive but worth it (Higgins & Murray, 2010; Kicklighter et al., 2007).

Regarding cooking habits, almost all respondents (98%) reported preparing most meals at home except for school lunch, and 94% ate out from 0-1 time per week. Almost all (96%) had enough kitchen equipment at home to cook, and 73% prepared most meals from "scratch" while 27% prepared meals mostly from packaged foods.

OPINIONS ABOUT THE NEWSLETTER AND PERCEIVED IMPACTS ON GRANDFAMILIES

Of the 54 GRGs included, 35 (65%) reported usually reading the newsletter completely and 12 (22%) partially read it. Six additional respondents read *NNG* but did not report how much. One respondent reported not reading the newsletter and did not respond to the rest of the survey, except for the demographic questions. Of GRGs who reported usually reading *NNG* in its entirety, 83% responded to the open-ended questions, while 50% of those who reported usually partially reading the newsletter responded to these questions.

One-third reported keeping and referring to their issues of the newsletter again sometimes, and 9% gave them to somebody (such as friends or family) to read. All respondents who had talked about the information with someone (61%) also reported making behavior changes as a result of reading the newsletter.

All survey respondents reported that they would recommend the newsletter to other grandfamilies and that its information was understandable. Ninety-six percent thought the newsletter's information was helpful and the same percentage reported that *NNG* was visually appealing.

Ninety-eight percent of respondents thought *NNG*'s recipes were helpful. Similarly, Californian GRGs identified "healthy cooking" as the health program topic that interested them the most (Ganthavorn, 2009). Twenty-seven GRGs (61% of the 44 who responded to the question) had prepared one or more *NNG* recipes. Some specifically mentioned liking the quick recipes and "food the kids can cook for us."

Table 1. Demographics of Households Headed by Custodial Grandparents in Kansas

Category	Response	Kansan SNAP-enrolled custodial grandparents who responded to the newsletter survey (n = 54)		All Kansan SNAP-enrolled custodial grandparents at the time of the newsletter survey (N = 2,248) ^a	All Kansan custodial grandparents in 2015 (N = 20,282)
		f, n	% ^b	%	%
Age (years)	Less than 60	38, 53	72	72	61 ^c
Gender	Female	52, 53	98	91	61 ^c
Ethnicity	Hispanic/Latino	3, 36	8	18	11 ^c
Race	White	40, 50	80	74	84 ^c
	Black	8, 50	16	21	10 ^c
	Asian	1, 50	2	2	—
	Other	1, 50	2	3	6 ^c
Number of years respondent had been a grandparent caregiver	4 or less	16, 51	31	—	60 ^d
	5 or more	35, 51	69	—	40 ^d
	5 to 8	13, 51	25	—	—
	9 or more	22, 51	43	—	—
Adults in the household	One	30, 49	61	80	—

Note. SNAP = Supplemental Nutrition Assistance Program. Cells with dashes indicate that data were not available.

^aData in this column are from K. Clark (personal communication, July 11, 2019).

^bPercentages in this column are based on the number of participants who responded to the category.

^cU.S. Census Bureau (2015b).

^dU.S. Census Bureau (2015a).

Another wrote that her grandchildren “eat better when they cook.”

Most of the responding GRGs believed they had improved their awareness, knowledge, motivation or confidence, and behaviors regarding cooking, healthful eating, physical activity, and healthful playing because of reading NNG (Table 2). Overall, 91% of the survey respondents indicated they had changed one or more behaviors regarding cooking, healthful eating, physical activity, or healthful playing, including practices of both the older and younger generations in their households.

The 159 handwritten comments by 78% of the survey respondents provided qualitative data describing how reading NNG had increased their perceived awareness, knowledge, motivation or confidence, and practices for cooking, healthful eating, physical activity, and healthful playing (Table 3). Additionally, some GRGs reported that their behavior changes had improved their grandfamily members' interactions and led them to feel greater emotional closeness. Comments included: “It has brought us closer as a family,” “Trying the recipe ideas are good on making memories with loved ones,” “How to enjoy your child,” “Working together [me and my husband] to get children

more interested,” and “Spending more time in the kitchen with my grandchild [a teenager] is especially helpful.”

