

## Developing & Assessing Nutrition Education Handouts (DANEH) Checklist

The Developing & Assessing Nutrition Education Handouts (DANEH) checklist was created by the Academy of Nutrition and Dietetics Foundation as part of the Future of Food (FOF) project. The purpose of the DANEH checklist is twofold: 1) to screen existing nutrition education handouts in order to establish the inclusion/exclusion of important quality components, and; 2) as a tool to use in developing quality nutrition education handouts. The checklist incorporates 21 constructs identified as quality indicators to be included in nutrition education handouts, based on a literature review. The constructs are categorized into five main topic areas: content; behavior focus; cultural sensitivity; written word; and organization/readability.

Results of DANEH validation testing proved that DANEH is a valid tool and has good interrater reliability for handouts for a general low-income audience when RDNs are the reviewers. It is recommended that a score of 18 out of 21 possible points (86%) by two reviewers is the cutpoint for handouts to be considered high quality handouts. For handouts with a score of 17, it is recommended that a 3<sup>rd</sup> reviewer rates the handout using DANEH. It is recommended that handouts with a score of 16 or less are not considered high quality.

The DANEH checklist is used to vet nutrition education handouts for inclusion on [HungerandHealth.org](http://HungerandHealth.org) for a target audience of individuals experiencing food insecurity. All handouts posted on [www.HungerandHealth.org](http://www.HungerandHealth.org) have been approved using the DANEH checklist.

## Nutrition Education Handout Checklist

### Scoring Criteria

#### **Content:**

##### **Current, accurate, and consistent with USDA Dietary Guidelines and MyPlate**

(required 'yes' for approval)

Yes

Check "yes" if the content promotes current, evidence-based recommendations, and is consistent with USDA Dietary Guidelines and MyPlate.

No

Check "no" if the content is based on outdated information (including MyPyramid).

Comments: \_\_\_\_\_

\_\_\_\_\_

##### **Promotes relevant health issues for target audience**

Yes

Check "yes" if the content addresses a relevant health issue of the target audience (i.e., reducing sodium for African-American audiences).

No

Check "no" if the content is not relevant to the target audience (i.e., eating organic fruits and vegetables for low-income audiences).

Comments: \_\_\_\_\_

\_\_\_\_\_

##### **Clear purpose**

Yes

Check "yes" if it is immediately clear what the handout will tell you or how it can help you.

No

Check "no" if you have to read much of the content before you realize what the handout will tell you or how it can help you.

Comments: \_\_\_\_\_

\_\_\_\_\_

**Total Content Score \_\_\_\_\_**  
**(3 possible 'yes' responses)**

**Behavior Focus:**

**One or two main themes**

Yes

Check “yes” if the handout contains no more than two main themes. For example, a handout with ten strategies to shop on a budget has one main theme, shopping on a budget.

No

Check “no” if the handout contains three or more main themes. For example, a handout that covers tips for healthy snacks, physical activity, and bedtime routines contains three main themes.

Comments: \_\_\_\_\_

\_\_\_\_\_

**Specific examples of desired behavior**

Yes

Check “yes” if the handout clearly instructs a person what to do, and how to do it through specific examples. For example, “Play active games with your kids, like hide-and-go-seek, double Dutch jump rope, or tag.”

No

Check “no” if the handout provides vague recommendations without specific examples of desired behavior. For example, “Be more physically active.”

Comments: \_\_\_\_\_

\_\_\_\_\_

**Total Behavior Focus Score \_\_\_\_\_**  
**(2 possible ‘yes’ responses)**

### **Cultural Sensitivity:**

#### **Culturally appropriate content for target audience**

Yes

Check "yes" if the handout is intended for a general audience and includes many cultural food and behavior practices. Check "yes" if the target audience is a specific culture, and the handout includes appropriate food and behavior examples for that culture.

No

Check "no" if the handout is intended for a general audience and does not include culturally diverse food and behavior practices. Check "no" if the target audience is of a specific culture and the handout does not represent appropriate food and behaviors for that culture.

Comments: \_\_\_\_\_

\_\_\_\_\_

#### **Culturally appropriate images for target audience**

Yes

Check "yes" if the handout is intended for a general audience and includes images that respectfully represent many cultures, including the people, places and foods pictured. Check "yes" if the target audience is a specific culture, and the handout includes images of people, places, and foods from that culture.

No

Check "no" if the handout is intended for a general audience and does not include images that respectfully represent many cultures. Check "no" if the target audience is of a specific culture and the handout does not include appropriate images representing that culture.

Comments: \_\_\_\_\_

\_\_\_\_\_

**Total Cultural Sensitivity Score \_\_\_\_\_**  
**(2 possible 'yes' responses)**

**Written Word:**

**Simple, common words**

Yes

Check "yes" if simple, common words are used frequently, with limited use of abbreviations, acronyms, and technical jargon.

No

Check "no" if complex and unfamiliar words are used frequently or if abbreviations, acronyms, and technical jargon appear excessively.

