



## Data Article

# The dataset for the assessment of the inflammatory potential of the overall diet consumed by women of childbearing age



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## ARTICLE INFO

## Article history:

Received 3 May 2021

Revised 3 June 2021

Accepted 18 June 2021

Available online 21 June 2021

## Keywords:

Childbearing age

Block food frequency questionnaire

Anti-inflammatory

Pro-inflammatory food items

Dietary inflammatory score

## ABSTRACT

The data presented in this article is related to the research article titled "Racial differences in dietary choices and their relationship to inflammatory potential in childbearing age women at risk for exposure to COVID-19". This data article provides details of dietary intake data from 509 women (African American,  $n = 327$  and Caucasian American,  $n = 182$ ) who are residents of Birmingham, AL. All women were characterized for demographic and lifestyle factors and indicators of excess body weight (EBW) that are likely to influence overall dietary habits. Dietary intake data was collected by administering the modified version of the NCI validated Block food frequency questionnaire (98.2-isoflav version) that includes 110 food items of the original version (98.2 version) and an additional 24 phytochemical rich food items. The data article describes our approach to derive the dietary inflammatory score using a validated empirical dietary inflammatory index based on the frequency and the amount of consumption of each food item with minor modifications. This data will allow researchers to understand the composition of a Southern-style diet consumed by women of childbearing age and its relationship to inflammatory

DOI of original article: [10.1016/j.nutres.2021.04.004](https://doi.org/10.1016/j.nutres.2021.04.004)

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<https://doi.org/10.1016/j.dib.2021.107238>

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potential, EBW, dietary guidelines, dietary reference intakes or diet quality indices.

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## Specifications Table

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subject                        | Health and Medical Sciences - Nutrition                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Specific subject area          | The dataset for the assessment of the inflammatory score of the diet of women of childbearing age                                                                                                                                                                                                                                                                                                                                                                                                         |
| Type of data                   | Tables-3<br>Figure-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| How data were acquired         | Dietary data was obtained by administering NCI validated food frequency questionnaire (Block 98.2-isoflavon)                                                                                                                                                                                                                                                                                                                                                                                              |
| Data format                    | Raw, Analysed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Parameters for data collection | Data was obtained from women age 19–50 years                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Description of data collection | Information regarding demographics and lifestyle factors was obtained by administering a risk factor questionnaire. Height, weight and waist circumference were measured using standard procedures. BMI was computed using weight and height measurements. % body fat was measured using a TANITA bioelectrical impedance equipment. Dietary intake data that reflected the consumption of food items over the past 12 months was gathered using Block food frequency questionnaire (FFQ) 98.2-isoflavon. |
| Data source location           | Institution: University of Alabama at Birmingham<br>City/Town/Region: Birmingham, Alabama<br>Country: USA<br>Latitude and longitude (and GPS coordinates, if possible) for collected samples/data: 32° 19' 5 6280" N 86° 54' 8 2728 W<br>Primary data sources: unavailable                                                                                                                                                                                                                                |
| Data accessibility             | Repository name: Mendeley repository<br>Data identification number: 10.17632<br>Direct URL to data: Mendeley Data - Dietary Data                                                                                                                                                                                                                                                                                                                                                                          |
| Related research article       | Piyathilake CJ, Badiga S, Chappell AR, Johanning GL, Jolly PE. Racial differences in dietary choices and their relationship to inflammatory potential in childbearing age women at risk for exposure to COVID-19. <i>Nutr Res.</i> 2021 Apr 25;90:1-12. <a href="https://doi.org/10.1016/j.nutres.2021.04.004">https://doi.org/10.1016/j.nutres.2021.04.004</a> . Epub ahead of print. PMID: 34049184; PMCID: PMC8143979                                                                                  |

## Value of the Data

- The dietary intake data presents information that reflects the consumption of 134 food items over a 12-month period and their differences by socio-demographic and lifestyle factors.
- This data will allow researchers to understand the composition of a Southern-style diet consumed by women of childbearing age and its relationship to inflammatory potential, EBW, dietary guidelines, dietary reference intakes or diet quality indices.
- This data will be useful to provide tailored dietary advice to reproductive age women in order to improve the quality of their diet.

## 1. Data Description

The dataset deposited consists of demographic information, lifestyle factors and dietary intake data obtained from 509 women of aged 19–50 years who are residents of Birmingham, AL. Demographic data consists of age, race, level of education and indicators of excess body weight (EBW), namely, BMI, percentage of body fat and waist circumference and health insurance

**Table 1**

The distribution of demographics and lifestyle information.

| Demographic/lifestyle variables                                                                              | N (%)     |
|--------------------------------------------------------------------------------------------------------------|-----------|
| <b>Race</b>                                                                                                  |           |
| African American                                                                                             | 327 (64%) |
| Caucasian American                                                                                           | 182 (36%) |
| <b>BMI (kg/m<sup>2</sup>)</b>                                                                                |           |
| <25                                                                                                          | 203 (40%) |
| ≥25                                                                                                          | 306 (60%) |
| <b>% Body fat</b>                                                                                            |           |
| <33                                                                                                          | 201 (39%) |
| ≥33                                                                                                          | 308 (61%) |
| <b>Waist circumference (cm)</b>                                                                              |           |
| <88                                                                                                          | 208 (41%) |
| ≥88                                                                                                          | 301 (59%) |
| <b>Level of education</b>                                                                                    |           |
| Grades 7-11                                                                                                  | 105 (21%) |
| Completed high school/General Educational Development (GED)                                                  | 178 (35%) |
| Vocational/trade school                                                                                      | 9 (2%)    |
| Partial college education                                                                                    | 165 (32%) |
| Completed college                                                                                            | 47 (9%)   |
| Partial/completed graduation                                                                                 | 5 (1%)    |
| <b>Physical activity</b>                                                                                     |           |
| <150 minutes/week moderate activity                                                                          | 408 (80%) |
| ≥150 minutes/week moderate activity                                                                          | 101(20%)  |
| <b>Current smoking status</b>                                                                                |           |
| Current smokers                                                                                              | 189 (37%) |
| Non-current smokers                                                                                          | 320 (63%) |
| <b>Parity</b>                                                                                                |           |
| 0 live births                                                                                                | 170 (33%) |
| ≥1 live birth                                                                                                | 339 (67%) |
| <b>Health insurance</b>                                                                                      |           |
| Paid for medical care on their own or by partner, parents or other relatives                                 | 253 (50%) |
| Paid for medical care through health maintenance organization (HMO), Medicaid or other government assistance | 256 (50%) |

