



# Taxi Drivers at Risk: Tailoring Nutrition and Exercise Materials

Emily McNeill<sup>1</sup> · Anuradha Hashemi<sup>1</sup> · Julia Ramirez<sup>1</sup> · Nicole Roberts-Eversley<sup>1</sup> · Francesca Gany<sup>1,2</sup>

Published online: 31 January 2019

© Springer Science+Business Media, LLC, part of Springer Nature 2019

## Abstract

Cognitive interviewing was used to refine nutrition and exercise health education materials for use in the New York City taxi driver community. Cognitive interviews were conducted with taxi drivers at garages and community centers across New York City. Interviews were conducted in five rounds with approximately 10 interviews conducted in each round. Modifications were made to the education materials between rounds based on driver feedback. Interviews were transcribed, coded to identify areas needing improvement, and then used to modify materials. Areas that needed adaptation included colloquialisms, literacy level, complex jargon/terminology, vague/confusing phrasing, driver-specific and ethnic-specific preferences, visual aids, and mathematical calculations. These were organized into four key themes: linguistic responsiveness, occupational and cultural adaptation, visuals, and calculations. Cognitive interviewing is a useful method for refining health education materials in the diverse driver population. Cognitive interviewing revealed a need to reduce literacy level, avoid complex terminology, make further occupational and cultural adaptations, use clear visual aids, and avoid the use of complex calculations. Cognitive interviewing is an effective method for refining health education materials for immigrant and low literacy populations.

**Keywords** Immigrants · Minority health · Health education · Cognitive interviewing · Nutrition

## Introduction

As the patient population in the United States becomes increasingly diverse, cultural responsiveness is becoming an even more important part of healthcare delivery. Culturally responsive care has been shown to improve patient outcomes, such as patient satisfaction, social services utilization, and patient communication [1–3]. Tailored health education is an important aspect of culturally responsive care and can increase the effectiveness of the information shared [4, 5]. For example, among low-income African American women in Chicago, culturally tailored HIV/AIDS risk-reduction messaging was significantly more likely to increase HIV testing rates, increase discussion of HIV/AIDS with friends, and increase condom request at follow-up in comparison to

the standard messaging [6]. Culturally tailored education has also been effective in increasing self-management behaviors, decreasing weight, and increasing physical activity in Mexican Americans, whereas standard counseling was found to be ineffectual [7].

Cognitive interviewing is an important tool for the evaluation and refinement of surveys, questionnaires, and educational materials [8]. It involves questioning the target population to ascertain their perceptions and understanding of the tested materials [9–11]. Cognitive interviewing has been used widely in health messaging across diverse groups. It has been used, for example, to: pilot nutrition messages for low-income populations in North Carolina, where it identified several issues in the messages, including unclear questions, vague response choices, confusing instructions, and complicated terminology [12]; and test diabetes management instruments among Spanish-speaking individuals of Caribbean origin, where it found similar problems in terms of unclear instructions, difficult terminology, and abstract concepts, which were then addressed [13].

There are two main approaches to cognitive interviewing: think aloud interviewing and verbal probing. The think aloud approach encourages the respondents to openly share their thoughts, feelings, and suggestions with respect to the

✉ Francesca Gany  
ganyf@mskcc.org

<sup>1</sup> Immigrant Health and Cancer Disparities Service, Department of Psychiatry and Behavioral Sciences, Memorial Sloan Kettering Cancer Center, New York, NY, USA

<sup>2</sup> Departments of Medicine and Public Health, Weill Cornell Medical College, Memorial Sloan Kettering Cancer, New York, NY, USA

tested materials. Verbal probing involves more structured questioning, which prompts participants to respond to specific items within or related to the materials. A common verbal probing technique might ask participants to paraphrase sections of the tested materials in order for the interviewer to assess understanding [9–11]. Both approaches were used in this paper to refine health materials for the New York City Taxi Driver community.

