



Entrenched deterrents to obesity prevention necessitate radical measures

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Abstract

Despite multiple individual-based strategies to reverse the obesity epidemic in America for some 30 years, obesity rates continue to climb: 39.8 percent of U.S. adults were obese in 2016 with another 27 percent classified as pre-diabetic and 18 percent of American children diagnosed as obese – a figure that has tripled in three decades [3-4]. Missing from this battle of the bulge is a population-based approach that would model those deployed during the anti-smoking campaign of the 1980s and beyond. Societal/legislative actions, while perceived by many as draconian and/or “un-American”, must be implemented if we are truly serious about addressing this national health epidemic.

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Introduction

Obesity evokes many reactions in America today. Tragically, the overwhelming majority of those responses has been counter-productive in resolving this national health problem: Denial, misplaced anger directed toward those who broach the subject, resignation, and outright acceptance/celebration of the condition itself [5-6,11,15]. Given the woeful track record of obesity prevention interventions over some three decades, these jaded reactions should not be that surprising albeit they perpetuate and exacerbate the epidemic. Continuing the same failed strategies is folly. Clearly, a different (or at the very least, another) approach is needed – a population-based approach that models the one deployed during the anti-smoking campaign of the 1980s and beyond.

Deterrents of obesity prevention

When obesity becomes the norm, its acceptance is readily accommodated. When some 67 percent of the adult population is obese or well on their way toward that designation, acceptance of this hypokinetic condition is virtually guaranteed [3]. Eighteen and one-half percent of American children (ages 2-17) were classified as obese in 2015-16 – a figure that has tripled in 30 years [4]; sadly, this rate also continues to climb. Complicating this obesity acceptance mindset has been its devolution to obesity celebration – an end-result of obesity advocates mistakenly morphing the *condition* obesity with the *person* with obesity [6]. Such co-mingling has miscast well-meaning healthcare providers as “fat shamers”. Another powerful force that under-

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mines obesity prevention is that cherished American ideal of individual rights whereby the individual citizen enjoys the God-given right to choose poorly. A related argument posits that the American emphasis on the value of individual responsibility creates a deep-rooted reluctance for societal intervention in what are viewed as personal behavioral choices [16]. Additionally, today's political climate (articulated from both sides of the legislative aisle) has been vehemently opposed to government meddling in citizens' private lives – a doctrine that poses a huge roadblock to population-based interventions, i.e., legislative actions. A corresponding factor that has obviated obesity prevention efforts is an increasing distrust of government and science research/data documenting the prevalence, incidence, distribution, and detrimental effects of obesity. When the general public does not perceive/acknowledge that a problem exists, then no corrective action is warranted nor sought. Paradoxically, there also appears to be a public perception that modern medical science will ameliorate obesity concerns with a new drug here and a new surgical procedure there. Such wishful thinking eliminates the need for individual effort and/or change by placing the onus of cure solely upon the medical/pharmaceutical professions – professions which many obesity nay-sayers are conflicted.

Failed past practices

A person's health status is influenced by multiple, interdependent forces: Genetics (biology); social circumstances (e.g., income); environmental exposures, including access to health-care services; policy-making; and individual behavior/lifestyle choices [21]. Historically, the focus of obesity prevention has rested virtually exclusively upon the individual whereby health-care providers have concentrated on changing individual behaviors: Decrease caloric intake; increase caloric expenditure; take medications; and, undergo surgeries. Unfortunately, the individual-based approach has yielded minimal gains in combating the national obesity epidemic. To be fair there have been dramatic success stories for select individuals utilizing sheer will power and/or medical intervention but these victories are more anecdotal than universal as evidenced by the nation's escalating obesity rates each successive year. Thus, one can reasonably conclude that additional, or alternative, approaches are required. One such approach appears to be promising: Population-based policies whereby taxation, legislation, regulation and dietary reformulation have achieved greater public health gains than the previously-mentioned individual interventions [7-8].

Nutritional shift

The dramatic increase in obesity across the population is not attributable to a sudden mass failure of peoples' self-discipline but rather a reflection of significant changes in living environments [13]. Specifically, the food supply and the infrastructure that affects physical activity are the central determinants of American (and other nations') obesity today: Pronounced increase in caloric availability and affordability of convenient, enticing, tasty foods and beverages coupled with technological and scientific innovations (e.g., smart phones, tablets, computer games, Netflix) that tend to diminish opportunities for physical activity and its concomitant expenditure of calories. America's nutrition transition (toward high fat, sugar, and salt) is not only unhealthy, it can be characterized as incredibly diverse and gratifying – fat and sugar are two of the most pleasurable elements of diet in terms of taste preferences [12]. Given the price reductions of unhealthy foods (calorie-rich, nutrition-poor) and the higher prices attached to healthier foods, the poor are particu-