information. Lifestyle data variables include parity, level of physical activity (minutes/week) and current smoking status (yes/no). The distribution of demographic and lifestyle data of the population are presented in [Table 1](#). A majority of the women are African American (64%), have excess body weight (~60% based on BMI, % body fat or WC), completed high school education or higher education (79%), engaged in less than 150 min of moderate physical activity (80%), non-smokers (67%) and 67% with parity  $\geq 1$  at the time the data collection. 50% of the women paid their medical care on their own while 50% had coverage through health maintenance organization (HMO), Medicaid or other government assistance.

To obtain dietary intake data, we administered the Block food frequency questionnaire 98.2-isoflavon version, which contains 110 food items of the original questionnaire (98.2) and an additional 24 phytochemical containing food items. The Block associates merged those additional 24 food items shown in [Fig. 1](#) with the 98.2 version to create the 98.2-isoflavon version.

The dietary intake data deposited is in the form of Microsoft Excel spreadsheets at the following site: [Mendeley Data-Dietary Data](#). The **Excel sheet 1** provides information on the frequency and the amount of food items consumed, daily intakes of macro and micronutrients, phytochemicals, dietary fibre, servings of food groups (vegetables, fruits, grains, dairy, meat/beans, dairy and fat/sugar/sweets) and health indices (glycaemic index, glycaemic load and healthy eating index). The frequency of consumption of food items is presented as the following codes; 1 = never, 2 = a few times per year, 3 = once per month, 4 = 2-3 times per month, 5 = once per week, 6 = 2 times per week, 7 = 3-4times per week, 8 = 5-6 times per week, 9 = every day. To be consistent, we have converted the frequency of consumption of food items to per week. As shown in **Excel sheet 1**, the amount of food consumed is coded as 1, 2, 3, 4 referring to the

| HOW OFTEN                                                       | NEVER                 | A FEW TIMES per YEAR  | ONCE per MONTH        | 2-3 TIMES per MONTH   | ONCE per WEEK         | 2 TIMES per WEEK      | 3-4 TIMES per WEEK    | 5-6 TIMES per WEEK    | EVERY DAY             | HOW MUCH EACH TIME                             |                       |                       |                       |                       |
|-----------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                                              | 2                     | 3-4                   | 5+                    |                       |
| White wine                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many glasses? (one glass equals 3.5 fl oz) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Red wine                                                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many glasses? (one glass equals 3.5 fl oz) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Grape juice, canned or bottled                                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many glasses? (one glass equals 6 fl oz)   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Chocolate milk                                                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many glasses? (one glass equals 8 fl oz)   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Dark chocolate candy bar                                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many bars?                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Milk chocolate candy bar                                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many bars?                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Plums, raw                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How much                                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Frozen strawberries or canned peaches                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How much                                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Grapes, white, green, red                                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many each time                             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Grapes black or black berries                                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many each time                             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Raspberries, raw                                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many each time                             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Blueberries, raw                                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How much                                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cherries, raw, sweet                                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many each time                             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cherry tomatoes                                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many each time                             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Onion, fried, boiled, cooked or raw                             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many slices or rings?                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Canned tomato products                                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How much                                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Celery, raw                                                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many stalks?                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Lemon juice, canned, bottled or fresh (do not include lemonade) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many Tbsp.                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

  

| HOW OFTEN                                                                           | NEVER                 | A FEW TIMES per YEAR  | ONCE per MONTH        | 2-3 TIMES per MONTH    | ONCE per WEEK         | 2 TIMES per WEEK      | 3-4 TIMES per WEEK    | 5-6 TIMES per WEEK    | EVERY DAY             | HOW MUCH EACH TIME |                       |                       |                       |                       |
|-------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                                                                     |                       |                       |                       |                        |                       |                       |                       |                       |                       | 1                  | 2                     | 3-4                   | 5+                    |                       |
| <b>Tea: Hot &amp; Cold</b>                                                          |                       |                       |                       | one cup equals 8 fl oz |                       |                       |                       |                       |                       |                    |                       |                       |                       |                       |
| Brewed flavored green, oolong, decaffeinated black                                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many cups?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Instant diet, green ready-to-drink, black ready-to-drink diet, plain or flavored    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many cups?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Ready-to-drink plain & flavored, instant sweetened or unsweetened plain or flavored | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many cups?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Brewed green decaf                                                                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many cups?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Brewed black                                                                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many cups?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Brewed green                                                                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | How many cups?     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Fig. 1. 24 Phytochemical rich foods included to the Block FFQ 98.2.

serving sizes from small to large and M referring to missing data. **Excel sheet 2** provides the codes based on the number of servings from 1-4 or missing data as "M" for each food item or a group of similar items. **Excel sheet 3** provides the data dictionary for demographic and lifestyle variables, indicators of EBW, and food items provided in the excel sheet 1.

### 1.1. Summarization of dietary intake data

All food items were grouped into two categories based on their inflammatory potential as either anti-inflammatory foods (75 food items) or pro-inflammatory foods (55 food items) based on published reports of knowledge about their effects on overall diet-related inflammation score or inflammatory biomarkers [1–9] and further grouped based on their similarity further subdivided into various food groups as shown in [Table 2](#). The scoring of the food items based on the frequency and the amount of consumption of the food item(s) per week is presented in [Table 3](#).

