

## The Obesity Epidemic and the Application of Kingdon's Theory of Multiple Streams

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### Abstract

Public health researchers are concerned with rising obesity rates, which have triggered greater focus on higher-quality nutrition consumption. As a result of the obesity epidemic, the U.S. Congress has mandated programs such as the Food Insecurity and Nutrition Incentive (FINI) program, which extended the Agriculture Improvement Act of 2014 (Farm Bill). This program is designed to reduce the incidence of unhealthy eating by incentivizing individuals to consume more fruits and vegetables through a prescriptive initiative. However, barriers such as military sustenance allowance and the number of individuals in a household, or "household count," were highlighted in a Government Accountability Agency (GAO) report, *DOD Needs More Complete Data on Active-Duty Servicemembers' Use of Food Assistance Programs*, which may affect junior-ranking military personnel. The report also disclosed that a large subset of junior-ranking military personnel subsists at low-income levels and are currently struggling to make ends meet, with cost exerting the greatest effect on their food options. This policy article analyzes an aspect of the Farm Bill (FINI program) using John Kingdon's multiple-streams framework in order to offer two policy proposals that may increase higher-quality nutritional consumption among junior-ranking military personnel.

*Keywords:* Farm Bill, Food Insecurity and Nutrition Incentive Program (FINI), obesity, military

### Introduction

According to the Centers for Disease Control (CDC), \$1.5 billion is incurred annually in obesity-related healthcare costs (CDC, 2019; Stokes, Ni, & Preston, 2017). Obesity is defined as relating to an individual having a body mass index greater than 30 kg/m<sup>2</sup> (Rush, LeardMann, & Crum-Cianflone, 2016; Stokes et al., 2017). Obesity can affect an individual's psychological wellbeing and quality of life. Currently, it is a primary cause of chronic health conditions, the most significant one being cardiovascular disease (Breland, Donalson, Nevedal, Dinh, & Maguen, 2017; Brug, Kremers, Lenthe, Ball, & Crawford, 2008; Tanofsky-Kraff et al., 2013). Obesity tops the policy priorities of several agencies such as the U.S. Department of Agriculture (USDA) and the Department of Defense (DOD), and has been noted by several high-level congressional committees. These entities have universally recommended strategies to deter an increase in obesity cases and to reduce the current levels. Some causes of rising obesity rates include increased fast-food intake, decreased fruit and vegetable consumption, poor lifestyle choices, lack of physical activity, genetics, and inequitable access to markets and stores that offer healthier food choices (Webber, Sobal, & Dollahite, 2010). For some time, researchers have noted the effects of obesity on the civilian population, but it is now clear that the problem is similarly widespread within the military population. In fact, the CDC estimates that obesity costs the nation \$103 million in lost job productivity and factors into the 71% of young adults in the United States who are unfit to serve in its armed forces (CDC, 2019).

With this in mind, Congressman Frank Lucas from Oklahoma (Congress, 2014a) introduced and sponsored the Agriculture Improvement Act of 2014 (Farm Bill). This multi-year bill not only addresses disparities in food security and rural and environmental policies, but may also improve warfighter nutrition in its revised bill of 2018. The policy analysis in this report will examine the benefits and constraints of the Farm Bill's Supplemental Nutrition Assistance Program (SNAP) as it relates to military personnel and reviews the latest solutions to the problem of insufficient fruit and vegetable consumption. To this end, Kingdon's (1995) multiple-streams framework will provide an illuminating model to approach the obesity crisis.

### Kingdon's Multiple Streams

Kingdon's multiple-streams framework encompasses several explanations of how ideas are incorporated into the governmental agenda, how solutions are proffered, and the means by which these proposed solutions evolve into law. Kingdon's multiple-streams framework has been applied to various topics such as tobacco cessation, immunization programs, and other public issues that may exert a political will. Kingdon's model indicates three streams to analyze and address: problem streams, policy streams, and political streams (Kingdon, 1995a). Other contributing factors include the promulgation of a problem by interest groups and the media, and shifts in the national mood, all of which play a role in the general perception that new laws should be proposed and passed. When streams converge, they create policy opportunities to introduce legislation that may eventually become law. Once a law affects one segment of society, there is a good chance it will spill over to adjacent segments.

