COVID-19 Working Paper: Shares of Commodity Consumption at Home, Restaurants, Fast Food Places, Schools, and Other Away-from-Home Places: 2013-16

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Abstract

A better understanding of commodity consumption will help government and businesses to address the Nation's deficiency in meeting Federal dietary guidelines and the effectiveness of commodity promotion and educational efforts. The data on commodity consumption by food source can be used to gauge adverse impacts on the agricultural commodity sectors when access to commercial eating places is limited due to COVID-19 restrictions. To this end, the U.S. Department of Agriculture's 2007-08 Food Intakes Converted to Retail Commodities Database (FICRCD) is supplemented with imputed values for new foods and applied to 2013-16 What We Eat in America (WWEIA) survey data to convert food consumption into commodity consumption. The data then is broken down into two broad categories—food at home and food away from home. Food away from home is further divided into four sources—a restaurant with waiter service (restaurant), fast food establishment (fast food), school cafeteria and daycare center (school), and other away-from-home places (others). While this approximation meets immediate data needs, developing FICRCD for 2013-16 is recommended as the statistically preferred approach to convert food consumption data into commodity consumption by source.

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USDA, Economic Research Service

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Summary

What Is the Issue?

COVID-19-related shelter-in-place restrictions caused consumers to purchase a larger share of foods from grocery stores instead of commercial eating places. A previous USDA, Economic Research Service (ERS) study reported that shares of commodities acquired for food consumption at home (FAH) and food consumption away from home (FAFH) varied greatly, with the 2007-08 FAH shares ranging from 93 percent for bananas and 80 percent for dairy products to 54 percent for chicken. Therefore, there is a need to update FAH and FAFH shares of commodity consumption in order to gauge the potential impacts of the shelter-in-place restrictions on agricultural commodity growers and marketers.

What Did the Study Find?

Using data from 2 national food intake surveys conducted between 2013 and 2016, ERS researchers separated 63 agricultural commodities into 9 major food source groups (fruit, vegetables, dairy, meats, eggs, grains, fat and oils, caloric sweeteners, and nuts). ERS researchers then broke down the data into FAH and FAFH, which was further categorized by restaurants, fast food, school, and other FAFH. Food source is defined primarily by where consumers acquire the food rather than where they eat it. Foods obtained at grocery stores are classified as FAH, although consumers can eat it away from home, such as at an office or in a school cafeteria. Foods prepared away from home are classified as FAFH, although they can be picked up as takeout or delivered to the consumer's home.

During 2013-16, FAH shares varied among the 9 major commodity groups, ranging from a low of 62 percent for meat, poultry, and fish to 89 percent for nuts, with other commodity groups between these ranges. Commodity shares within a major commodity group also varied. For example, within the meat, poultry, and fish group, 53 percent of chicken and 61 percent of beef was consumed at home; meanwhile consumers purchased 73 percent of pork for FAH consumption during 2013-16.

Shelter-in-place restrictions may adversely affect full-service restaurants more than fast food places since full-service restaurants may not have previously relied on take-out or delivery options. When eating out, Americans favored certain commodities more from fast food places than from full-service restaurants, such as potatoes, chicken, and cheese (see figure in the summary). Therefore, shelter-in-place restrictions that limited dine-in services could have differing impacts on various commodities. On the FAH sector, the COVID-19-induced increase in grocery spending would be allocated among food commodities according to economic determinants (i.e., expenditure and price elasticities) and

behavioral changes (stockpiling, online shopping, purchasing close substitutes for restaurant food, etc.).

How Was the Study Conducted?

ERS researchers used two databases for this analysis: The Federal dietary intake surveys and the Food Intakes Converted to Retail Commodities Databases (FICRCDs), which links foods and commodities for data collected in dietary intake surveys. The dietary intake surveys include the 1994-96 and 1998 Continuing Survey of Food Intakes by Individuals and 2003-04, 2005-06, and 2007-08 What We Eat in America (WWEIA) report, which is the dietary component of the National Health and Nutrition Examination Survey (NHANES).

The FICRCD has not been developed for WWEIA data since 2007-08. In the absence of the FICRCD applicable to 2013-16 WWEIA data, we supplemented the 2007-08 FICRCD with imputed approximations for new foods and applied it to the 2013-16 WWEIA data to estimate the at-home and away-from-home shares of major commodity groups. In 2013-16 WWEIA, 5,575 unique foods were reported by those who completed the dietary recall, including 3,596 foods covered by the 2007-08 FICRCD and 1,979 foods not covered. We calculated the weighted average FICRCD conversion factors for the 3,596 overlapping foods at the 4-digit code food categories, which were treated as imputed values for the 1,979 foods reported in 2013-16 WWEIA but not in FICRCD. The weights employed included the quantity of each food consumed by the respondent and the respondent's sample weight. The supplemented FICRCD breaks down foods reported in 2013-16 WWEIA into commodities, and then their amounts are totaled up by FAH and FAFH to estimate the commodity consumption shares by food source in the United States.