## 2. Experimental Design, Materials and Methods

### 2.1. Data collection

The data was collected from 509 reproductive age women who are residents of Birmingham, AL. A risk factor questionnaire was administered to obtain information regarding demographics and lifestyle factors. Height, weight and waist were measured using standard procedures. BMI was computed using the weight and height measurements ( $\text{kg}/\text{m}^2$ ). Percentage body fat was measured using the TANITA bioelectrical impedance equipment.

### 2.2. Assessment of dietary intake

Self-administered dietary intake data was gathered using the modified version of the validated Block food frequency questionnaire (FFQ) 98.2-isoflavon that contain 134 food items (110 food items of the original version +24 phytochemical rich food items added). The study staff was available to provide guidance and clarity on questions and to check the completeness of answering questions. The questionnaire included information on the portion sizes of food items consumed and their frequency. Each participant was provided with portion size pictures to aid in choosing the accurate portion size. Information obtained from the FFQ data was processed by the Nutriquest (Mason City, IA 50401) using a database developed and updated from the USDA Nutrient Database for Reference standards. The data file provided by the Nutriquest included information on the estimates of the amount and the frequency of each food item as well as daily nutrient intakes of 40 nutrients of interest to the current study.

### 2.3. Calculation of the dietary inflammatory score (DIS)

Dietary data summarized was used to calculate the DIS using a similar method as described by Kannauchi et al [10] to derive the empirical dietary inflammatory index (eDII), an index based on the frequency and the amount of consumption of foods. Unlike in this previous method, we scored individual food items rather than food groups in order to obtain a more comprehensive score. Briefly, we grouped the food items consumed by each study participant as pro-inflammatory or anti-inflammatory based on published reports of knowledge about their effects on overall diet-related inflammation score or inflammatory biomarkers. [1–9] The food items grouped as anti-inflammatory ( $n = 75$ ) or pro-inflammatory ( $n = 55$ ); respectively and were further grouped based on their similarity. We computed the weekly consumption of each

**Table 2**

Foods items grouped based on their similarity and their inflammatory effect.

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**Anti-inflammatory Foods**

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**Vegetable/fruit juices**

- Tomato juice or V8 juice
- Real 100% orange juice or grapefruit juice including fresh, frozen or bottled
- Grape juice
- Other real juices like apple juice, prune juice, lemonade
- Lemon juice canned, bottled or fresh

**Health drinks**

- Instant breakfast milkshakes like carnation, diet shakes like slim fast or liquid supplements like Ensure

**Coffee/tea beverages**

- Coffee regular or decaf
- Tea or iced tea
- Brewed flavored green, oolong, decaffeinated black tea
- Instant diet tea
- Ready to drink tea
- Brewed green tea decaf
- Brewed black tea
- Brewed green tea

**Milk**

- Milk
- Milk or milk substitutes on cereals
- Ice cream, ice milk, ice cream bars
- Yogurt or frozen yogurt

**Alcoholic beverages**

- Wine (red or white)
- Beer or non-alcoholic beer
- Liquor or mixed drinks

**Fruits and berries**

- Raw peaches, apricots, nectarines (in season)
- Cantaloupe (in season)
- Strawberries (in season)
- Frozen strawberries
- Watermelon (in season)
- Bananas
- Apples or pears
- Orange or tangerines
- Grapefruit
- Plums, raw
- Frozen strawberries or canned peaches
- Grapes, white, red or green
- Grapes black or black berries
- Raspberries, raw
- Blueberries
- Cherries
- Others-honeydew, pineapple, kiwi (in season)
- Canned fruits like applesauce, fruit cocktail or dried fruit like raisins

**Vegetables and green leafy vegetables**

- Spinach
- Mustard greens, turnip greens, collards
- Broccoli
- Carrots or mixed vegetables or stews containing carrots
- Green beans and peas
- White potatoes not fried including boiled, baked, mashed, and potato salad
- Sweet potatoes, yams (not in pie)
- Raw tomatoes included in salad
- Cherry tomatoes
- Cole slaw, cabbage
- Celery raw
- Any other vegetables like okra, squash, cooked green peppers
- Canned tomato products

(continued on next page)

Table 2 (continued)

|                                                                  |
|------------------------------------------------------------------|
| Anti-inflammatory Foods                                          |
| <b>Onion</b>                                                     |
| Onions fried, boiled cooked or raw                               |
| <b>Bean or legume products</b>                                   |
| Split bean or lentil soup                                        |
| Refried beans                                                    |
| Baked beans, black-eyed peas, pintos, any other dried beans      |
| Chili with bean with or without meat                             |
| Tofu, bean curds                                                 |
| <b>Salad and salad dressing</b>                                  |
| Green salad                                                      |
| Raw tomatoes including in salad                                  |
| Salad dressing                                                   |
| <b>Vegetable stew and vegetable soup</b>                         |
| Vegetable stew                                                   |
| Vegetable soup, vegetable beef, chicken vegetable or tomato soup |
| <b>Cereals with high fiber</b>                                   |
| Cooked cereals like oat meal cream of wheat or grits             |
| High fiber cereals like all bran, raisin bran, fruit-n-fiber     |
| Dark bread like rye or whole wheat including in sandwiches       |
| <b>Fatty fish and shellfish</b>                                  |
| Oyster                                                           |
| Other shellfish like shrimps, scallops, crabs                    |
| Tuna, tuna salad, tuna casserole                                 |
| Other fish, not fried                                            |
| <b>Meat substitutes</b>                                          |
| Meat substitutes-veggie burgers and garden burgers               |
| <b>Nuts</b>                                                      |
| Peanuts, other nuts, or seeds                                    |
| Peanut butter                                                    |
| <b>Miscellaneous</b>                                             |
| Catsup, salsa or chili peppers                                   |
| Mustard soy sauce, steak sauce, barbecue sauce, other sauces     |
| Pro-inflammatory Foods                                           |
| <b>Beverages</b>                                                 |
| Regular soft drinks, bottled drinks like Snapple                 |
| Drinks with some juice in them like sunny delight, juice squeeze |
| Kool aid, HI C or other drinks with added vitamin C              |
| <b>Rice and cereal related foods</b>                             |
| Rice dish made with rice                                         |
| Chinese food, Thai or Asian                                      |
| Any other cold cereal like cornflakes, Special K                 |
| <b>Corn and related items</b>                                    |
| Corn                                                             |
| Corn bread or corn muffins                                       |
| Tortillas                                                        |
| <b>Refined foods-cakes, pastries, cookies, biscuits</b>          |
| Crackers                                                         |
| Doughnuts, Danish pastry                                         |
| Cakes, sweet rolls, coffee cake                                  |
| Cookies                                                          |
| Pancakes, waffles, French toast, pop tarts                       |
| Rolls, hamburger buns English muffin, bagels                     |
| Biscuits or muffins                                              |
| White bread or toast including French, Italian or in sandwiches  |
| <b>Pasta</b>                                                     |
| Noodles, macaroni, pasta salad                                   |
| Spaghetti lasagna or other pasta with tomato sauce               |