Taxi drivers are at a high risk for cardiovascular disease, hypertension, cancer, metabolic diseases, and obesity, because of the long hours spent driving, their sedentary lifestyle, their poor diets, particulate matter exposure, high stress, and a lack of health benefits [14, 15]. Additionally, in some areas, large numbers of drivers are foreign-born. In New York City, over 90% of drivers were born abroad. They hail mostly from West African, South Asian, and Latin American countries and often speak English as a second language [16]. This increases the need for linguistically and culturally tailored health education materials. Cognitive interviewing techniques could be especially valuable in ensuring that health education designed for this group is effective. This paper describes the use of cognitive interviewing to refine nutrition and exercise educational materials for immigrant taxi drivers in New York City, a technique that can be effectively used in populations with multiple health-related risk factors, limited time, low literacy, and a large number of immigrants from diverse backgrounds. This work was conducted through the Taxi Network, a community-engaged research and service delivery program designed to assess and address health disparities among taxi drivers in New York City.

## Methods

A three page taxi driver physical activity and nutrition handout, and an approximately 55 slide PowerPoint presentation tailored for taxi drivers, were developed based on dietary recommendations from the USDA [17], exercise recommendations from the US Department of Health and Human Services [18], and heart health information from the American Heart Association [19]. The materials were developed through an iterative process involving a community advisory board comprised of taxi drivers, and work with community based organizations serving West African, South Asian, and Latino taxi drivers. The handout and PowerPoint drew on materials used in several educational and health interventions conducted with the taxi driver population. All text was originally written at no higher than an eighth-grade reading level.

The first page of the handout listed the risk factors for heart disease and the benefits of regular exercise. The second

page explained vigorous and moderate exercise, and the recommended amount for adults. It also included a description of six exercises that drivers could perform in their cars. The final page contained a list of the recommended portions of each food group, accompanied by the USDA's MyPlate graphic [20] and a portion guide graphic [21, 22]. The PowerPoint presentation was designed to accompany a pedometer intervention and to be distributed to taxi drivers and their social network supports. It contained 20 slides on social network support responsibilities, five slides on pedometer usage and step count goals, 15 slides on heart health, and 15 slides on nutrition.

A convenience sample of drivers was approached during free Taxi Network health screenings, conducted at various Taxi Network yellow cab garages in New York City, and at one of the Taxi Network partner community based organizations, the South Asian Council for Social Services. Approximately 75 drivers were approached over a 2-week period. Drivers were informed of the purpose of the educational handout and presentation and verbal consent was obtained to begin the cognitive interview.

Cognitive interviews were conducted according to a guide adapted from Gordon B Willis of the Research Triangle Institute [9]. Think aloud techniques were used first, to avoid interviewer-imposed bias and to allow for completely open-ended responses from the participants. It was clarified to participants that any feedback, good or bad, was welcome. If participants gave limited responses, verbal probing techniques were used. Interviews typically lasted 5–10 min and were conducted one-on-one, with a few exceptions in which interviews were conducted in groups of two or three. Audio or visual recording was not used to avoid the risk that recording would detrimentally affect responses. Interviews were conducted in rounds until data saturation was reached and no new codes were produced. Five rounds were completed with approximately 10 drivers interviewed in each round. Modifications to items were made to the handout between each round if an item received commentary from 2 or more drivers.

Responses were transcribed by the interviewer and subsequently coded by hand. A priori codes were developed based on a review of the literature on cognitive interviewing use in immigrant populations. A priori codes included language and terminology, cultural preferences, and unclear graphics/wording. During data collection, emergent codes and sub-codes were added as transcripts were reviewed post-interviews.

No personal health information was collected or shared outside Memorial Sloan Kettering Cancer Center (MSKCC). Therefore, upon consultation with the Memorial Sloan Kettering Cancer Center Institutional Review Board/Privacy Board, this work was deemed a QI project, as such written consent was not obtained for participation. This QI project was not

considered human subjects' research and approval by the Memorial Sloan Kettering Cancer Center Institutional Review Board was not required.

## Results

Approximately 50 drivers participated in the interviews, out of approximately 75 approached. Reasons for refusal included time constraints or lack of interest in the health materials. Drivers interviewed included those of Hispanic, South Asian, Eastern European, and West African backgrounds. All participants were male. Interviews were held in the taxi garage or at the community location at which drivers were approached.