## Problem Streams

Kingdon defines problem streams as those activated by indicators, events, or crises (Kingdon, 1995b). In regard to the obesity epidemic, noticeable indicators of rising healthcare costs associated with obesity and comorbidities ensued. For instance, in 2014 the economic burden of obesity in the United States was estimated at \$2 trillion (Tremmel, Gerdtham, Nilsson, & Saha, 2017). Also, in 2013, the Military Health System (MHS) absorbed medical-related costs of \$1 billion in obesity-associated claims. At the same time, research reports brought closer scrutiny to the rising overweight and obesity rates within the active-duty military community (Tanofsky-Kraff et al., 2013). Due to the rising medical costs of obesity and associated comorbidities, the government agenda included this problem stream as described by Kingdon (1995). In fact, the Farm Bill received great support from both the House and the Senate (after some convincing) due to economical threats (Congress, 2014b). Further solutions to obesity were proposed that would modify the SNAP program, such as encouraging healthier food options. In addition, some states passed sugar taxes to reduce sugar consumption. The problem stream of rising medical costs and economic burden increased the urgency of the issue on the federal government's agenda.

## Policy Streams

According to Kingdon (1995), the element of “primeval soup” (policy streams) also increases the chance that a problem will be recognized and addressed on the government's agenda. This “primeval soup” results when several ideas about a situation float around and bump into one another (Kingdon, 1995c). When this occurs, some ideas float to the top while others do not. Those that take precedence do so because they interest a critical mass of community specialists or policy communities composed of researchers, interest groups, and health or environmental specialists. In addition, they may present papers, proposals, briefs, or testimonials to persuade the public. The Farm Bill took up the concerns of individuals and policy entrepreneurs such as Congressman Frank Lucas, the then Agriculture Committee chairman, to elicit significant interest. Additionally, agencies like the USDA and the American Heart Association sounded the alarm on rising obesity rates. These organizations proposed solutions that would increase fruit and vegetable consumption and simultaneously benefit local farmers, who would provide fresh produce to consumers.

Advocates who claimed that obesity had become a public health epidemic triggered the development of the Health Initiative Incentives program. This successful pilot program became the impetus for the 2014 Food Insecurity and Nutrition Incentive Program (FINI), which was housed under the Farm Bill's Supplemental Nutrition Assistance Program (SNAP) (Berkowitz, Seligman, Rigdon, Meigs, & Basu, 2017; Mozaffarian et al., 2018). The purpose of FINI is to provide access to healthier foods such as fruits and vegetables through a prescriptive partnership between an individual's health or nutrition provider and participating grocery stores. Eligible participants for this incentive include individuals with low incomes who are at risk of developing chronic health conditions (Mozaffarian et al., 2018).

### Political Streams

According to Kingdon (1995), political streams can include changes in organizational administration or alterations in national health priorities. Regarding the obesity epidemic, several political forces shaped national perceptions. For example, studies showed that higher obesity rates resulted from individuals dining out while unaware of the high caloric content of the foods they were consuming. The Obama administration's Let's Move! campaign brought greater awareness for an opportune window (Obama, 2012; Penney et al., 2017; Story, Kaphingst, Robinson-O'Brien, & Glanz, 2008). These political streams helped to shape public opinion, enhance bipartisanship, and increase traction for public health initiatives on the government agenda. The existing national priority to reduce childhood obesity further supported the success of Let's Move! It is important to note that one stream alone cannot bring to fruition a program that requires the effort of multiple streams to create the synergy necessary for "primeval soup" (Kingdon, 1995a). In essence, the convergence or "coupling" of the three streams provides greater impetus to set agendas and formulate legislation that eventually becomes law (Kingdon, 1995a).

### The Power of Spillovers

While the FINI program housed under the Agricultural Improvement Act of 2014 should be applauded for its bipartisan passage, there is a value-added opportunity to increase the promotion of fruit and vegetable consumption among junior-ranking military personnel. This is the potential of spillover, which Kingdon (1995a) defines as a phenomenon that occurs once a principle has been established to the degree that its acceptance encourages results in areas adjacent to the primary one. A hypothetical example, one with potential for implementation, involves the economic barrier to a subset of junior-ranking military personnel who receive FINI incentives according to modest levels of sustenance pay based on household count. Most of those affected are junior-ranking military personnel (i.e., E-1 through E-4) desiring FINI incentives for healthier eating (GAO, 2016). They may qualify for the FINI program based on their income status but not their sustenance allowance. In fact, stipulations may inadvertently disqualify military personnel from procuring FINI incentives. For example, some stipulations require an applicant to reach a certain household count in order to qualify. Take, for instance, the case of a junior-ranking military member (i.e., E-1) with one child who is struggling to make ends meet; due to the stipulations of household count and insufficient dependents, they would not qualify for a need-based incentive. For this reason, several states have been forced to navigate military pay constraints such that soldiers can qualify for FINI incentives. Unfortunately, not all states have a mitigation strategy to account for this policy issue. Thus, as future Farm Bill proposals are considered while military obesity rates continue to climb, alternatives or amendments to the current bill may help decrease unhealthy dietary choices for junior-ranking military personnel. To address poor dietary habits among low-income soldiers and promote healthy eating, other possible initiatives may include modified farm bills and higher taxes on unhealthy food. For example, at the municipal level, certain large American cities have introduced surtaxes on sugar-added beverages, thereby incentivizing the consumption of more healthful choices such as fruit and vegetable juice.