PROFESSIONAL USE OF THE NEWSLETTER

Thirty educators, mostly KSU Extension Family and Consumer Sciences professionals, completed an online evaluation survey (not shown). Most (93%) thought NNG had helpful health and wellness information. They had distributed printed copies, used its information in their own publications or educational sessions, and forwarded it electronically to others. Seventy percent had disseminated it to senior citizens, low-income families, mothers, caregivers in general, and the general public.

PRINCIPLES FOR STRENGTHENING EDUCATIONAL NEWSLETTER OUTREACH

Various principles for improving effectiveness of educational newsletters have been published. We speculate that several of these replicable factors contributed to the self-reported improved awareness, knowledge, motivation or confidence, and wellness practices among our NNG newsletter survey respondents.

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Table 2. Average Custodial Grandparent Responses and Percentages Responding Affirmatively About Their Perceived Increase in Awareness, Knowledge, Motivation/Confidence, and Behavior Changes Regarding Cooking, Healthful Eating, Physical Activity, and Healthful Playing, After Reading the *Nourishing the Next Generation* Newsletter for 1–5 Years

Survey query	Average response (SD)	Percent of total responses with a “Yes” response	# Total responses
Has reading the <i>Nourishing the Next Generation</i> newsletter led you to have more awareness about recommendations for:			
Healthy eating?	2.6 ^a (0.6)	96	53
Physical activity?	2.5 ^a (0.7)	92	48
Has reading the <i>Nourishing the Next Generation</i> newsletter led you to learn something new, or to learn more about a topic, or to recognize anything that you could change to allow you and your family to eat or play more healthfully?	2.2 ^a (0.8)	76	51
Has reading the <i>Nourishing the Next Generation</i> newsletter led you to feel more motivated or confident to follow recommendations for healthy eating or physical activity?	2.2 ^a (0.8)	78	49
Has reading the <i>Nourishing the Next Generation</i> newsletter led you to do any of these:			
Offer low-cost meals and/or snacks that are more healthful to your grandchild?	2.8 ^b (0.6)	84	51
Eat more meals together as a family?	2.7 ^b (0.6)	82	49
Increase the physically active time of your grandchild/grandchildren?	2.7 ^b (0.6)	80	50
Improve your food safety practices?	2.7 ^b (0.7)	76	49
Spend more time in the kitchen with your grandchild/grandchildren?	2.6 ^b (0.7)	72	50
Limit the “screen” and sitting-down time of your grandchild/grandchildren?	2.6 ^b (0.7)	69	49
Anything else differently with your grandchild/grandchildren, or to change anything about your family’s eating or physical activities?	2.3 ^b (0.8)	54	50

^aScale = 3 (“Yes, very much”), 2 (“Yes, somewhat”), 1 (“No”).

^bScale = 3 (“Yes”), 2 (“Considering it”), 1 (“No”).

- *NNG* was research- and theory-based. Health promotion efforts based on appropriate theory can improve healthful practices and well-being (Rimer & Glanz, 2005). A theory-based newsletter educational program was more effective than a similar but non-theory-based program for improving healthful eating and reducing nutritional risk among older adults attending congregate meal sites (Francis et al., 2014).
- A high percentage (65%) of respondents usually read *NNG* in its entirety. Its home delivery, design, brevity, and conversational tone likely contributed to this. Using principles of clear communication and designs tailored to readers’ preferences increases a newsletter’s effectiveness as a learning tool. Design elements for newsletters that older adults and adults with limited resources prefer include frequent exposure, small amounts of relevant information at a time, attractive colors, concrete graphics, and large letter fonts (Clayton, 2010; Harmon et al., 2007; Higgins & Barkley, 2004b; McKenna & Scott, 2007).
- *NNG*’s information was perceived as helpful and understandable to 96% of respondents. An

intervention’s intended audience should inform the included content and components (Ganthavorn, 2009; Higgins & Barkley, 2003b; Sumo et al., 2018). To discover the learning needs and interests of our demographic segment prior to developing *NNG*, we conducted qualitative interviews with Kansan GRGs (Higgins & Murray, 2010) and read published literature. Grandparents and older adults prefer positive (gain-frame) nutrition messages focusing on foods and behaviors to include, rather than on foods to exclude and behaviors to avoid (loss-frame messages) (Higgins & Barkley, 2004a; Kicklighter et al., 2007). Wellness education that motivates older adults to take action toward a more healthful lifestyle uses themes that relate to their everyday challenges, provides easy to understand information with new ideas and action-oriented tips to implement, and is oriented to solving problems by helping them use new information, previous knowledge, and their experiences (Clayton, 2010; Higgins & Barkley, 2003a).

