Published in final edited form as:

Int J Drug Policy. 2014 May ; 25(3): 562–568. doi:10.1016/j.drugpo.2013.10.013.

Dealing food: Female drug users' narratives about food in a prison place and implications for their health

Amy B. Smoyer^{a,*} and Kim M. Blankenship^b

^a Center for Interdisciplinary Research on AIDS, School of Public Health, Yale University, 135 College Street, #200, New Haven, CT 06510, USA

^b American University, Department of Sociology, Center on Health, Risk and Society, 4400 Massachusetts Avenue, NW, Washington, DC 20016-8072, USA

Abstract

Background—Prison is a major “place” for drug users in the US, yet remarkably little is known about the lived experience of incarceration. More information about prison life is needed to improve health outcomes for incarcerated and formerly incarcerated people.

Methods—Thirty (30) formerly incarcerated women were interviewed about prison food. All interviews were digitally recorded and transcribed. Qualitative data analysis software was used to code and organize the data using thematic analysis.

Results—As described in these participants' narratives, prison food systems contributed to the construction of boundaries that distinguished the prison place from places and life outside the institution's walls. Participants also described boundaries within the prison that resulted in a patchwork of interior places, each with their own unique structure, meaning, and food system. These places, constructed by physical location, movement, and power, or lack thereof, included various micro-geographies that further defined women's individual prison experience. The boundaries that separated these places were not fixed: Women shifted and diminished internal and external borders by resisting food policies and reproducing their outside lives inside.

Conclusion—These findings call for public policy officials and prison administrators to reexamine the prison place in order to facilitate healthier eating behaviors and lay the groundwork for more positive communication between inmates and correctional staff and administration. More research is needed to measure how these types of changes to the prison food environment impact nutritional, mental health, substance abuse, and criminal justice outcomes.

Keywords

Women; Prison; Food; Place; Substance use

© 2013 Elsevier B.V. All rights reserved.

* Corresponding author. Tel.: +1 203 508 5356. amy.smoyer@yale.edu (A.B. Smoyer)..

Conflict of interest statement

The authors of this paper have no actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work.

Introduction

In this paper, we discuss the concept of place and explore how female drug users' experiences in a prison place may affect their health. Specifically, we analyze women's narratives about food in prison to document and describe how the prison place shapes access to food and eating behavior and how food and eating behavior construct the prison experience.

Place, power, and structure

Place is an evolving concept that has been defined as a space to which meaning and experience have been attached (Cresswell, 2004). Place is constructed and reconstructed by the struggles for power enacted by its inhabitants. This is an iterative process: "Places are never finished but produced through the reiteration of practices - the repetition of seeming mundane activities on a daily basis" (Cresswell, 2004, p. 82). Consensus about the boundaries of place is contested, and may not be dictated by bricks and mortar. For example, theory about the distributional geographies of incarceration suggests that prison places extend beyond facility walls to surrounding communities (Moran, 2013). In this sense, place is constructed not only by physical structures but also by cultural and social expectations that "are constantly being performed" (Parr, 2000, p. 37). The meanings assigned to place are created through processes of inclusion and exclusion; what is left out or outside defines and describes the place as much as what is inside. Further, micro-geographies within a place construct individual internal spaces that are heterogeneous (Parr, 2000).

The prison place

The emerging field of carceral geography seeks to understand, among other things, "the nature of carceral spaces and the experiences within them" by examining how the regulation of prison space and the movement of people through these spaces make place (Moran, 2013, p. 176). Indeed, construction of the prison place includes much more than high walls and barbed wire. This place is produced by legal and administrative policy and the negotiations and deliberations among the elected officials, community, staff, and inmates who create and enact these policies. In addition, the prison place has a particular transitory quality as inmates come to this space for various amounts of time, leave, and then often return, even though it is usually not their intention at the time of departure to come back. Meanwhile, staff move through the prison on a regular and anticipated schedule, spending more time inside the prison than the inmates who the facility was built to confine. The experiences, beliefs, and identity of both the people who move through the prison and those who never set foot inside the building impact how the place is experienced and performed.

Prison as a place for female drug users

Since the 1970s, prison has been a major place for drug users in the US (Mauer, 1999). The US has the highest per capita rate of incarceration in the world with over two million people behind bars, 7% of whom are women (Carson & Sabol, 2012; International Prison Centre for Prison Studies, 2011). Eighty-five percent (85%) of US prisoners have a history of substance use or addiction (CASA, 2010). This massive incarceration of drug users has come at tremendous human and fiscal cost. For prisoners, who are disproportionately poor

and non-White, the experience of incarceration can exacerbate problems of health, under-education, and unemployment (Mauer & Chesney-Lind, 2002; Mauer & King, 2007; Travis & Waul, 2003). Further, their removal from communities weakens the family networks and social fabric of these neighborhoods (Clear, 2007). Financially, the states spend approximately \$50 billion per year on corrections, on average, 2.5% of their total budgets (Kyckelhahn, 2012).