Figure: Restaurant and fast food shares of selected commodities, 2013-16

Percent
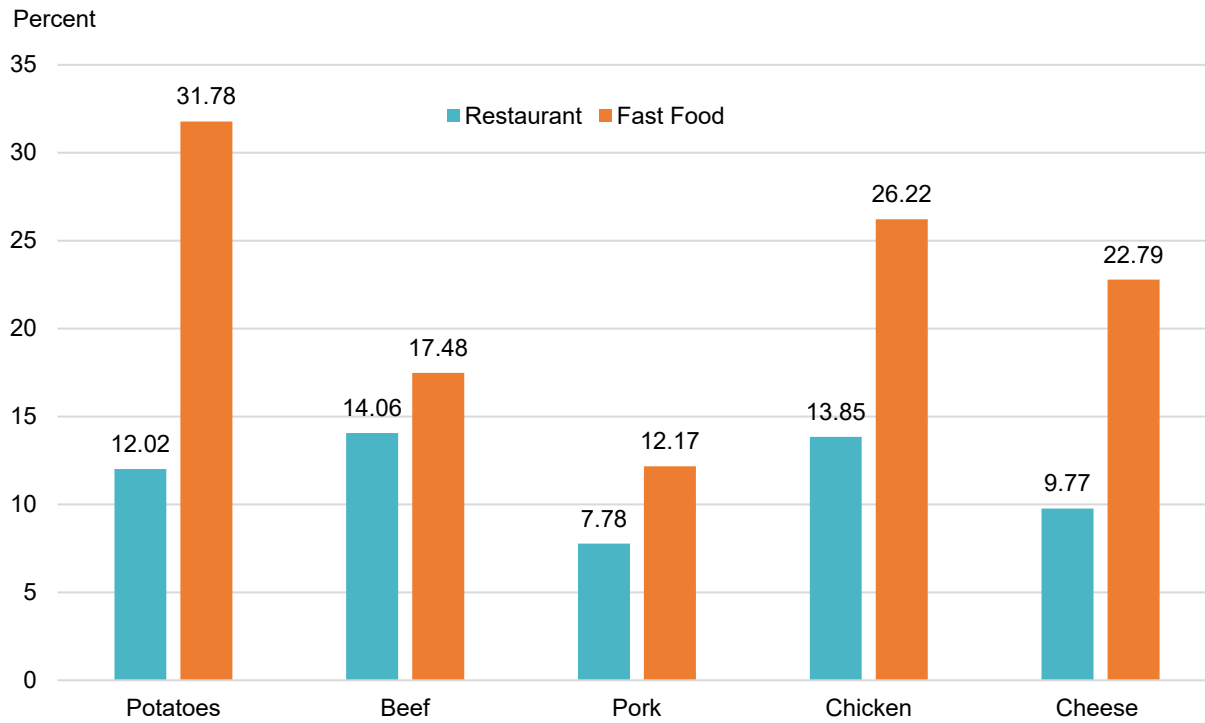
Source: USDA, Economic Research Service calculations from What We Eat in America 2013-14 and 2015-16.

Introduction

Food prepared away from home (FAFH)—whether eaten in restaurants, fast-food and other locations, or as takeout or delivery to be eaten at home—is now a routine part of most Americans' diet, accounting for 34 percent of caloric intake during 2015-16. The Government has conducted annual food consumption surveys to monitor Americans' diets. The surveys provide rich data on what foods consumers of different demographics obtain at various locations. The surveys collect data on food consumption (such as apple pie) but not commodity consumption (such as apples in various product forms). Recognizing the need to understand commodity consumption, USDA, Agricultural Research Service (ARS) developed, in conjunction with USDA, Economic Research Service (ERS), the Food Intakes Converted to Retail Commodities Databases (FICRCDs) to translate foods into commodities (USDA, ARS 2020a). FICRCDs were developed for the USDA's food consumption surveys conducted during 1994-98 and for the integrated What We Eat in America (WWEIA) survey jointly conducted by USDA and Health and Human Services' (HHS) National Center for Health Statistics (NCHS) between 2002 and 2008. The WWEIA survey is ongoing with the latest data in 2015-16, but the FICRCDs have not been updated since 2008 (USDA, ARS 2020b).