(continued on next page)

**Table 2** (continued)

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|                        |
|------------------------|
| Pro-inflammatory Foods |
|------------------------|

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|                                                                                                      |
|------------------------------------------------------------------------------------------------------|
| <b>Cheesy foods</b>                                                                                  |
| Cheese, sliced cheese or cheese spread including on sandwiches                                       |
| Cheese dishes without tomato sauce like macaroni and cheese                                          |
| Pizza including carry out                                                                            |
| <b>Eggs</b>                                                                                          |
| Eggs including egg biscuits or egg mcmuffins (not egg substitutes)                                   |
| <b>Meat-red, processed and organs</b>                                                                |
| Bacon                                                                                                |
| Beef steaks, roasts, pot roasts or in frozen dinners or sandwiches                                   |
| Pork chops, pork roasts or frozen dinners or sandwiches                                              |
| Veal, lamb or deer meat                                                                              |
| Ribs, spareribs                                                                                      |
| Liver including chicken livers or liverwurst                                                         |
| Gizzard, pork neck bones, chitins, pig feet etc.                                                     |
| Mixed dishes with beef or pork, like stew, corned beef hash, stuffed cabbage, meat dish with noodles |
| Mixed dishes with chicken like chicken casserole, chicken and noodles pot pie or stir fry            |
| Chicken or turkey not fried such as baked, grilled or in sandwiches                                  |
| Boloney, sliced ham, turkey lunch meat, other lunch meat                                             |
| Tacos, burritos, enchiladas, tamales etc. with meat and chicken with focus on the amount of meat     |
| <b>Hot dogs, hamburgers, sausages</b>                                                                |
| Hot dogs or sausages like polish, Italian or chorizos                                                |
| Hamburgers, cheeseburgers, meat loafs, at home or in restaurant with focus on the amount of meat     |
| Breakfast sausages including sausage biscuits                                                        |
| <b>Fried foods</b>                                                                                   |
| Snacks like Potato chips, corn chip, popcorns (not pretzels)                                         |
| French fries, Fried potatoes or hash browns                                                          |
| Fried chicken at home or restaurant                                                                  |
| Fried fish or fish sandwich at home or in restaurant                                                 |
| <b>Pies and cobbler</b>                                                                              |
| Pumpkin pie, sweet potato pie                                                                        |
| Any other pie or cobbler                                                                             |
| <b>Candy and bars</b>                                                                                |
| Chocolate candy or candy bars                                                                        |
| Other candy, not chocolate, like hard candy, caramel, jelly beans                                    |
| Breakfast bars, granola bars, power bars                                                             |
| Milk chocolate bar                                                                                   |
| <b>Fats &amp; sugar</b>                                                                              |
| Margarine on bread or potatoes or vegetables                                                         |
| Butter on bread or potatoes or vegetables                                                            |
| Mayonnaise, sandwich spreads                                                                         |
| Sugar in tea or coffee                                                                               |
| Jelly, jam or syrup                                                                                  |
| <b>Miscellaneous</b>                                                                                 |
| Gravy                                                                                                |
| Other soups chicken noodle chowder, mushroom, instant soups                                          |

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food item using the frequency and quantity information reported by the participants. We then categorized the consumption of each food item into three groups of consumption level as high, moderate or low based on frequency and amount consumed per week and provided a score depending on whether the item was pro-inflammatory (+2, +1 or 0) or anti-inflammatory (-2, -1 or 0). The inflammatory scores of all items were then added to create the overall DIS for each study participant. For example, if the study participant had a score of -30 for the consumption of anti-inflammatory foods and a score of +35 for the consumption of pro-inflammatory foods, then the overall DIS for that participant is +5.



**Table 3**

Food item(s) scored as high, moderate or low (anti-inflammatory -2, -1 and 0 and proinflammatory +2, +1 and 0) based on the frequency and the amount of consumption of each item(s) per week.

