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RESEARCH ARTICLE

Healthy Eating Policy, Public Reason, and the Common Good

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Abstract
The contribution of food and diet to health is much disputed in the background culture in the US. Many commercial or ideological advocates make claims, sometimes with health as a primary goal, but often accompanied by commercial or ideological interests. These compete culturally with authoritative recommendations made by publicly funded groups. For public policy concerning diet and health to be legitimate, not only should it not be inconsistent with the scientific evidence, but also it should not be inconsistent with the political environment. *Healthy Eating Policy and Political Philosophy* (HEPPP), by Barnhill and Bonotti (2022), addresses how policy in this complex area might be justified. In the present essay I highlight some important strengths of their work and also make some points about how it might be clarified or enlarged in scope.

The great strength of *HEPPP* is that it emphasizes the role of a political philosophy in evaluating the legitimacy of public policy. They presume a well-off liberal democratic state, and specifically they draw on Rawls' political liberalism, as developed in *Political Liberalism* (*PL*). One of several interlocking technical concepts developed in this book, *public reason* speaks to the boundaries of what should be acceptable in public deliberation about constitutional essentials and basic justice. *HEPPP* explores the application of an extension of public reason to the justification of policies related to "healthy eating." Public reason has two components, both of which pertain to a common understanding among citizens: (1) a common understanding of the principles and ideals that are the foundation of the political society, and (2) a common understanding of the standards that govern reason and evidence, including common sense. *HEPPP* argues that even though for diet and health the complexity of the scientific evidence goes far beyond anything like common sense for a typical citizen, the technical idea of "accessibility" of the scientific evidence justifies reliance on it within the concept of public reason. I question this accessibility argument about scientific evidence and public reason because the nature of the population-level epidemiological evidence about diet and health is that it often includes judgments that are based on arguable interpretations, framing incidence in terms of risk and prevention; thus the issue is more than one of potential accessibility of scientific evidence. Nevertheless, evaluation and consideration of the scientific evidence is of obvious practical importance in policy deliberation concerning policy related to what Rawls call "ordinary legislation." Even though public reason applied to healthy eating policy may

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not be as pertinent as it is for constitutional essentials and basic justice, and even though it is unlikely to result in a "correct outcome," invoking reasons based on political values and principles held in common has important value even in these deliberations about more ordinary questions. That value applies not to the specifics of the particular issue, but to the larger context for the particular policy being deliberated, as a potential contribution to an overlapping consensus that is stable for the right reasons. If this vision of political liberalism were achieved, then contentious debate about health eating policy and its scientific basis could occur within that context and be resolved within the basic political structure. Because public health and political liberalism have a common concern for a good at the population level, they have an underlying affinity. Healthy eating policies could be evaluated in two not-unrelated ways: based on their instrumental contribution to the good of the public body of citizens as population-level health, and according to their stabilizing contribution to an overlapping consensus among citizens. In this latter way a policy would contribute to a *conditional* integral common good a la Sulmasy, one that has the prospect of conditioning a political system, and by doing so create the conditions of the possibility of a *constitutive* integral common good that is constituted on the right reasons for allegiance to an overlapping consensus. To conclude with reference to *HEPPP*, public reason may play an important function with respect to the political common good, even as debates about the weight and meaning of scientific evidence from epidemiology play out in deliberation of ordinary legislation concerning healthy eating.

Keywords Diet and health policy · Healthy eating · Public reason · Common good · Population perspective · Public health policy · Political liberalism

Introduction

The relationship between diet and health has been studied extensively, particularly with respect to non-contagious chronic disease. Emphasis has been on what healthy people might do to "reduce the risk" of these diseases by altering their eating behavior. The evidence gathered has to do with how a beneficial outcome in a population might be associated with a change in behavior in that population. The methods of epidemiology are central to generating population-level evidence that bears on the relationship. If the knowledge base is judged to be sufficient on an aspect of this relationship, it may be possible to design a public policy that would improve the health of the population. However, interventions have political ramifications, and these need to be considered in addition to the scientific prospects for success. In *Healthy Eating Policy and Political Philosophy* (*HEPPP*) Barnhill and Bonotti (2022) ask about the basis on which a particular policy is justified both politically and scientifically. In Chap. 5 they frame their core question: *"when, if ever, are healthy eating efforts … publicly justified and consistent with the idea of public reason?"* Their question makes the idea of "public reason" central to public justification. They draw on the idea of public reason as presented by John Rawls in *Political Liberalism* (*PL*, 2005). The form of their question applies equally well not just to healthy eating policy, but more broadly, to public health policy and even to public policy in general. In the present essay I highlight some important strengths of their work and also make some points about how it might be clarified or enlarged in scope. I will argue that both the public health perspective and Rawls' notion of political liberalism involve a concern for a population-level good: for public health the

population-level good is the health of the population, and in political liberalism the population-level concern is the vitality of the liberal democratic society. These population-level goods are often not appreciated in a liberal state, which characteristically values a utilitarian analysis based on the aggregated experience of individuals. (Coggon 2023: 15)

