

Table 1: Steps to identify relevant foods to target in a dietary intervention

Steps to Determine Foods for a Dietary Intervention	Key Characteristics that Effect Dietary Intake
Define Sociodemographic Variables	Marital status <ul style="list-style-type: none">• Married, Divorced, Separated, Single, Widowed Race <ul style="list-style-type: none">• Caucasian, African American, Pacific Asian, Native American, and Other Gender <ul style="list-style-type: none">• Male, Female Age <ul style="list-style-type: none">• 0–12 Months, Years
Define Geographic Variables	Regional <ul style="list-style-type: none">• North, South, East, West, Midwest Urbanization <ul style="list-style-type: none">• City, Suburban, Rural
Identify Changeable Foods to Target	Consumption Frequency <ul style="list-style-type: none">• Rank % between 25 and 75

Step 3: Define the geographic characteristics of the priority population

Dietary intake varies by geographic region and urban versus rural influences. The CSFII divides the United States into five geographic regions that are further defined by urbanization type. Urbanization types include city, outside the city, and rural areas. PARADE participants lived in ten urban and suburban counties in a large Midwest city. Therefore, the CSFII data was analyzed for those living in a metropolitan city and outside the city in the Midwest. Results identified nearly three-quarters of the sample living in a metropolitan area (central city, 21% and suburban, 53%). These geographic criteria resulted in a final sample of dietary intake data for 164 children, mean age 7.93 (SD = .82). Steps 1–3 identified 2423 food entries by the CSFII. This included 670 unique foods including 49 fruits and 79 vegetables consumed by the sample.

Step 4: Identify changeable FV for the priority population

Individual characteristics and environmental exposures influence food familiarity and determine frequency of consumption. We next selected those foods meeting criteria for 'moderate consumption'. CSFII food consumption data is organized by numerical food codes and food amounts. Data can be viewed in a number of ways; specific food, food form (canned, frozen, raw), how often a food was eaten, and the amount eaten (gram weight). Individual food items were rank ordered by the percentage of respondents who reported consuming them over the observation period. Foods whose rank fell into the 25th to 75th percentile were defined as "moderately consumed". Five fruits and eight vegetables were identified as moderately consumed and targeted for an intervention among these school-aged children. Foods in the top quartile (>75%) or most frequently consumed (i.e., oranges,

carrots) and FV at the lower range (<25%) of consumption (i.e., grapefruit, sweet potatoes) were not included in the intervention. Table 1 summarizes the steps that define the key characteristics to consider when determining relevant foods for a dietary intervention.

Results

Using national frequency data to estimate local FV consumption

An important assumption being made is that accurate conclusions can be drawn from food consumption frequencies collected from a national sample because they mirror local consumption patterns. Table 2 compares FV consumption frequency identified from the CSFII with baseline PARADE data (intervention and delayed intervention groups) and indicates agreement between CSFII rank % and PARADE rank % consumptions. For example, according to the national data, those FV eaten most frequently (oranges, juice, apples, potatoes, lettuce) correspond with the PARADE baseline data as indicated by the 76–100 rank percents. Similar agreement occurs for those fruits and vegetables eaten moderately (25–75 rank percent) and least often (<25 rank percent). However, a few discrepancies are noted. Although not identified as a moderately eaten fruit from the national data set, kiwi falls within the moderately eaten range at PARADE baseline (13% versus 31%) and therefore should have been targeted as changeable in the intervention. Vegetable consumption was less congruent than fruit consumption. Two vegetables (corn, carrots) were eaten more often in the national sample than reported by PARADE children at baseline. Conversely, PARADE children ate green beans and cabbage slaw more often. Overall, the authors conclude that using national dietary data to identify percent rank cut points defining consumption frequency can be