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Eating Together at the Firehouse: How Workplace Commensality Relates to the Performance of Firefighters

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Cooperative activities among coworkers can provide valuable group-level benefits; however, previous research has often focused on artificial activities that require extraordinary efforts away from the worksite. We investigate organizational benefits that firms might obtain through various supports for coworkers to engage in commensality (i.e., eating together). We conducted field research within firehouses in a large city to explore the role that interacting over food might have for work-group performance. Using a mix of qualitative and quantitative methods, our field research shows a significant positive association between commensality and work-group performance. Our findings establish a basis for research and practice that focuses on ways that firms can enhance team performance by leveraging the mundane and powerful activity of eating.

Questions about *why* individuals cooperate with each other have provided for rich debate among moral theorists, political commentators, philosophers, and evolutionary biologists (e.g., Wilson & Kniffin, 2003). Questions about how people cooperate with each other have provided more tractable and applicable results that help us to recognize the mechanisms that facilitate mutually beneficial outcomes within groups (e.g., Smith, Carroll, & Ashford, 1995). While various forms of reciprocity (e.g., Goldstein, Griskevicius, & Cialdini, 2011) and social exchange (e.g., Bottom et al., 2006) are commonly highlighted as mechanisms to facilitate cooperation within groups, experiential tasks such as walking in synchrony with each other (Wiltermuth & Heath, 2009) and environmental nudges (e.g., through music: Greitemeyer, 2009) have also been shown to increase cooperation. Given the value that cooperation among co-workers can create and the costs entailed by non-cooperative behavior among co-workers (e.g., Kniffin & Wilson, 2005, 2010), the identification of additional sources for improving performance through cooperative activities is needed.

One environmental feature of workplaces that should be considered as a potential source for enhancing team performance through cooperative activities involves the cafeterias and catered events that employers commonly provide for employees; however, this has previously been understudied by organizational researchers. Beyond the basic bodily sustenance that cafeterias

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and catering can supply, organizational support for worksite eating can generate value by (1) facilitating greater collaborations among co-workers who might otherwise not talk with each other except when they break for eating, (2) increasing productivity by minimizing time spent traveling for an off-site meal, and (3) encouraging healthy eating—and lower health insurance costs—through influence over menus. While the benefit of minimizing travel can be a logistical enhancement for an office that lacks nearby food providers and the health benefit can be obtained when employers execute nutrition-oriented wellness programs (e.g., Devine et al., 2007; Jensen, 2011), we are interested in the key research question: Does worksite eating that is shared among co-workers enhance team performance?

The question that we investigate is motivated by (1) theoretical interests to consider ways that existing resources (e.g., cafeterias) might be recognized and optimized in relation to workplace performance as well as (2) topical interests invited by reports of firms, particularly in the technology sector, that increasingly provision food for their professional staff (Guynn, 2012; Levy, 2011). To date, organizational researchers have studied or used food-based figures of speech such as the "gobbling up" of competition discussed by Riad and Vaara (2011) and the "recipe book" template for product development routines described by Salvato (2009) as much as—or more often than—actual studies of food in the workplace. Previous research in other fields has explored the role of commensality (i.e., eating together) in dyadic romantic relationships (e.g., Bove, Sobal, & Rauschenbach, 2003; Kniffin & Wansink, 2012; Marshall, 2006; Sobal, Bove, & Rauschenbach, 2002) just as family researchers have questioned the degree to which "the family that eats together is the family that stays together" (e.g., Musick & Meier, 2012; Neumark-Stzainer et al., 2000; Sobal, 2000; Sobal & Nelson, 2003; Sobal & Hanson, 2011; Wilk, 2010). In our case, we examine commensality among professionals in contemporary work environments to shed light on a contemporary managerial approach to engaging employees individually—since eating is physically a solitary activity—and socially—since worksite cafeterias are designed to bring co-workers together. Given that the costs for sponsoring workplace eating—whether it is for facilities and/or food—are clear and easily measured, popular debates about the merits of employer-sponsored eating (e.g., Dvorak, 2012) are presently very imbalanced since measures of organizational benefits are substantially less clear.

In this article, we review and integrate research from several disciplines relating to shared meals and behavior before presenting the results of field research about commensality among professional firefighters. Our multidisciplinary literature review acknowledges relevant work conducted by organizational researchers, as well as anthropologists and social psychologists, across a range of naturalistic and laboratory settings. Our field research of firefighters—and firehouses—is specifically motivated by the stereotype of frequent commensality in firehouse kitchens and employs a complementary set of qualitative and quantitative methods to examine the relevance that food consumption might have for organizational behavior. Because firehouses offer a prototypical model for the relevance of workplace commensality, our research is able to highlight dynamics that have potentially generalizable application for organizational theories and practices. As a benefit of our mixed-methods approach (cf. Bendersky & Hays, 2012), we are able to ground our research (Glaser & Strauss, 1967) by checking for consistency between our qualitative and quantitative data.

SHARED MEALS AND BEHAVIOR

Among researchers studying contemporary work environments, questions relating to food have been understudied perhaps because the mundane nature of eating can easily be "taken for granted" (Suddaby, Elsbach, Greenwood, Meyer, & Zilber, 2010) and—notwithstanding popular trends for consumption of food-related mass media—perhaps the relatively physical and messy nature of eating (Rozin, Haidt, & Fincher, 2009) is less appetizing to study when compared with more formal and straightforward managerial topics. As an exception to this pattern, Dacin, Munir, and Tracey (2010) explored the question of communal eating among university students; however, they do so with the primary intention of understanding the role of cafeterias in relation to individual-level identity formation. Similarly, Fine (1996a) studied the relevance of occupation-specific rhetoric among restaurant cooks; however, his focus on the role of language in relation to specific kinds of work could be about any profession (e.g., he studies how restaurant workers discuss their profession in comparison with others such as artists and businesspeople). There have also been a number of field studies that have focused on different specific aspects of food in the workplace (Driver, 2008; Pina e Cunha, Cabral-Cardoso, & Clegg, 2008) such as the role of homemade baked goods (Thomson & Hassenkamp, 2008); however, those analyses—along with a study of pervasive commensality among modern-day mafia members as portrayed in popular films (Parker, 2008)—are limited to interpretations of qualitative data.