Several aspects of the educational materials needed modification for the drivers, including idioms, literacy level, complex jargon/terminology, vague/confusing phrasing, driver-specific and ethnic-specific preferences, a need for clear visual aids, and information requiring mathematical calculations. These were grouped into four key themes: linguistic responsiveness, cultural/occupational adaptation, importance of visuals, and calculations.

### Linguistic Responsiveness

There were numerous instances in which the language of the materials was not appropriate for the target population due to: (1) literacy level, (2) colloquialisms, (3) terminology/jargon, and (4) vague/confusing phrasing.

#### Literacy Level

The materials were originally written at an 8th grade reading level, which proved to be too high a register for many of the drivers. Modifications were made to lower the reading level of the materials to a 5th grade reading level. For example, *assistance* was replaced with *help* and *reduce* was replaced with *lower*. *Brisk-walking* was modified to *fast-walking*, and "Go at your own *pace*" was modified to "Go at your own *speed*". Endurance was replaced with an elementary level definition, shown in the following example:

Original Text: Regular exercise can help increase endurance.

Modified Text: Regular exercise can help increase *your ability to exercise and make exercising easier*.

#### Colloquialisms

Drivers who did not speak English as their primary language had difficulty understanding colloquialisms. The examples below, such as watch your weight and cut back on caffeine, needed modification or further clarification.

Original Text: Watch one's weight.

Modified Text: *Keep one's weight healthy*.

Original Text: Cutting back on alcohol and caffeine can also sometimes help. Drink no more than one serving per day.

Modified Text: *Drink less alcohol and fewer drinks with caffeine, such as coffee and soda*. Drink no more than one serving per day.

Original Text: You and your buddy should aim to eat food that is high in fiber.

Modified Text: You and your buddy should *try* to eat food that is high in fiber.

### Jargon/Terminology

Several medical, exercise, and nutrition terms impeded comprehension of the materials. Drivers did not understand terms such as daily step counts or shin muscles. *Daily step counts* was replaced with the definition, "the number of steps you walk each day." Front lower leg muscles was used instead of *shin* muscles. Drivers also did not know the difference between whole grains and refined grains, therefore examples of whole and refined grains were added. Additional modifications made to clarify terms can be found in the examples below.

Original Text: Eat whole grains instead of refined grains.

Modified Text: Eat whole grains (*like whole wheat bread or brown rice*) instead of refined grains (*like white rice or white bread*).

Original Text: Try to eat lean proteins.

Modified Text: Try to eat lean proteins. *Lean proteins are proteins that are low in fat*.

### Vague/Confusing Phrasing

There were also numerous instances in which drivers found information to be vague or confusing. Notably, drivers did not understand the difference between vigorous and moderate physical activity. In reference to the description of moderate physical activity "A person doing moderate physical activity can talk but not sing", one driver stated that he did not understand the relevance of singing to exercise

Original Text: A person doing moderate physical activity can talk but not sing. Walking, dancing, and riding a bike are all examples of moderate activity.

Modified Text: *How can you tell if you are getting moderate exercise? Your breathing gets faster and you start to sweat a little, but you can still talk*.

**Original Text:** A person doing vigorous physical activity cannot say more than a few words without stopping for breath.

**Modified Text:** *How can you tell if you are getting vigorous exercise? Your breathing is fast and deep, you start to sweat a lot, and you cannot say more than a few words without stopping to breathe.*

Additionally, the advice to focus on whole fruits instead of juice was not understood or was misinterpreted as a recommendation to eat entire fruits, rather than sectioned fruits. The text was modified to include a definition of whole fruit and to clarify the recommendation to avoid drinking fruit juice. Below are additional examples of modifications made post cognitive interviewing.

**Original Text:** Focus on whole fruits.

**Modified Text:** *Eat the actual fruit (for example, canned in water, frozen without sugar, or fresh) instead of drinking only the juice of the fruit. For example, eat an orange instead of drinking orange juice.*

**Original Text:** To work your abdominal muscles: Squeeze your abdominal muscles as though you are trying to touch your ribs to your stomach, then release and sit up tall.

**Modified Text:** To work your abdominal muscles: Squeeze your abdominal muscles *by sucking in your stomach*, then release and sit up tall.