A better understanding of commodity consumption will help government and businesses to address such issues as the Nation's ongoing efforts to meet Federal dietary guidelines and the effectiveness of commodity promotion. For example, by determining the amounts of fruit and vegetables different demographic subgroups consume and via different food sources, stakeholders can identify which populations are particularly deficient in consuming certain foods, such as fruit and vegetables, and the food sources where deficiency appears to be relatively severe. The data on the food source of commodity consumption could have implications for the effectiveness of marketing and educational efforts. If a commodity is consumed mainly at home (e.g., milk), it makes sense to target educational and other efforts for that commodity more at grocery shoppers than restaurant-goers. Previous ERS studies reported a higher percentage of pork is consumed at home than beef, meaning the closure of dine-in options at commercial eating places to combat the spread of COVID-19 would likely impact the beef sector more severely than the pork sector.

To meet the immediate need of understanding commodity consumption changes due to COVID-19, we supplemented the 2007-08 FICRCD by approximation to estimate the at-home and away-from-home shares of 63 commodities consumed in the United States during 2013-16. The approximation involved imputation of food-to-commodity conversion factors for foods included in 2013-16 WWEIA data but not included in the 2007-08 FICRCD. Using this approximation approach, we found the 2013-16 commodity shares by source are largely consistent with the previously reported 2007-08 shares,

suggesting that dietary habits take time to change. Nevertheless, because the commodity composition of foods may have changed since 2007-08 and a better understanding of commodity consumption is crucial for the public and private sectors, developing updated conversion factors for a 2013-16 FICRCD is recommended as the statistically preferred approach to convert food consumption data into commodity consumption by source.

Data: Federal Dietary Recall Surveys and Food-to-Commodity Conversion Factors

Prior to 2002, USDA and NCHS conducted separate surveys of food intake by individuals. Since 2002, USDA and NCHS have integrated their surveys into the WWEIA survey (USDA, ARS 2020a). WWEIA is the dietary component of the National Health and Nutrition Examination Survey (NHANES), a continuous survey administered by NCHS. WWEIA respondents list, using 24-hour dietary recall methodology over 2 nonconsecutive days, which foods they ate, how much of each food they ate, and where they obtained the food. Each year, NHANES surveys a nationally representative sample of up to 5,000 persons in 15 U.S. counties. NHANES data are released every 2 years; the individual survey year and respondents' locations are suppressed to safeguard data confidentiality. The 2001-02 data, the first edition of WWEIA, and the 2015-16 data are the latest.

USDA developed several databases to support the use of food intake data to monitor Americans' diet and understand food and commodity consumption patterns. Among them, Food Intakes Converted to Retail Commodities Databases (FICRCDs) translate foods reported in WWEIA into 60 or more commodity groups (USDA, ARS 2020b) and can be used to achieve the objective of this study.[1] For example, the 2007-08 FICRCD indicates that each 100 grams of 2-crust apple pie contains 10.2 grams of shortening, 53.4 grams of raw apples, 20.8 grams of wheat flour, and 10.7 grams of caloric sweeteners.

ERS researchers used FICRDCs to understand commodity consumption by socio-economic and demographic characteristics and by food source (Lin et al., 2016a; 2016b). These analyses covered the WWEIA intake data up to 2007-08 because FICRCDs have not been updated since 2008. In this study,

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[1] Other databases include Food Nutrient Database for Dietary Studies (FNDDS), Standard Reference (SR), and Food Pattern Equivalent Database (FPED). FNDDS and SR provide nutrient values. FPED translates food into food groups specified in the Dietary Guidelines for Americans, and the food groups are aggregates of the food commodities specified in FICRCD. For example, FPED has meat group, whereas FICRCD breaks it down to beef, pork, chicken, etc.

we supplemented the 2007-08 FICRCD using imputed approximate conversion factors for foods reported in 2013-14 and 2015-16 but not covered in the 2007-08 FICRCD as described below.

Approximating Conversion Factors for 2013-14 and 2015-16 WWEIA Intake Data

WWEIA employs the USDA's 8-digit food coding scheme to record food intakes. The first 4 digits separate foods reported in WWEIA into 150 main categories (USDA, ARS 2020b). In 2015-16 WWEIA, 5,575 unique foods were reported by those who completed the dietary recall, including 3,596 foods covered by the 2007-08 FICRCD and 1,979 foods not covered. We calculated the weighted average FICRCD data for the 3,596 overlapping foods at the 4-digit food code level. These averages were treated as imputed approximate conversion factors for the 1,979 foods reported in 2015-16 WWEIA but not in FICRCD. The weights employed include the quantity of each food consumed by each respondent and the respondent's sample weight—the number of Americans each respondent represents in the U.S. population. The resulting database covers all foods in the 2013-14 WWEIA as well.

