Nutritional Quality of Foods At and Away From Home

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Americans are eating out more than ever as their incomes rise, time for cooking becomes scarce, and dining out becomes more affordable. These factors that have favored dining out are expected to continue boosting consumer demand for food away from home.

Although Americans have become increasingly conscientious about nutrition, they seem to be less attentive to the importance of nutrition when they eat out. One reason may be that information on the nutritional content of foods away from home is not readily apparent or available to consumers. Another reason may be that consumers could pay more attention to taste, price, or entertainment value than nutrition when eating out.

The nonprofit consumer advocacy group, Center for Science in the Public Interest, has called attention to the high fat, saturated fat, and sodium contents of many menu items in popular restaurants, fast-food establishments, and movie theaters. But their study captures only part of a wide range of food choices facing consumers when they eat out.

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This study analyzes data from the USDA's 1995 Continuing Survey of Food Intakes by Individuals (CSFII). The results show that away-from-home foods are generally higher in fat, saturated fat, cholesterol, and sodium, and lower in fiber and calcium than home foods. Consequently, the increasing popularity in dining out may be a barrier for Americans to improve the nutritional quality of their diets.

A major advantage of the CSFII survey is that the data represent what Americans typically eat, at or away from home. The CSFII collects information on what, when, where, and how much Americans eat. USDA's Agricultural Research Service (ARS) maintains a nutrient database, which is used to calculate the amount of nutrients in each food eaten. This article analyzes the 2-day individual intakes for Americans age 2 years and older. The 1995 CSFII represents 63 million children (age 2-17) and 191 million adults (age 18 and older) in the United States.

Away-from-home and home foods are defined here according to where the foods are obtained, not where they are eaten. Food at home consists of foods purchased at retail stores, such as the grocery store or supermarket. Food away from home consists of foods obtained from foodservice and entertainment establishments. Away-from-home foods are classified into four groups: "restaurants," or places with waiter service; "fast food," those self-service and carry-out eating places and cafeterias; "schools," including day-care centers and summer camps; and "others," which include vending machines, community feeding programs, and someone else's home (for adults, eating occasions at school are included in the "others" category). Meals and snacks consisting of a combination of away-from-home and home foods are classified according to the component that contributes the most calories to that particular eating occasion.

Americans Favor Fast Food When Eating Out

During 1995, Americans ate an average of 2.7 meals and 1.6 snacks each day (table 1). The number of meals eaten by Americans exhibits a U-shape pattern (drops and then increases) with respect to age, declining from 2.9 meals a day among preschoolers (age 2-5) to 2.5 meals among adolescent females, and then rising to 2.7 meals among adults age 40 and older. Preschoolers also snacked most frequently, averaging 2.1 snacks a day. Seniors age 60 and older snacked least frequently with 1.4 snacks consumed by senior males and 1.2 snacks by senior females.

Table 1
Americans Favor Fast Foods When Eating Out

Item	All, from ages 2+	2-5	6-11	Age 12-17 Male	Female	Age 18-39 Male	Female	Age 40-59 Male	Female	Age 60+ Male	Female
					Number						
Meals per day	2.7	2.9	2.8	2.7	2.5	2.6	2.6	2.7	2.7	2.7	2.7
Snacks per day	1.6	2.1	1.6	1.6	1.7	1.5	1.5	1.6	1.5	1.4	1.2
					Percent						
Meals:											
At home	71	77	68	66	70	61	68	70	75	82	84
Away-from-home	29	23	32	34	30	39	32	30	25	18	16
Fast food[1]	43	40	27	40	32	54	49	44	44	34	31
Schools[1]	9	24	42	33	32	NA	NA	NA	NA	NA	NA
Restaurants[1]	26	9	9	9	15	26	30	36	30	40	37
Others[1]	23	28	21	18	21	20	22	20	26	26	32
Snacks:											
At home	78	80	78	79	77	70	72	75	83	87	86
Away from home	22	20	22	21	23	30	28	25	17	13	14
Fast food[1]	25	15	18	20	28	33	26	29	27	21	17
Schools[1]	4	31	14	10	3	NA	NA	NA	NA	NA	NA
Restaurants[1]	8	4	3	2	0	9	11	8	10	11	11
Others[1]	63	50	66	68	68	59	63	63	63	68	72
Calorie distribution:											
Home	66	76	67	63	69	55	63	68	71	78	80
Away om home	34	24	33	37	31	45	37	32	29	22	20
Fast food[2]	14	8	9	13	12	23	15	13	11	7	5
Schools[2]	2	7	11	8	6	NA	NA	NA	NA	NA	NA
Restaurants[2]	8	2	3	5	5	10	11	11	9	9	7
Others[2]	9	8	9	10	9	11	11	8	8	7	8