| Anti-inflammatory Foods                                                                                   | Score                 |                           |                     |
|-----------------------------------------------------------------------------------------------------------|-----------------------|---------------------------|---------------------|
|                                                                                                           | -2 (high consumption) | -1 (moderate consumption) | 0 (low consumption) |
| <b>Vegetable/fruit juices</b>                                                                             |                       |                           |                     |
| Tomato Juice or V8 juice                                                                                  | ≥ 7 glasses           | 5-6 glasses               | < 5 glasses         |
| Real 100% orange juice or grapefruit juice including fresh, frozen or bottled                             | ≥ 7 glasses           | 5-6 glasses               | < 5 glasses         |
| Other real juices like apple juice, prune juice, lemonade                                                 | ≥ 7 glasses           | 5-6 glasses               | < 5 glasses         |
| Lemon juice canned, bottled or fresh                                                                      | ≥ 7 glasses           | 5-6 glasses               | < 5 glasses         |
| <b>Health drinks</b>                                                                                      |                       |                           |                     |
| Instant breakfast milkshakes like carnation, diet shakes like slim fast or liquid supplements like Ensure | ≥ 7 cans              | 5-6 cans                  | < 5 cans            |
| <b>Coffee/tea beverages</b>                                                                               |                       |                           |                     |
| Coffee regular or decaf                                                                                   | ≥ 14 cups             | 7-13 cups                 | < 7cups             |
| Tea or iced tea                                                                                           | ≥ 14 cups             | 7-13 cups                 | < 7cups             |
| Brewed flavored green, oolong, decaffeinated black tea                                                    | ≥ 14 cups             | 7-13 cups                 | < 7cups             |
| Brewed green decaf tea                                                                                    | ≥ 14 cups             | 7-13 cups                 | < 7cups             |
| Brewed black tea                                                                                          | ≥ 14 cups             | 7-13 cups                 | < 7cups             |
| Brewed green tea                                                                                          | ≥ 14 cups             | 7-13 cups                 | < 7cups             |
| <b>Milk</b>                                                                                               |                       |                           |                     |
| Milk                                                                                                      | ≥ 7 cups              | 5-6 cups                  | < 5 cups            |
| Ice cream, ice milk, ice cream bars                                                                       | > 3 cups              | 2 cups                    | < 2 cups            |
| Milk or milk substitutes on cereals                                                                       | ≥ 40 oz.              | 10-40 oz.                 | < 10 oz.            |
| Yogurt or frozen yogurt                                                                                   | ≥ 5 cups              | 3-4 cup                   | <3 cup              |
| <b>Fruits</b>                                                                                             |                       |                           |                     |
| Raw peaches, apricots, nectarines (in season) (number consumed)                                           | ≥ 5                   | 3-4                       | < 3                 |
| Cantaloupe (in season) (number consumed)                                                                  | ≥ 1                   | 1/2                       | < 1/2               |
| Strawberries (in season)                                                                                  | ≥ 3 cups              | 2 cups                    | < 2 cups            |
| Watermelon (in season)                                                                                    | ≥ 3                   | 2                         | < 2                 |
| Other seasonal fruits-honeydew, pineapple, kiwi                                                           | ≥ 3 cups              | 2 cups                    | < 2 cups            |
| Bananas (number consumed)                                                                                 | ≥ 5                   | 3-4                       | ≤ 2                 |
| Apples or pears (number consumed)                                                                         | ≥ 5                   | 3-4                       | ≤ 2                 |
| Orange or tangerines (number consumed)                                                                    | ≥ 5                   | 3-4                       | ≤ 2                 |
| Grape fruit (number consumed)                                                                             | ≥ 5                   | 3-4                       | ≤ 2                 |
| Plums, raw (number consumed)                                                                              | ≥ 5                   | 3-4                       | ≤ 2                 |
| Frozen strawberries or canned peaches                                                                     | ≥ 2 cups              | 1 cup                     | < 1 cup             |
| Grapes, white, red or green (number consumed)                                                             | ≥ 20                  | 19->10                    | ≤ 10                |
| Grapes, black or black berries (number consumed)                                                          | ≥ 20                  | 19->10                    | ≤ 10                |
| Raspberries, raw (number consumed)                                                                        | ≥ 20                  | 19->10                    | ≤ 10                |
| Blueberries (number consumed)                                                                             | ≥ 20                  | 19->10                    | ≤ 10                |
| Cherries (number consumed)                                                                                | ≥ 20                  | 19->10                    | ≤ 10                |
| Canned fruits like applesauce, fruit cocktail or dried fruit like raisins (number consumed)               | > 3 cups              | 2 cups                    | < 2 cups            |
| <b>Vegetables and green leafy vegetables</b>                                                              |                       |                           |                     |
| Broccoli                                                                                                  | ≥ 3 cups              | 2 cups                    | < 2 cups            |
| Carrots or mixed vegetables or stews containing carrots                                                   | ≥ 3 cups              | 2 cups                    | < 2 cups            |
| Green beans and green                                                                                     | ≥ 3 cups              | 2 cups                    | < 2 cups            |
| Spinach                                                                                                   | ≥ 3 cups              | 2 cups                    | < 2 cups            |
| Mustard greens, turnip greens, collards                                                                   | ≥ 3 cups              | 2 cups                    | < 2 cups            |
| Potato                                                                                                    | ≥ 5 cups              | 3-4 cups                  | < 3 cups            |

(continued on next page)