Definition of Food Source

In WWEIA, survey respondents reported whether they ate the food at home and where they acquired it. Food sources are aggregated into two broad categories—food at home (FAH) and food away from home (FAFH). Away from home is further separated into four sources—a restaurant with waiter service (restaurant), fast food establishment (fast food), school cafeteria and daycare center (school), and other away-from-home places (such as vending machines and community feeding programs), shown in table 1. The determination of FAH versus FAFH is predicated on where the food was obtained. FAH can be eaten away from home, and FAFH can be eaten at home. For example, FAH includes breads and peanut butter purchased at grocery stores and eaten as a peanut butter sandwich at home, school, or work. Meanwhile, home delivery or takeout from a pizza parlor is classified as FAFH, even if it was eaten at home.

Method

After defining a food as FAH or FAFH for each respondent, FAH and FAFH shares of a commodity for a population can be calculated using two alternative approaches—the mean ratio and the population proportion. These two approaches may yield similar results, but they often produce different (but equally valid) results representing different interpretations of the data. Since our objective is to estimate the FAH versus FAFH distribution of agricultural commodities consumed by Americans, the population proportion is deemed the right approach for accomplishing the objective. The mean ratio approach results in the FAH and FAFH shares for a representative American. The

formulas for deriving FAH and FAFH shares under both approaches are given below, followed by a simplified illustration of the population proportion's advantage in determining how much of a commodity Americans consumed at home versus away from home.

Let P denote the population and W the sample weight, i.e., the number of Americans a survey respondent represents in the U.S. population. Q represents the total U.S. consumption of a commodity, separated into FAH and FAFH. The proportion of total consumption at home can be expressed as:

$$FAH/Q = W_i * \sum_i FAH_i / (W_i * \sum_i Q_i)$$ where i is the ith respondent

The population proportion approach follows this formula by first summing up weighted FAH and Q quantities across all individuals in the survey and then taking the ratio of the 2 sums.

The mean ratio approach calculates the FAH share of commodity consumption for each individual and then derives the weighted average share across all individuals.

$$\text{The weighted average FAH share} = \sum_i W_i * (FAH_i / Q_i) / P$$

The mean ratio approach represents the estimated FAH share for a representative consumer. Because the individual FAH share (FAH_i / Q_i as a percentage is unit free) is used in the mean ratio approach, differences in the consumption amounts across individuals are not factored into the weighted average.

A simplified illustration demonstrates the differences in data interpretations between the mean ratio and population proportion approaches and why we use population proportion in our analysis. Suppose the U.S. population is represented by a sample of 2 individuals of equal sample weight. Individual A consumes 10 pounds of apples, of which 4 pounds are consumed at home. Individual B consumes 20 pounds of apples entirely at home and nothing away from home. The mean ratio approach signifies that an average consumer eats 70 percent of apples at home (the average of 40 percent and 100 percent). Individual B eats more apples than individual A, but the difference in consumption amount vanishes as percentages are used in the mean ratio approach. On the other hand, the population proportion approach indicates that of the total apples Americans consumed, 80 percent (24/30 pounds) are consumed at home.

Results

Table 2 estimates shares of commodity groups consumed at home and away from home (disaggregated into restaurants, fast food places, school, and others). For comparison with 2013-16 data, table 2 also includes the 2007-08 shares for the two main food sources, as reported in the 2016 ERS report (see table 2, Lin et al., 2016b).

A previous ERS research (Lin et al., 2016b) reported consumption shares by food source for 63 commodity groups, except butter. In general, the 2013-16 data were consistent with 2007-08 data. Among the 62 commodity groups, 50 were within 5 percent or smaller deviations from the 2007-08 data; 8 deviated between 5-10 percent; and the remaining 4 groups deviated by more than 10 percent. The researchers observed small percentage changes from 2007-08 to 2013-16 for major food categories (more frequently reported), than their subcategories (less frequently reported). The observed changes from 2007-08 to 2013-16 suggest that dietary habits take time to change.