More commonly, researchers have mentioned the roles served by cafeterias without highlighting much if any organizational significance. For example, Bernstein (2012) specified eating in the company cafeteria as one of the ways that his study's "embedded participant-observers" presumably fit into the organizational culture of the mobile phone factory they described. Similarly, Kellogg (2012, p. 1556) briefly recognized the way that cafeterias can provide a space for informal congregating and communicating among coworkers to blow off steam and reinforce workplace norms, Gavetti and Rifkin (2007, p. 429) acknowledged how an early Internet company proudly claimed that its cafeteria was intended as a frugal, utilitarian environment, Ashforth et al. (2007, p. 170) mentioned "lunchrooms" as a place where organizations can permit workers to take respite from stressful roles, and Rothbard, Phillips, and Dumas (2005) noted that cafeterias can provide a place for employees to intermingle work and family roles in cases where employees might bring their young children from onsite childcare facilities into the main cafeteria for lunch. In addition, Golding (1991) described a workplace where a "hierarchy of dining rooms" reinforced social disparities between various layers of the organization, Kennly and Florida (1995) described the single cafeterias in Japanese-brand auto factories in the United States as symbolic of the minimal hierarchy found in those environments, Watson (1982) discussed how the creation of "eating rooms" in a factory became a point of labor-management negotiations, and Prashantham and Dhanaraj (2010) used cafeterias as one of their research sites with the hope of accessing informal organizational knowledge.

In contrast with previous work that often scratches various interesting surfaces regarding the potential importance of worksite eating, our study is intended to focus attention on the particular role of cafeterias and other communal eating locations as spaces where organizational costs and benefits should be considered in pursuit of facilitating cooperation among coworkers and enhancing team performance. In effect, our interests are comparable to popular discussions about how "water coolers"—at a significantly smaller scale and without the institutional backing of eating in cafeterias—can be magnets for a kind of "slack" within firms (Bourgeois, 1981; Cyert & March,

1956). As a potential kind of "slack," we are interested in the degree to which behavior that might seem superfluous or wasteful to outside observers ultimately carries significant importance for organizational performance. Against this backdrop, our study of how professional firefighters use food in their worksites (i.e., firehouses) contributes uniquely to the organizational literature by highlighting and measuring potential benefits that can be leveraged through the basic and universally necessary activity of eating.

Multidisciplinary Studies of Food and Behavior

Outside of contemporary workplace settings, anthropologists, sociologists, and social psychologists have studied the variable ways in which eating together is important for human groups. For example, in the broadest of lights, it is notable that evolutionary studies of the origins of *Homo Sapiens* have highlighted communal cooking and eating as quintessential human traits (Wrangham, 2009). Indeed, most important social events or rituals in contemporary societies continue to involve some kind of food. Epitomized in the United States by Thanksgiving as a day of extraordinary feasting—typically among close associates (Wallendorf & Arnould, 1991), food is pervasive as a part of organized social activities.

Mixing social and work relationships, archaeological evidence has indicated a long tradition of food being utilized as a managerial tool for incentivizing labor in prehistorical environments. Archaeologists and ethnographers, for example, have discussed "work feasts" as "collective work events" where food and/or (alcoholic) beverages were offered as incentives to attract labor (e.g., for harvesting crops) for one or more days (Dietler & Herbich, 2001). Such events are comparable to contemporary holiday parties (e.g., Rosen, 1988; Sturdy, Schwarz, & Spicer, 2006) in the sense that they are periodic feasts; however, modern office parties are not known to engage partygoers in intensive physical work such as crop harvesting. Notably, just as the role of commensality in relation to contemporary firms' performance has been understudied, Dietler and Herbich (2001) wrote that "work feasts have been such a common feature of agrarian societies that they have been taken for granted as part of the expected cultural background" among archaeologists (p. 246).

The rich anthropological evidence of group-level functionality of food sharing for feasts (e.g., Mills, 2007) and "everyday" commensality (e.g., Kennedy, 2012; Pollock, 2012) points to reasons why food might function to help bond people together. In her analysis in the United Kingdom of the "grammar" of food sharing—or the relationships between social categories and food categories, Douglas (1972) observed that "meals"—by definition—are shared among "family, close friends, [and] honored guests" and that, traditionally, coworkers limit their joint consumption to drinks. The idea of meal sharing as "intimate" is consistent with experimental findings that look at the role of eating within romantic relationships (e.g., Kniffin & Wansink, 2012; Miller, Rozin, & Fiske, 1998) and the implication is that the intimacy of eating is fundamentally intertwined with the deepening of social ties among people eating together.

An important limitation with respect to anthropological studies of food among pre-industrial groups in relation to worksite eating is that related activities such as food production and cleaning are unbundled and outsourced in most contemporary workplaces to food service workers and janitorial staff. Consequently, when Fischler (2011) wrote that "commensality produces bonding" (p. 533), we expect that he was implicitly using a broad definition of commensality that includes activities such as cooking and cleaning and, perhaps, food shopping and meal planning. Through

our study of firehouses, we clearly define commensality as "eating together" to differentiate it from related activities such as food shopping and cooking.

At a finer-grain scale, there also exists a body of research that focuses on the relationship between specific types of food and group-oriented decision making. For example, Meier, Moeller, Riemer-Peltz, and Robinson (2012) find that "sweet" foods (e.g., chocolate) appear to influence people to engage in cooperative or figuratively "sweet" behaviors. Similarly and less surprisingly, Sayette et al. (2012) reported that moderate doses of alcohol can increase social bonding among strangers in a lab setting. In the case of our study of firehouses, although it is valuable to recognize that specific food types are known to influence behavior, there is too much variety of specific types of food and beverage—although alcohol is prohibited—to be able to examine any specific food influences because there is no centralized control of the menu across the fire department that we studied. We expect that this variety is common across other work environments, though, where employees are not expected—as in a factory setting, for example—to eat mainly and regularly from a company cafeteria. In this vein, our study of firehouses presents an opportunity for studying the organizational benefits of commensality in a naturalistic setting with more context than experimental settings provide (Heath & Sitkin, 2001; Johns, 2006).

Firehouses as Exemplars for Worksite Eating

As indicated by the common name for their worksites, "firehouses" traditionally have included domestic functions, because a consistent number of firefighters need to be present at all times in case of an emergency. Although those emergencies often present life-threatening situations that require speed, strength, cooperation, and skill to address, the amount of time that firefighters need to spend at their stations requires that they also eat, sleep, and recreate at their stations. Against those backdrops, firefighters have developed a broadly accepted, recognized, and celebrated tradition that coworkers will jointly consume meals that they prepare for themselves (e.g., Deutsch, 2004). Indeed, there exists a subgenre of cookbooks that focus exclusively on recipes generated by firefighters (e.g., Young, 2003).

Given our focus on the organizational benefits of "eating together," we can observe that it is relatively common for workplaces to have kitchens—with or without tables and chairs—where employees can make final touches on their meals (e.g., with a microwave). Firehouses, which traditionally have extensive kitchen facilities, are useful to consider as an endpoint that is shared, perhaps, with some restaurants (Fine, 1996b) on the spectrum of workplaces where coworkers prepare food and eat together. Given that the organizational variable of commensality of coworkers is typically overlooked, though, firehouses provide a useful entry point for analyzing the subject of workplace eating.