**Table 3** (continued)

| Anti-inflammatory Foods                                          | Score                 |                           |                           |
|------------------------------------------------------------------|-----------------------|---------------------------|---------------------------|
|                                                                  | -2 (high consumption) | -1 (moderate consumption) | 0 (low consumption)       |
| Sweet potatoes, yams (not in pie)                                | ≥ 5 cups              | 3-4 cups                  | < 3 cups                  |
| Any other vegetables like okra, squash, cooked green peppers     | ≥ 5 cups              | 3-4 cups                  | < 3 cups                  |
| Cole slaw, cabbage                                               | > 3 cups              | 2 cups                    | < 2 cups                  |
| Refried beans                                                    | > 3 cups              | 2 cups                    | < 2 cups                  |
| Chili with bean with or without meat                             | > 3 cups              | 2 cups                    | < 2 cups                  |
| Baked beans black eyed peas, pintos and any other dried beans    | > 3 cups              | 2 cups                    | < 2 cups                  |
| Raw tomatoes included in salad                                   | > 3 cups              | 2-3 cups                  | < 2 cups                  |
| Cherry tomatoes                                                  | > 3 cups              | 2-3 cups                  | < 2 cups                  |
| Celery raw                                                       | > 10 stalks           | 5-10 stalks               | < 5 stalks                |
| Canned tomato products                                           | > 3 cups              | 2-3 cups                  | < 2 cups                  |
| <b>Salad and salad dressings</b>                                 |                       |                           |                           |
| Green salad                                                      | ≥ 5 cups              | 3-4 cups                  | < 3 cups                  |
| Raw tomatoes including in salad                                  | > 5 cups              | 3-4 cups                  | < 3 cups                  |
| Salad dressings                                                  | > 7 tbsp              | 5-6 tbsp                  | < 5 tbsp                  |
| <b>Vegetable stew and vegetable soup</b>                         |                       |                           |                           |
| Vegetable stew                                                   | ≥ 5 bowls             | 3-4 bowls                 | < 3 bowls                 |
| Vegetable soup, vegetable beef, chicken vegetable or tomato soup | ≥ 5 bowls             | 3-4 bowls                 | < 3 bowls                 |
| <b>Beans and legumes</b>                                         |                       |                           |                           |
| Split peas, ban or lentil soups                                  | ≥ 5 bowls             | 3-4 bowls                 | < 3 bowls                 |
| Green beans and peas                                             | > 3 cups              | 2-3 cups                  | < 2 cups                  |
| Baked beans, black-eyed peas, pintos, any other dried beans      | > 3 cups              | 2-3cups                   | < 2 cups                  |
| Tofu, bean curds                                                 | ≥ 2cups               | 1 cup                     | < 1 cup                   |
| Split bean or lentil soup                                        | > 5 bowls             | 3-5 bowls                 | < 3 bowls                 |
| <b>Onion/garlic</b>                                              |                       |                           |                           |
| Onions fried, boiled cooked or raw                               | ≥ 2 cups              | 1 cup                     | < 1 cup                   |
| <b>Cereals and cereal products with high fiber</b>               |                       |                           |                           |
| Cooked cereals like oat meal cream of wheat or grits             | > 7 bowls             | 5-6 bowls                 | < 5 bowls                 |
| High fiber cereals like all bran, raisin bran, fruit fiber       | >7 bowls              | 5-6 bowls                 | < 5 bowls                 |
| Dark bread like rye or whole wheat including in sandwiches       | > 14 slices           | 7-13 slices               | < 7 slices                |
| <b>Fatty fish and shellfish</b>                                  |                       |                           |                           |
| Oyster                                                           | ≥ 2 cups              | 1 cup                     | < 1 cup                   |
| Other shellfish like shrimp, scallops, crabs                     | ≥ 2 cups              | 1 cup                     | < 1 cup                   |
| Tuna, tuna salad, tuna casserole                                 | ≥ 2 cups              | 1 cup                     | < 1 cup                   |
| Fried fish or fish sandwiches at home or in a restaurant         | ≥ 2 cups              | 1 cup                     | < 1 cup                   |
| Other fish, not fried                                            | ≥ 2 cups              | 1 cup                     | < 1 cup                   |
| <b>Meat substitutes</b>                                          |                       |                           |                           |
| Meat substitutes-veggie burgers and garden burgers               | > 5 patties           | 3-5 patties               | < 3 patties               |
| <b>Nuts</b>                                                      |                       |                           |                           |
| Peanuts, other nuts or seeds                                     | > 3 cups              | 2-3 cups                  | < 2 cups                  |
| Peanut butter                                                    | > 7 tsp               | 5-6 tsp                   | < 5 tsp                   |
| <b>Alcoholic beverages</b>                                       |                       |                           |                           |
| Wine (red or white)                                              | 7-20 glasses          | 2-6 glasses               | < 2 glasses, ≥ 21 glasses |
| Beer or non-alcoholic beer                                       | 7-13 bottles          | 5-6 bottles               | < 5 bottles, ≥ 13 bottles |
| Liquor or mixed drinks                                           | 7-13 bottles          | 5-6 bottles               | < 5 bottles, ≥14 bottles  |

(continued on next page)

Table 3 (continued)