Figure 1. FAH and FAFH shares of commodity groups, 2013-16
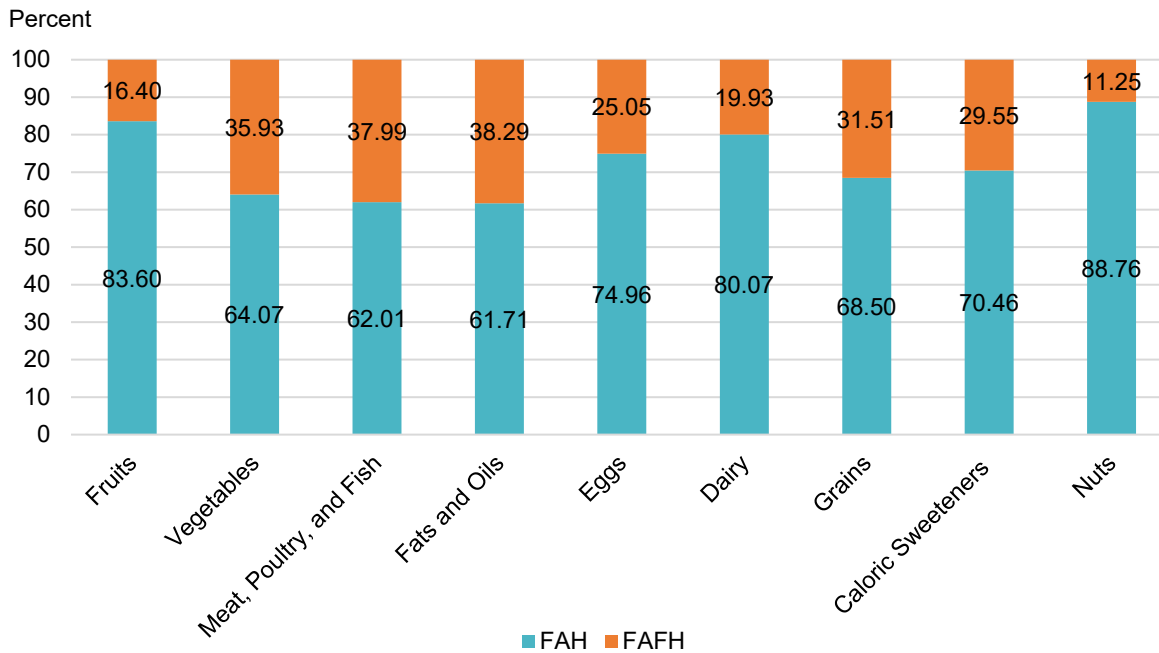
Percent

Note: FAH = Food at Home. FAFH = Food Away from Home.

Source: USDA, Economic Research Service calculations based on 2013-16 What We Eat in America.

The average FAH and FAFH shares of the nine major commodity groups are shown in figure 1 for the 2013-16 period. The FAH shares vary by commodity groups, ranging from a low of 62 percent for the meat, poultry, and fish group, and the fats and oils group, to 89 percent for nuts, with other commodity groups falling in between (figure 1). COVID-19-related shelter-in-place restrictions forced consumers to purchase a large share of their foods from grocery stores at the expense of commercial eating places. Because a larger share of fruits is typically purchased at grocery stores as compared to vegetables and meat, poultry, and fish (84 percent versus 64 percent and 62 percent, respectively), we would expect the reduction in food away from home to have a larger adverse impact on the vegetables and meat,

poultry, and fish sectors than on the fruits sector. This expectation assumes the mix of FAH and FAFH foods purchased prior to the pandemic will continue into the pandemic.

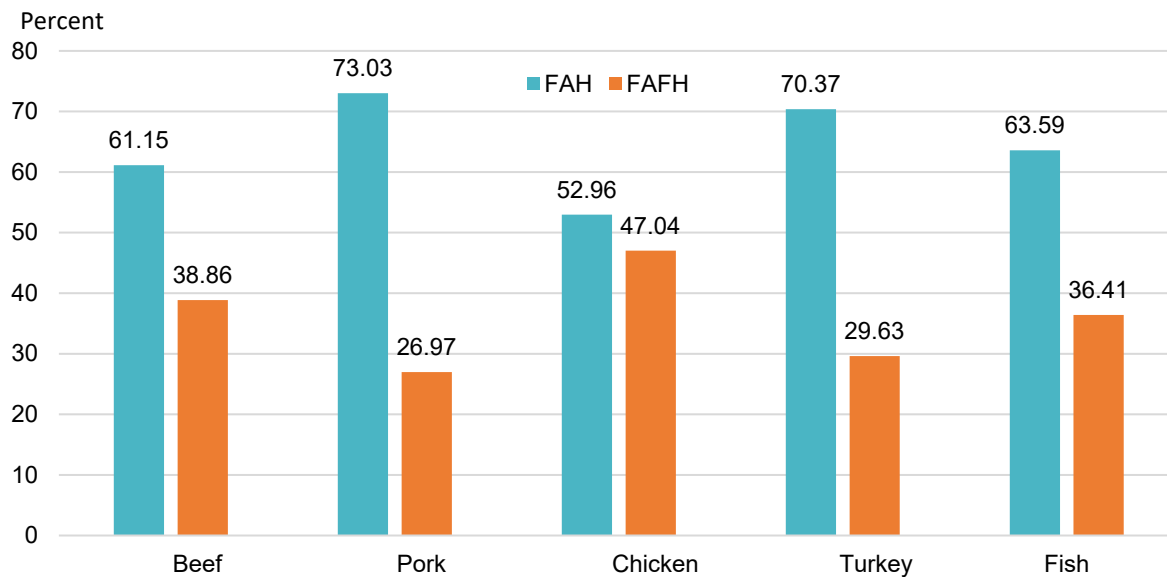**Figure 2. FAH and FAFH shares of beef, pork, chicken, turkey, and fish: 2013-16**

Percent

Note: FAH = Food at Home. FAFH = Food Away from Home.