Comments: \_\_\_\_\_

**Positive messages**

Yes

Check "yes" if messages focus mostly on the positive behavior desired, i.e. "do this."

No

Check "no" if the messages focus mostly on the negative behavior to change, i.e. "don't do this."

Comments: \_\_\_\_\_

**Active voice, second person (you/your), conversational tone**

Yes

Check "yes" if the handout refers to the second person (i.e. "you/your"), stays in the present tense, and uses a conversational/friendly tone. For example, "Offer healthy and tasty after school snacks for your kids, like grapes or cheese sticks."

No

Check "no" if handout refers to the third person, uses the past tense, and/or is too formal. For example, "Parents need to provide nutrient-dense foods in-between meals for their children and adolescents."

Comments: \_\_\_\_\_

**Repetition of key words and/or new concepts**

Yes

Check "yes" if key words and/or new concepts are repeated effectively for reinforcement, or if repeating key words is not necessary (i.e. for a very short handout).

No

Check "no" if repeating key words and/or new concepts would be effective for reinforcement, but are missing.

Comments: \_\_\_\_\_

**Total Written Word Score \_\_\_\_\_  
(4 possible 'yes' responses)**

## Organization and Readability

### Logical order, most important message first

Yes

Check "yes" if the information is displayed in a logical order, with the most important messages listed first.

No

Check "no" if information is disorganized, and/or the most important messages do not appear until later in the handout.

Comments: \_\_\_\_\_

\_\_\_\_\_

### Short paragraphs

Yes

Check "yes" if each paragraph is short (60 words or less) and only contains one topic. Check "yes" if the handout does not contain paragraphs.

No

Check "no" if each paragraph is long (over 60 words) and/or contains two or more topics.

Comments: \_\_\_\_\_

\_\_\_\_\_

### Space around headings and text

Yes

Check "yes" if there is a ½ inch margin around the perimeter of the handout and has at least a double space before headings.

No

Check "no" if the margins are less than ½ inch around the perimeter of the handout and/or there is little space before headings.

Comments: \_\_\_\_\_

\_\_\_\_\_

### Blocks of text are left-justified

Yes

Check "yes" if blocks of text are left-justified.

No

Check "no" if blocks of text are centered or right-justified.

Comments: \_\_\_\_\_

\_\_\_\_\_

**Bullets, numbers, and tables**

Yes

Check "yes" if bullets, numbers, and/or tables appear often.

No

Check "no" if the handout contains mostly text, and few bullets, numbers, or tables.

Comments: \_\_\_\_\_

**Several informative headings/subheadings**

Yes

Check "yes" if several headings/subheadings are present to help identify what the text will tell you next.

No

Check "no" if few headings/subheadings are present, and/or if the headings/subheadings do not inform you what the text will tell you next.

Comments: \_\_\_\_\_

**Easy to read font**

Yes

Check "yes" if font is at least 12 point, and is serif (with feet, like Times Roman) or sans serif (without feet, like arial).

No

Check "no" if font is smaller than 12 point, and is fancy or curly.

Comments: \_\_\_\_\_

**Important text is bolded or underlined if necessary**

Yes

Check "yes" if emphasizing text, bolding and underlining are used. Check "yes" if no emphasis of text is needed, (i.e. for a very short handout).

No

Check "no" if emphasizing text uses all caps or italics.

Comments: \_\_\_\_\_

**Purposeful and relevant images**

Yes

Check “yes” if images show instruction or the desired behavior, are placed near relevant text, and include captions when necessary to describe the behavior or emphasize a point.

No

Check “no” if images do not show instruction or the desired behavior, are not placed near relevant text, or do not include captions as necessary.

Comments: \_\_\_\_\_

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**5<sup>th</sup> grade reading level**

Yes

Check “yes” if handout is written at or below a 5<sup>th</sup> grade reading level.

No

Check “no” if handout is written at a 6<sup>th</sup> grade reading level or higher.

Three options for determining reading level:

**Option #1: Word Readability Program**

1. Set up readability program:

- a. Click Review
- b. Click Spelling & Grammar
- c. Click Options
- d. Select Show readability statistics

2. Select, copy, and paste text into Word. Fix any sentences that were separated when cutting and pasting from pdf to Word.

3. Under Review, click Spelling and Grammar Check.

4. Look for the FleschKincaid Grade Level of the bottom of the Spelling and Grammar box.

**Option #2: Readability Score Website**

1. Visit <https://readabilityscore.com/>.

2. Select, copy, and paste text into the online readability score tool. (No need to fix any separated sentences.)

3. Look for the FleschKincaid Grade Level at the right of the screen.



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**Option #3: Readability Formula By Hand**

1. Select three samples of 100 word passages randomly.
2. Count the number of sentences in all three 100 word passages, estimating the fraction of the last sentence to the nearest 1/10th.
3. Count the number of syllables in all three 100 word passages. Make a table as follows:  
Number of Sentences Number of Syllables  
First 100 words \_\_\_\_\_  
Second 100 words \_\_\_\_\_  
Third 100 words \_\_\_\_\_  
Total \_\_\_\_\_  
Average \_\_\_\_\_
4. View <http://www.readabilityformulas.com/graphics/frygraph2lg.jpg> and enter the graph with Average Sentence Length and Number of Syllables. Plot where the two lines intersect. Area where dot is plotted signifies the approximate reading grade level of the content.
5. If you find a great deal of variability, you can put more sample counts into the average.