Although fire departments make a practice to include full kitchens in firehouses, all aspects of kitchen use are contingent on self-government by the firefighters. In places where firefighters cook, for example, they are solely responsible for any systems of purchasing or procuring cookware, plates, and silverware just as they need to maintain supplies such as condiments, coffee, and "canteen" food (e.g., candy). As a remarkable system of "order without law" (Ellickson, 1991) and without regulation from the kind of health inspections that monitor public eating establishments, firehouse food culture is a strong tradition that firefighters implicitly understand to be important (Kaprow, 1999; McCarl, 1982).

Comparable to the way in which cafeterias in large corporate offices are not typically mandatory locations for employees to eat, it is notable that firefighters neither need to use kitchens—especially in urban settings with nearby restaurants that provide delivery service—nor do they need to use any part of the kitchens (e.g., refrigerator, microwave, or utensils) in coordination with anyone else. As a matter of practice, though, firefighters do tend to fully engage the resources that are available to them for the collective production and consumption of food. With the benefit of our research, we are able to gain a fine-grained understanding of the dynamics that involve commensality among professional firefighters.

Conceptual Framework

As illustrated in the left side of Figure 1, which aims to reflect the diversity of variables that we just reviewed, the planning of meals and preparation of food that traditionally occurs in firehouses are independent from the specific—and much more common—activity of coworkers eating together. We can highlight, however, that the act of talking together during a meal (a) seems to be a critical reason to expect why commensality might increase overall cooperation and (b) is a common aspect of eating together among coworkers in most contemporary settings. Our expectations about the relevance of talking when eating draws upon robust experimental findings that demonstrate that people cooperate significantly more even after engaging in several minutes of "cheap talk" (Messer, Zarghamee, Kaiser, & Schulze, 2007). With respect to eating and talking, the two activities appear almost definitionally intertwined as long as the neighboring eaters are familiar with each other.

The main relationship that our study aims to explore and highlight involves the association between eating together and team performance. As Kozlowski and Ilgen (2006) suggested in their review of mechanisms that encourage cohesion within groups, it is plausible that commensality (i.e., the mechanism that we explore in this article) and performance are reciprocally related and

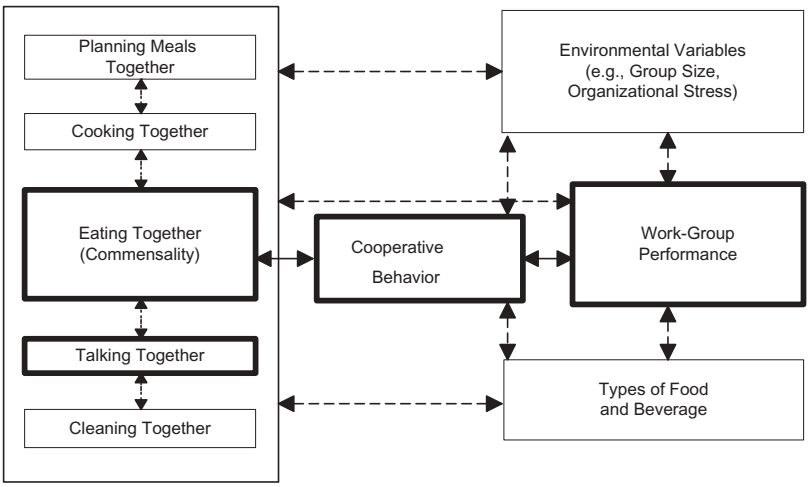

FIGURE 1 Conceptual diagram of commensality in relation to organizational performance.

that accounts for the bidirectional arrows in Figure 1. Notably, our study is also designed to consider the relevance of environmental factors (e.g., stress), and our framework acknowledges that specific types of food and beverage can contribute to increased cooperation. Given, though, the great variety of foods consumed in firehouse kitchens ranging from spaghetti with clams to fried chicken sandwiches, it is not feasible to focus on specific food and beverage influences.

Through this early investigation into the role of commensality among coworkers, our goal is to identify the presence of relationships that might help managers and future researchers facilitate greater work-group performance. In addition to informing the current practice of several large employers providing food as a fringe benefit for professional employees (e.g., Guynn, 2012; Levy, 2011), the present study has value, as eating is an activity in which people generally need to engage several times each day. In this respect, understanding the place of commensality in relation to organizational performance is uniquely important as a potential mechanism that enhances performance within firms. Other activities such as singing together have been demonstrated to increase group performance (Wiltermuth & Heath, 2009), but they are not generally considered to be daily activities that are already available for organizational leveraging.

OVERVIEW OF THE CURRENT RESEARCH

During the course of 15 months, we conducted complementary qualitative and quantitative research with a fire department in a large city in the United States that employs more than 2,100 people. Main sources that we drew upon were (a) meetings with department and union leaders, (b) semistructured group interviews at a sample of firehouses, (c) newspapers and public reports concerning the fire department, (d) books and other chronicles of firefighting, and (e) a quantitative survey that we administered to all of the department's officers (i.e., captains and lieutenants that form the population of shift supervisors across the department). As a first step, we sought and gained permission from leaders of the department and union to conduct 2 weeks of on-site interviews to learn about the role of food and culture in firehouses to help formulate the questionnaire for subsequent administration to the department's full set of officers. Through the first step, we were able to gain qualitative data that we used to refine our focus for the quantitative measures that we gained through a department-wide survey.

Qualitative Analysis of Workplace Commensality

Participants and Procedures

With joint labor–management support, the first author was able to visit 13 firehouses across a large city over the course of 2 weeks. During the visits, which tended to last slightly more than 2 hr, the first author was able to engage all of the firefighters—including officers—who were on duty in semistructured conversations about food, as well as myriad aspects of their experiences on "the job," as they regularly call it. Partly because the first author has a close relative who served more than 20 years in the department, the firefighters were generally content to engage the conversation topics. At the first station that the first author visited, he identified the close family relationship with a retired member of the department and was told, "You're part of the

family." The first author's self-introduction at the other sites included reference to the close family relationship, which facilitated broader-ranging conversations than someone with no connection might have gained. Likewise, as part of the informed consent process, participants understood that their comments would only be considered anonymously outside of the interview. As an additional measure to engage open participation, the conversations were recorded through the first author's note taking rather than audio recordings that potentially would have been personally identifiable.

Whereas we anticipated that one-on-one interviews with the shift officer would be the foundation of our qualitative observations, the first author embraced the opportunity of talking concurrently with all of the on-duty firefighters, as well as the officers. Typically, the semistructured group conversations occurred in the area where meals were consumed, and all of the interviews started with introductory questions about the ways in which the firefighters usually ate in the firehouses. The Appendix provides the interview guide that the first author used as a reference for the interviews. As illustrated through the interview guide, once topics related to food were exhausted, the first author then asked questions related to the firefighters' backgrounds and experiences in order to better understand cultural aspects of the department. Using the method of "constant comparison" as each interview was analyzed with respect to others before the next interview was conducted (Glaser & Strauss, 1967), responses to some of our initial questions helped to generate emergent follow-up questions that were posed during subsequent interviews. Of interest, several of the interviews were interrupted by alarm calls and those experiences provided natural topics of conversation as well (e.g., to learn about the calls) when the firefighters returned to the firehouse.