What is (un)known about prison

In spite of this significant, long-term investment in prisons, remarkably little is known about the lived experience of incarceration. Scientific attempts to understand what, if anything, about prison “works” have focused research on the evaluation of specific interventions and long-term trends. Women's health-related prison research, for example, focuses on prevalence of disease (especially HIV, substance abuse and obstetrical care) and behavioral and medical interventions to improve health outcomes (e.g. Alleyne, 2007; Freudenberg, 2001; Grella & Rodriguez, 2011; Marshall, 2010; Springer, 2010; Staton-Tindall et al., 2011; Wingood, 2003). Similarly, existing literature about prison food and nutrition offers guidance on how to comply with nutritional standards, legal requirements, and budgetary and security issues (e.g. Brisman, 2008; Cray, 2001; Edwards, Hartwell, Reeve, & Schafheitle, 2007; Foster, 2006; Herbert, Plugge, Foster, & Doll, 2012; Stein, 2000; Tammam, Gillam, Gesch, & Stein, 2012; Wakeen, 2008), and describes interventions to improve prisoner diets and help inmates lose weight (Eves & Gesch, 2003; Khavjou et al., 2007; Nikolas, 2000; Robinson, Haupt-Hoffman, Stewart, Schneider, Hamm, & Garrison, 2006).

In this pursuit of empirical outcomes, descriptive social science research about what life in contemporary US prison systems actually entails has been lost (Simon, 2000). Today's prison institutions have been described as a ‘black box’ because so little is known about “how individuals feel and act while incarcerated [and how the experience] may affect their attitudes and behaviors after release” (Visher & O'Connell, 2012, p. 386). As a result of the lack of information about this place, all prisoners, and especially female prisoners, experience a “hyperinvisibility” at the intersection of criminal justice status, gender, race and socio-economic class (Davis, 1998, p. xi). Research about prison health overlooks the lived experience of incarceration and how this prison place affects health. Given the disproportionate representation of drug users among the prison population, more information is needed about this place in order to effectively respond to the health needs of drug users during and after incarceration.

Using food narratives to build knowledge about prisons and health

Here we analyze formerly incarcerated women's narratives about prison food in order to build knowledge about the prison place and how their health has been impacted by the experience of incarceration. As described earlier, daily mundane activities – like those related to the acquisition, preparation, distribution and consumption of food – are critical to constructing and understanding place. While “the social and cultural uses of food provide much insight into the human condition” (Counihan, 1999, p. 24) and analysis of food and food-related behaviors has explicated culture, social relationships and place across a broad

range of time periods and geographic locations (Wood, 1995), analysis of prison food systems is limited. The small body of research about prison food that does exist has been conducted primarily in male correctional facilities in England and Canada (Earle & Phillips, 2012; Godderis, 2006a, 2006b; Milligan, Waller, & Andrews, 2002; Smith, 2002; Ugelvik, 2011; Valentine & Longstaff, 1998). We expand on this existing body of work by analyzing the prison food narratives of women incarcerated in the United States in order to build knowledge about the impact of this place on health.

Methods

For this project, 30 formerly incarcerated women were interviewed about prison food. All of the participants had been imprisoned in the same women's correctional facility in New England (US). Participants were recruited, using convenience sampling, from a community-based program that provides post-incarceration housing and re-entry services in a large urban area. In accordance with the approved IRB protocol, all respondents provided written informed consent and were compensated \$30 for their time and expenses. The sample was racially diverse: 40% White, 43% Black, and 17% Latina. The majority (67%) were between the ages of 25 and 45, but women over 45 (23%) and under 25 (10%) were also included. Seven of the women had been incarcerated only one time, 12 had been incarcerated 2 or 3 times and the rest ($n = 11$) had served from 5 to 32 sentences. For 21 of the women, the controlling offense for their most recent incarceration was a drug-related charge.