**Original Text:** Vary your veggies.

**Modified Text:** *Eat different types of veggies.*

## Occupational/Cultural Adaptation

Additions were made to tailor the materials to taxi drivers, including adapting the nutrition information for South Asians, West Africans, and Latin Americans.

### Taxi Drivers

Participants valued the included health information that was specific to taxi drivers. The exercises that can be done in the car widely appealed to the drivers. One driver remarked that the car exercise suggestions were good because “a lot of people are lazy and they spend more time in the car than they spend outside”. Additionally, drivers appreciated the graphic that compared normal, pre-hypertensive, and hypertensive levels to the green, yellow, and red lights on a traffic light (Fig. 1) [23].

However, there was still a need for further adaptation for this occupational group. For example, many drivers stated that street food was the processed or fast food that they most commonly consumed due to its easy accessibility from the

car. Therefore, street food was added to the list of processed or fast foods that drivers should avoid.

**Original Text:** Avoid processed and packaged food, like sausages, hot dogs, and canned foods. These foods usually contain high levels of salt, also known as sodium, and fat.

**Modified Text:** Avoid processed, “fast”, and packaged food, like sausages, hot dogs, *street food*, and canned foods. These foods usually have high levels of salt, also known as sodium, and fat.

Drivers commented that hiking would be a difficult form of exercise to practice regularly because of their lack of access to natural areas in their working and living environments. This activity was replaced with going to the gym.

**Original Text:** Plan to include different activities:

-Hiking

**Modified Text:** Plan to include different activities:

-Join a gym! Gyms can cost as little as \$10/month.

## Adaptation of Nutrition Information

The nutrition materials in particular were found to need modifications for the immigrant drivers. For example, the recommended artichokes and Brussels sprouts were not generally consumed, whereas okra and eggplant were popular among West African and South Asian drivers. Tomatoes were popular among West African, South Asian, and Latin American drivers. Pears were replaced with guava as requested by all ethnic groups. Latin American drivers requested the inclusion of avocados. Additionally, Hindu, vegetarian drivers brought attention to the overrepresentation of meats, fish, and poultry as protein options. Examples



Fig. 1 Color-coded blood pressure levels displayed in traffic light [23]

of cultural adaptations to the nutrition information can be found below.

**Original Text:** Vegetables (like artichokes, broccoli, Brussels sprouts, spinach, collard greens, kale, cabbage, cauliflower)

**Modified Text:** Vegetables (like *green beans*, broccoli, *okra*, spinach, collard greens, kale, cabbage, cauliflower, *tomatoes*, *eggplant*, *peas*)

**Original Text:** Fruits (like apples, grapefruits, raspberries, blackberries, pears)

**Modified Text:** Fruits (like apples, grapefruits, raspberries, blackberries, *guava*)

**Original Text:** Eat more fatty fish: mackerel, lake trout, herring, sardines, albacore tuna, and salmon are high in good fats (called omega-3 s)

**Modified Text:** *Eat more good fat: fatty fish such as salmon and tuna are high in good fats (called omega-3 s). Avocados and nuts also have good fats, but should be eaten in small amounts.*

## Visuals

Visuals were popular among drivers and were often noted to be good supplements to the material presented. For example, drivers indicated that the USDA MyPlate visual (Fig. 2) [20] was very useful for interpreting the recommended daily portions listed in the text.

Visuals were also taken very literally. Many drivers interpreted a lemon pictured on a section pertaining to fruit consumption as a recommendation to consume lemons (Table 1, Item 1). Therefore, the lemon was replaced with a banana, a more commonly consumed yellow fruit, and one that can be easily eaten during the taxi drivers' workday. Finally, drivers found complex visuals that required large amounts of accompanying text for accurate interpretation to be confusing, and preferred simple

visuals. The portion control aid we originally used [21] was replaced with a simpler graphic with less text [22] (Table 1, Item 2).

## Calculations

Drivers found mathematical calculations, and information that required calculations to be understood, to be difficult, stating that the calculations were “too much.” As a result, a conversion of grams of sugar to teaspoon was replaced with the maximum recommended amount of sugar in both grams and teaspoons. A sample nutrition label (Fig. 3) [24, 25] was amended with values that were divisible by two or three instead of values that needed to be divided by 6. However, the nutrition label remained difficult for the drivers to understand, Drivers additionally, had difficulty understanding the recommended amount of physical activity because they could not successfully convert the time given in minutes into hours. One driver converted 150 min into one and a half hours and several could not successfully divide the number of minutes among several days of the week.

