

Current Research

Making Time for Meals: Meal Structure and Associations with Dietary Intake in Young Adults

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ABSTRACT

Background Prior studies have found that family meals and other aspects of meal structure are associated with dietary intake during adolescence, but little research has characterized meals in young adulthood.

Objective This study was designed to describe attitudes regarding the social nature of meals, time constraints on meals, and meal regularity in young adults. In addition, this study aimed to describe the sociodemographic characteristics of young adults who report eating dinner with others and "eating on the run," and examine associations of these behaviors with meal attitudes and dietary intake.

Design Data for this cross-sectional analysis were drawn from Project EAT (Eating Among Teens)-II, the second wave of a Minnesota population-based study.

Subjects/setting Mailed surveys and food frequency questionnaires were completed in 2003-2004 by 1,687 young adult (mean age=20.5 years; 44% male) participants.

Main outcomes measured and statistical analyses performed χ^2 tests were calculated to examine differences in meal attitudes and behaviors according to sociodemographic characteristics. Relationships between meal attitudes and behaviors were explored using Spearman's correlation coefficients. Linear regression models adjusted for demographic characteristics were used to examine associations between meal behaviors and dietary intake variables.

Results The majority of young adults reported they enjoy and value eating with others, but 35% of males and 42% of females reported lacking time to sit down and eat a meal. Eating dinner with others was significantly associ-

ated ($P \leq 0.01$) with several markers of better dietary intake, including higher intakes of fruit, vegetables, and dark-green and orange vegetables. Eating on the run was significantly associated ($P < 0.01$) with higher intakes of soft drinks, fast food, total fat and saturated fat, and lower intake of several healthful foods.

Conclusions Findings suggest that health services and programs for young adults should encourage taking the time to sit down for meals and to share meals with others.

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National nutrition data indicate that the majority of young adults consume excessive amounts of sugar-sweetened beverages and high-fat, high-sodium foods, and consume less than the recommended amounts of whole grains, fruits, vegetables, and calcium (1,2). These dietary patterns are of concern because they contribute to excess weight gain and increase future risk for development of chronic diseases. Interventions are needed to improve current dietary patterns and address major barriers to the selection and consumption of a healthful diet during young adulthood. Qualitative research has found that young adults perceive time constraints to be an important influence on their dietary intake (3).

At a time when long-term, adult dietary patterns are being formed, the transition from adolescence to early young adulthood (typically defined as ages 18 to 25 years) involves many new responsibilities that might heighten perceptions of time scarcity (4). The perception of time scarcity might influence several aspects of meal structure, including organization, preparation, and context of meals. For example, young adults may deal with time pressures by eating food while they are engaged in other activities; limiting at-home meal preparation; eating quickly in their car; or limiting social interaction at dinner (5). Some prior research suggests that adolescents and young adults who spend more time in food preparation have better-quality diets (6,7). In addition, previous studies have found that more frequent family meals are associated with better diets during adolescence (8-10). However, little is known about social eating (eating meals with others) and other aspects of meal structure such as "eating on the run" (to pair eating with other tasks away from home) in early young adulthood.

In order to design effective nutrition interventions for young adults, additional research is needed to better understand their attitudes relating to meal structure and

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how eating behaviors, such as social eating and eating on the run, can influence dietary intake. The current study was designed to describe attitudes regarding the social nature of meals, time constraints on meals, and meal regularity in young adults. In addition, this study aimed to describe the sociodemographic characteristics of young adults who report social eating and eating on the run, and examine associations of these behaviors with meal attitudes and dietary intake. It was hypothesized that social eating would be associated with a more healthful dietary pattern and eating on the run would be associated with a less healthful dietary pattern.

METHODS

Sample and Study Design

Data for this cross-sectional analysis were drawn from Project EAT (Eating Among Teens)-II, the second wave of a population-based study designed to examine determinants of dietary intake and weight status among young people (11). At baseline (1998-1999), 3,074 young people were surveyed in Minnesota high schools. Five years later (2003-2004), participants were mailed a follow-up survey and a food frequency questionnaire. Follow-up survey data were collected from 68% of those for whom contact information was available ($n=1,710$ of 2,513), representing 56% of the original high school cohort. The sample for the current study consisted of 750 males and 937 females who completed both mailed assessments (mean age=20.5 years, standard deviation=0.9). All study protocols were approved by the University of Minnesota's Institutional Review Board Human Subjects Committee. Additional details of the design have been reported elsewhere (11,12).