Source: USDA, Economic Research Service calculations based on 2013-16 What We Eat in America.

Commodities are likely to be impacted differently by the restrictions on dining out. As shown in figure 2, Americans favor consuming certain commodities when eating out. For example, 47 percent of chicken and 39 percent of beef were purchased for FAFH consumption during 2013-16, compared to 27 percent of pork. A variety of meat cuts are more favored in the restaurant trade than grocery stores (Davis and Lin 2005a and 200b). We expect these cuts to be affected more by the pandemic than the cuts favored by grocery stores.

A switch from dining out to FAH consumption resulted in increased grocery spending, which, according to the economic theory, is allocated among commodities according to economic determinants (i.e., expenditure and price elasticities, which measure changes in consumption amount in response to changes in food expenditure and prices) and consumer behavior (e.g., stockpiling, online shopping, purchasing ready-to-eat or semi-processed foods, which are close substitutes for restaurant foods, etc.). Past ERS research provided estimates of expenditure and price elasticities (Okrent and Ashton, 2012; Huang and Lin, 2000). The U.S. Bureau of Labor Statistics reports relative price changes among commodities at the consumer level (2020). Future research can use these elasticity estimates and relative prices to estimate changes in consumption under COVID-19 can be

attributed to economic determinants. Consumers have also altered their food purchasing behavior under COVID-19. Many Americans minimized grocery store trips by stockpiling and/or turning to online purchasing. Stockpiling and online shopping may alter the mix of grocery purchases. Furthermore, facing dining out restrictions, consumers may purchase more foods that are close substitutes for restaurant foods. To study the potential changes in grocery mix under the pandemic, ERS researchers have acquired real-time purchase data from private vendors to compare food purchases before and during the pandemic.

Figure 3. Restaurant and fast food shares of selected commodities, 2013-16 averages
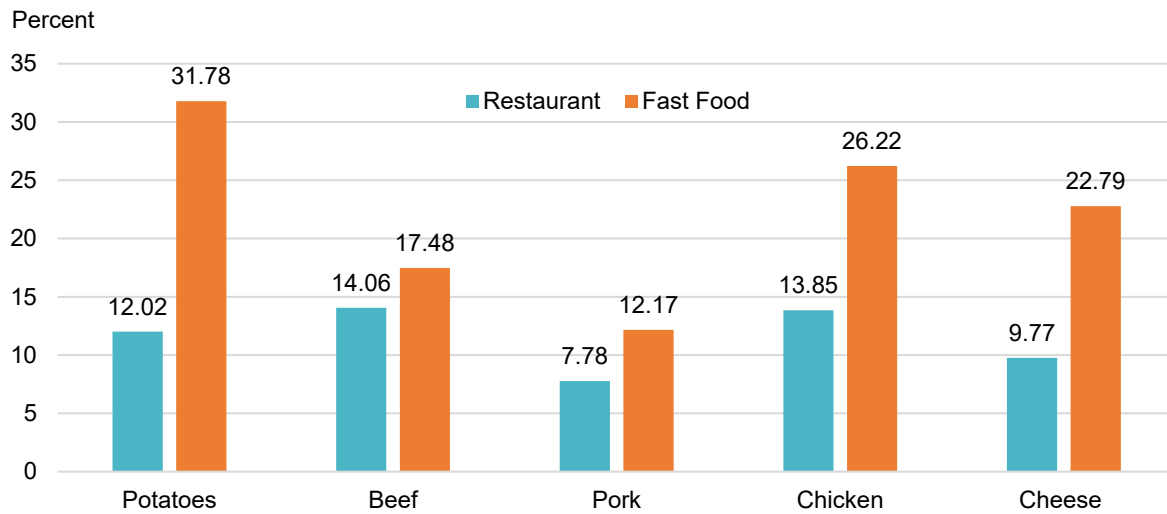
Percent

Source: USDA, Economic Research Service calculations based on 2013-16 What We Eat in America.

Food consumption recorded in WWEIA is translated into nutrients using the Food and Nutrient Database for Dietary Studies (FNDDS), USDA's nutrient database (USDA, ARS, 2020c). During 2013-16, total food energy (calories) consumed at fast food places was almost twice the total energy consumed at restaurants, accounting for 15.5 percent and 8.1 percent, respectively, of total food energy consumed by Americans. Dine-in restrictions may affect sit-down restaurants more than fast food places because most fast food establishments offer drive-thru options, which have been commonplace for decades, whereas the take-out or pick-up option at restaurants may not yet be as popular. Many fast food places specialize in certain foods, such as chicken products and burgers, while sit-down restaurants tend to offer a more extensive menu. Consequently, separating commodity shares for the FAFH sector into subcategories improves understanding of the likely impacts of restricted access to commercial eating places during the COVID-19 pandemic.