## Proposal One

The need to decrease constraints that block access to fruits and vegetables is evident. According to one major GAO report that monitored the progress of soldiers, nutritional barriers, and Farm Bill implementation, active-duty soldiers spent more than \$21 million-worth of food stamps at their local commissaries from 2014 to 2015 (GAO, 2016). In the same report, the researchers acknowledged that the financial burdens of some military members may disadvantage them from making healthy dietary food choices (GAO, 2016).

Although the SNAP program currently offers incentives whereby military personnel qualify for food stamps based on income criteria, there remains a major gap in delivering incentives to struggling junior-ranking military personnel (GAO, 2016). As a proposed solution, a macro-level policy revision of the FINI program should exclude military sustenance allowance and household count from the formula to determine food stamp eligibility. This policy change may improve warfighters' health status by encouraging nutritious food options in the form of fruits and vegetables from local participating grocery stores and markets. The advantage of this proposal is that the recommended intake of fruits and vegetables ensures that funds are spent on nutritious foods instead of lower-cost consumables with high sugar and fat content.

One danger in enacting this proposal is that individuals may fear stigmatization if others learn that they rely on a government food-assistance program (Gaines-Turner, Simmons, & Chilton, 2019). While the SNAP program offers incentives to supplement a family's income and increase the quality of consumable foods in the home (Berkowitz et al., 2017), little research has been conducted into whether such incentives have a paradoxical effect, that is, whether they disincentivize recipients who fear the social stigma of accepting government aid to assist with household expenses. Nevertheless, there are some advantages to instituting a revamped policy. Since the FINI program is designed to increase fruit and vegetable consumption, eliminating sustenance pay as a stipulation would decrease financial hardship among military personnel.

## Proposal Two

A second proposal would increase junior soldiers' sustenance allowances so that personnel within this group automatically receive additional funding to assist in purchasing healthier foods and decrease financial burdens. Also, nutrition education should be implemented at the entry point of a military member's career and throughout their career lifecycle in an effort to optimize healthier food choices. Perhaps the best timepoints to incorporate nutrition education training occur during milestone military school trainings, where a nutritionist or qualified healthcare professional with a nutrition-related background could facilitate lessons. Equipping soldiers with the best nutritional options improves health outcomes.

One possible benefit to this proposal is that, unlike the FINI program where funding is allocated specifically for fruits and vegetables, this option is designed to encourage individuals to make healthy food choices that improve their entire diet. The advantage of this option is that there is no social stigma linked to using a government-sponsored program to assist with food purchases.

### Conclusion

Alternative policy proposals in the Farm Bill seek to address rising obesity rates and improve the diet of our country's most precious human capital, military servicemembers. We must seek to improve on the current Farm Bill by allowing junior-ranking military personnel to obtain fruit and vegetables incentives without stipulations of military pay allowances and household count. Kingdon's (1995) multiple streams theory provides a valuable framework to describe how a prosocial idea progresses through various political stages to become law.

Although the 2014 Food Insecurity and Nutrition Incentive (FINI) program from the Farm Bill was discussed in this article, it is important to note that the 2018 Farm Bill has not addressed the aforementioned concerns over stipulations of military pay allowances and household count that may impose barriers for some military members to receive incentives for the purchase and consumption of fruits and vegetables. Implementation of the 2014 Farm Bill illuminated further considerations for military members who may be disadvantaged by stipulations of military allowances and household count. As a further recommendation, ongoing discussions of policies that reduce financial burdens and advocate for improved nutrition among military personnel should include the Armed Services Committees.

In conclusion, as public health concerns stemming from an obesogenic environment continue to grow, future discussions on a wider civilian scale should be contemplated by applying John Kingdon's multiple streams theory in order to optimize health solutions. For instance, the National School Lunch Program (NSLP), which provides low-or no-cost breakfast and lunches to school children in need, has garnered greater public attention since making changes in healthy food choices. After high school, however, the financial burden of rising college tuition rates has impacted the quality of student diets. At present, the NSLP solely provides nutritious meals until a student reaches the age of 18. Extending the NSLP through the age of 21 may offer a cost-effective way to decrease the rising obesity rates and increase diet quality among college students. All in all, efforts to maximize access to healthy food choices in both the military and civilian population may help to improve health outcomes and decrease rising obesity rates.

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