Surveys and Measures

Social Cognitive Theory guided the development of the Project EAT surveys at baseline and follow-up. The baseline Project EAT-I survey (13) that was used to assess determinants of dietary intake and weight status among adolescents was modified at follow-up to allow for the measurement of items particularly relevant to eating behaviors in early adulthood. Of significance for the current analysis, items on meal attitudes and behaviors were developed by the research team and pretested in focus groups with 20 young adults before they were added to the Project EAT-II survey. For pretesting, young adults individually completed a prefinal version of the survey and then provided oral feedback as a group on the content of the survey, the wording of items, and the response options provided for each item. Meal attitudes and behaviors were included on the follow-up survey, based on findings of previous research regarding family meals and improved health outcomes in adolescents (8-10,14-17).

Meal Attitudes. Young adults were asked to indicate how strongly they agreed with four statements about meals on the Project EAT-II survey. Enjoyment of social eating was assessed with the item: "I enjoy sitting down with family or friends and eating a meal together." Perceived importance of social eating was assessed with the item: "It is important to sit down and eat at least one meal a day

with other people (family or friends)." Perceived importance of meal regularity was assessed with the item: "Regular meals are important to me." Perceived time constraints on meals was assessed with the item: "It is hard to find time to sit down and eat a meal." Response options for each item were "strongly disagree," "somewhat disagree," "somewhat agree," and "strongly agree."

Meal Behaviors. The Project EAT-II survey was also used to assess behaviors relating to meal structure. Social eating was assessed with the item: "I usually eat dinner with other people." Eating on the run was assessed with the item: "I tend to 'eat on the run.'" Response options for both items were "strongly disagree," "somewhat disagree," "somewhat agree," and "strongly agree." For analyses examining associations of meal behaviors with characteristics of young adults and their dietary intake, responses were dichotomized (disagree or agree).

Dietary Intake. The Youth and Adolescent Food Frequency Questionnaire was used to assess usual past year intake of fruit, vegetables, dark-green and orange vegetables, whole grains, and soft drinks (18). Specific foods and beverages included in each category have been described elsewhere (12,19). Although the unit of measure was daily servings, estimates primarily reflect frequency of consumption only as serving sizes were not queried or defined for every item on the questionnaire. In addition, the food frequency questionnaire was used to assess usual daily intakes of total energy (kcal), total fat (percent of total energy), saturated fat (percent of total energy), calcium (mg), sodium (mg), and fiber (g). Nutrient intakes were determined in May 2006 by Channing Laboratory using a specially designed database, primarily based on the United States Department of Agriculture's Nutrient Database for Standard Reference (release 16) (20). Previous studies have examined and reported on the reliability and validity of intake estimates (18,21,22).

Fast-Food Intake. Young adults were asked to report frequency of fast-food intake on the Project EAT-II survey in response to the question: "In the past week, how often did you eat something from a fast-food restaurant (eg, McDonald's, Burger King, Hardee's)?" Six response categories ranged from "never" to "more than seven times."

Demographics and Weight Status. Sex, living space and arrangements, student status, employment, romantic relationships, parental status, height, and weight were self-reported on the Project EAT-II survey. Employment status was determined by the number of hours per week that participants reported working for pay (part-time was defined as <40 hours). Committed romantic relationships were defined as having a committed dating partner, fiancé, spouse, or same-sex domestic partner. Weight status categories were defined according to current body mass index (BMI; calculated as kg/m^2) guidelines for adults (not overweight: $\text{BMI} < 25.0$, overweight: $\text{BMI} = 25.0$ to 29.9, and obese: $\text{BMI} \geq 30.0$) (23). Race/ethnicity and family socioeconomic status were self-reported on the Project EAT-I survey. Family socioeconomic status (SES) was based primarily on parental educational level, defined by the higher level of either parent at baseline (12).