Note: NA = Not applicable. [1]Percent of away-from-home meals or snacks. [2]Percent of total calories. Source: Compiled by USDA's Economic Research Service from the 1995 CSFII, individuals providing 2 days of intake.

On average, Americans ate out more than once for every four meals (29 percent) and more than once for every five snacks (22 percent) during 1995. Adult males age 18-39 consumed the largest share of their meals and snacks away from home. Seniors ate the fewest share of their meals and snacks away from home.

Fast foods were by far the most common source of meals away from home, accounting for 43 percent of all meals away from home (table 1). However, its relative importance varied, depending on the age group. Fast-food places were particularly popular among adults age 18-39, accounting for more than half of all away-from-home meals. Schools provided 42 percent of the away-from-home meals for children (age 6-11), but adolescents (age 12-17) consumed more meals from fast-food places than from schools.

As Americans get older, they more often eat at restaurants when dining out. Restaurants accounted for 10 percent of away-from-home meals among children, but captured more than one-third of those meals among seniors.

Although fast-food establishments provided one-quarter of all snacks away from home, "others" (which include snacks given as gifts or eaten at someone else's home) were the most popular source of away-from-home snacks, accounting for 63 percent of away-from-home snacks. Daycare centers provided about one in every three away-from-home snacks (31 percent) eaten by preschoolers. Fast-food establishments increase in popularity as a source of away-from-home snacks as children age, accounting for 18 percent of away-from-home snacks eaten by children age 6-11, 20 percent for adolescent males, and 28 percent for

adolescent females. As adults age, fast-food places become the less popular source of away-from-home snacks, and "others" are the most popular source of away-from-home snacks.

Overall, 27 percent of meals and snacks (eating occasions) were away from home, and they provided 34 percent of total calories (table 1). This suggests that people either eat larger amounts when they eat out or they eat higher calorie foods—or both. Fast-food outlets accounted for 10 percent of all eating occasions, and provided 14 percent of total dietary calories and 41 percent of the away-from-home calories. Restaurants followed with 5 percent of all eating occasions, 8 percent of total calories, and 24 percent of away-from-home calories.

The away-from-home share of total calories initially increases with age. Preschoolers obtained 24 percent of their total calories away from home, while adult males age 18-39 obtained 45 percent of their calories away from home—the highest among Americans. As adults get older, however, they eat at home more often and obtain a smaller share of calories away from home. For example, senior females obtained only 20 percent of their calories away from home and senior males obtained 22 percent.

Children age 6-11 obtained more of their away-from-home calories from schools than from fast-food outlets, restaurants, or other places, whereas adolescents obtained more of their away-from-home calories from fast-food places than schools (table 1). Fast foods provided 15 to 23 percent of total calories consumed by adults age 18-39—the highest among Americans. Fast-food places provided adults age 40-59 with 12 percent of total calories, more than the 10 percent provided by restaurants. But restaurants provided 8 percent of calories for seniors—a greater portion than fast-food places.

Higher Fat and Cholesterol in Away-From-Home Foods

Because the amounts and types of foods consumed tend to differ depending on the source of food (home, fast food, and restaurant), we control for these differences by comparing nutrient densities—the amount of nutrients provided on the basis of 1,000 calories.