The restaurant and fast food shares of potatoes, beef, pork, chicken, and cheese during 2013-16 are shown in figure 3. The fast food shares of total consumption of potatoes and cheese were more than twice that of the restaurant shares, whereas the fast food share of beef was 24 percent more than that of the restaurant share. Therefore, dine-in restrictions may affect the purchasing patterns of products from the beef sector relatively more than potatoes and cheese.

Limitations and Future Research

The FICRCD has not been developed for WWEIA data since 2007-08. In the absence of new conversion factors applicable to 2013-16 WWEIA data, we supplemented the 2007-08 FICRCD by imputing approximate conversion factors for foods not already covered in the database. We applied the updated FICRCD to the 2013-16 WWEIA data to estimate the FAH and FAFH shares of major commodity groups. While the 2013-16 commodity shares by food source are largely consistent with the previously reported 2007-08 shares, they rely on imputed approximate conversion factors for 1,979 foods, 35 percent of the reported foods in 2015-16. Further, the commodity composition of foods reported in 2013-16 WWEIA may have changed since 2007-08. Thus, updating FICRCD for each round of WWEIA remains the statistically preferred and recommended approach. We also note that prior to the release of the two USDA, ERS reports (Lin et al., 2016a and 2016b) on commodity consumption by demographics and by food source, USDA, ERS researchers used several USDA databases to study the consumption of individual commodities, such as tomatoes, apples, potatoes, beef, pork, and others (such as Davis and Lin 2005a and 2005b on pork and beef; a list of the approximately 20 studies is available upon request). The popularity of these studies with agricultural growers and marketing groups prompted the collaborative efforts to develop the FICRCDs. Research to serve these stakeholders will be enhanced by updating the FICRCD to reflect current food consumption.

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Table 1. Definition of food source in 2013-16 What We Eat in America

Food source code	Where the food was obtained	Food source
1	Store	FAH
2	Restaurant with waiter/waitress	Restaurant
3	Fast food restaurant/pizza	Restaurant
4	Bar/tavern/lounge	Restaurant
5	Restaurant – no additional information	Restaurant
6	Cafeteria not at school	Restaurant
7	School cafeteria	School
8	Children care center	School
9	Family/adult care center	Other FAFH
10	Soup kitchen/shelter/food pantry	FAH if eaten at home; otherwise other FAFH
11	Meals on Wheels	Other FAFH
12	Community food program – other	Other FAFH
13	Community food program – no additional info	Other FAFH
14	Vending machine	Other FAFH
15	Common coffee pot or snack tray	Other FAFH
16	From someone else/gift	FAH
17	Mail order purchase	FAH
18	Residential dining facility	Restaurant
19	Grown by you or someone you know	FAH
20	Fish caught by you or someone you know	FAH
24	Sport, recreation, entertainment facility	Restaurant
25	Street vendor, vending truck	Other FAFH
26	Fundraiser sales	Other FAH
27	Store - convenience type	FAH
28	Store - no additional info	FAH
91	Other, specify	Other FAFH
99	Don't know	Missing

Note: FAH = food at home; FAFH = food away from home

Source: USDA, Agricultural Research Service, 2013-16 What We Eat in America (2020b).

Table 2. Source of food energy and agricultural commodities:
2007-08 and 2013-16 at home and away from home shares