| Anti-inflammatory Foods                                                   | Score                 |                           |                     |
|---------------------------------------------------------------------------|-----------------------|---------------------------|---------------------|
|                                                                           | -2 (high consumption) | -1 (moderate consumption) | 0 (low consumption) |
| <b>Miscellaneous</b>                                                      |                       |                           |                     |
| Catsup, salsa or chili peppers                                            | > 14 tbsp             | 7-13 tbsp                 | < 7 tbsp            |
| Mustard soy sauce, steak sauce, barbecue sauce, other sauces              | > 14 tbsp             | 7-13 tbsp                 | < 7 tbsp            |
| Pro-inflammatory Foods                                                    | Score                 |                           |                     |
|                                                                           | +2 (high consumption) | +1 (moderate consumption) | 0 (low consumption) |
| <b>Beverages</b>                                                          |                       |                           |                     |
| Regular soft drinks, bottled drinks like snapple                          | ≥ 7 bottles/          | 5-6 bottles               | < 5 bottles         |
| Drinks with some juice in them like sunny delight, Juice squeeze          | ≥ 7 bottles           | 5-6 bottles               | < 5 bottles         |
| Kool aid, HI C or other drinks with added vitamin C                       | ≥ 7 bottles           | 5-6 bottles               | < 5 bottles         |
| <b>Rice and cereal related foods</b>                                      |                       |                           |                     |
| Rice dish made with rice                                                  | > 7 cups              | 5-6 cups                  | < 5 cups            |
| Any other cold cereal like cornflakes, special K                          | > 5 bowls             | 3-4 bowls                 | < 3 bowls           |
| Chinese food, Thai or Asian                                               | ≥ 5 bowls             | 3-4 bowls                 | < 3 bowls           |
| <b>Corn and related items</b>                                             |                       |                           |                     |
| Corn                                                                      | > 3 cup               | 2 cup                     | < 2 cup             |
| Corn bread or corn muffins                                                | > 14 pieces           | 7-13 pieces               | < 7 pieces          |
| Tortillas (number consumed)                                               | > 14                  | 7-13                      | < 7                 |
| <b>Refined foods-cakes, pastries, cookies, biscuits</b>                   |                       |                           |                     |
| Crackers                                                                  | > 3 cups              | 2 cups                    | < 2 cups            |
| Doughnuts, Danish pastry (number consumed)                                | ≥ 5                   | 3-4                       | < 3                 |
| Cakes, sweet rolls, coffee cake                                           | > 15 pieces           | 10-15 pieces              | < 10 pieces         |
| Cookies (number consumed)                                                 | ≥ 14                  | 10-13                     | < 10                |
| Pancakes, waffles, French toast, pop tarts                                | > 7 pieces            | 5-6 pieces                | < 5 pieces          |
| Rolls, hamburger buns, English muffin bagels (number consumed)            | > 15                  | 10-15                     | < 10                |
| Biscuits or muffins (number consumed)                                     | > 7                   | 5-6                       | < 5                 |
| White bread or toast including French, Italian or in sandwiches           | > 14 slices           | 7-13 slices               | < 7 slices          |
| <b>Pasta</b>                                                              |                       |                           |                     |
| Noodles, macaroni, pasta salad                                            | ≥ 5 cups              | 3-4 cups                  | < 3 cups            |
| Spaghetti, lasagna or other pasta with tomato sauce                       | ≥ 5 cups              | 3-4 cups                  | < 3 cups            |
| <b>Cheesy foods</b>                                                       |                       |                           |                     |
| Cheese, sliced cheese or cheese spread including on sandwiches            | ≥ 14 slices           | 7-13 slices               | < 7 slices          |
| Cheese dishes without tomato sauce like macaroni and cheese               | ≥ 5 cups              | 3-4 cups                  | < 3 cups            |
| Pizza, including carry out                                                | ≥ 10 slices           | 7-9 slices                | < 7 slices          |
| <b>Eggs</b>                                                               |                       |                           |                     |
| Eggs including egg biscuits or egg mcmuffins (not egg substitutes)        | ≥ 7 eggs              | 5-6 eggs                  | < 5 eggs            |
| <b>Meat-red, processed and organ meat</b>                                 |                       |                           |                     |
| Bacon                                                                     | ≥ 7 eggs              | 5-6 eggs                  | < 5 eggs            |
| Pork chops, pork roasts or frozen dinners or sandwiches (number consumed) | ≥ 3                   | 2                         | < 2                 |
| Veal, lamb or deer meat                                                   | ≥ 3lb                 | 2lb                       | < 2lb               |
| Ribs, spare ribs                                                          | ≥ 10 ribs             | 5-9 ribs                  | < 5 ribs            |
| Liver, including chicken livers or liverwurst                             | ≥ 3lb                 | 2lb                       | < 2lb               |
| Gizzard, pork neck bones, chitlins, pig feet                              | ≥ 3lb                 | 2lb                       | < 2lb               |

(continued on next page)

**Table 3** (continued)

|                                                                                                      | Score                 |                           |                     |
|------------------------------------------------------------------------------------------------------|-----------------------|---------------------------|---------------------|
|                                                                                                      | +2 (high consumption) | +1 (moderate consumption) | 0 (low consumption) |
| <b>Pro-inflammatory Foods</b>                                                                        |                       |                           |                     |
| Mixed dishes with beef or pork, like stew, corned beef hash, stuffed cabbage, meat dish with noodles | ≥ 3lb                 | 2lb                       | < 2lb               |
| Mixed dishes with chicken like chicken casserole, chicken and noodles pot pie or stir fry            | ≥ 3lb                 | 2lb                       | < 2lb               |
| Chicken or turkey not fried such as baked, grilled or in sandwiches                                  | ≥ 3lb                 | 2lb                       | < 2lb               |
| Boloney, sliced ham, turkey lunch meat, other lunch meat                                             | ≥ 7slices             | 5-6 slices                | < 5 slices          |
| Tacos, burritos, enchiladas, tamales etc. with meat and chicken with focus on meat                   | ≥ 3lb                 | 2lb                       | < 2lb               |
| <b>Hot dogs, hamburgers, sausages</b>                                                                |                       |                           |                     |
| Hot dogs or sausages like polish, Italian or chorizos (number consumed)                              | ≥ 7                   | 5-6                       | < 5                 |
| Hamburgers, cheeseburgers, meat loafs, at home or in a restaurant with focus on amount of meat       | ≥ 2 lb                | 1 lb                      | < 1 lb              |
| Breakfast sausages including sausage biscuits (number consumed)                                      | ≥ 7                   | 5-6                       | < 5                 |
| <b>Fried foods</b>                                                                                   |                       |                           |                     |
| Snacks like potato chips, corn chip, popcorns (not pretzels)                                         | ≥ 5 bowls             | 3-4 bowls                 | < 3 bowls           |
| Fried chicken at home or at a restaurant                                                             | ≥ 7 pieces            | 5-6 pieces                | < 5 pieces          |
| French fries, fried potatoes or hash browns                                                          | > 5 cups              | 3-4 cups                  | < 3 cups            |
| Fried fish or fish sandwiches at home or at a restaurant                                             | > 3 cups              | 2-3 cups                  | < 2 cups            |
| <b>Pies and cobbler</b>                                                                              |                       |                           |                     |
| Pumpkin pie, sweet potato pie                                                                        | ≥ 3 slices            | 2 slices                  | < 2 slices          |
| Any other pie or cobbler                                                                             | ≥ 3 slices            | 2 slices                  | < 2 slices          |
| <b>Candy and bars</b>                                                                                |                       |                           |                     |
| Chocolate candy or candy bars                                                                        | ≥ 7 bars              | 5-6 bars                  | < 5 bars            |
| Other candy, not chocolate, like hard candy, caramel, jellybeans                                     | ≥ 20 pieces           | 10-20 pieces              | < 10 pieces         |
| Breakfast bars, granola bars, power bars                                                             | ≥ 20 bars             | 10-19 bars                | < 10 bars           |
| <b>Fat</b>                                                                                           |                       |                           |                     |
| Margarine on bread or potatoes or vegetables                                                         | ≥ 7 tsp               | 5-6 tsp                   | < 5 tsp             |
| Butter on bread or potatoes or vegetables                                                            | ≥ 7 tsp               | 5-6 tsp                   | < 5 tsp             |
| Mayonnaise, other sandwich spreads                                                                   | ≥ 7 tbsp              | 5-6 tbsp                  | < 5 tbsp            |
| Sugar in tea and coffee                                                                              | ≥ 40 tsp              | 39-15 tsp                 | < 15 tsp            |
| Jelly, jam or syrup                                                                                  | ≥ 7 tbsp              | 5-6 tbsp                  | < 5 tbsp            |
| <b>Miscellaneous</b>                                                                                 |                       |                           |                     |
| Gravy                                                                                                | ≥ 7 tbsp              | 5-6 tbsp                  | < 5 tbsp            |
| Other soups like chicken noodle, chowder, mushroom, instant soups                                    | > 5 bowls             | 3-4 bowls                 | < 3 bowls           |