- *NNG* was relevant and engaging. Two-thirds of the GRG survey respondents reported talking about *NNG*’s information or had given their issues of it

Table 3. Sample Comments of Custodial Grandparents Regarding Their Perceived Awareness, Knowledge, Motivation/Confidence, and Behavior Changes Regarding Cooking, Healthful Eating, Physical Activity, and Healthful Playing, After Reading the *Nourishing the Next Generation* Newsletter for 1–5 Years

Factor	Sample comments
Awareness	"I sometimes forget what kinds of healthy snacks there are. And it reminded me to keep them active instead of watching video games."
	"What foods are better for my grandkids."
	"Sometimes they [the newsletters] just clue me in on little things I didn't know."
	"Learning new ways to cook healthy."
Knowledge	"New things my grandson can eat, also things for him to do."
	"Healthy benefits of food and drink choices."
	"Different ways to do meals, and interest and involve the children hands on. Let them measure, taste, make their choice of meals."
	"The way to promote exercising for city kids."
Motivation or confidence	"Adding other food to eat, or less of this and that. It's so good to try new things for the family."
	"Motivated to change our eating habits."
	"Makes me feel good when my family does eat healthy."
	"[It] made me try to do more physical things."
Behavior changes	"Confirming what I have been doing for him is good for him."
	"It helps as a support system."
	"We eat and talk, and everybody does more physical things (like play basketball and tag)."
	"Walking and/or playing and leaving the TV/games/internet off."
Behavior changes	"I have utilized a lot of the healthy snack ideas and some of the tips on helping children try new foods."
	"We are eating and cooking more vegetables."
	"Grandchildren choose snacks from a selection of healthy fruits and veggies."
	"Sit down [for meals] as a family, eat more healthy snacks."

to others. One-third had saved issues for future reference. The circumstance of newsletter content serving as discussion topics promotes behavior change and the sharing experience helps readers integrate socially, stimulates them cognitively, and encourages them to provide information to someone in need of it (Walker & Riley, 2001).

- Some respondents described *NNG* as "a support system." Other researchers have concluded that in addition to providing information, newsletters have the potential to enhance feelings of support (Brintnall-Peterson et al., 2009; Dworkin et al., 2011; Weigel & Martin, 2004).
- Some respondents mentioned that they were cooking together more often, sharing more family meals, playing actively together more often, and that reading *NNG* had helped their family members be closer emotionally. Newsletters can promote behavior changes by informing individuals about new practices and their likely benefits, originate and reinforce social influences, motivate people to take action, and enhance perceived self-efficacy (Bandura, 2001).

STUDY LIMITATIONS

Generalizability of our results to other newsletters and audiences are reduced because of this study's limitations:

- *Lack of a control group.* Other physical activity or nutrition newsletter-only interventions that had control groups have reported positive impacts (Doerksen & Estabrooks, 2007; Essery et al., 2008; Larsen et al., 2015; Pearson et al., 2010).
- *Receipt of just one newsletter.* Characteristics of newsletters and delivery methods influence their impacts. Our respondents received six home-delivered issues yearly for 1-5 years of only one newsletter, *NNG*. We cannot predict outcomes of newsletters with different characteristics or delivery methods.
- *Lack of respondent diversity.* Eating attitudes of all survey respondents were positive toward eating healthfully, which undoubtedly shaped their opinion of the value of a health and wellness newsletter. Almost all (98%) were women. All lived in just one state in the central United States, identified English as their preferred language, had

limited resources, were responsible for dependent children, and were enrolled in SNAP. Not all newsletters will be directed at such a specific population.

- *A 12% response rate.* This study's percentage of completed surveys was similar to the 14% who responded to a mailed survey about a Californian GRG program (Ganthavorn, 2009) and higher than the 5% of parents who responded to a teen newsletter survey (Dworkin et al., 2011), but lower than the response rate of many other studies.
- *Self-reported data.* Self-reports are susceptible to systematic bias, especially to response set and social desirability biases, and may not reflect objectively measured data.