All of the interviews, which lasted approximately 90 min, were digitally recorded and transcribed. The data collection instrument was a 14 item semi-structured interview that asked about food and eating experiences in different parts of the prison (e.g. intake, cafeteria, and housing units), favorite and least favorite foods, and cooking practices. Each primary question had a series of probes that asked how, where and by/with whom food was acquired, prepared and shared. The semi-structured nature of these interviews meant that each interview evolved differently; the order of questions was determined by participant responses and each participant raised unsolicited comments and information. In addition to conducting all of the interviews, the first author transcribed the interviews, using this process as an opportunity to identify emerging themes and adjusting the interviews to incorporate and further explore preliminary findings (Bird, 2005). She then used qualitative data analysis software (NVivo) to code and organize the data using thematic analysis (Braun & Clarke, 2006). The study's thematic analysis included the following steps: becoming familiar with the data (listening, reading and memo writing, including matrix development); generating initial codes; applying, editing and consolidating codes; organizing and reviewing themes to generate findings (Braun & Clarke, 2006; Miles & Huberman, 1994; Patton, 2002).

Findings

As described in these participants' narratives, prison food systems contributed to the construction of boundaries that distinguished the prison place from places and life outside the institution's walls. Participants also described boundaries within the prison that resulted in a patchwork of interior places, each with their own unique structure, meaning, and food

system. These places, constructed by physical location, movement, and power, or lack thereof, included various micro-geographies that further defined women's individual prison experience. The boundaries that separated these places were not fixed: Women shifted and diminished internal and external borders by resisting food policies and reproducing their outside lives inside.

Inside/outside boundary

Participants' narratives constructed a boundary between prison and the non-incarcerated community with time and space (Moran, 2012). Life in the streets was before/after and physically outside the prison place. In addition, experiences and meaning related to food constructed this distinction. Women reported having eaten irregularly in the community during the weeks prior to their arrests, primarily because they were using drugs heavily: "I wasn't really eating, I was running on the streets doing drugs. I was eating like, that 25 cent chips a day, maybe like two bags" (P28). At the time of their arrest, 18 (78%) of the women reported being under the influence of drugs or alcohol; 7 (30%) reported being addicted to opiates. In this context of drug use, eating behavior was sporadic, unstructured, and inconsistent. In their first hours at the prison, during the initial processing and medical exam, this food insecurity continued: Women arrived at the facility in the early evening and were not fed until the next morning. "Even if you was to ask [for food], they'd tell you no. . . I didn't bother [to ask] because I already been through it already" (P13). These comments from P13 demonstrate how for women who had already been incarcerated at this facility, the prison place was partially defined by access to food, or lack thereof. When they began to receive prison food service, many women reported being too worried or high to eat:

That night, I was high too. Like all I kept thinking about was, what was gonna happen. . . My little sister, she's coming up to [prison] with me, so I'm just like, oh, God. And then the kids, I'm thinking about my DCF case. And I'm like, I'm not f***ing, this case is serious. Like, I'm not going nowhere. I didn't want even want to eat that. I didn't want to eat nothing. (P14)

Although incarcerated, P14 was still experiencing the effects of street drugs from the outside and was focused on the people and circumstances beyond the prison walls; her life transcended the carceral boundary. Choosing not to eat during this time reflected a refusal or inability to engage in her immediate surroundings: Her mind and self remained on the outside. Similarly, P8 recalled being too dope-sick to eat during intake: "I couldn't eat 'cause I was still sick. . . I thought I would try it [breakfast] and that day there was oatmeal and cake and of course, because it was sweet, the cake, I ate. And it wasn't warm, it was a little warm, and that was it" (P8). Her reluctance to eat was driven by the physical withdrawal produced by her relocation. In these ways, the intake space was a frontier: Food experiences were half-street and half-prison as food was available but scarce and drug use, although suspended, still interfered with consumption.

Internal boundaries

Interior places included housing spaces (i.e. assessment, general population, medical unit, and segregation), activity spaces (i.e. cafeteria, kitchen, classrooms, recreation/program rooms, and hallways), and micro-geographies within these places. The distinction between

these interior places was partially constructed by variations in food experiences and access. Here, we discuss three major food spaces that women described in their narratives: the confined housing spaces, the general population space, and the micro-geography of hunger.

Confined units (assessment, medical, segregation)

In the assessment units (where women were held when they arrived at the facility while undergoing medical and psychosocial assessments), medical units (which housed women experiencing acute medical problems), and segregation units (where women were held as the result of disciplinary action), women reported being confined to a solitary or shared room on a continual basis, leaving only for short recreational breaks and medical/counseling appointments. Meals were delivered to women in these units on trays three times a day or picked up in the common areas and taken back to the cell for consumption.

The first space that women encountered after passing through the intake frontier was the assessment unit. Here they began to settle into their lives on the inside. Women described the food that was delivered on trays to their shared cells in the assessment unit as often inedible and cold: “A lot of times, the food gets mixed up, like when they deliver the food, the slop will fall onto the bread and the green beans will go into the slop and then it's like everything's everywhere” (P25). Still, the food routine was steady and predictable and this consistency contributed to the construction of this place as relatively safe and restful, a break from the stressors of street life and addiction. Prison, like the cake that P8 described, “wasn't warm, it was a little warm.”