larly disadvantaged with fewer opportunities to "choose" the healthy, more expensive diet [18]. As stated previously, lack of will power is not the primary reason for today's obesity epidemic; "Big Food" plays a key role in perpetuating and exacerbating obesity and its concomitant co-morbidities of diabetes 2, heart disease, stroke, sleep apnea, specific cancers, and joint dysfunction [19]. It is this author's contention that dramatic changes must occur in the food supply system if reduction of obesity is to be realized – a conclusion shared by others [10]. Such changes will require a population-based approach whereby the food industry is regulated by local, state, and federal governments providing fiscal interventions. Without question, a "hard approach" that focuses on governmental interventions will be vigorously opposed by the obesogenic processed-food industry that favors the "soft approach" of educational and industry voluntary codes [17]. In short, dramatic actions in producing, marketing, distributing, and selling foods are required to improve the quality and quantity of American life – actions that will force most Americans out of their comfort zone.

Societal, legislative interventions

1. Health warning labels on selected foods or beverages high in sugar, calories, fat, salt
2. Ban sale of selected foods and beverages to children under age 16
3. Ban sale of selected foods and beverages at federal, state, municipal locales (schools, museums, historical sites, parks, swimming pools)
4. Ban sale of selected foods and beverages at youth-oriented locales (schools, sport/dance/karate venues, Scouts)
5. Eliminate vending machine sales of selected foods and beverages
6. Ban advertising of selected foods and beverages on TV, radio, billboards, internet
7. Ban display of selected foods and beverages at point-of-sale
8. Restrict companies to "plain packaging" of selected foods and beverages
9. Eliminate drive-in for selected "fast food" restaurants whose menu offerings include items more than 30 percent of selected foods and beverages
10. Provide monetary incentives for persons with healthy BMIs (annual bonus from employers, income tax credits)
11. Provide "Food Addiction Counseling" services in health coverage plans
12. Subsidize producers of healthy foods and beverages
13. Levy "distributor tax" on companies that produce or sell selected foods and beverages
14. Levy "sin tax" on buyer of selected foods and beverages

Radical measures

Regulation Justification

Most assuredly, the aforementioned governmental interventions will elicit a fusillade of outrage accompanied by acrimonious defenses of multiple U.S. Constitutional Amendments – a

harangue that will parallel those early legislative attempts that comprised the anti-smoking campaign in the 1960s. The salient issue before us is finding that balance between individual liberty and the well-being of society as a whole. That “balance” is woefully out of kilter when one considers the adverse effects of Americans’ choosing unhealthy diets and/or Big Food foisting its ultra-processed, government-subsidized high-fructose corn syrup, high-fat, high-salt food stuffs upon the American citizenry. Individual liberty must be compromised given the detrimental impact upon health care costs, absenteeism, and increased disability rates [1-2,9,20].

McKinnon (2010), while summarizing John Stuart Mills’ 1885 treatise *On Liberty*, identifies three arguments that justify government infringement upon personal liberties:

1. Imperfect rationality: “Inconsistency is common in diet..., people may value good health, but make poor short-term diet... choices that are out of line with their long-term health goals” (p. 2)
2. Asymmetric information: “...government information about diet... is underprovided and disseminated compared with that provided by food and beverage manufacturers” (p. 3)
3. Financial externalities: “...medical costs related to obesity were recently estimated as much as \$147 billion per year” (p.3) [14]

Those financial costs, as reported by McKinnon, may be far too conservative. Cawley & Meyerhoefer (2012) place the cost factor of obesity-related illness in adults at \$209.7 billion [2]. Even more disturbing than these data are projections by Wang et al. (2011) who predict that current trends in obesity rates will add 65 million more obese adults to this at-risk population by 2030 resulting in an annual increase of \$48-66 billion [20]. However, the economic costs associated with obesity extend far beyond medical care costs. Consequent losses in worker productivity (lost workdays and absenteeism) represent an economic cost as high as \$390-580 billion [20]. Individuals who are obese have not and will not shoulder this financial cost by themselves – all of society pays for this national health concern – a concern that continues to grow and accounts for more than 20 percent of U.S. national health expenditures spent treating obesity comorbidities [2].

Conclusion

Governments are charged with the responsibility of protecting its citizens from harm. When the food and beverage industry fails to deliver healthy outcomes for its consumers, government must intervene [13,17]. The current food supply environment encourages, entices, and goads the public to overeat and choose poorly. Healthy living must be promoted, not imperiled, by the market place. Voluntary reform efforts by Big Food, educational efforts directed toward consumers, and sheer will power of individuals to choose wisely have not made any meaningful impact on this national health epidemic. Reversing this four decade-long diet devolution will require radical measures – initiatives that begin with governmental legislation and forceful regulation.

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