The 13 sites that were visited compose more than 20% of the city's population of firehouses and varied in relation to location and typical activity levels (i.e., slow or busy). The sites also varied in size, as some firehouses are home to a single engine company (with approximately four firefighters and one officer on duty at all times), a single ladder company (with the same portfolio of personnel), or a "double house" combination that is home to an engine and a ladder company (with approximately eight firefighters and two officers per location). Almost all of the sites were also home to paramedic units; however, the nature of the paramedics' job duties place them outside of the firehouse significantly more often compared with firefighters. Of relevance to our study of organizational commensality, paramedics are consequently not part of meal planning and production at the firehouses, although firefighters typically offer them servings of their food and often pack food for the paramedics to eat while they are responding to calls outside of the firehouse.

Notably, each of the city's more-than-50 fire stations is staffed by four separate shifts. Consequently, although our on-site interviews permitted us to meet with firefighters at more than 20% of the city's stations, it is important to acknowledge that each station is home to four stable and independent sets of coworkers as shifts. Just as work groups or shifts are also known as platoons in the department, it is also true that the terms "officer," "work-group supervisor," and "platoon leaders" are interchangeable and equivalent throughout this article.

Findings and Discussion

In contrast with the university dining rooms that Dacin et al. (2010) described, and unlike the large corporate cafeterias that might occupy one or two floors of a tall office tower, firehouses are much more like the "total institutions" that Goffman (1961) described in the sense that

people carry out work, recreation, sleep, and food activities as part of the group and cannot be far from each other for the duration of their lengthy shifts. In this light, it is noteworthy that—during the course of previewing our site visits—the first adjective that a department administrator (and former firefighter) used to describe firehouses was "insular." An ethnographic study of a New York City firehouse corroborates this observation when Halberstam (2002) colorfully described firehouses as "a world apart from civilians . . . as close to a hermetically sealed world as you are likely to find in contemporary America" (p. 5).

Supported by our observations inside firehouses, we learned through our interviews that firefighters regularly spend time in the dining room—adjacent to the cooking equipment—after returning from alarms (e.g., in response to fires). Rather than being an isolated part of firefighters' workplaces, the *de facto* dining room in each firehouse was also typically the main gathering location where firefighters could monitor alarms, debrief after returning from alarm calls to help identify lessons that might be useful for future events, and otherwise watch television or talk while "on call" for the next potential run. Whereas other locations in some of the firehouses could be used for debriefing, the biological and social need to replenish oneself after responding to an alarm call explains some of the centrality of the kitchen.

Our ethnographic approach to studying firehouses adds important informal perspectives to previous studies that focus on formal processes. For example, Colquitt, Lepine, Zapata, and Wild (2011) discussed the myriad tasks that are part of the job of firefighter in the context of their investigation of how trust is developed and maintained among firefighters in relation to emergency events; however, their analysis makes no mention of the role of informal group activities—such as food sharing in the kitchen—that can be central for firefighters' interpersonal activities. Similarly, it is noteworthy that the 1,100-page textbook *Essentials of Fire Fighting* (Goodson & Murnane, 2008) that is commonly used for training in fire departments across the United States makes no mention of food-related aspects of the job.

To offer a contrast and draw more closely upon the interviews that we conducted, the first main theme that we found about firehouse life was expressed with a firefighter's statement that "this place is like a fishbowl—everything is focused on the kitchen." To help explain reasons why firefighters cook and eat together, we can acknowledge that there is certainly an economy of scale and efficiency that is gained by sharing the food activities and those economic reasons presumably account for the origin and robustness of commensality in firehouses. Notably, though, firefighters are clear to import significantly more meaning into the commensal process and no one during our site visits explicitly volunteered cost savings or time savings as the reason they cook and eat together. Instead, the most common explanation centered on variants of the phrase "we're like a family" or, in one firefighter's words, "this is like a holiday meal every day" with the implication that coworkers are akin to extended family members. It is notable in this context that the department we studied is regulated by civil service hiring practices and—although firefighters might historically have included a significant number of actual kin—most departments, including the one that we studied, do not consider family ties in the hiring process. As a dramatic example of the bonds among firefighters, as well as the importance of firehouse commensality, when an active-duty firefighter in a big-city fire department was publicly eulogized during the time of our study, a coworker highlighted that "[the fallen firefighter] gave you 110%, whether he was *washing dishes* [emphasis added] or going down a smoky hallway" (Tanfani, 2011). In this light, to the extent that working on "the job" is a "self-defining" (Fiol & Romanelli, 2012) aspect of firefighters' lives, it is clear that activities involved with commensality are central to their experiences.

As a function of the schedule used by the department that we studied, each shift that we interviewed tended to join in one prepared meal—lunch for the day shift and dinner for the night shift. More specifically, work groups serving the 10-hr daytime shifts typically cooked and ate a midday meal, whereas the 14-hr overnight shifts, which start at 6 p.m., cooked and ate an evening meal. Given this schedule, it is notable that some firefighters are known to eat dinner at home before eating again at the firehouse. Whereas such behavior might be motivated by a physical desire to eat (e.g., one firefighter with more than five children at home was openly and jokingly teased that he cannot eat enough food at his home), the tendency for active firefighters to be married also seems to explain the double dinners. One such firefighter explained proudly in the company of his coworkers that "you don't want to diss the wife" by not eating food that she prepares—thereby implying clearly and strongly that it was equivalently important to avoid disrespecting the rest of his work group. Indeed, the second main theme that we gathered through the interviews was that ideal work groups or platoons functioned like ideal families.

Although the great majority of firefighters that we met were men, we did talk with one veteran woman from the department who stated that "fitting in" to the firehouse culture was important and that if a person does not fit, then the rest of the crew will "make it easy for you to [want to] leave" the job. Given that she clearly did fit in the department, she made that observation primarily with a sense of pride although it is notable in this context that Anderson (2006) specified exclusion from firehouse meals as a potential avenue for harassment. With respect to diversity of food preferences, we did interview one vegetarian firefighter with decades of service who (a) did not eat the same foods as others at meals during his regular shifts but (b) carefully made it a practice to eat his brown bag meals at the same time and place as the rest of the crew and contributed to kitchen cleaning just as most firefighters who do not cook are expected to do.

To summarize the findings of our qualitative research, we found detailed evidence concerning the nature of commensality among firefighters in the firehouses that were part of our sample. The exceptional case of the veteran vegetarian firefighter who joins in collective eating—with his own food—presents a strong illustration of the role of commensality within firehouses. Methodologically, the flexibility that was offered by the close interest demonstrated by the firefighters permitted the first author to ask a wide range of questions for understanding workplace eating in broader organizational contexts. At any of the several points when a firefighter asked why a particular question was being asked (e.g., about work schedules), the first author indicated clearly that the interviews were being conducted to help inform the questionnaire that we planned for distribution to the department's full population of officers. More specifically, the first author stated in several of the interviews that a goal of the ethnographic visits involved "asking all kinds of questions to figure out the right questions to ask" in the department-wide questionnaire. For example, although we asked questions about job satisfaction, cooperative behavior within the work groups, and unit-level performance patterns in our interviews, we believe that those variables are best investigated systematically and quantitatively.