CONCLUSIONS AND IMPLICATIONS

Results suggest that the *NNG* newsletter was effective. Reading it led responding GRGs to report having greater perceived awareness, knowledge, and motivation or confidence regarding wellness recommendations. Ninety-one percent reported that reading *NNG* had led their grandfamilies to improve some of their cooking, healthful eating, physical activity, and healthful playing behaviors, including practices of both the older and younger generations. Sixty-one percent of respondents reported talking about the newsletter's information, and all who had done so reported improving their wellness behaviors. Some participants reported feeling supported by the newsletter and that they had strengthened their intrafamily emotional connections. Responding community educators reported using the emailed newsletter extensively to disseminate information.

To our knowledge, no other published study has assessed impacts of an educational intervention using print materials to support custodial grandparents in meeting the physical wellness needs of the children in their care. Although our study was small, the results are promising. Finding practical and effective community-level interventions to help support this underserved and often rural demographic segment can be challenging.

Effective newsletters are written using clear communication principles and have components and designs tailored to readers' preferences, along with research- and theory-based content that reflects readers' learning needs and interests. They offer a feasible limited-cost way for Extension professionals and other outreach educators to consistently support large numbers of their constituents with helpful, relevant, and engaging information. The positive impacts of our project are consistent with results of other Extension professionals and researchers in a variety of disciplines, studying different populations, and using various distribution methods, for newsletter-only interventions.

ACKNOWLEDGMENTS

We gratefully thank our respondents for the time they spent thoughtfully completing the survey, especially the busy grandparents raising their grandchildren. We thank Michelle Burklund (office specialist for KSU Extension Food, Nutrition, Dietetics and Health) for her continual help over the years of conducting the *NNG* project. We also thank Susan Craig and Kent Waltmire (both retired from the Kansas Department for Children and Families) for providing enthusiastic project support and prompt data summaries of Kansas SNAP for each issue of the newsletter. Finally, we thank Laura Brannon (professor in the Department of Psychological Sciences at KSU) for her help with the survey methodology and review of draft manuscripts, Jacquelyn McClelland (professor emerita in the Department of Agricultural and Human Sciences at North Carolina State University) for her review of draft manuscripts, John Ehiri (professor in the University of Arizona's Mel & Enid Zuckerman College of Public Health) for his help during Author Higgins' sabbatical leave, and Kelly Clark (contracted management systems analyst with the Kansas Department for Children and Families) for providing data used in the final journal article.

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APPENDIX 1. ONE ISSUE OF *THE NOURISHING THE NEXT GENERATION* NEWSLETTER

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Wishing You Joyful Holidays and a Happy New Year!

December / January newsletter

Nourishing the Next Generation

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

For more support, contact your local extension office.

The Food Assistance Program can help people of all ages with low income buy nutritious foods for a better diet. To find out more, call 1-888-369-4777.

Material funded by USDA SNAP. USDA is an equal opportunity provider. Newsletter developed by Mary Meck Higgins, Ph.D., R.D., L.D., K-State Research and Extension Human Nutrition Specialist and Associate Professor, Dept. of Human Nutrition. Contents of this publication may be reproduced for educational purposes. All other rights reserved. In each case, credit Mary Meck Higgins, "Nourishing the Next Generation."

Nourishing the Grandkids with Between-Meal Snacks

Offering your grandchild snacks is a great idea (EXCEPT as a reward for "good" behavior, which is not recommended). Choose consistent snacking times, such as mid-morning and mid-afternoon, or right after naps. Keep portions small enough that your grandchild can enjoy eating again at mealtimes. To avoid choking problems in young grandchildren, be sure to monitor the size of the pieces and the hardness of the foods that you offer, and do not allow children to run around while eating.

Many quick-to-serve foods and beverages can be nourishing snacks. If you choose to provide a packaged snack food, read the Nutrition Facts label to find foods low in added sugars, salt and saturated fat. Suggestions for no-cook or pre-cooked snacks include cool tap water served with: raw vegetables dipped in hummus, peanut butter, low-sodium salsa or salad dressing; unsweetened fruit; hard-boiled egg; milk with raw or cooked rolled oats or another unsweetened whole-grain breakfast cereal; whole-grain bread, pita, tortilla or crackers; milk; yogurt; and low-fat cheese.