Table 1. Comparisons across sex for attitudes and behaviors relating to meal structure among young adult participants in Project EAT (Eating Among Teens)-II^{a,b}

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	P value ^c
	← % (n) →				
Attitudes regarding meal structure					
Enjoyment of social eating					<0.001
Males	1.7 (12)	9.5 (71)	46.5 (345)	42.3 (315)	
Females	1.5 (14)	5.4 (51)	31.0 (289)	62.1 (579)	
Perceived importance of social eating					<0.001
Males	4.5 (33)	19.3 (144)	46.4 (345)	29.8 (221)	
Females	3.3 (31)	14.5 (135)	41.1 (383)	41.1 (383)	
Perceived importance of meal regularity					0.72
Males	2.9 (21)	16.6 (122)	50.8 (375)	29.8 (220)	
Females	2.5 (23)	18.5 (171)	48.9 (452)	30.1 (278)	
Perceived time constraints on meals					0.007
Males	29.7 (220)	35.6 (264)	30.2 (225)	4.5 (33)	
Females	26.2 (244)	32.2 (301)	33.8 (316)	7.8 (73)	
Behaviors related to meal structure					
Social eating					<0.001
Males	5.9 (44)	24.1 (179)	43.4 (322)	26.6 (198)	
Females	7.3 (68)	19.6 (183)	37.7 (351)	35.4 (331)	
Eating on the run					0.004
Males	18.1 (134)	31.4 (233)	38.4 (284)	12.1 (90)	
Females	15.4 (143)	25.4 (237)	45.6 (426)	13.6 (127)	

^aUnadjusted percentages, weighted to reflect the probability of responding to the Project EAT-II survey.

^bThe sample size for different variables may vary from the total sample size because of missing responses.

^cP value represents testing for a sex difference across the four categories of agreement by the χ^2 test (3 degrees of freedom).

Statistical Analyses

Descriptive statistics and χ^2 tests were calculated to examine differences in meal attitudes and behaviors according to characteristics of young adults. For analyses examining weight status, females who indicated that they were pregnant were excluded. Relationships between meal attitudes and behaviors were explored using Spearman's correlation coefficients. Sex-stratified linear regression models were used to examine associations between meal behaviors and dietary intake variables because prior research has found differences in the dietary intake patterns of males and females (24,25). Regression models simultaneously included both meal behaviors of interest (social eating and eating on the run) and were controlled for characteristics (race/ethnicity, student status, and employment) of young adults associated with meal behaviors that have also been shown to be associated with dietary intake in previous research (24,26,27).

All analyses were weighted to adjust for differential response rates to Project EAT-II using the response propensity method (28). The weighted racial/ethnic and SES proportions of the study sample were as follows: 56.0% white, 17.0% Asian, 16.3% African American, and 10.7% mixed or other race, whereas SES was low or low-middle (36.7%), middle or upper-middle (50.7%), and high (12.6%). A 95% confidence level was used to interpret the statistical significance of probability tests, corresponding to a P value of <0.05. Analyses were conducted using the Sta-

tistical Analysis System (SAS, version 8.2, 2001, SAS Institute, Cary, NC).

RESULTS

Of the 1,710 young adults who provided follow-up survey data, participants were excluded from analyses if they did not complete the Project EAT-II survey (n=10) or the Youth and Adolescent Food Frequency Questionnaire at follow-up (n=5). In addition, participants were excluded if they reported a biologically implausible level (defined a priori as <400 kcal/day or >7,000 kcal/day) of energy intake (n=8). These exclusions resulted in a final sample for analyses of 1,687 participants.

Meal Attitudes and Behaviors

The majority of young adults somewhat or strongly agreed they enjoy social eating, feel it is important to have social eating experiences, and feel it is important to have regular meals (Table 1). Females were more likely than males to strongly agree that they enjoy social eating (62.1% vs 42.3%; $P<0.001$) and feel it is important to have social eating experiences (41.1% vs 29.8%; $P<0.001$). Although most young adults indicated they feel (somewhat or strongly) that it is important to have regular meals, 35% of males and 42% of females reported perceived time constraints on meals.

The majority of young adults agreed (somewhat or strongly) that they usually eat dinner with other people;

Table 2. Correlation coefficients for attitudes and behaviors relating to meal structure among young adult participants in Project EAT (Eating Among Teens)-II^a

	Enjoyment of social eating	Perceived importance of social eating	Perceived importance of meal regularity	Perceived time constraints on meals	Social eating	Eating on the run
Attitudes regarding meal structure						
Enjoyment of social eating	1.00					
Perceived importance of social eating	0.53***	1.00				
Perceived importance of meal regularity	0.26***	0.34***	1.00			
Perceived time constraints on meals	-0.05*	-0.13***	-0.22***	1.00		
Behaviors related to meal structure						
Social eating	0.37***	0.51***	0.27***	-0.21***	1.00	
Eating on the run	-0.06*	-0.16***	-0.21***	0.58***	-0.17***	1.00

^aUnadjusted and unweighted Spearman's correlation coefficients.
 * $P < 0.05$.
 *** $P < 0.001$.

however, females were more likely than males to indicate strong agreement with the statement (35.4% vs 26.6%; $P < 0.001$). Half of males and 59.2% of females somewhat or strongly agreed that they tend to eat on the run. While females were more likely than males to agree (somewhat or strongly) they tend to eat on the run (50.5% vs 59.3%; $P < 0.001$), strong agreement was indicated by approximately equal proportions of females and males (12.1% vs 13.6%; $P < 0.37$).