Supervisory Survey of Firehouse Commensality

Participants and Procedures

With labor–management support, questionnaires were distributed to all 395 of the fire department's officers (captains and lieutenants) several months after the on-site interview visits. From

among the full population of officers, 244 captains and lieutenants—each of whom lead independent work groups—responded and identified themselves as serving a primary assignment at one of the city's firehouses. Surveys were distributed through the department's intramural mail system and returned in preaddressed, postage-paid envelopes to an address at our university. Officers were assured of anonymity as well as confidentiality of their individual responses, and we offered an indirect incentive whereby the number of participants would proportionally determine how much we contributed to two scholarship funds supported by labor and management for firefighters' survivors (e.g., widows).

Our sample of more-than-50% of the full officer population includes at least one officer from 97% of the city's firehouses with a proportional balance across the four shifts that serve each firehouse. Consequently, the breadth of our sample permits us to consider the influence of variation with respect to eating practices among coworkers.

Consistent with the department's gender profile and the profession's history across the United States (Craig & Jacobs, 1985), the sample is 97% male. Similarly consistent with the department's ethnic profile, 74% of our respondents self-identified as European American (e.g., Irish American), 21% self-identified as African American, 4% described themselves as Hispanic or Latino Americans, and 1% reported being Asian American. For the purposes of our statistical analyses, we used dummy variables of male and European American to examine influences of gender and ethnicity.

Measures

Work-group performance. In their roles as shift leaders, officers are the first line of supervision for firefighters. To gain officer's assessments of their current work groups, we asked the question, "Compared with other companies you have served within the fire department, please rate the performance of your current, regular platoon" on an 11-point scale (0 = *not at all successful*, 5 = *average*, 10 = *extremely successful*) similar to Grant et al.'s (2009) approach. Officers have the knowledge to answer this kind of comparative question, as they are routinely transferred every few years to gain experience in different locations. Although fire departments are increasingly seeking to create their own measures of unit-level performance (e.g., based upon response times), our analysis relies upon supervisory ratings because other measures, which need to incorporate variables such as the geographical coverage of each fire station, are not presently available.

Demographic variables. In addition to the demographic variables that we measured and reported in the previous subsection to allow us to consider the representativeness of the survey sample, we asked respondents to identify whether they presently worked in a single or combination engine-and-ladder firehouse and whether their current assignment tended to involve "fewer than average," "average," or "more than average" alarm responses.

To support strong participation, we asked participants to identify demographic variables of gender, age, and job tenure categorically as an extra guard for anonymity. For example, instead of asking for specific ages, we asked participants to identify their age within one of 10 categories ranging from 18–24 (1) to 65 or more (10). For job tenure, we asked participants to identify the number of years they have served the department in one of seven categories ranging from 0–5 (1) to 31 or more (7).

Commensality variables. Participants were asked a set of questions that relate to the social organization of food consumption within their regular work-groups.

To measure the frequency of communal cooking, we asked, "On a given four-day tour [or set of four consecutive work days followed by four consecutive days away from work], please describe the frequency that your regular platoon cooks group meals" with options on a scale of 1–5 ranging *never, once a tour, twice a tour, three times a tour,* and *four times a tour*.

To measure the degree to which people eat together, we asked, "Please estimate the percentage of firefighters (not counting paramedics and not counting guests) who are 'in' for group meals at your regular firehouse?" given that "in" is local parlance for an individual's commitment to eat the common meal and share in the costs. Options on a scale of 1 to 5 ranged from 0% (*no one "in"*), 25% are in, 50% are in, 75% are in, and 100% are in. Given the temporary rotation of assignments that firefighters periodically face, we also asked for an indication of when they last worked at a work group that did not regularly cook with options ranging within the *past 6 months, past year, past five years,* or *never*.

To measure the method by which funds are pooled for group meals, we asked officers to indicate whether their current work-group pools together meal funds at the start of each tour or a day-to-day basis, because we anticipated that "pooling" reflected groups with relatively greater trust among coworkers.

To assess officers' perceptions of the importance of food in the firehouse, we asked, "If applicable, how much does the tradition of a regular meal during each shift contribute to the degree of cooperation that exists (or doesn't exist) within your platoon" with options ranging from 1 (*doesn't contribute*) to 9 (*very important contributor*).

Cooperative behavior. As a specific measure of cooperation within the work groups, we followed Grant, Parker, and Collins's (2009) three-item measure that they coincidentally developed through a study of firefighters and asked participants, "To describe your current, regular platoon, please rate HOW OFTEN do members of your platoon (a) make pro-active efforts to find new ways to benefit co-workers," (b) "seek out opportunities to have positive impacts on coworkers at work," and (c) "try to go out of their way to do good for coworkers outside of the boundaries of their job" ($\alpha = .92$). Participants were instructed to score with a 5-point range from 1 (*never*) to 5 (*very often*).

As our main within-subjects test, we asked participants to complete the same scale in relation to their personal experiences with other work groups. Specifically, we asked, "If you have worked in a firehouse where the platoon did not regularly cook, please rate HOW OFTEN did members of that platoon (a) make pro-active efforts . . ." ($\alpha = .95$).

Job satisfaction. Following Eisenberger et al.'s (1997) four-item scale for overall job satisfaction, we asked participants to rate the extent of their agreement on a 7-point scale, from 1 (*strongly agree*) to 7 (*strongly disagree*), with statements including, "All in all, I am very satisfied with my current job" and "Knowing what I know now, if I had to decide all over again whether to take my job, I would" ($\alpha = .90$).

Results and Discussion

As indicated in Table 1, the average age of our respondents was slightly above our sixth age category of 45 to 49 years old. Respondents also tended to have a significant amount of tenure within the department, as our fourth job tenure category reflected 16 to 20 years of service.