Compared with home foods, away-from-home foods had, on average, higher fat, saturated fat, and cholesterol densities (table 2). Home foods provided average fat and saturated fat densities of 34.7 grams and 12.0 grams per 1,000 calories, respectively, compared with 41.8 grams and 14.3 grams per 1,000 calories for away-from-home foods. The higher fat and saturated fat densities for away-from-home foods occur for all age groups and both genders (tables 3 and 4).

On average, restaurant foods had higher fat and lower saturated fat densities than fast foods, although fast foods consumed by children had a slightly higher fat density than restaurant foods consumed by children (tables 2 and 3). School meals and school snacks eaten by children had the highest saturated fat density of all, higher than the saturated fat density of fast foods consumed by children and adults. In June 1994, USDA put forth the School Meals Initiative for Healthy

Table 2
Americans' Diets High in Fat, Saturated Fat, and Sodium, and Low in Fiber and Calcium

Food outlets for Americans	– – Nutrient-to-calorie density[1] – – Total fat	Saturated fat	Cholesterol	Sodium	Fiber	Calcium
	grams	*grams*	*mg*	*mg*	*grams*	*mg*
Age 2 and above:						
Home foods	34.7	12.0	127	1,651	8.2	422
Away-from-home foods[2]	41.8	14.3	136	1,703	6.1	352
Fast food	42.7	14.8	123	1,722	5.6	362
Schools[3]	39.7	15.7	105	1,595	7.2	672
Restaurants	44.6	14.0	182	1,927	6.8	299
Others[3]	38.6	13.3	120	1,496	6.2	314
All foods[4]	37.2	12.7	130	1,669	7.5	398
Benchmark nutrient density	33.3	11.1	150	1,199	10.5	441

Notes: [1]Densities are measured per 1,000 calories. [2]Away from home presents the aggregate of fast foods, restaurants, schools, and others. [3]Schools are classified as a separate category for children and are combined into "others" for adults. [4]Nutrient densities for all foods are weighted averages of densities of home foods and away from home foods. Source: Compiled by USDA's Economic Research Service from the 1995 CSFII, individuals providing 2 days of intake.

Table 3
Too Much Fat, Saturated Fat, and Sodium, and Insufficient Fiber and Calcium in Children's Diets

Food outlets for Americans	– – Nutrient-to-calorie density[1] – – Total fat	Saturated fat	Choles-terol	Sodium	Fiber	Calcium
	grams	*grams*	*mg*	*mg*	*grams*	*mg*
Children age 2-17:						
Home foods	34.5	12.5	118	1,590	6.9	473
Away-from-home foods[2]	39.2	14.3	107	1,569	6.1	432
Fast food	41.7	14.8	101	1,602	5.5	358
Schools[3]	39.7	15.7	105	1,595	7.2	672
Restaurants	41.4	14.3	135	1,714	6.3	355
Others[3]	35.2	12.4	103	1,451	5.7	317
All foods[4]	36.0	13.0	114	1,583	6.6	460
Benchmark nutrient density	33.3	11.1	157	1,255	7.5	509
Children age 2-5:						
Home foods	34.9	13.2	124	1,527	7.1	547
Away-from-home foods[2]	39.2	14.4	112	1,566	6.6	447
Fast food	42.4	14.6	103	1,543	5.5	307
Schools[3]	36.7	14.4	119	1,584	7.8	678
Restaurants	44.7	16.5	152	1,799	7.0	419
Others[3]	36.9	13.5	106	1,515	6.5	383
All foods[4]	36.0	13.5	121	1,536	7.0	522
Benchmark nutrient density	33.3	11.1	200	1,602	5.7	534
Children age 6-11:						
Home foods	34.2	12.3	117	1,570	7.1	462
Away-from-home foods[2]	39.1	14.5	106	1,589	6.3	478
Fast food	41.7	14.8	103	1,640	5.7	356
Schools[3]	39.4	16.0	106	1,588	7.5	741
Restaurants	38.8	13.4	142	1,541	5.2	349
Others[3]	36.4	12.9	97	1,558	5.9	334
All foods[4]	35.8	13.0	114	1,576	6.8	467
Benchmark nutrient density	33.3	11.1	158	1,262	7.1	457
Adolescent males age 12-17:						
Home foods	35.3	12.5	108	1,675	6.3	465
Away-from-home foods[2]	39.5	14.3	111	1,574	5.7	397
Fast food	41.2	14.6	103	1,657	5.1	370
Schools[3]	41.4	15.9	96	1,601	6.6	610
Restaurants	44.3	15.3	127	1,764	7.3	340
Others[3]	33.7	12.2	124	1,358	5.1	287
All foods[4]	36.8	13.2	109	1,638	6.1	440
Benchmark nutrient density	33.3	11.1	116	929	7.5	464
Adolescent females age 12-17:						
Home foods	33.6	11.7	124	1,598	6.8	413
Away-from-home foods[2]	39.0	13.6	96	1,523	5.9	375
Fast food	41.9	15.1	93	1,498	5.8	382
Schools[3]	40.9	15.8	101	1,619	6.2	530
Restaurants	39.3	13.4	128	1,866	6.0	360
Others[3]	33.5	10.2	77	1,301	5.6	262
All foods[4]	35.3	12.3	115	1,575	6.5	401
Benchmark nutrient density	33.3	11.1	163	1,307	10.5	653