**Original Text:** Men: 9 teaspoons maximum per day.  
4.2 g = 1 teaspoon sugar

**Modified Text:** *Remember that men should eat less than 9 teaspoons of sugar each day, including what is found in foods they buy. That is equal to 38 g of sugar.*

**Original Text:** Most adults should get at least 150 min per week of moderate physical activity.

**Modified Text:** Most adults should get least *two and a half hours* per week of moderate physical activity.

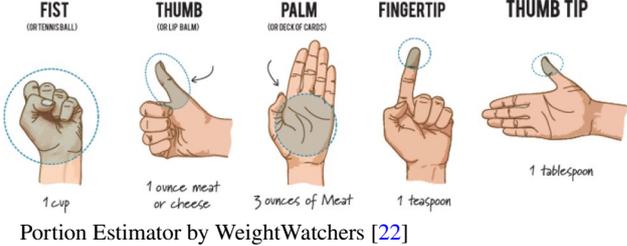
**Fig. 2** MyPlate from the USDA [20]



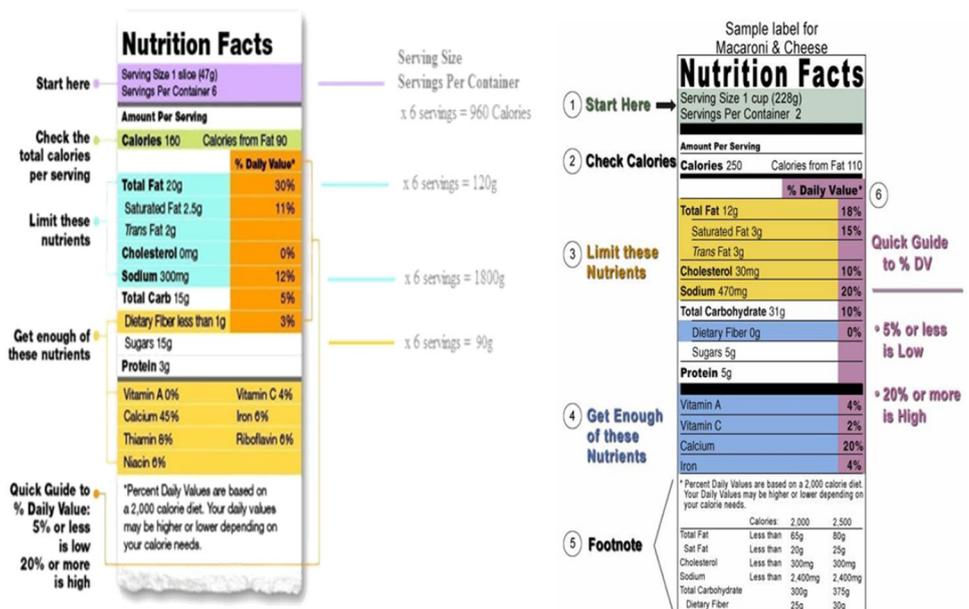
### Recommended Daily Portions:

- 2 cups of fruits
- 2 ½ cups of vegetables
- 2 ½ cups (or 5 oz) of whole grains such as cooked brown rice, whole grain cereal, whole wheat pasta (1 slice of whole wheat bread= 1 oz of grains)
- 3 cups of low fat dairy
- Limit oil to 2-3 teaspoons a day
- 5 ½ oz of protein (like meat, poultry, fish or tofu) or 2 portions of protein that are the size of your palm

**Table 1** Visual aid modifications

Item no.	Pre-interviewing	Item context	Post interviewing
1		Accompanied slide with recommendation to eat different colors of fruits	
2			

**Fig. 3** Nutrition label by the American Heart Association and Sample Label for Macaroni and Cheese by the FDA [24, 25]



## Discussion and Conclusion

### Discussion

These findings reinforce existing literature, which has shown that cognitive interviewing is a successful technique

for identifying issues with language and phrasing in written materials. However, this study also introduces novel findings, such as difficulties understanding colloquialisms, unique to immigrant populations who speak English as a second language and have low English literacy. This indicates the particular utility of cognitive interviewing when used in immigrant populations.