	2007-08		2013-16 Average					
	At Home	Away from Home	At Home	Away from Home				
				Total	Restaurant	Fast Food	School	Other
				Percent				
Food energy	70.7	29.3	69.2	30.8	8.1	15.5	1.9	5.3
Fruits: total	86.6	13.4	84.8	15.2	2.9	4.5	3.6	4.3
Apples: total	88.3	11.7	85.8	14.2	1.3	2.9	6.4	3.6
Apples as fruit	89.4	10.6	88.4	11.6	1.3	1.9	5.3	3.1
Apples from juice	87.3	12.8	83.2	16.8	1.2	4.0	7.5	4.1
Bananas	93.3	6.7	93.3	6.7	0.8	1.6	1.8	2.6
Berries	88.6	11.4	87.0	13.0	2.1	3.7	2.1	5.2
Grapes	89.4	10.6	87.6	12.4	1.6	2.9	3.2	4.7
Melons	84.4	15.6	82.6	17.4	5.2	4.3	1.4	6.5
Oranges: total	85.2	14.8	83.5	16.5	2.9	6.4	3.3	3.9
Oranges as fruit	90.1	9.9	89.5	10.5	0.6	0.8	4.5	4.6
Oranges from juice	84.8	15.2	82.9	17.1	3.2	7.0	3.1	3.8
Other citrus fruits	70.8	29.2	74.8	25.2	12.7	7.4	1.1	4.1
Stone fruits	91.1	9.0	82.9	17.1	1.1	9.8	3.3	3.0
Tropical fruits	82.3	17.7	79.9	20.1	4.5	3.6	4.7	7.4
Vegetables: total	63.5	36.6	64.1	35.9	11.6	18.0	1.8	4.5
Leafy vegetables: total	57.7	42.3	64.9	35.1	13.3	16.7	1.5	3.5
Lettuce	52.8	47.2	58.5	41.5	14.2	21.6	1.9	3.9
Celery	79.0	21.0	78.7	21.3	7.3	7.9	0.8	5.2
Cucumbers	63.0	37.0	77.1	22.9	7.4	9.0	1.8	4.6
Green peas	80.1	19.9	80.8	19.2	8.4	5.6	1.5	3.7
Legumes dried	70.0	30.0	70.9	29.1	10.8	10.8	2.2	5.4
Onions	61.2	38.8	64.1	35.9	15.0	14.3	1.6	5.0
Peppers	59.4	40.6	64.7	35.3	14.9	14.8	1.6	3.9
Carrots	78.7	21.3	81.6	18.4	6.3	4.7	3.4	4.0
Snap beans	76.1	23.9	78.3	21.7	8.7	4.3	1.8	7.0
Sweet corn	79.6	20.4	83.6	16.4	5.0	4.4	1.9	5.2
Tomatoes	62.3	37.7	58.2	41.9	12.9	22.5	1.8	4.7
Brassica: total	71.2	28.8	76.4	23.6	11.6	6.3	1.4	4.3
Broccoli and cauliflower	73.8	26.2	77.7	22.3	11.6	5.7	1.8	3.3
Potatoes	54.4	45.6	49.6	50.4	12.0	31.8	2.4	4.2
Meat, poultry, and fish: total	61.1	38.9	62.0	38.0	13.2	17.6	1.8	5.3
Meat: total	64.2	35.9	65.7	34.3	11.7	15.3	1.6	5.7
Beef	60.3	39.7	61.1	38.9	14.1	17.5	1.9	5.4

Pork	71.6	28.4	73.0	27.0	7.8	12.2	1.2	5.8
Poultry: total	56.5	43.5	54.9	45.1	12.9	24.7	2.8	4.7
Chicken	53.6	46.4	53.0	47.0	13.8	26.2	2.7	4.2
Turkey	77.4	22.6	70.4	29.6	6.5	12.8	3.2	7.1
Fin and shellfish	63.3	36.7	63.6	36.4	20.3	9.8	0.5	5.8
Fat and oils: total	60.5	39.5	61.7	38.3	10.3	19.7	1.8	6.4
Butter	Not reported*		74.6	25.4	10.5	8.9	0.9	5.0
Margarine	72.8	27.2	74.6	25.4	10.0	7.2	1.4	6.8
Other oils	79.3	20.7	82.3	17.7	0.7	6.2	1.7	9.2
Salad and cooking oils	57.2	42.8	56.5	43.5	11.4	25.0	1.9	5.3
Shortening	56.8	43.3	65.5	34.5	7.9	14.7	2.2	9.8
Eggs	71.5	28.5	75.0	25.0	9.4	9.4	0.8	5.4
Dairy: total	81.4	18.6	80.1	19.9	3.2	8.3	5.2	3.2
Fluid milk: total**	84.9	15.1	83.5	16.5	1.9	5.5	6.4	2.8
Cheese	56.5	43.5	60.8	39.2	9.8	22.8	2.2	4.4
Yogurt	91.3	8.7	90.3	9.7	1.0	5.5	1.3	1.9
Other dairy	71.3	28.7	70.3	29.7	6.8	14.9	0.9	7.1
Grains: total	69.6	30.4	68.5	31.5	8.4	16.3	1.9	4.9
Corn flour	78.2	21.8	78.3	21.7	7.0	7.6	2.2	4.9
Oat flour	95.7	4.3	92.6	7.4	2.0	1.9	1.3	2.3
Rice dried	74.6	25.4	71.8	28.2	13.8	9.5	0.7	4.2
Wheat flour	65.6	34.4	65.8	34.2	8.3	18.8	2.1	5.1
Caloric sweeteners	71.5	28.5	70.5	29.5	5.5	15.3	1.5	7.2
Nuts: total	90.0	10.0	88.8	11.2	1.9	4.0	0.3	5.1
Tree nuts	89.3	10.7	85.8	14.2	3.2	5.2	0.1	5.8
Peanuts	90.4	9.6	89.5	10.5	1.5	3.6	0.3	5.2

Notes: * Butter was not reported due to data limitations. ** Data for fluid milk by fat content are available but not reported here.

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