Notes: [1]Densities are measured per 1,000 calories. [2]Away from home presents the aggregate of fast foods, restaurants, schools, and others. [3]Schools are classified as a separate category for children and are combined into "others" for adults. [4]Nutrient densities for all foods are weighted averages of densities of home foods and away from home foods. Source: Compiled by USDA's Economic Research Service from the 1995 CSFII, individuals providing 2 days of intake.

Children to address the high fat levels and other nutritional problems in school meals and in children's diets. But since implementation began during the 1996-97 school year, the 1995 CSFII data do not yet reflect changes in school meals.

According to the *Dietary Guidelines for Americans*, fat intake should be limited to no more than 30 percent of total dietary calories, and saturated fat intake should be below 10 percent of total calories. Because each gram of fat generates an average of 9 calories, the recommendations can be expressed as 33.3 grams of fat and 11.1 grams of saturated fat per 1,000 calories—a measure termed "benchmark" density in this study. By comparing the nutrient density with this benchmark, we can evaluate the nutritional quality of foods against recommended intakes. (Tables 2, 3, and 4 also report nutrient densities for all foods consumed, which are weighted averages of densities for home and away-from-home foods. Thus the nutrient densities for all foods measure the nutritional quality of overall diet.) It is known that energy and nutrient intakes from dietary recall surveys are subject to underreporting. Consequently, the benchmark density calculated from reported intakes tends to be smaller than the actual density.

All of the food outlets had higher average fat densities than the benchmark densities (table 2). While many Americans have made substantial progress in reducing the fat content in their diets over the past few decades, many individuals in all age groups need to continue reducing the fat content in all food sources—particularly from away-from-home foods—in order to meet recommended levels.

Away-from-home foods had a higher average cholesterol density than home foods (136 mg versus 127 mg per 1,000 calories), mainly because of the high cholesterol density of restaurant foods (182 mg per 1,000 calories—almost 50 percent higher than the cholesterol density of home foods and fast foods). Restaurant foods eaten by children had a cholesterol density 16 percent higher than that of home foods (table 3). Among adults, the cholesterol density of restaurant foods, at 187 mg per 1,000 calories, is almost 50 percent higher than home foods or fast foods (table 4).

Many health authorities recommend that daily cholesterol intake should not exceed 300 mg—regardless of age and gender. The benchmark cholesterol density, 300 mg of cholesterol divided by a person's reported caloric intake, varies from person to person because individual caloric intake varies from person to person. We calculate a benchmark density for specific groups of individuals by summing the recommended intakes of a nutrient for all individuals in the group and dividing by the sum of those individuals' reported caloric intakes.