For me, when I went to jail, and every time I've gone to jail, my runs have been so long and hard that I was grateful that I got to jail so I could just go to sleep. . .Some rest. I'm gonna be safe. I don't have to sleep with this dude, to be out of the cold. I don't have to pay these people, to be out of the cold. I don't have to stay up all night, trying to keep getting high to be out of the cold. . .When you get to jail, it's like, you know what? All of that! I just want to sleep, you know what I'm saying, I don't have to go through none of that. And it's about getting rest now, eating if you want to, bathing properly, and just getting all of that muck off of you and just clearing your head. That's how it was for me. . . You got your food, you can eat it. But if you can't eat, you can always put it to the side. (P11)

While the food supply and organization of this space was appreciated at first, as women recovered from the series of events that led to their incarceration, the confined food routine quickly became old.

They were feeding me, I thought I was just getting breakfast, I was like, “Oh, this is nice. I don't have to go to the cafeteria, I get it right in my room, oh great.” And then lunch came, and then dinner and I was like, “What the hell is this? Why aren't we going to the chow hall?” (P5)

This shifting perception of the assessment unit and its food systems reflect the iterative nature of place. The mundane activities of daily life – in this case the delivery, consumption, and removal of cafeteria meals on trays – constructed a sense of place and meaning that evolved over time.

A central feature of the all confined housing spaces, including assessment, was the women's singular reliance on meal trays from the cafeteria for sustenance. As P5 describes, meals were delivered to people in these units three times a day. In the assessment and medical units, logistical issues made it difficult for women to acquire commissary snacks. Women in these units did not work and the short-term nature of these placements made it impractical to order through the commissary system. Placement in the segregated unit was usually accompanied by a "loss of commissary" status that suspended women's ability to purchase food from the prison store. With only the tray meals to sustain them, women described retaining pieces of uneaten food, in all of the confined spaces, to eat between meals. As P11 phrased it, it was common to "put it to the side." Doing so created a micro-geography of plenty and food access in the food desert: "In medical, you can hoard food. . . Soup. Or potato salad, you want for later. . . Peaches" (P8). While these confined spaces were designed to be strict food environments consisting of only meal service, women resisted this construction by creating their own personal micro-geography with fruit and cake in Styrofoam cups.

General population

Once assessment processes were complete, medical problems resolved, and/or disciplinary consequences completed, women were relocated to housing units in the general population wings of the facility, which afforded more movement and access to activity spaces, including the cafeteria. Participants reported two primary food spaces when discussing their lives in the general population: the cafeteria and the housing units. Cafeteria meals were served three times a day, there was no charge for the food, and attendance was optional. Going to the cafeteria was the only activity that was universally available on a daily basis, making it the principal pathway for movement through the prison place. "It [going to the cafeteria] felt like you were out in the world, in your own little way, like you were doing something because you're not just stuck in a cell, you're out and about" (P25). This narrative illustrates the role of daily food practice in constructing and organizing the prison's internal places. Movement from the housing units to the cafeteria was equated with going out to eat, crossing boundaries from one area to another.

If going to the cafeteria was eating out, then the other major food space – the housing units – offered the opportunity to eat in. Food prepared and consumed in this inside place included commissary items and food smuggled in from the cafeteria and kitchen. The only items that were officially permitted in the housing units were the commissary foods. Women were able to purchase these items once a week. Choices included candy, cakes, chips, crackers, pre-cooked rice and pastas, condiments (e.g. peanut butter, jelly, mayonnaise), and processed meats, cheese and fish. Funds for these purchases came from friends and family in the community or income from prison work assignments. Women had access to hot water in the common area of the housing unit that could be used to prepare soups, coffee, and tea. Trading or sharing commissary items was prohibited: "I wasn't allowed to give you a soup because if I was to give you a soup that's considered contraband to you" (P13). In addition, taking commissary items out of the housing units and into other places in the prison and bringing food into the housing units from the kitchen and cafeteria was prohibited. In these

ways, prison food policy sought to create a static, impermeable border that included only the individual and her commissary supply, if any.

Hunger

The third and final major food space described in this data about the prison experience was hunger. This micro-geography transcended physical space, it was found in the confined units and the general population, especially at night, and even the cafeteria.