In Rawls' political liberalism, in the domain of the political the person is understood as the citizen, a status that mediates between the individual and the political structure. As a group, citizens together comprise the civic body. They have concern for themselves, for their fellow citizens, and for the civic body they comprise. I suggest that the citizen concept is needed for justification of public health efforts as well. Public health interventions are fundamentally about reducing future incidence of health problems in a population. The practical political wisdom of knowing which health problems should be prioritized and addressed by the state is a problem to be resolved by the civic body for two reasons: (1) any public policy question should be resolved at this level, and (2) the problem has an explicitly population dimension, reflexively affecting the population that is the civic body, considered both individually and collectively. Policy issues in public health are in a sense doubly political in that they are ultimately justified or not according to a similar notion of the political common good.

Epidemiological research is capable of identifying a variety of potential opportunities for intervention to improve health by reducing incidence of health problems. Considerations of political normativity are required for the state to decide whether and how to address the various disparities that might be argued by advocates to be "epidemiological imperatives." This normative approach involves something other than the standard ethical approaches of utilitarianism or deontology: it may require a political virtue ethic that highlights political virtue and practical wisdom.

Barnhill and Bonotti's question involves the value of health, both for individuals and for populations. Often the value of health is not explicitly considered, but simply presumed as an unalloyed good. It may be given a special high status according to what they and others label "healthism" (p15). (see also Wilson, 2009) Opposition to public health initiatives often presumes a liberal individualistic perspective with individual liberty as a primary value. It will be hard to determine whether a public health intervention is "justified" if an unexamined value of public health is weighed only against the cost to individual freedom. Accusations of paternalism result for many interventions, and it is often couched as interfering with individual autonomy. Barnhill and Bonotti see this dominant concern about paternalism as based on a values myopia (see Ch 4); after addressing paternalism, they attempt to lay out a more complete framework by which to explore the question of public justification. Other writing in the tradition of public health ethics has proposed ad hoc frameworks for evaluating public health activities.[1] Barnhill and Bonotti follow Coggon (2012, 2023) in addressing the question of public justification in the context of a political philosophy.

In their approach they draw on the political philosophy of Rawls in *PL* for their theoretical framework. They contextualize their analysis as pertaining to a high-income liberal democracy.[2] (10, 59, 175) As part of this analysis they seek to place the value of public health in the context other values, rather than as an ethical concern that trumps them. Per-

[1] See Kass (2001) for an influential early scheme.

[2] Although they state this explicitly, they do not explain right away. Because they are following Rawls, about whom some has said his work is limited in application this way, they may be making this admission up front. Later in their discussion of the accessibility concept of public reason they state that in this sort of society

haps the most important contribution of *HEPPP* is to highlight a wide range of values, especially political values, that should be considered in evaluating a public health policy, which is to say justifying it. I argue that their expanded notion of public reason is problematic, not so much in that it addresses policies other than those of constitutional essentials and basic justice, but in that it treats the complex scientific evidence from epidemiology as if it could counterfactually be accessible, as for evidence from natural science, conceived as something like a complicated "common sense." By this emphasis they run the risk of undermining the most important thing about public reason: drawing on values and principles held in common to frame public deliberation about public policy. The common-values-based component of public reason aligns with a particular notion of the common good: the integral common good described by Sulmasy (2001).

Rawls and Political Liberalism

By *public reason* they mean the idea expressed by Rawls in his *PL*. In *PL, public reason* is one of an interconnected web of ideas including the *domain of the political*, *political conceptions of justice*, a *comprehensive doctrine*, and an *overlapping consensus*.[3] These terms do not appear in his earlier and influential *Theory of Justice*, in which his conception of justice was presented as "justice as fairness" (JAF). In *PL* Rawls presents a revised understanding of JAF, grouping his preferred political conception of justice with other reasonable conceptions rather than continuing to present it as what he had come to recognize had been a comprehensive political doctrine. He was driven to make this change because of the fact of pluralism in liberal democratic societies. The new problem addressed in *PL* was "whether in the circumstances of a plurality of reasonable doctrines, both religious and nonreligious, liberal and nonliberal, a well-ordered and stable democratic government is possible."(xxxix) The idea of public reason became a central component of his notion of political liberalism. Public reason is a core idea applicable to deliberations of public policy, such that those deliberations could result in publicly justified public policy. That justification he hoped would lead to a political structure that was stable for the "right reasons," meaning that it was positively supported by the pluralist elements within it rather than only tolerated by them.

Public reason is formulated according to one of a family of political conceptions of justice, each of which stipulate rights, liberties, and opportunities normally implicit in a constitution; assign priorities to them; and assure the means to make use of them.(223)[4] In *PL* Rawls says it pertains to the domain of the political, i.e., to constitutional essentials and matters of basic justice. For all political conceptions in the family of political concep-

one can expect science to be held in high regard, and so their concept of scientific accessibility may be more reasonable. The two possibilities are not exclusive.