Based on 1995 reported caloric intakes, the benchmark cholesterol density for all Americans age 2 and older was 150 mg for each 1,000 calories consumed (table 2). The average cholesterol density of home foods in the survey was 127 mg per 1,000 calories, and away-from-home foods was 136 mg per 1,000 calories (table 2). Adult males age 18-39, however, had a much lower benchmark density of 107 mg of cholesterol per 1,000 calories because they tend to eat more than others do (table 4). Yet their cholesterol density was 123 mg per 1,000 calories for home foods and 170 mg per 1,000 calories for restaurant foods (table 4). To meet their recommended cholesterol intake, adult males need to choose foods low in cholesterol, especially considering the fact that nutrient intakes are likely to be underreported in dietary recalls.

Restaurant Foods High in Sodium

The sodium density of home foods was lower than the levels in fast foods and restaurant foods, but higher than the level in school meals (table 2). These estimates include sodium occurring naturally in foods and sodium added in food processing and preparation, but not salt added at the table. Restaurant foods had the highest sodium density of all food sources. For example, restaurant foods eaten by adults had a sodium density of 1,952 mg per 1,000 calories, which is 17 percent higher than home foods and 12 percent higher than fast foods (table 4).

According to *Diets and Health*, daily sodium intake should be limited to 2,400 mg or less. As with cholesterol, this results in individuals who eat more having lower values of benchmark density. Using reported caloric intakes, benchmark sodium densities range from a low of 859 mg per 1,000 calories for adult males age 18-39 and 929 mg per 1,000 calories for adolescent males to a high of 1,602 mg per 1,000 calories for preschoolers, averaging 1,255 mg per 1,000 calories for children and 1,181 mg per 1,000 calories for adults (tables 3 and 4).

With the exception of preschoolers, average sodium densities of most food outlets exceed benchmark densities, resulting in average sodium consumption levels that substantially exceed the recommended level. Most Americans could reduce sodium intake by careful choice of the foods they eat away from home.

School Meals Are Rich in Fiber and Calcium

School meals provided the richest source of calcium and fiber for children in 1995. The calcium density in school meals was 672 mg per 1,000 calories—42 percent higher than the calcium density in home foods eaten

Table 4
Dietary Problems Start in Childhood and Continue Into Adulthood

Food outlets for Americans	Total fat	Saturated fat	Cholesterol	Sodium	Fiber	Calcium
	– – Nutrient-to-calorie density[1] – –					
	grams	*grams*	*mg*	*mg*	*grams*	*mg*
Adults age 18 and above:						
Home foods	34.8	11.8	129	1,671	8.6	406
Away-from-home foods[2]	42.6	14.3	144	1,741	6.2	329
Fast food	42.9	14.8	128	1,747	5.6	362
Restaurants	44.9	14.0	187	1,952	6.8	293
Others[3]	39.6	13.6	126	1,509	6.4	313
All foods[4]	37.5	12.6	135	1,695	7.7	379
Benchmark nutrient density	33.3	11.1	148	1,181	11.4	420
Adult males age 18-39:						
Home foods	35.2	12.4	123	1,707	7.3	386
Away-from-home foods[2]	41.7	14.6	134	1,704	5.7	337
Fast food	42.0	15.2	119	1,739	5.2	374
Restaurants	42.8	13.4	170	1,867	6.7	281
Others[3]	40.3	14.6	132	1,477	5.8	311
All foods[4]	38.2	13.4	128	1,705	6.6	364
Benchmark nutrient density	33.3	11.1	107	859	11.1	330
Adult females age 18-39:						
Home foods	33.7	11.4	122	1,630	8.0	415
Away-from-home foods[2]	42.3	13.9	140	1,695	6.1	331
Fast food	43.6	14.8	125	1,708	5.9	366
Restaurants	43.8	13.1	176	2,038	6.4	291
Others[3]	38.8	13.3	123	1,314	6.3	322
All foods[4]	36.8	12.3	128	1,654	7.3	384
Benchmark nutrient density	33.3	11.1	173	1,384	11.7	528
Adult males age 40-59:						
Home foods	35.3	11.7	134	1,668	8.5	388
Away-from-home foods[2]	43.3	14.1	161	1,791	6.2	307
Fast food	42.5	14.0	144	1,778	5.7	329
Restaurants	47.3	14.9	217	1,944	6.4	293
Others[3]	39.4	13.3	117	1,613	6.8	288
All foods[4]	37.8	12.5	143	1,707	7.8	362
Benchmark nutrient density	33.3	11.1	131	1,046	11.5	349