I would wake up in the middle of the night, my stomach would be so hungry, like I would be starving, I mean my stomach would be, I would wake up cause I was so hungry, that my stomach was like hurting, it was growling really bad like the pit of my stomach felt like it was burning, like it was just. . . I was starving. (P5)

Hunger can be understood as a micro-geography because it describes an individual experience that may not be shared with other people in the same physical space (Parr, 2000). All of the women in the housing unit are in the same space, but variations in their lived experience and the meaning they ascribe to the prison create the unique micro-geographies in which they dwell.

On one level, this micro-geography of hunger was built by a physical lack of food. Avoiding hunger required women to have snacks on hand and not all women had access to the financial and social resources that were needed to supplement cafeteria meals with commissary items and/or food smuggled from the kitchen or cafeteria. Participants' reports of hunger, however, cannot be completely explained by inadequate food supplies. As the anthropological and sociological theory about food maintains, "There is no more absolute sign of powerlessness than hunger" (Counihan, 1999, p. 7). Power disparities between the incarcerated women and the prison institution and its agents produced hunger. For example, P17 described how she "left the chow hall hungry" because she was "rushing to eat." In trying to explain this hunger she said, "I don't know if it was because you had to inhale it, and it didn't hit my stomach, but I always hungry in there." P26 told a similar story: "You're trying to eat it fast and there's no substance to it, it just sort of fills you for a minute and then you're starving again." P13 described the breakfast food as plentiful yet "it doesn't do nothin' for you" because of the awkward timing. Stripped of the power to decide when, where, what, and how fast to eat, some women reported that the cafeteria meals—however plentiful - could not satiate their hunger.

Movement

In spite of prison food regulations that sought to discourage food movement between and within the confined units, general population, and activity spaces, women described moving food through these places in a way that diminished boundaries and assigned new meaning to these spaces.

Interior boundaries

Women described an illicit flow of food between the cafeteria, the kitchen, and the housing units in the general population. For example, participants who worked in the kitchen stole food from this place and brought it to the housing units: "A big block [of butter]. They wrap

it up, like a lot of people, cause you wear, like the little cook's, chef coat, and they put it in that, wrap it up, and just walk with it, you know" (P1). This movement of food and subsequent preparation and consumption of smuggled items in the housing units deconstructed internal boundaries and transformed the housing units into kitchen and cafeteria places. Smuggling food from the cafeteria to the housing units was a near daily activity for many women, a constant reiterative performance through which place was produced.

I would take the hamburger back [to the housing unit in general population]. All of us would go to chow and we'll get our hamburgers and we'll bring the hamburgers back from the chow hall. And then when it was time to cook, I'll chop up the hamburger and I'll use the Roman Noodles (sic), and just some sauce, and make Hamburger Helper. (P24)

In this narrative, P24 sounds like a happy homemaker on the outside, shopping for food with friends, cooking up an everyday dish, adding her own sauce and garnish. This performance rejects the conventional meaning of the "chow hall" as a place of supervised eating, reconstructing the cafeteria as a corner store and the housing unit as a personal kitchen and dining room.

Every participant spoke about how they traded and shared the food with each other, moving food between and within housing units and pooling resources to prepare fairly elaborate dishes using hot water and heat from hair blow dryers and radiators. These activities satiated hunger by allowing access to a greater quantity and variety of food between meals and providing women with the opportunity to gain some semblance of power by controlling when, where, and how they ate.

Let me tell you how we do cooking. They give us trash, clear trash bags, and then we have a hot pot. What we would do was take our noodles, and since I worked in the kitchen, I would get chicken bits. You could also order off the commissary you could get sauces and whatever, but you take it and mix it with the noodles; you pour water in there, you twist up the bag, put it in something. Sometimes you wrap it in a towel and sit it there till the noodles get soft. The food will get soft. That's how we cook. (P3)

The cooking groups, like the one that P3 described here, represented yet another micro-geography within the prison space, a unique space within a larger place created by an individual, or in this case a group of individuals. Women described moving in and out of these groups, depending on social dynamics and their ability to contribute resources or cooking skills. Those who found themselves inside a quality cooking group enjoyed a higher level of food security than those on the outside.

Inside/outside boundary

In addition to destabilizing interior boundaries, the movement of food through the prison diminished the boundary between places inside and outside of the facility by reproducing the street dynamics of policing and drug trafficking on the inside. For example, women prepared and exchanged seasonings in a unit called balls, the size of which was standardized and

assigned a specific value: “We would bring our own commissary to the chow hall and dress stuff up, too. . .like on chicken day, on Sunday, we would make hot sauce ball, bring ‘em with us to put on our chicken” (P25). The “hot sauce ball” that P25 described was a static form of currency and exchange, like a “dime bag” or “eight ball” of drugs on the street. Participants described meticulously preparing these packets with a variety of different products using trash bags and hair ties. Another form of currency was the “coffee ball” that included a specific amount of coffee, creamer, and sugar, and was widely exchanged for other food, services and social power.