Attitudes regarding eating with others were directly correlated ($r = 0.37$ to 0.51 ; $P < 0.001$) with report of social eating (Table 2). Endorsement of perceived time constraints on meals showed a weak, inverse association ($r = -0.21$; $P < 0.001$) with social eating and a moderate, direct association ($r = 0.58$; $P < 0.001$) with eating on the run. The perceived importance of meal regularity showed a weak, direct association ($r = 0.27$; $P < 0.001$) with social eating and a weak, inverse association ($r = -0.21$; $P < 0.001$) with eating on the run. Reports of social eating and eating on the run, showed a weak, inverse association ($r = -0.17$; $P < 0.001$). Approximately 38% of young adults indicated they tend to eat on the run and indicated they usually eat dinner with others.

Meal Behaviors According to Characteristics of Young Adults

Living space and arrangements ($P < 0.01$), relationship status ($P < 0.001$), and weight status ($P = 0.019$) were significantly related to social eating (Table 3). Social eating was most often reported by young adults living in campus housing and those who were in committed romantic relationships. Compared to young adults who were living with their parents, a romantic partner, or roommates, young adults who lived alone were least likely to report social eating. Obese young adults less often reported social eating when compared to those who were either overweight or not overweight.

Race/ethnicity ($P < 0.001$), student status ($P = 0.03$), and employment status ($P < 0.001$) were significantly related to eating on the run (Table 3). Eating on the run was least

often reported by young adults of Asian race, nonstudents, and by those who were not currently working for pay. Although the association was of only marginal statistical significance ($P = 0.06$), a higher percentage of obese young adults reported eating on the run compared to overweight and not overweight young adults.

Associations of Meal Behaviors with Dietary Intake and Fast-Food Intake

After adjusting for response to eating on the run and sociodemographic characteristics, social eating was significantly associated ($P \leq 0.01$) with higher intakes of fruit, vegetables, and dark-green and orange vegetables among both sexes (Table 4). Compared to young adults who disagreed with the statement they "usually eat dinner with others," males ate an average of 0.4 additional servings and females ate an average of 0.5 additional servings of fruit and vegetables per day if they agreed with the statement. Among females, social eating was also associated with lower intakes of total fat ($P = 0.009$). Among males, social eating was associated with higher intakes of total energy ($P = 0.03$), calcium ($P = 0.009$), sodium ($P = 0.03$), and fiber ($P = 0.009$).

After adjusting for response to social eating and sociodemographic characteristics, eating on the run was significantly associated ($P < 0.01$) with higher intakes of soft drinks, fast food, total fat, and saturated fat among both sexes (Table 5). Compared to young adults who disagreed with the statement they tend to eat on the run, males ate an average of one additional time per week and females ate an average of one additional time every 2 weeks at a fast-food restaurant if they agreed with the statement. Among females, eating on the run was also associated ($P < 0.01$) with lower intakes of fruit, vegetables, dark-green and orange vegetables, and fiber. Among males, eating on the run was associated with lower intake of whole grains ($P = 0.02$) and higher intake of total energy ($P = 0.03$).

Table 3. Social eating and eating on the run: Comparisons across sociodemographic characteristics among young adult participants in Project EAT (Eating Among Teens)-II