Continued—

by children. The fiber density in school meals was 7.2 grams per 1,000 calories—4 percent higher than that in home foods eaten by children (table 3). Among adults, home foods had the highest calcium and fiber densities of all food sources (table 4). Restaurant foods had a fiber density 21 percent higher than fast foods, but fast foods had a calcium density 24 percent higher than restaurant foods.

Estimated benchmark calcium densities (based on the Recommended Daily Allowance—RDA—for calcium of 1,200 mg for those age 11-24 and 800 mg for all others) range from a low of 330 mg per 1,000 calories for adult males age 18-39 to a high of 653 mg per 1,000 calories for female adolescents (table 3). The average benchmark calcium densities were 509 mg per 1,000 calories for children and 420 mg per 1,000 calories for adults.

Because adolescent females and adult females typically eat fewer calories but have the same calcium RDA as their male counterparts, they need to eat more calcium-dense

Table 4
Dietary Problems Start in Childhood and Continue Into Adulthood—*Continued*

Food outlets for Americans	– – Nutrient-to-calorie density[1] – – Total fat	Saturated fat	Cholesterol	Sodium	Fiber	Calcium
	grams	*grams*	*mg*	*mg*	*grams*	*mg*
Adult females age 40-59:						
Home foods	34.8	11.6	129	1,652	9.2	402
Away-from-home foods[2]	44.7	14.4	141	1,817	7.0	340
Fast food	45.8	15.0	130	1,762	6.1	365
Restaurants	47.7	14.9	181	2,009	8.0	322
Others[3]	40.1	13.1	113	1,677	7.1	327
All foods[4]	37.6	12.4	133	1,699	8.6	385
Benchmark nutrient density	33.3	11.1	185	1,481	11.5	494
Senior males age 60 and above:						
Home foods	35.6	12.0	143	1,683	9.8	428
Away-from-home foods[2]	44.1	14.0	177	1,825	6.4	299
Fast food	45.6	14.9	167	1,842	5.9	343
Restaurants	46.3	14.6	216	1,959	6.9	270
Others[3]	40.0	12.3	138	1,642	6.4	293
All foods[4]	37.5	12.4	151	1,714	9.1	399
Benchmark nutrient density	33.3	11.1	154	1,236	11.5	412
Senior females age 60 and above:						
Home foods	34.2	11.2	137	1,675	10.8	453
Away-from-home foods[2]	42.1	13.3	168	1,817	7.5	339
Fast food	42.9	13.0	170	1,796	7.0	340
Restaurants	45.8	14.5	211	2,010	7.5	330
Others[3]	38.3	12.3	130	1,661	7.9	345
All foods[4]	35.7	11.6	144	1,703	10.1	430
Benchmark nutrient density	33.3	11.1	211	1,689	11.5	563

Notes: [1]Densities are measured per 1,000 calories. [2]Away from home presents the aggregate of fast foods, restaurants, schools, and others. [3]Schools are classified as a separate category for children and are combined into "others" for adults. [4]Nutrient densities for all foods are weighted averages of densities of home foods and away from home foods. Source: Compiled by USDA's Economic Research Service from the 1995 CSFII, individuals providing 2 days of intake.

foods if they are to meet the recommendations. The 1995 data show that none of the food outlets for females (adolescents and adults) had sufficient calcium to meet their recommended intakes.