The trafficking of food was prohibited and actively discouraged by the prison administration and correctional officers. Inmates caught smuggling food could be issued a ticket and brought before the Disciplinary Board. Here, P8 described the events surrounding her attempt to bring food, including several coffee balls, to another inmate during Bible Study:

[The female CO] put me up against the wall and search me. . .She feels the coffee balls. . .And I'm like, I'm trying to whisper to her, “Come on man, it's only coffee. . .” Everybody's comin' up out of Bible Study now, looking at me. It looks like I'm being arrested in jail, like for a drug bust. . .[The ticket] wound up getting thrown out. . . I went through that embarrassment of being put against the wall. Searched. . . that is how I was treated for trying to give something to a friend. . .So it was really like how we get treated on the street, exactly. (P8)

This type of scenario reinforced the participants' drug-using street identities as hustlers in an underground economy working to get a fix. As P8 states, “it was really how we get treated on the street, exactly.” In this moment, the distinction between the street place and the prison place was suspended. In addition, the fundamentally unenforceable character of the prisons food rules, given the ratio of prisoners to correctional officers and the creativity and effort dedicated to circumventing food rules in order to feed their hunger for food and control, brought the dynamics of drug policy and enforcement in the community inside the prison walls.

Health implications

The (re)construction of food places in prison that is described here has implications for thinking about both nutrition/weight and substance use outcomes for incarcerated women with histories of drug use.

Nutrition/weight

As is the case in non-incarcerated US communities, obesity and overweight are on the rise among prisoners (Dong & Tang, 2014). This data illuminates some of the ways in which the organization of the prison place may produce detrimental health outcomes related to food and eating. Women described experiencing food insecurity on the street and as they travelled through the intake frontier. They found the daily serving of three cafeteria meals in assessment to provide some degree of relief, at least initially. In addition, the construction of micro-geographies with hoarded items, in this and other confined spaces, reinforced a sense of food security. However, as they moved deeper into the prison space, their hunger reemerged as access to food varied by site and time and feelings of powerlessness dug pits

in their stomachs. In an effort to satiate their hunger for food and power, women described excessive snacking on commissary items and consumption of elaborate dishes cooked with peers between meals.

While data about participants' pre- and post- incarceration weights were not systematically collected, field notes indicate that 14 of the women were visibly overweight or obese at the time of their interviews. More than half (57%, $n = 17$) of the participants reported gaining weight while incarcerated, amounts ranging from 5 to 100 pounds. Three participants (10%) reported that their weight remained the same, 4 (13%) lost weight and no information about weight change was reported from 6 (20%) of the participants. This analysis of place suggests that these detrimental weight outcomes can be attributed, in part, to behaviors produced by the prison's internal boundaries. In an effort to deconstruct and push back against these boundaries, women overate, under-ate, and obsessed about food. For some, their addiction to drugs in the external, non-prison, environment seemed to be replaced inside by an addiction to food. In short, we are suggesting that the physically and mentally unhealthy eating behaviors that women described were partially fueled by poorly constructed internal boundaries and efforts to enforce these borders.

Substance use

In addition to unhealthy eating behaviors, the organization of prison space encouraged women to engage in behaviors that reinforced their identities as law breakers and drug users. Using their knowledge from the street about how to move illegal product, the inmate community constructed a complicated system of trade to secure the food they needed and repel institutional control over their lives. Specifically, they challenged and deconstructed internal boundaries by moving food between places with disparate food resources. For example, transporting foodstuff from the kitchen and cafeteria, where food was plentiful, to the housing units where supplies were limited. This movement of food perpetuated a relationship of distrust and suspicion between the prisoners and the State, which, arguably, undermines the construction of prison as a rehabilitative place and may interfere with efforts to engage these women in health care and prevention services. The powerlessness and food insecurity of this place encouraged engagement in illicit activities (i.e. hoarding, smuggling and trading) that mirrored the dynamics of drug use outside prison. To satiate their appetites for power and nourishment, women broke rules, challenged authority, and risked disciplinary consequences. They consumed whatever they could acquire. The parallels between these prison food behaviors and drug-use behavior in the community undermine the social construction of prison places as sites of order that can be distinguished from the chaos of the streets. The boundaries between inside and outside are blurred as women experience similar struggles with self and State in both places.