This study also provided insight into cultural preferences, particularly with respect to nutrition. Through cognitive interviewing techniques, it became apparent that the nutrition recommendations in the materials required further adaptation to suit the diverse taxi driver population. Adaptations to other driver characteristics, such as occupation, were widely appreciated and enriched through the interviewing process. Thus, cognitive interviewing was effective in revealing occupation-specific and ethnic-specific preferences that encouraged engagement with the information presented in the materials.

Finally, these findings had implications for the creation of health materials for immigrant and low literacy populations. Health materials should be written at a fifth-grade reading level and complex language should be replaced with low register wording. Simple visual aids should accompany text to improve understanding of the materials. Additionally, calculations should be avoided, and if they are necessary, only include basic computations, such as doubling or halving.

## Conclusion

Cognitive interviewing within the target population resulted in further adjustments in the materials' literacy level, changes to nuanced English language use, avoidance of jargon and terminology, and edits to clarify messaging. Driver feedback indicated that the literacy level of the materials needed to be reduced from an eighth-grade reading level to a fifth-grade reading level. Colloquialisms, complex terminology, and vague phrasing needed to be replaced with low register language and clarifying examples to improve understanding.

Cognitive interviewing also identified strengths and weaknesses in the cultural tailoring of the materials. Interviewing identified that the culturally-linked foods of Latin Americans, West Africans, and South Asians needed greater representation. All ethnic groups requested the inclusion of foods commonly eaten in their culture, such as tomatoes, guava, and avocados. Meatless food options needed to be added to accommodate Hindu vegetarians. On the other hand, occupation-specific items, such as the exercise activities that can be performed in the car, were widely appreciated by the target population. Interviewing identified further areas that required tailoring to drivers, such as the addition of street foods to a list of foods that should be avoided.

Cognitive interviewing also identified visuals as the preferred method of communication in this population. Simple visuals were found to facilitate comprehension of the messages. Thus, visuals with excessive wording were replaced, as in Item 2 of Table 1, and visuals were altered to more closely represent recommendations, as in Item 1 of Table 1.

Additionally, information that required mathematic calculations for understanding proved to be too complex. Exercise

and nutrition recommendations were modified to include commonly used and easily measurable units and calculations were omitted when they could be replaced with text.

One limitation of this study is that responses were not audio recorded, therefore there is a risk that some of the responses were not completely or accurately transcribed by the interviewers. Additionally, to minimize driver burden (time is money for the drivers), demographic variables, such as age, years of driving experience, country of birth, and years of residency in the United States, native language, and English language proficiency level were not collected. However, interviews were conducted with a diverse group of immigrant drivers, facilitating generalizability. Cognitive interviews should be conducted iteratively with the target population to improve the understanding and acceptance of the materials.

## Practice Implications

Cognitive interviewing is a useful technique for refining and tailoring health education materials in immigrant populations. Cognitive interviewing revealed cultural gaps, language issues, and communication preferences that can be used to improve the effectiveness of health education and counseling in practice, especially in immigrant and low literacy populations.

**Acknowledgements** This work was supported by National Cancer Institute P30 CA008748 Core Cancer Center Support Grant; National Institute on Minority Health and Health Disparities, U01 MD010648 Taxi STEP (Social networks, Technology, and Exercise through Pedometers), and National Institute of Nursing Research, R01 NR015265 Taxi HAILL (Taxi Health Access Interventions for Linkages and Lifestyle).

## Compliance with Ethical Standards

**Conflict of interest** The authors declare that they have no conflict of interest.

## References

1. Mazor, S. S., Hampers, L. C., Chande, V. T., & Krug, S. E. (2002). Teaching Spanish to pediatric emergency physicians: Effects on patient satisfaction. *Archives of Pediatrics & Adolescent Medicine*, *156*(7), 693–695.
2. McElmurry, B. J., McCreary, L. L., Park, C. G., et al. (2009). Implementation, outcomes, and lessons learned from a collaborative primary health care program to improve diabetes care among urban Latino populations. *Health Promotion Practice*, *10*(2), 293–302. <https://doi.org/10.1177/1524839907306406>.
3. Majumdar, B., Browne, G., Roberts, J., & Carpio, B. (2004). Effects of cultural sensitivity training on health care provider attitudes and patient outcomes. *Journal of Nursing*, *36*(2), 161–166.