Nourishing the Next Generation

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

Increasing Indoor 'Active Time'

You can have a lot of fun playing inside with a young grandchild when the weather outside is harsh, while also encouraging physical activity. Here are some ideas:

- ♥ Skip, march, sneak slowly, jump, slide your feet, tip-toe, crawl, walk sideways and backwards, and roll around in some of the rooms in your house.
- ♥ Circle your arms at your sides, pedal an imaginary bicycle, shrug your shoulders, reach up high, bend down low, twist at your waist, do swimming front and back strokes with your arms, and give yourselves big bear hugs.
- ♥ Play imagination games, such as:
 - ♥ Acting out songs and stories.
 - ♥ Guessing which imaginary huge letters of the alphabet or numbers he or she has drawn in the air – first “draw” with hands, then with feet.
 - ♥ Pretending to play different musical instruments.
 - ♥ Moving like animals — hop like a kangaroo, wiggle your nose like a rabbit, pounce like a cat, waddle like a duck, stomp like a bull, wave your arms like an elephant’s trunk, flap your arms like a bird, wiggle like a snake, gallop like a horse, jump like a frog, roll over like a pig in the mud, and swim like a dog.
 - ♥ Moving like tree branches in the wind, stomping and clapping like thunder, waving your arms like a lightning bolt, spinning like a tornado, moving up and down like an ocean wave, twirling like a leaf in the breeze, turning yourselves into rainbows.
- ♥ Throw a few empty plastic bags in the air and try to catch them before they land.
- ♥ Toss a balloon or a soft toy back and forth to each other, or into a box.
- ♥ Turn on lively music and dance.

Image courtesy of www.DailyClipArt.net

Source: Adapted from [Get Moving Today Activity Calendar](http://www.healthychildcare.org/PDF/LetsMove%20CalendarENGLCalendarFULL.pdf), www.healthychildcare.org/PDF/LetsMove%20CalendarENGLCalendarFULL.pdf

Using Cost-Cutting Foods in Tasty Meals and Snacks

Feeding a grandchild adds to your grocery bills! Certain foods are typically lower-cost options all year, and many times they are also the advertised sale items at the grocery store. For protein foods, cooked dried beans and peas, lentils, canned tuna and peanut butter are generally the best buys. Lower-priced vegetables include potatoes, carrots, cabbage and canned green beans and tomatoes. For fruit, bananas, apples, raisins and 100% frozen juices are often the lowest in price. Large containers of rolled oats are both versatile whole grains and low in cost. For dairy, fluid milk is usually the best bargain.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service, Manhattan, KS.
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APPENDIX 2. CUSTODIAL GRANDPARENTS' EVALUATION SURVEY OF THE
NOURISHING THE NEXT GENERATION NEWSLETTER (SAMPLE SHOWN HAS THE CODE
S-1 FOR CONTINUALLY RECEIVING THE NEWSLETTER FOR AT LEAST 1 YEAR)

Nourishing the Next Generation

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

S-1

Dear grandparent raising one or more grandchildren or another child relative,

Would you please help us evaluate the newsletter, *Nourishing the Next Generation*? It will take you 5 to 10 minutes to answer the questions below and on the back. Please send us your responses in the next two weeks, using the enclosed postage-paid envelope. We will use the information that you share to improve our newsletter, and will summarize our results in published research magazines. Your participation is completely confidential and voluntary, and you may skip answering questions if you wish. You will have no penalty if you decide not to participate. If you have any questions, please call Mary Meck Higgins (phone number 785-587-7226) in the Human Nutrition Department at Kansas State University. We greatly value your opinions, and appreciate your responses – thank you!

What do you do with the *Nourishing the Next Generation* newsletters that are mailed to you about every other month? (Please check all that apply)

- ☐ I do not usually read them.
- ☐ About half the time I glance through or read them, and half the time I do not.
- ☐ I usually quickly glance through them.
- ☐ I usually read them completely.
- ☐ I keep them and refer back to them sometimes.
- ☐ I keep them but I have not looked at them again.
- ☐ I give them to somebody else to read. If yes, please describe: _____
- ☐ I throw them away or recycle them.