Policy implications

These findings call for public policy officials and prison administrators to reexamine the prison food environment in order to facilitate healthier behaviors and lay the groundwork for more positive relationships between inmates and correctional staff and administration. While we have focused here on women's experiences with food in prison, discussion and interventions related to prison food should not exclude male prisoners. Additional research

on gender specific issues is needed. Specific recommendations that may ameliorate the prison experience for women, and possibly men as well, include creating greater food security across prison places so the need to move food across spaces becomes obsolete. Understanding about the micro-geography of hunger allows for interventions to locate and satiate this need. In addition to making food more consistently available across time and space, providing nutritional information about cafeteria and commissary foods, offering cooking and nutrition classes, and expanding cafeteria offerings may reduce experiences of hunger by offering incarcerated people a greater sense of control over their lives in prison. Increased access to mental health services may reduce the extent to which incarcerated drug users swap drugs for food in prison by addressing the underlying issues that fuel addiction. Finally, more research is needed about the lived experience of incarceration in order to measure how these types of changes to the prison food environment impact nutritional, mental health, substance abuse, and criminal justice outcomes.

Acknowledgements

The project described was supported by Award Number T32MH020031 and P30MH062294 from the National Institute of Mental Health. The content is solely the responsibility of the authors and does not necessarily represent the official views of the Center for Interdisciplinary Research on AIDS, the National Institute of Mental Health, or the National Institutes of Health.

References

- Alleyne V. Locked up means locked out: Women, addiction and incarceration. *Women & Therapy*. 2007; 29(3):181–194.
- Bird CM. How I stopped dreading and learned to love transcription. *Qualitative Inquiry*. 2005; 11(2): 226–248.
- Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006; 3:77–101.
- Brisman A. Fair fare? Food as contested terrain in U.S. prisons and jails. *Georgetown Journal on Poverty Law & Policy*. 2008; 15(1):49–93.
- Carson, EA.; Sabol, WJ. Prisoners in 2011. Bureau of Justice Statistics; Washington DC: 2012.
- CASA. National Center on Addiction and Substance Abuse at Columbia University. Behind bars II: Substance abuse and America's prison population. Columbia University; New York: 2010.
- Clear, TR. Imprisoning communities: How mass incarceration makes disadvantaged neighborhoods worse. Oxford University Press; New York: 2007.
- Counihan, CM. The anthropology of food and body: Gender, meaning and power. Routledge; New York: 1999.
- Cray C. No to prison food. *Multinational Monitor*. 2001; 22(6):4.
- Cresswell, T. Place: A short introduction. Blackwell Publishers; Malden, MA: 2004.
- Davis, AY. A world unto itself: Multiple invisibilities of imprisonment.. In: Jacobson-Hardy, M., editor. *Behind the Razor Wire: Portrait of a contemporary American prison system*. New York University Press; New York: 1998.
- Dong K, Tang A. Obesity in correctional facilities: A review of epidemiology and etiology. *Journal of Health Care the Poor and Underserved*. 2014 in press.
- Earle R, Phillips C. Digesting men? Ethnicity, gender and food: Perspectives from a 'prison ethnography'. *Theoretical Criminology*. 2012; 16(2):141–156.
- Edwards JSA, Hartwell HJ, Reeve WG, Schafheitle J. The diet of prisoners in England. *British Food Journal*. 2007; 109(3):216–232.