4. Ernst, F. A. (2005). Speaking of health: Assessing health communication, strategies for diverse populations. *Journal of the National Medical Association*, 97(6), 846–.
5. Kreuter, M. W., & McClure, S. M. (2004). The role of culture in health communication. *Annual Review of Public Health*, 25, 439–455.
6. Kalichman, S. C., Kelly, J. A., Hunter, T. L., Murphy, D. A., & Tyler, R. (1993). Culturally tailored HIV-AIDS risk-reduction messages targeted to African-American urban women: Impact on risk sensitization and risk reduction. *Journal of Consulting and Clinical Psychology*, 61(2), 291–295.
7. Vincent, D. (2009). Culturally tailored education to promote lifestyle change in Mexican Americans with type 2 diabetes. *Journal of the American Association of Nurse Practitioners*, 21(9), 520–527.
8. Collins, D. (2003). Pretesting survey instruments: An overview of cognitive methods. *Quality of Life Research*, 12(3), 229–238.
9. Willis, G. B. Cognitive interviewing. A 'how to' guide. 2005.
10. Beatty, P. C., & Willis, G. B. (2007). Research synthesis: The practice of cognitive interviewing. *Public Opinion Quarterly*, 71(2), 287–311. <https://doi.org/10.1093/poq/nfm006>.
11. Campanelli, P. Testing survey questions: New directions in cognitive interviewing. *BMS Bulletin of Sociological Methodology*. 1997; (55):5–17.
12. Carbone, E. T., Campbell, M. K., & Honess-Morreale, L. (2002). Use of cognitive interview techniques in the development of nutrition surveys and interactive nutrition messages for low-income populations. *Journal of the American Dietetic Association*, 102(5), 690–696.
13. Rosal, M. C., Carbone, E. T., & Goins, K. V. (2003). Use of cognitive interviewing to adapt measurement instruments for low-literate Hispanics. *The Diabetes Educator*, 29(6), 1006–1017.
14. Burgel, B. J., Gillen, M., & White, M. C. (2012). Health and safety strategies of urban taxi drivers. *Journal of Urban Health*, 89(4), 717–722.
15. Kurosaka, K., Daida, H., Muto, T., Watanabe, Y., Kawai, S., & Yamaguchi, H. (2000). Characteristics of coronary heart disease in Japanese taxi drivers as determined by coronary angiographic analyses. *Industrial Health*, 38(1), 15–23.
16. New York City Taxi and Limousine Commission. Taxicab factbook. 2016.
17. US Department of Health and Human Services and US Department of Agriculture. 2015–2020 Dietary Guidelines for Americans. Washington, DC US Dept of Health and Human Services. December 2015; 8th ed.
18. US Department of Health and Human Services. 2008 physical activity guidelines for Americans. 2008.
19. American Heart Association. Answers by Heart Fact Sheets. (n.d.).
20. USDA Center for Nutrition Policy and Promotion. MyPlate. In: M. Graphic (Ed.) [choosemyplate.gov](http://choosemyplate.gov): USDA; 2013.
21. Guard Your Health. Infographic: Hand Guide to Portion Control. Guard Your Health 2013.
22. Weight Watchers. Portion Estimator. In: P. Estimator (Ed.) [weightwatchers.com](http://weightwatchers.com): Weight Watchers.
23. Immigrant Health and Cancer Disparities at Memorial Sloan Kettering Cancer Center. Color-coded Blood Pressure Levels Displayed in Traffic Light. 2018.
24. FLIPcancerNow. Nutrition labels: Unriddled!. (2013). Retrieved August 28, 2018 from <https://flipcancer.org/2013/08/nutrition-labels-unriddled/>.
25. U.S. Food & Drug Administration. How to Understand and Use the Nutrition Facts Label. (2018). Retrieved August 24, 2018 from <https://www.fda.gov/food/labelingnutrition/ucm274593.htm#see4>.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.