\*(Source: Readability formulas.

<http://www.readabilityformulas.com/frygraphreadabilityformula>)

Comments: \_\_\_\_\_

\_\_\_\_\_

**Total Organization and Readability Score \_\_\_\_\_**  
**(10 possible 'yes' responses)**

Total Score \_\_\_\_\_

Overall Comments:

**Approval**

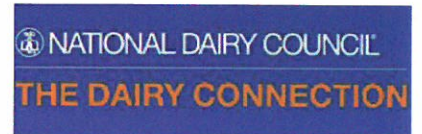
In my professional opinion, I consider this handout a quality nutrition education handout.

Yes

No

By: \_\_\_\_\_

Date: \_\_\_/\_\_\_/\_\_\_



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### References:

1. U.S. Department of Health & Human Services Centers for Medicare & Medicaid Services. Toolkit for Making Written Material Clear and Effective. <http://www.cms.gov/Outreach-and-Education/Outreach/WrittenMaterialsToolkit/index.html?redirect=/WrittenMaterialsToolkit/> Accessed December 10, 2012.
2. Tolma, E, John, R, Garner, J. Evaluation of United States Department of Agriculture-Sponsored Consumer Materials Addressing Food Security. *Am J of Health Promotion*. 2007; 21:164-174.
3. National Cancer Institute. Pink Book: How to Make Health Communication Programs Work. <http://www.cancer.gov/cancertopics/cancerlibrary/pinkbook/page1/AllPages> Accessed December 10, 2012.
4. Network for a Healthy California. Developing Nutrition Education Material for Low Literacy Audiences. <http://www.cdph.ca.gov/programs/cpns/Documents/Network-DevelopingLowLiteracyMaterials.pdf> Accessed December 10, 2012.
5. Peregrin, T. Picture This: Visual Cues Enhance Health Education Messages for People with Low Literacy Skills. *J Amer Diet Assoc*. 2010; 110:S28-S32.
6. Eliassen, E, Wilson, M. Selecting Appropriate Elementary School Nutrition Education Resources. *Am J of Health Studies*. 2007; 22:224-227.
7. U.S. Department of Health and Human Services. Centers for Disease Control. Quick Guide to Health Literacy. <http://www.health.gov/communication/literacy/quickguide/Quickguide.pdf> Accessed December 10, 2012.
8. Cancer Patient Education Network. Suitability Assessment of Materials. <http://www.cancerpatienteducation.org/health-literacy/hcp-training/StM-PrincesMgt Clinicians SAM Scoring Sheet.pdf> Accessed December 10, 2012.
9. U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. Simply Put: A Guide for Creating Easy-to Understand Materials. [http://www.cdc.gov/healthliteracy/pdf/simply\\_put.pdf](http://www.cdc.gov/healthliteracy/pdf/simply_put.pdf) Accessed December 10, 2012.
10. National Cancer Institute. Clear & Simple. Developing Effective Print Materials for Low-Literate Readers. <http://www.cancer.gov/cancertopics/cancerlibrary/clear-and-simple/page1> Accessed December 10, 2012.
11. Kirkpatrick, MA, Mohler, CP. Using the Readability Assessment Instrument to Evaluate Patient Medication Leaflets. *Drug In J*. 1999; 33:557-563.
12. National Institutes of Health. Clear Communication: A NIH Health Literacy Initiative. <http://www.nih.gov/clearcommunication/healthliteracy.htm> Accessed December 10, 2012.
13. Buono, K. Food Research and Action Center. Creating CACFP Materials in a Low Literacy Format. [http://frac.org/newsite/wp-content/uploads/2009/05/tool\\_kit.pdf](http://frac.org/newsite/wp-content/uploads/2009/05/tool_kit.pdf) Accessed December 10, 2012.
14. Plain Language. Document Checklist for Plain Language. [www.plainlanguage.gov](http://www.plainlanguage.gov) Accessed December 11, 2012.
15. Wilson, M. Readability and Patient Education Materials Used for Low-Income Populations. *CJ Nurse Specialist*. 2009; 23:33-40.
16. McCray, AT. Promoting Health Literacy. *J Am Med Inform Assoc*. 2005; 12:152-163.
17. Story M, Stang J (eds) *Nutrition and the Pregnant Adolescent: A Practical Reference Guide*. Minneapolis, MN: Center for Leadership, Education, and Training in Maternal and Child Nutrition, University of Minnesota, 2000.
18. Readability Formulas. <http://www.readabilityformulas.com/fry-graph-readability-formula.php> Accessed December 11, 2012.