TABLE 1
Descriptive Statistics and Correlations

Variable (Scale)	M	SD	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
1. Age (1–10)	6.21	1.66												
2. Tenure (1–7)	4.40	1.66	.80**											
3. EuroAmerican (0,1)[a]	.74	.44	.05	.11										
4. Double house (0,1)[b]	.57	.50	−.08	−.05	−.11									
5. Number of alarms (1–3)	2.14	.78	−.20**	−.18**	.02	.25**								
6. Eat together (1–5)	4.80	.46	−.04	.04	.10	−.05	.10							
7. Cook together (1–5)	4.87	.51	−.07	.00	.08	.14*	.22**	.39**						
8. Pool funds once per tour	.77	.42	−.19**	−.13	−.11	.01	.31**	.04	.15*					
9. Meal important (1–9)	8.07	1.51	−.06	−.05	.03	.05	.12	.15*	.29**	.01				
10. Work-group performance (0–10)	9.32	1.75	−.01	.10	.09	.03	.31**	.19**	.14*	.09	.33**			
11. Cooperative behavior 1 (1–5)	3.56	1.10	−.18**	−.07	−.02	.01	.14*	.11	.13*	.10	.21**	.43**		
12. Cooperative behavior 2 (1–5)	1.61	1.16	.03	−.00	.05	.02	−.06	−.10	−.11	−.09	−.01	.01	.23**	
13. Job satisfaction (1–7)[c]	5.98	1.40	−.06	−.06	−.19**	−.06	.06	−.04	.08	.15*	−.08	−.02	−.05	−.13*

Note. $n = 244$ firehouse shift officers.
[a] 1 = European American. [b] 1 = double house. [c] Reverse scored.
*$p < .05$. **$p < .01$.

Focusing on two additional contextual variables, 57% of our respondents were primarily assigned within a "double house," which means that there is a ladder and an engine company that work out of the same firehouse. In contrast with the 43% of respondents who work in "single houses," there are typically 10 people on duty at a double house, whereas single houses normally have five firefighters on duty at any given time. With respect to the number of alarms, 24% of respondents indicated that their firehouse tends to have fewer-than-average calls to answer, 38% reported that they respond to an average number of alarms, and 38% indicated that they have greater-than-average demand for alarm responses. Responses to this question are important indicators of low response bias because if participants felt a need to impress anyone seeing the data, there would have been strong pressure—amidst a political-economic environment where cutbacks in public services are common—for everyone to report that their assignments respond to a greater-than-average number of alarms. With respect to funding mechanisms, a full 77% of the participants reported that their work groups raises funds for group meals once each tour compared with 23% who raise funds on a day-to-day basis.

For the measures of commensality, participants tended to report a strong tradition of eating and cooking together in their current, primary assignments. For example, when officers were asked about the importance they attribute to group cooking and eating within firehouses, the average of 8.07 ($SD = 1.51$) is close to the anchor of 9, which equaled *very important contributor*. For the question about their current work groups cooking together, 92% of respondents reported that their current group cooks during all 4 days of a regular tour, whereas 6% indicated that their group cooks 3 of the 4 days of a regular tour, 2% reported that their group cooks half of the time, 0% registered that cooking occurs only once per tour, and less than 1% reported that group cooking never occurs. For the question about the percentage of people within their current work groups who are regularly "in" for jointly eating meals, 81% reported that everyone is part of the group meals, and 19% reported that three fourths of the group is part of the meal, and less than 1% indicated that no one is part of any group meal.

In relation to our main interests and conceptual framework, Table 1 reveals significant positive correlations between work-group performance and eating ($r = .19$, $p < .01$), as well as cooking together ($r = .14$, $p < .05$). We did not find a significant correlation between eating together and cooperative behavior; however, cooking together does correlate positively with cooperative behavior ($r = .13$, $p < .05$). Because our respondents skew heavily in favor of eating and cooking together, we conducted robustness checks of our findings by collapsing all of the responses that did not eat or cook together 100% of the time into dummy variables, and we obtained the same patterns of statistical significance—with cell sizes greater than 20 (cf. Simmons, Nelson, & Simonsohn, 2011)—for work groups that do not always eat or cook together ($n = 45$ and 21, respectively).

Looking in closer detail at the associations between organizational characteristics and commensal behaviors, Table 2 presents two sets of multivariate regression analyses that we conducted. For each of the regressions in Table 2, to address the nonindependent nature of multiple ratings—an average of four—from officers at each of the firehouses in our sample, we followed the recommendations of Antonakis, Bendahan, Jacquart, and Lalive (2010) and used a cluster-robust variance estimator. This method incorporates the multilevel nature of our sample whereby each of the firehouses represented in our sample is shared by four platoons.

It is noteworthy—and consistent with our key research question—that eating together was significantly associated with unit-level performance in Model 1. Similarly, as the conceptual model

TABLE 2
Results of Regression Analyses for Workgroup or Firehouse Shift Performance

	(1) *Performance* B *(SE)*	*(2)* *Performance* B *(SE)*
Double house	−.08 (.22)	−.04 (.20)
Eat together	.58 (.19)**	.46 (.18)**
Number of alarms	.66 (.15)**	.55 (.15)**
Cooperative behavior		.60 (.12)**
Constant	5.14 (.92)**	3.78 (.76)**
F	10.01	20.37
Df	234	234
R^2	.12	.26

**$p \leq .01$.

in Figure 1 anticipates, one of the environmental variables (number of alarms) also was significant, indicating that busier firehouses tend to receive higher supervisory ratings. When we added cooperative behavior as an independent variable in Model 2 in line with Figure 1's conceptual diagram and partly motivated by the positive correlation between cooperative behavior and work-group performance ($r = .43.$, $p < .01$), it is clear that eating together as well as our measure of organizational citizenship each were significant and the model has more explanatory power ($R^2 = .26$). As with the correlations, we conducted robustness checks with dummy variables that collapsed responses of less-than-100% commensality and the patterns of association reported in Table 2 continued to exist for Models 1 and 2.

For our within-subjects test in which we asked for supervisory ratings of cooperative behavior in officers' current firehouses and the last one they led where there was not group eating, we can note that—because of the relatively frequent rotation of temporary assignments that firefighters face—69% of our sample had worked with a work group within the past 5 years that did not regularly cook, whereas 31% had never done so. When we compared with the cooperative behavior measures from those with experience with work groups that did not regularly cook with the set of measures for the respondents' current work groups, the difference was highly significant, $t(165) = 17.4$, $p < .001$, such that officers reported much more cooperative behavior within units that routinely cook and eat together when compared with those that do not engage in commensality.

Consistent with the view generated by Models 1 and 2 in Table 2 that eating together and cooperative behavior have independently significant positive relationships with work-group performance, mediation analysis showed that our measure of cooperative behavior was not a significant mediator in the relationship between eating together and work-group performance. More specifically, following Baron and Kenny (1986), eating together was significantly associated with work-group performance ($r = .19$, $p < .01$, $R^2 = .04$), but eating together was not significantly associated with cooperative behavior ($r = .11$, $p = .08$, $R^2 = .01$) even though cooperative behavior was significantly associated with work-group performance ($r = .43$, $p < .01$, $R^2 = .18$). When cooperative behavior was partialled out of the eating behavior and work group performance correlation, eating together was still significantly and positively related with work group

performance (partial $r = .16$, $p < .05$, $R^2 = .03$), yielding a change in R^2 of .01 between the initial eating together and work group performance correlation and the partial correlation adjusting for cooperative behavior as a potential mediator. This pattern of results invites closer consideration of what is important about eating behavior such that it appears to have significant positive associations with work-group performance that are independent of the platoons' cooperative behavior.