	Usually Eat Dinner with Others		Tend to Eat on the Run	
	% Agree (n) ^{ab}	P value ^c	% Agree (n) ^{ab}	P value ^d
Total	71.7 (1,202)		55.4 (927)	
Sex		0.15		<0.001
Males	69.9 (520)		50.5 (374)	
Females	73.1 (682)		59.3 (553)	
Race		0.48		<0.001
Asian	70.2 (197)		41.5 (117)	
Black	69.4 (186)		54.1 (146)	
White	73.2 (678)		59.1 (546)	
Mixed/other	69.5 (124)		58.0 (104)	
Socioeconomic status		0.15		0.39
Low	69.1 (420)		53.6 (325)	
Middle	73.8 (616)		57.2 (476)	
High	72.0 (150)		56.5 (118)	
Living space		0.002		0.40
Parent's home	71.5 (567)		55.4 (438)	
Rented apartment or home	68.2 (385)		57.3 (324)	
Campus housing	81.1 (176)		52.0 (113)	
Living arrangement		<0.001		0.17
Live alone	45.8 (41)		61.3 (55)	
With parents	72.0 (591)		54.7 (448)	
With roommates	78.7 (102)		47.7 (62)	
With a spouse or partner	73.0 (422)		56.9 (329)	
Student status		0.87		0.03
Not student	71.3 (463)		51.6 (335)	
Part-time	70.7 (146)		61.1 (126)	
Full-time	72.3 (579)		56.8 (454)	
Employed		0.90		<0.001
Not employed	72.2 (189)		40.9 (107)	
Employed part-time	71.8 (628)		57.1 (498)	
Employed full-time	70.8 (370)		60.4 (316)	
Parental status		0.09		0.20
No children	70.8 (990)		56.1 (784)	
1 or more children	75.8 (206)		51.9 (141)	
Relationship status		<0.001		0.97
Not in a committed relationship	67.1 (539)		55.3 (143)	
In a committed relationship	75.7 (652)		55.4 (477)	
Weight status		0.019		0.06
Not overweight (BMI ^e <25.0)	72.3 (752)		54.8 (569)	
Overweight (BMI 25.0-29.9)	75.3 (273)		52.8 (191)	
Obese (BMI≥30.0)	64.4 (133)		62.8 (129)	

^aUnadjusted percentages, weighted to reflect the probability of responding to the Project EAT-II survey.
^bThe sample size for different variables may vary from the total sample size due to missing responses and rounding of weighted frequencies.
^cP values represent χ^2 tests of overall differences in the proportion of young adults who agreed (strongly or somewhat) that they usually eat dinner with others.
^dP values represent χ^2 tests of overall differences in the proportion of young adults who agreed (strongly or somewhat) that they tend to eat on the run.
^eBMI=body mass index; calculated as kg/m².

DISCUSSION

This study described attitudes and behaviors relating to meal structure, and associations with dietary intake among young adults. The results suggest that young adults enjoy and value social eating experiences. How-

ever, perceived time constraints may be a common barrier to sitting down for meals. Social eating was associated with greater intake of several healthful foods (eg, vegetables) and with higher intakes of calcium and fiber among males. In contrast, eating on the run was associ-

Table 4. Adjusted^a daily mean dietary intakes by report of social eating among female and male young adult participants in Project EAT (Eating Among Teens)-II

Intake	Females			Males		
	Usually Eat Dinner with Others			Usually Eat Dinner with Others		
	Disagree	Agree	<i>P</i> value ^b	Disagree	Agree	<i>P</i> value ^b
Foods (servings)						
Fruit	1.51	1.68	0.004	1.54	1.70	0.01
Vegetables	1.51	1.81	<0.001	1.26	1.51	<0.001
Dark-green and orange vegetables	0.38	0.46	0.01	0.28	0.33	0.008
Whole grains	0.69	0.76	0.12	0.91	0.91	0.43
Soft drinks	1.03	1.14	0.23	1.38	1.33	0.50
Fast-food intake (times/week)	1.95	1.65	0.10	2.20	2.21	0.75
Nutrients						
Energy (kcal)	1,662	1,731	0.09	1,986	2,119	0.03
Energy from fat (%)	30.0	28.8	0.009	31.3	31.1	0.71
Energy from saturated fat (%)	10.3	9.9	0.05	11.0	10.8	0.32
Calcium (mg)	810	858	0.05	941	1,043	0.009
Sodium (mg)	2,012	2,028	0.83	2,296	2,477	0.03
Fiber (g)	13.6	14.4	0.05	14.3	15.7	0.009

^aThe weighted model is adjusted for race/ethnicity, student status, employment status, and report of eating on the run.

^b*P* values represent testing to examine differences in intakes of young adults according to agreement with the statement "I usually eat dinner with other people."

