

Background & Study Design

Type 2 diabetes is highly prevalent among South Asians/Asian Indians (AI) in the US¹, but standard Diabetes Self-Management Programs (DSMP)² do not address AI's cultural characteristics. There is a gap of knowledge about AI's nutrition- and healthcare-related behaviors that are likely to influence diabetes outcomes. The aim of this presentation is to describe nutrition and diabetes care-related lifestyle characteristics of AI who participate in DSMP.

Cross-sectional baseline data were collected through group-administered surveys among 40 AI adults prior to participating in community-based DSMP in New Jersey in 2019. Anthropometric data were measured by trained research staff.

DHQ III semi-quantitative food frequency questionnaire and Healthy Eating Index 2015 (HEI) were used to measure dietary quality; Asian food preference at home and restaurants was also collected. Diabetes care behaviors included measures such as 10-item diabetes self-efficacy scale³, 4-item health distress scale (range: 0-5)⁴, 3-item scale for communications with doctors (range: 0-5)⁴, and 4-item social role-diabetes interference scale (range: 0-4)⁴. Body weight/height (BMI) and waist circumference (WC) were used to characterize weight status. Descriptive results were calculated using IBM SPSS Statistics.

Participant Characteristics

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Age (mean±SD)	58.9 ± 14.3
Gender	
Male	11
Female	29
Marital status	
Married/partner	32
Single	4
Other	4
Household size	
1	5
2	15
3	10
4-6	10
Years of education (mean±SD)	16.9 ± 3.6
Diabetes diagnosis	
Has diabetes	16
Has pre-diabetes	9
No diabetes/pre-diabetes	15

Results

Food Intake	Mean ± SD or %
Healthy Eating Index	37.9 ± 13.7
Fruit intake (cups per day)	1.1 ± 1.6
Fruit juice (cups per day)	0.5 ± 0.4
Vegetable intake (cups per day)	1.5 ± 1.4
Starchy vegetables (cups per day)	0.2 ± 0.2
Legumes (cups per day)	0.2 ± 0.3
Refined grains (oz per day)	1.5 ± 1.4
Whole grains (oz per day)	0.9 ± 1.3
Total grains (oz per day)	2.4 ± 2.2
Dairy (cups per day)	1.0 ± 0.4
Meat, poultry, seafood (oz per day)	0.4 ± 0.7
Fiber intake (g per day)	14.9 ± 13.8
Percentage of calories from added sugars	18.4%
Prefer mostly/all Asian food at home	80.0%
Prefer mostly/all Asian food in restaurants	52.5%

Wellness and Health Care Behaviors	Mean ± SD
Diabetes self-efficacy, 1-10 scale	7.4 ± 1.9
Social activities scale, 0-4 scale	1.7 ± 2.6
Health distress scale, 0-5 scale	1.5 ± 1.3
Communication w/ doctors, 0-5 scale	2.9 ± 1.2

Anthropometric Measures	Mean ± SD or %
BMI	27.9 ± 4.7
High risk waist circumference, % (≥90 cm for males, ≥80 cm for females)	85%

- The mean overall HEI score (37.9) was low.
- Food intake patterns have shown a heavily plant-based diet which fell short of recommended intake levels for food categories such as whole grains, vegetables, and dairy.
- Total fiber intake seemed to be significantly lower than the adequate intake levels of 21-30 g/day for adults aged 50 years or more.
- Percentage of caloric intake coming from added sugars was substantial.
- The majority of the participants reported a heavy preference for Asian foods at home but less of a preference for it at restaurants.
- Body weight status of vast majority of the participants was in the high-risk category for cardiovascular and other chronic diseases such as type 2 diabetes.
- Although diabetes self-efficacy appeared to be moderately high, self care behaviors indicated presence of a need for improvement.

Conclusions

- These results indicate a need to improve weight status and dietary quality, which can be potential risk factors for type 2 diabetes and its complications.
- Future education programming should be tailored to address South Asian dietary intake preferences and include strategies to improve health distress, social role interference and communication with healthcare providers.
- These results establish a baseline about the diabetes-related lifestyle and self-care behaviors as well as characteristics of the local South Asian community. The results will further help shape future data collection methods and culturally appropriate curriculum development and implementation phases of this study.