Comments?

Would you recommend the newsletter to other grandparents raising a grandchild or another child relative? ☐ Yes, very much. ☐ Yes, somewhat. ☐ No, not at all.

Comments?

What is your opinion about **information** in *Nourishing the Next Generation* newsletters?

- It is visually appealing: ☐ Yes, very much. ☐ Yes, somewhat. ☐ No.
 - I understand the information: ☐ Yes, very much. ☐ Yes, somewhat. ☐ No.
 - The information is helpful or provides new ideas for me to use: ☐ Yes. ☐ No.
 - I have talked about information in them with somebody else: ☐ Yes. ☐ No.
 - I have put into practice specific information from a newsletter: ☐ Yes. ☐ No.
- If yes, please describe:

What is your opinion about **recipes** included in some of the newsletters?

- They are helpful: ☐ Yes, very much. ☐ Yes, somewhat. ☐ No, not at all.
- I have prepared one or more of the recipes: ☐ Yes. ☐ No. If yes, please describe:

Has reading *Nourishing the Next Generation* newsletters led you to have more **awareness about recommendations** for:

- Healthy eating: ☐ Yes, very much. ☐ Yes, somewhat. ☐ No.
 - Physical activity: ☐ Yes, very much. ☐ Yes, somewhat. ☐ No.
- If yes, please describe:

Has reading the newsletters **led you to do any of these?** (Please check all that apply)

- Eat more meals together as a family: ____ Yes. ____ Considering it. ____ No.
- Offer low-cost meals and/or snacks that are more healthful to your grandchild/grandchildren: ____ Yes. ____ Considering it. ____ No.
- Spend more time in the kitchen with your grandchild/grandchildren: ____ Yes. ____ Considering it. ____ No.
- Improve your food safety practices: ____ Yes. ____ Considering it. ____ No.
- Limit the 'screen' and sitting-down time of your grandchild/grandchildren: ____ Yes. ____ Considering it. ____ No.
- Increase the physically-active time of your grandchild/grandchildren: ____ Yes. ____ Considering it. ____ No.

Have the newsletters led you to **do anything else differently** with your grandchild/grandchildren, or to **change anything about your family's eating or physical activities?** ____ Yes. ____ I am considering doing something differently. ____ No.
Please describe:

Has reading *Nourishing the Next Generation* newsletters led you to **learn something new**, or to **learn more** about a topic, or to **recognize anything that you could change** to allow you and your family to eat or play more healthfully?

- ____ Yes, very much. Please describe:
- ____ Yes, somewhat. Please describe:
- ____ No.

Has reading *Nourishing the Next Generation* newsletters led you to feel more **motivated or confident** to follow recommendations for healthy eating or physical activity?

- ____ Yes, very much. Please describe:
- ____ Yes, somewhat. Please describe:
- ____ No.

Do you have **other comments, or suggestions** to make the newsletters more meaningful to you in your everyday grandparenting?

Please tell us **about yourself and your household:**

My grandchild/grandchildren living with me are ages: _____

My age is: ____ 40-49. ____ 50-59. ____ 60-69. ____ 70 or older.

I am: ____ Female. ____ Male.

I am: ____ Non-Hispanic/Non-Latino. ____ Hispanic/Latino.

I am: ____ White. ____ Black. ____ Asian. ____ Other: _____

I am: ____ The only adult in my household. ____ One of the adults in my household.

I/We have been taking care of at least one grandchild for _____ years.

I/We prepare most meals at home, except for school lunch: ____ Yes. ____ No.

Most meals that I/we prepare at home are: ____ From "scratch." ____ Packaged foods.

I/We have enough kitchen equipment at home to cook: ____ Yes. ____ No.

We eat out: ____ 0-1 times per week. ____ 2-3 times/wk. ____ 4 or more times/wk.

Trying to eat healthfully is important to me: ____ Yes. ____ No.

I encourage my grandchild/grandchildren to eat healthfully: ____ Yes. ____ No.

I/We have a hard time buying healthy foods on our food budget: ____ Yes. ____ No.