## Ethics Statement

The data collection was conducted according to the Declaration of Helsinki and was approved by the University of Alabama at Birmingham Institutional Review Board, protocol number IRB-040126002.

## CRedit Author Statement

**Chandrika J. Piyathilake:** Conceptualization, Methodology, Resource, Investigation, Formal analyses, Writing - original draft, Preparation and finalizing the manuscript; **Suguna Badiga:** Investigation, Formal analysis, Visualization; **Ashley R. Chappell:** Investigation; **Gary L. Johanning:** Writing - reviewing & editing; **Pauline E. Jolly:** Writing - reviewing and editing.

## Declaration of Competing Interest

The authors have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Acknowledgments

This work was supported by R01 105448 (National Cancer Institute) and T37-MD001448 (Minority Health Research Training grant, National Institute on Minority Health and Health Disparities)

## Supplementary Materials

Supplementary material associated with this article can be found in the online version at doi:[10.1016/j.dib.2021.107238](https://doi.org/10.1016/j.dib.2021.107238).

## References

- [1] L. Ferrucci, A. Cherubini, S. Bandinelli, B. Bartali, A. Corsi, F. Lauretani, et al., Relationship of plasma polyunsaturated fatty acids to circulating inflammatory markers, *J. Clin. Endocrinol. Metab.* 91 (2006) 439–446, doi:[10.1210/jc.2005-1303](https://doi.org/10.1210/jc.2005-1303).
- [2] S.G. Wannamethee, G.D. Lowe, A. Rumley, K.R. Bruckdorfer, P.H. Whincup, Associations of vitamin C status, fruit and vegetable intakes, and markers of inflammation and hemostasis, *Am. J. Clin. Nutr.* 83 (2006) 567–574, doi:[10.1093/ajcn.83.3.567](https://doi.org/10.1093/ajcn.83.3.567).
- [3] A. Bordonni, F. Danesi, D. Dardevet, D. Dupont, A.S. Fernandez, D. Gille, et al., Dairy products and inflammation: a review of the clinical evidence, *Crit. Rev. Food Sci. Nutr.* 57 (2017) 2497–2525, doi:[10.1080/10408398.2014.967385](https://doi.org/10.1080/10408398.2014.967385).
- [4] S.H. Ley, Q. Sun, W.C. Willett, A.H. Eliassen, K. Wu, A. Pan, et al., Associations between red meat intake and biomarkers of inflammation and glucose metabolism in women, *Am. J. Clin. Nutr.* 99 (2014) 352–360, doi:[10.3945/ajcn.113.075663](https://doi.org/10.3945/ajcn.113.075663).
- [5] W. Chai, Y. Morimoto, R.V. Cooney, A.A. Franke, Y.B. Shvetsov, L. Le Marchand, et al., Dietary red and processed meat intake and markers of adiposity and inflammation: the multiethnic cohort study, *J. Am. Coll. Nutr.* 36 (2017) 378–385, doi:[10.1080/07315724.2017.1318317](https://doi.org/10.1080/07315724.2017.1318317).
- [6] E.M. Holt, L.M. Steffen, A. Moran, S. Basu, J. Steinberger, J.A. Ross, et al., Fruit and vegetable consumption and its relation to markers of inflammation and oxidative stress in adolescents, *J. Am. Diet Assoc.* 109 (2009) 414–421, doi:[10.1016/j.jada.2008.11.036](https://doi.org/10.1016/j.jada.2008.11.036).
- [7] A. Basu, S. Devaraj, I. Jialal, Dietary factors that promote or retard inflammation, *Arterioscler. Thromb. Vasc. Biol.* 26 (2006) 995–1001, doi:[10.1161/01.ATV.0000214295.86079.d1](https://doi.org/10.1161/01.ATV.0000214295.86079.d1).
- [8] S. Jung, M.H. Kim, J.H. Park, Y. Jeong, K.S. Ko, Cellular antioxidant and anti-inflammatory effects of coffee extracts with different roasting levels, *J. Med. Food.* 20 (2017) 626–635, doi:[10.1089/jmf.2017.3935](https://doi.org/10.1089/jmf.2017.3935).
- [9] K.W. Della Corte, I. Perrar, K.J. Penczynski, L. Schwingshackl, C. Herder, A.E. Buyken, Effect of dietary sugar intake on biomarkers of subclinical inflammation: a systematic review and meta-analysis of intervention studies, *Nutrients* 10 (2018) 606, doi:[10.3390/nu10050606](https://doi.org/10.3390/nu10050606).
- [10] M. Kanauchi, M. Shibata, M. Iwamura, A novel dietary inflammatory index reflecting for inflammatory ageing: technical note, *Ann. Med. Surg. (Lond)* 47 (2019) 44–46, doi:[10.1016/j.amsu.2019.09.012](https://doi.org/10.1016/j.amsu.2019.09.012).