Table 5. Adjusted^a daily mean dietary intakes by report of eating on the run among female and male young adult participants in Project EAT (Eating Among Teens)-II

Intake	Females			Males		
	Tend to Eat on the Run			Tend to Eat on the Run		
	Disagree	Agree	<i>P</i> value ^b	Disagree	Agree	<i>P</i> value ^b
Foods (servings)						
Fruit	1.78	1.50	0.004	1.66	1.65	0.99
Vegetables	1.98	1.52	<0.001	1.48	1.40	0.44
Dark-green and orange vegetables	0.52	0.38	<0.001	0.33	0.30	0.19
Whole grains	0.73	0.75	0.85	1.00	0.83	0.02
Soft drinks	0.97	1.23	<0.001	1.22	1.44	0.002
Fast-food intake (times/week)	1.46	1.96	<0.001	1.67	2.64	<0.001
Nutrients						
Energy (kcal)	1,696	1,725	0.65	2,009	2,140	0.03
Energy from fat (%)	28.3	29.8	<0.001	30.2	32.0	<0.001
Energy from saturated fat (%)	9.6	10.3	<0.001	10.5	11.2	<0.001
Calcium (mg)	851	839	0.80	1,043	991	0.36
Sodium (mg)	2,023	2,023	0.83	2,373	2,470	0.09
Fiber (g)	15.1	13.5	0.001	15.2	15.4	0.62

^aThe weighted model is adjusted for race/ethnicity, student status, employment status, and report of "eating dinner with others."

^b*P* values represent testing to examine differences in intakes of young adults according to agreement with the statement "I tend to 'eat on the run.' "

ated with higher intakes of soft drinks, fast food and fat, and with lower intake of several healthful foods among females.

The observation that social eating is related to a more healthful pattern of dietary intake among young adults was in agreement with the hypotheses of this study and adds to prior research in adolescents. Previous studies in the Project EAT sample and other adolescent populations have demonstrated that youth who report more frequent family meals also have higher intakes of fruit, vegetables,

and several key nutrients (8-10). In the present study sample, only half of young adults were living with their parents, suggesting that some young adults may have been eating family meals with their parents, but that a large proportion were likely eating with other meal companions. The results indicate that eating with others is also beneficial for youth in early adulthood, at a time when meal companions may often be friends and romantic partners.

As hypothesized, eating on the run was associated with

a less healthful pattern of dietary intake. The findings suggest that the foods young adults perceive to be convenient for purchasing and eating on the run are often obtained at fast-food restaurants and tend to be high in fat. While few studies have examined the relationship between this particular eating style and dietary intake, previous research in young adults has shown that frequent fast-food intake and snacking are similarly associated with greater intakes of total energy, fat, and saturated fat (24,29,30). The large majority of noninstitutionalized young adults are engaged in activities outside the home relating to completion of a post-secondary degree or employment (31). These young adults may frequently choose to eat convenience foods away from home and at fast-food restaurants because of perceived time scarcity. Given the correspondence between the findings of studies relating frequent fast-food intake, snacking, and eating on the run to dietary intake, future research should explore associations of eating on the run with the location and frequency of snacks and meals.

Strengths and limitations of the current study relate to the assessment of meal structure and the large, population-based sample at an understudied life stage. Examining both meal attitudes and behaviors together provided insight into the nature of nutrition promotion strategies that may be well-received by young adults; however, these measures were brief. The findings from this study suggest a need for further qualitative and empirical research to examine meal structure among young adults, including the development of stronger measures. For example, research using focus groups should explore whether eating on the run means different things to different people and better characterize both the nature and frequency of social eating outside of the family home. Although the large sample was diverse in terms of race, family SES, and student status, it was drawn from only one Midwestern state. Accordingly, the generalizability of study findings may be limited.

CONCLUSIONS

The findings of this study suggest there is a need to address the influence of perceived time constraints on the eating and meal behaviors of early young adults. Perceived time constraints and difficulties with time management may lead young adults to limit the frequency of having shared meals and to more often eat on the run, especially among those with greater work and school commitments. Having few shared meals and frequently eating on the run were associated with poorer dietary intake. Future research will be needed to identify common time barriers to sitting down to meals and to explore other aspects of social eating that may influence dietary intake (eg, physical meal location).

As most young adults indicated they enjoy and value time that is spent eating with others, it may be beneficial for health-promotion strategies targeting young adults to address the management and reduction of individual time barriers to having regular shared meals. In addition, food and nutrition professionals should give consideration to the busy lifestyles of young adults when providing dietary recommendations. Young adults should be provided with ideas for simply prepared meals that promote the achievement of dietary recommendations within

energy needs. Postsecondary institutions and businesses employing young adults should be encouraged to support good nutrition by providing scheduled time and access to facilities for meals, along with healthful meal and snack options.

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