To take stock and juxtapose our main qualitative and quantitative findings, it is clearly the norm that firefighters in our sample frequently cook and eat together and that officers believe that commensality has a significant relationship with organizational performance. It is also clear that the cases where people do not cook are relatively uncommon and poorly regarded. This measurement is consistent with the finding from our on-site interviews, as there was a degree of embarrassment that people communicated when they talked about people who "don't follow the tradition" when we asked about the existence of firehouses—or work groups, more precisely—that do not regularly cook and eat with each other.

Additional notable findings include the positive correlations between the number of alarms and the size of firehouses (double house) in relation to funding meals once each tour. We can speculate that busier, larger firehouses face more pressure to gain the economies of scale that exist when people cook together and that they minimize transaction costs by funding their meals once each tour instead of daily. Put another way, it is possible that smaller groups (single houses) are more able to level the costs of each days' meals than the larger groups. Of interest in relation to each platoon's funding mechanism, Table 1 also indicates a positive correlation between funding meals once each tour and job satisfaction.

DISCUSSION

As a prototypical example of worksites where coworkers eat with each other, firehouses provide a valuable entry point for exploring the organizational benefits that we find to be related with supports for workplace commensality. Whereas the life-and-death nature of firefighting would seem to encourage bonding among firefighters (Ashforth & Kreiner, 1999, p. 420) and encourage a high degree of organizational identification that Van Vugt and Hart (2004) described as a kind of "social glue," our field research clearly finds that commensality is an important part of the cultural fabric that helps successfully functioning firehouses operate. Previous organizational studies of firefighting have focused on studying the formal protocols of incident command systems in relationship to effective, efficient, and safe management at the sites of fires (e.g., Bigley & Roberts, 2001), as well as various cases of real-time "sensemaking" in the context of specific fire events (e.g., Cook, Sutton, & Useem, 2005; Matlis & Sonenshein, 2010; Weick, 1993; Whiteman & Cooper, 2011). Similarly, Bacharach and Bamberger (2007) considered how unit-level organizational factors such as supervisory practices might favorably support the ways in which firefighters respond to traumatic events. In our case, the cross-sectional design of our research does not provide evidence of causality; instead, we can address our research question and conclude from our data that the informal tradition of workplace commensality within firefighting units is significantly and positively associated with team performance.

As is the case when coworkers in more mundane settings make plans to gather over food and/or beverages when they are not at work, it is very remarkable that the firehouse food culture

that we explored is fully unregulated by the employer. Following Jones and George (1998), we expect that this is a strong example of "tacit knowledge that cannot be translated into rules or routines" (p. 543). Further, our findings illustrate Jones and George's proposition that "it is extremely time consuming to translate into standards or procedures" because "the intense interactions in teams, facilitated by unconditional trust, are both the generators and actualizers of tacit knowledge" (p. 543). In the case of our study of firehouses, the interactions among team members is especially "intense"; however, their other points nonetheless apply: (a) It would be a wasteful expense for a fire department to attempt to codify or regulate worksite commensality beyond the single act of provisioning kitchen equipment, and (b) our analysis is clear that commensality is significantly associated with successful functioning among coworkers. The "brief ethnography" approach (A. D. Meyer, Gaba, & Colwell, 2005) that we employed to open our investigation of firehouse "cafeterias" was critical for helping us systematically and quantitatively measure the patterns that we found.

Most generally, our findings illustrate the organizational benefits that can be facilitated through workplace commensality. Given cross-cultural differences in eating patterns, as well as the conceptualization of cooperation (Keller & Loewenstein, 2011), it is possible that workplaces in societies where commensality is more prevalent in non–work settings would yield different results. Given firm-level differences in the degree to which cooperation among employees is desirable, it is also likely that some organizations would gladly discontinue supports for workplace commensality if it were established that cafeterias, for example, were fostering suboptimal cliques or other subunits the interests of which were not aligned with the firm (cf. Campbell, 1994). Although our investigation of firehouse commensality cannot address large-scale cross-cultural differences, the dispersed structure of fire departments in which specific and relatively undifferentiated units or work groups need to rely upon each other is certainly a workplace where cooperation, communication, and organizational citizenship has value (Grabowski & Roberts, 1999). In this context, Detert and Treviño's (2010) study of subordinate–superior relationships is notable—and complementary to our findings—because they report several instances where cafeterias functioned as "informal" places where the "atmosphere" facilitated greater openness and employee voice vis-à-vis higher-ranking supervisors.

Limitations, Future Directions, and Practical Implications

As an entry point for studying the organizational benefits of commensality in contemporary professional worksites, our field research of firehouses includes several limitations that future studies can further consider. First, questions involving the relatively unique nature of firefighting and firefighters demand concern with respect to generalizability across professions and organizations. Although we have highlighted the unique aspects of firefighting, it might also be the case that firefighters tend to be—or become—relatively collectivist—and more prone to commensality—as they adapt to the job (e.g., Chen, Chen, & Meindl, 1998; Wagner, 1995). Second, questions involving causality of commensality and other organizational structures and processes could be addressed through lab experiments or longitudinal research designs (Ployhart & Vandenberg, 2010). We expect that both of these methods could be more naturally conducted outside of the domain of firefighting partly because artificially reproducing many of the dimensions found in firehouses—such as responding to life-and-death situations—would be

challenging. Third, the relatively strong tradition of firehouse commensality that we found in our sample, at least, limited the extent of between-subject analyses that we could conduct; consequently, our correlational analyses might be driven by an unrepresentatively small sample of supervisors from firehouses where the tradition is not regularly practiced. Fourth, it is possible that omitted variables such as the personality types of firefighters (cf. Chatman & Barsade, 1995) or the proximity of firefighters' homes to their worksites might account for some of the relationships that our field research uncovered. It is plausible, for example, that a worksite where all of the employees have a 1-hr commute in each direction will be less predisposed to contribute to sharing food and conversation with each other given research showing that relatively long commutes tend to significantly worsen a person's mood (Van Rooy, 2006). Finally, and specific to our study, although we conducted interviews with a very small fraction of the population of officers from which our survey sample was generated, it is possible that those respondents were biased in their responses due to social desirability interests.

Future directions for research include designs to disentangle some of the boundary conditions that might apply to our investigation of firehouse commensality. In addition to conditions relating to the work, the presence of (a) a full kitchen as part of (b) a relatively small worksite for (c) a job for which demands vary across time pose several dimensions that further study will be able to investigate. For example, although we do not expect on-site group cooking to be seriously considered for most contemporary workplaces, it is plausible that experiential education courses such as "ropes"-based outdoor experience programs (e.g., J. P. Meyer, 2003) might profitably benefit from offering kitchen-based experiences for the purposes of team building. Systematic testing of the effectiveness of such food-based programs in organizations would be practically valuable in addition to contributing to a broader interpretation of our findings. In a more naturalistic set of circumstances, field studies would be valuable that test for the impact upon employee performance and attitudes when employer-sponsored cafeterias are discontinued.