Even though school meals had a higher calcium density than foods from all other sources, school meals eaten by female adolescents had a calcium density of 530 mg per 1,000 calories (table 3)—81 percent of the group's benchmark density of 653 mg per 1,000 calories. As a result, adolescent females, on average, reached only 61 percent of their calcium RDA, and only 10 percent of them met the calcium RDA. Compared with other children, adolescent females have the highest tendency to eat foods lower in calcium when eating out, skip morning meals (typically high in calcium), eat the smallest number of meals and snacks (hence consume less of all nutrients), and drink the least amount of fluid milk (an important source of calcium in the American diet).

The American Health Foundation recommends a dietary fiber intake of "age plus five" for those age 2-20, and the Food and Drug Administration uses 11.5 grams of fiber per 1,000 calories as its Daily Value for nutrition labeling. Dividing recommended fiber intakes by reported caloric intakes, estimated average benchmark fiber densities increase with age, from 5.7 grams per 1,000 calories among preschoolers to 11.5 grams per 1,000 calories among those age 20 and above (tables 3 and 4).

The fiber density in both home and away-from-home foods eaten by children and adults fell substantially short of the benchmark densi-

ties. For example, the benchmark fiber density for adults is 33 percent higher than the fiber density in home foods and 84 percent higher than the level in away-from-home foods. Consequently, only about one in six adults met the recommended intake for dietary fiber. With away-from-home foods (excluding school meals) providing lower fiber density than home foods, the increased tendency to eat out could reduce fiber intake among children and adults.

Wiser Food Choices Needed, Especially When Eating Out

The most recent data on national food consumption patterns, the 1995 CSFII, indicate that away-from-home foods are generally higher in fat, saturated fat, cholesterol, and sodium, and lower in fiber and calcium than home foods. Furthermore, people tend to consume more calories when eating away from home than when eating at home. In 1995, food away from home accounted for 27 percent of eating occasions but 34 percent of total calories. More than 40 percent of those away-from-home calories were obtained from fast foods. Food away from home is especially popular among adult males age 18-39, who obtained 45 percent of their calories from away-from-home sources. Fast foods alone contributed 23 percent of the group's total caloric intake.

The benchmark measure of nutrient density allows us to evaluate the quality of foods with respect to recommended intakes of particular nutrients. The CSFII 1995 data show that fat, saturated fat, and sodium densities in home and away-from-home foods exceed the benchmark measure, implying that Americans need to reduce fat, saturated fat, and sodium intakes at, and especially away from, home.

Americans have a long way to go before reaching the recommended fiber intake in their diets, as the fiber density in home and away-from-home foods falls substantially below the benchmark. While cholesterol intake is not a problem for many Americans, adult males have to reduce their cholesterol intake at and away from home in order to meet the recommendation. Insufficient calcium is a major dietary problem facing adolescent females and adult females, and the data show that none of the foods selected by consumers in five food outlets have sufficient calcium to meet their recommended calcium intakes at reported energy intake levels.

The increased popularity of dining out presents a barrier for Americans to continue improving their diets. Food purchased away from home generally contain more of the nutrients overconsumed and contain less of the nutrients underconsumed by Americans. Therefore, nutrition policy, education, and promotion strategies focused on improving the nutritional quality of food away from home are needed. Improvements in the nutritional quality of school meals, under USDA's School Meals Initiative for Healthy Children, are expected to help reduce children's intake of fat, saturated fat, and sodium. Past efforts by some fast-food chains and restaurants to market nutritionally improved products have been unsuccessful. It appears that consumers are less attentive to the importance of nutrition when they eat out. Consumers need to pay attention to the nutritional quality and portion sizes of foods eaten at and away from home if they want to meet the recommended Dietary Guidelines. Dietary changes come only gradually and require strong commitment from consumers, with educational assistance from health professionals and the Government.

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