

Comparison of NDSR and the ASA24™ for 24-hour Dietary Recall Collection

	NDSR ¹	ASA24 ²
Recall Methodology and Options		
Mode of administration	Interviewer administered	Self-administered and interviewer administered with adaptation ³
Multiple pass approach to recall collection included	yes	yes
Prompts displayed in English or Spanish	yes	yes
Dietary supplement use assessment option	yes	yes
Meal name, time, and location queries	yes	yes
Participant Burden		
Internet access required	no	yes
Typical interview duration	20 min ⁴ - recall 10 min - dietary supplement	24 min ⁵ for recall and dietary supplement assessment
Food & Nutrient Database		
Approximate number of foods in the database	18,927 ⁶	8,690 ⁶
Number of Food groups and FPED categories	174 ⁷ & 3	155 ⁸ & 37 ⁹
Number of nutrients, nutrient ratios, and other food components	178	65
Brand name products	7,767	2,000
Number of restaurants	23 (all menu items)	21 (some menu items)
Completeness of nutrient values	99-100% (except 92% for pectins)	100%
Quality Assurance		
Ability to edit a record (e.g., change a food or food amount)	yes	no
Ability to add foods or supplements that are not in the database	yes	no

¹Nutrition Data System for Research (University of Minnesota Nutrition Coordinating Center)

²Automated Self-Administered 24-hour Dietary Recall System (National Cancer Institute)

³Requires in-person collection so that participant may view food portions in the ASA24 interface or modification of portion size reporting procedures if the participant cannot view the ASA24 interface.

⁴Harnack L., Stevens M, Van Heel N, Schakel S, Dwyer J, Himes J. A computer-based approach for assessing dietary supplement use in conjunction with dietary recalls. J Food Comp Anal. 2008; 21:578-582.

⁵ASA24 Respondent Website Features, National Cancer Institute, <https://epi.grants.cancer.gov/asa24/respondent/features.html>

⁶Variable ingredients options can result in upwards of 100,000 food variations (e.g. chicken thigh prepared with various preparation methods and variable ingredients such as oil, salt).

⁷NCC Food Serving Count System, <http://www.ncc.umn.edu/wp-content/uploads/2021/07/NCC-Food-Groups-from-2021.pdf>

⁸FPED: Food Pattern Equivalents Database,

<https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/food-surveys-research-group/docs/fped-overview/>

⁹WWEA: What We Eat In America categories,

https://www.ars.usda.gov/ARUserFiles/80400530/pdf/1516/food_category_list.pdf