Finer-grained designs would also permit closer consideration of the mechanisms that account for the correlational findings that we report. Although we highlighted candidate mechanisms from other disciplines—including the notion that the intimacy of food sharing elicits bonds among people eating with each other—it is also true that closer analysis can examine the degree to which worksite commensality might facilitate unit-level commitment, which in turn would be expected to account for better unit-level performance (e.g., Conway & Briner, 2012). In addition, closer study of the associations of workplace commensality in other organizations would benefit from more specific measures of performance (e.g., safety; Hofmann, Jacobs, & Landy, 1995).

Practical implications that emerge from the research that we present in this article include the caution that commensality alone should not be expected to unilaterally cause cooperation or enhanced performance among coworkers. Through our field research, though, we find that commensality among coworkers can be a strong and important practice that is positively associated with enhanced work-group performance. Although the costs that organizations invest to support on-site eating are clearly measured as direct expenses, our research highlights the opportunity that exists to start measuring and optimizing less direct organizational benefits that can be obtained through institutional support for commensality among coworkers. Precisely because of the mundane nature of eating whereby everyone feels the need to eat every day, this area of investigation carries significant potential as a mechanism to increase work-group performance within organizations by leveraging natural needs to eat when compared with less mundane activities that would require more complicated employer interventions. Through our interdisciplinary review of

the functionality that food sharing can serve within organizations, our study highlights how the relatively intimate act of coworkers eating with each other is positively correlated with enhanced team performance.

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APPENDIX A: INTERVIEW GUIDE

1. What was the most recent meal that you and your crew had in the station?

Probes: Who ate with you? Where did you eat? What was served? What did you eat? Who prepared the meal? Who cleaned up? Who purchased the food?

2. How are cooks chosen?

Probes: Same person or rotation; one person or a team; assignment or volunteer; experienced (work or home); skilled; personal preference; preferences of other firefighters?

What are some of the reasons cooks are chosen this way?

Is there ever difficulty finding someone to prepare meals? To clean up? To purchase food?

Are there ever “too many cooks in the kitchen” at a firehouse?

How does the gender of firefighters affect food preparation work at the firehouse?

How does the job assignment of firefighters affect whether they cook at the firehouse (Probe: Ladder companies)?

Do people who cook at the firehouse also cook at home?

Is there ever competition about who cooks?

Can good cooks in the firehouse get perks? Have you heard of any cases where good cooks have been able to get transfers because of their cooking? What about promotions?

How do you feel about that?

3. Equipment and facilities

What kind of equipment and facilities for cooking and eating are available at the firehouse?

How would you describe the furniture in this firehouse's kitchen? How long has it been here? Do you think there's much difference between the facilities here and the setup at other firehouses?

How would you describe the plates, silverware, and glasses: Who is responsible for replacing them? When was the last time new ones were purchased? Who picked them?

4. Timing of meals

For how many shifts across a regular 4-day and 4-night period does your crew prepare and eat a big meal with each other?

How often are your meals interrupted by alarms?

How do alarms or expectations of alarms affect cooking and eating and the types of meals you plan? Probes: certain days or nights of the week?

5. Eating together

Do most or all of the firefighters on your crew eat together?

Probes: exceptions: People eat before their shift starts (at home, with family, at a restaurant?)

People eat separately (e.g., use microwave, order take out, bring food from home)? What kinds of food do people bring from home? What kinds do people bring to work?

Is there a place for people to store personal food brought in from home? Locker? Refrigerator space? Is the refrigerator and freezer usually empty between shifts? What's inside otherwise?

Probes: How does that work? What are some of the reasons for that?

When captains are on duty, do they join the crew for meals? Do lieutenants eat with the rest of the house?

How do the Emergency Medical Technicians (EMTs) interact with the firefighters when it comes to food in the firehouse?

What do people talk about at mealtime? Sports? Family? Politics? Food? Cooking?

6. Kinds of food

How are the foods for crew meals chosen?

Probes: established pattern, preferences of crew, preferences of cook, cost, health, time, other? Who chooses? What kinds of conflict come up about the types of food served?

What are the most common/favorite meals for your crew?

Do you drink the same beverages at home that you do at work at home?

7. Amount of food

How would you describe the amount of food people eat at crew meals?

Do people eat differently after returning from calls? After a fire, how does the work done here affect how much people eat?

Were you hungry when you at your most recent meal here? Do you think everyone was hungry?

What kinds of rules or practices are used in deciding how much food to serve?

Probe: Have you ever heard anyone talk about a rule of thumb to serve "a half a pound a man" for each main ingredient? Other rules (cost?)

How is the cost of the food covered (e.g., split evenly)?

Do any local restaurants offer a deal for takeout for the firehouse?

What happens to food that is leftover from a meal?

Probes: Is leftover food held for the same shift from one day or night to the next? Is it taken by someone, maybe the cook?

8. How are food and meals at this station different than other stations and shifts in which you've worked? How is this affected by the size of the firehouse?

How are meals at your shift different from the other three that work at this firehouse? How much interaction is there among the shifts?

To what extent are ingredients and/or leftovers shared across shifts? How are costs shared for the sharing of those materials?

9. How much involvement do you have with food and meals at the firehouse?

Probes: How is this similar or different from what you expected when you joined the fire department?

10. Does this firehouse have wireless and/or wired Internet connections? What about cable or satellite television? How has the Internet and smartphones impacted food preparation and consumption? Do people watch cooking shows on TV?

11. Satisfaction

How do food and meals affect firefighter satisfaction with the job?

What are your experiences with either good or bad meals affecting satisfaction? Transfers? Team work? How do holidays affect food and meals in the firehouse? How are other special occasions marked with food (e.g., birthday cakes, promotions, retirements)?

What kinds of food are brought in from home for sharing with others in the firehouse?

12. Exercise

When do crew members exercise (besides working)? Probes: on duty, before or after their shifts?

Safety:

Do many firehouses fry food in their kitchens? Do you know of any kitchen fires in the inside of firehouses?

13. Challenges

What are some of the challenges that a firehouse might face when it comes to food?

14. Health

How does firefighter health affect food and meals at the firehouse?

Probes: special diets (e.g., diabetes, vegetarian, vegan, high blood pressure), weight loss or weight control, fitness for the job.

How do firefighters on special diets manage crew meals?

What kinds of health concerns do the firefighters who work with you have?

How well informed do you think firefighters are about health problems common to their profession (e.g., heart disease)?
What have you heard retirees say about the ways that eating (and cooking) at the firehouse affects their postretirement eating and health?

15. Wellness

What is your experience with wellness programs for firefighters?

How well did they work?
What should an ideal wellness program for a fire department look like?

16. With regard to food and meals:

What does this fire department do well?

What could this fire department do better?

17. Is there anything else you'd like to add?

Thank You!