- Eves A, Gesch B. Food provision and the nutritional implications of food choices made by young adult males, in a young offenders' institution. *Journal of Human Nutrition and Dietetics*. 2003; 16(3): 167–179. [PubMed: 12753110]
- Foster RK. Prison foods. *Nutrition Bulletin*. 2006; 31(3):173–174.
- Freudenberg N. Jails, prisons, and the health of urban populations: A review of the impact of the correctional system on community health. *Journal of Urban Health*. 2001; 78(2):214–235. [PubMed: 11419576]
- Godderis R. Dining in: The symbolic power of food in prison. *Howard Journal of Criminal Justice*. 2006a; 45(3):255–267.
- Godderis R. Food for thought: An analysis of power and identity in prison food narratives. *Berkeley Journal of Sociology*. 2006b; 50:61–75.
- Grella CE, Rodriguez L. Motivation for treatment among women offenders in prison-based treatment and longitudinal outcomes among those who participate in community aftercare. *Journal of Psychoactive Drugs*. 2011:58–67. [PubMed: 22185040]
- Herbert K, Plugge E, Foster C, Doll H. Prevalence of risk factors for noncommunicable diseases in prison populations worldwide: A systematic review. *Lancet*. 2012; 379(9830):1975–1982. [PubMed: 22521520]
- International Prison Centre for Prison Studies. Entire world: prison population rates per 100,000 of the national population. 2011. Retrieved from <http://www.prisonstudies.org/info/worldbrief/wpbstats.php?area=all&category=wbpoprate>
- Khavjou OA, Clarke J, Hofeldt RM, Lihs P, Loo RK, Prabhu M, et al. A captive audience: Bringing the WISEWOMAN program to South Dakota prisoners. *Women's Health Issues*. 2007; 17(4): 193–201. [PubMed: 17572105]
- Kyckelhahn, T. State corrections expenditures, FY 1982–2010. Bureau of Justice Statistics; Washington, DC: 2012.
- Marshall D. Birth companions: Working with women in prison giving birth. *British Journal of Midwifery*. 2010; 18(4):225–228.
- Mauer, M. *Race to incarcerate*. The New Press; New York: 1999.
- Mauer, M.; Chesney-Lind, M., editors. *Invisible punishment: The collateral consequences of mass imprisonment*. New Press; New York: 2002.
- Mauer, M.; King, RS. *Uneven Justice: State rates of incarceration by race and ethnicity*. The Sentencing Project; Washington DC: 2007.
- Miles, MB.; Huberman, AM. *Qualitative data analysis*. Sage Publications; Thousand Oaks, CA: 1994.
- Milligan R-J, Waller G, Andrews B. Eating disturbances in female prisoners: The role of anger. *Eating Behaviors*. 2002; 3(2):123–132. [PubMed: 15001009]
- Moran D. Doing time in carceral space: Timespace and carceral geography. *Geografiska Annaler: Series B, Human Geography*. 2012; 94(4):305–316.
- Moran D. Carceral geography and the spatialities of prison visiting: Visitation, recidivism, and hyperincarceration. *Environment and Planning D: Society and Space*. 2013; 31:174–190.
- Nikolas, H. The Well Woman Project: Meeting women's nutrition needs at the Adelaide Women's Prison.. Paper presented at the Women in Corrections; Adelaide, Australia. 2000.
- Parr H. Interpreting the 'hidden social geographies' of mental health: Ethnographies of inclusion and exclusion in semi-institutional places. *Health and Place*. 2000; 6:225–237. [PubMed: 10936777]
- Patton, MQ. *Qualitative research and evaluation methods*. 3rd ed.. Sage; Thousand Oaks, CA: 2002.
- Robinson KM, Haupt-Hoffman D, Stewart B, Schneider F, Hamm N, Garrison V. Is obesity a problem in a juvenile correctional facility? *Journal of Correctional Health Care*. 2006; 12(3):175–180.
- Simon J. The 'society of captives' in the era of hyper-incarceration. *Theoretical Criminology*. 2000; 4(3):285.
- Smith C. Punishment and pleasure: Women, food and the imprisoned body. *Sociological Review*. 2002; 50(2):197–214.
- Springer SA. Improving healthcare for incarcerated women. *Journal of Women's Health*. 2010; 19:13–15.

- Staton-Tindall M, Frisman L, Lin H-J, Leukefeld C, Oser C, Havens JR, et al. Relationship influence and health risk behavior among re-entering women offenders. *Women's Health Issues*. 2011; 21(3):230–238. [PubMed: 21315617]
- Stein K. Foodservice in correctional facilities. *Journal of the American Dietetic Association*. 2000; 100(5):508–509. [PubMed: 10812371]
- Tammam J, Gillam L, Gesch B, Stein J. Reduce junk food consumption. *British Medical Journal*. 2012; 345(7880):27–28.
- Travis, J.; Waul, M. Prisoners once removed: The impact of incarceration and reentry on children, families, and communities. Urban Institute Press; Washington, D.C.: 2003.
- Ugelvik T. The hidden food: Mealtime resistance and identity work in a Norwegian prison. *Punishment & Society*. 2011; 13(1):47–63.
- Valentine G, Longstaff B. Doing porridge: Food and social relations in a male prison. *Journal of Material Culture*. 1998; 3(2):131–152.
- Visher CA, O'Connell DJ. Incarceration and inmates' self perceptions about returning home. *Journal of Criminal Justice*. 2012; 40(5):386–393.
- Wakeen, B. Nutrition and Foodservice Management in Correctional Facilities. 3rd ed.. American Dietetic Association; Chicago: 2008.
- Wingood G. Feminization of the HIV epidemic in the United States: Major research findings and future research needs. *Journal of Urban Health*. 2003; 80(4 Suppl. (3)):iii67–iii76. [PubMed: 14713673]
- Wood, RC. The sociology of the meal. Edinburgh. Edinburgh University Press; Scotland: 1995.