[3] This brief overview of necessity gives only a glimpse of the complex version presented by Rawls in *PL*. It is important to realize that this latter book substantially reformulates the idea of "justice as fairness" in his earlier *Theory of Justice*. Unless otherwise noted, all references to Rawls are for the Expanded Edition of *PL* (2005).

[4] Each political conception of justice has a preference about how to particularize the rights, liberties, and opportunities. Public reason entails deliberation within the bounds of the common liberal values of the family of political conceptions of justice, values that are in common because they are more abstractly understood.

tions of justice, the "values of political justice," including equality and liberty, are abstract political values held in common.(223) This stipulation equally ruled out invoking religious, non-religious, and anti-religious *comprehensive* doctrines in public deliberation. The central theme was, for constitutional essentials and basic justice, deliberation was to rely only on principles and values held in common, even as they might be interpreted or ordered differently by those deliberating.

A second component of public reason relies on a second kind of political values in a political conception of justice: "guidelines of inquiry." Again the theme was that certain general guidelines would be in common for all the members in the family of political conceptions. Thus public reason pertains to the use of both abstract political values and general guidelines for inquiry, both of which would be held in common.

It is noteworthy that in immediately elaborating on these ideas Rawls includes in the first kind of political values "the values of the common good," and he includes in the second kind of political values "such political virtues … as the (moral) duty of civility."(224) Although he does not elaborate on what he means by "the values of the common good," it seems clear that his notion would not be an economic one but a political one. Thus I suspect he means something like "the political common good." This sense of the term *common good* is something other than the meaning anathema to many liberals, who worry about the loss of individual rights and liberties; this latter kind of common good can hardly be his meaning here.

Public Reason and *HEPPP*

Many have written about how to understand what Rawls meant by public reason and about how Rawls's thought about public reason might be developed further. In *HEPPP* Barnhill and Bonotti expand Rawls' narrow application of public reason beyond constitutional essentials and the basic structure.(125)[5] They seek to apply public reason to public policy related to "healthy eating." They focus on guidelines for inquiry, per Rawls limited to "presently accepted general beliefs and forms of reasoning found in common sense, and the methods and conclusions of science when these are not controversial."(224)

Barnhill and Bonotti explore in detail how scientific evidence about eating and health might pertain to the use of public reason.[6] How scientific evidence might contribute to public policy is important question concerning public health policy in general, not just the relationship between diet and health in particular. In popular culture there is great interest in food and health and diet and health, and claims by advocates or commercial actors are often poorly supported by scientific evidence; consider the prevalence the marketing of so-called superfoods and fad diets. For example, Barnhill and Bonotti note that the term

[5] Although in *PL* Rawls was careful to limit the required application of public reason in this way, in fact he said that deliberations of constitutional essentials and basic justice were restricted *only* to public reason; he suggested that elements of public reason might be applied more broadly, but in those situations he suggested that considerations based on other than public reason might be applicable as well. Expanding the application of public reason might mean that only public reason applied to ordinary legislation as well, but this seems not what Rawls argued. The latter expansion would seem to pertain both to the notion of public reason and to the breadth of its application: public reason would require guidelines for accommodating complex scientific evidence.

[6] *HEPPP* focuses on health as absence of non-contagious chronic disease. The analysis does not consider policy concerning nutrient sufficiency.

"natural foods" has no scientific basis (p177), but it is nevertheless an effective commercial marketing tool.[7] The many advocates of all stripes (Thompson 2016) employ non-propositional techniques of persuasion, and often use moralization. (Kraaijeveld and Jamrozik 2022) These various voices compete for visibility, and the competition leads to claims that lack epistemic humility. (Farrer 2022) As a result a typical citizen will find it difficult to navigate abundant misinformation in order to appreciate the complex science related to diet and health. In this confusing environment, Barnhill and Bonotti rely on an accessibility notion concerning scientific evidence.(p139) (see also Badano & Bonotti, 2020) Their arguments would apply most strongly to evidence from the natural sciences, which are theory driven, but they are less plausible for evidence from epidemiology. As Broadbent (2013) says, "Epidemiology has matured to the point where it is no longer plausibly seen as a thorough application of common sense."

They draw on public reason to do two things: (1) to justify invoking the methods and conclusions of science when the complexity of the science is beyond the resources of the typical citizen, and (2) to mediate deliberation when scientific evidence is weak (168) or contested by scientists.[8] This latter goal would seem outside the domain of public reason, but rather something to be deliberated among disagreeing advocates in deliberations outside of constitutional essentials and matters of basic justice.

Epidemiology and Public Reason

The field most pertinent to public health and to the relationship between diet and health is epidemiology. Both Krieger (2011) and Broadbent (2013) point out that epidemiology has minimal theory, that it is more like a methodology. In addition, epidemiology pertains to understanding population incidence; thus the meaning of cause (to the extent that it can be inferred) is not what causes a particular case, but what causes differences in incidence in a population. (Rose 1985) As a field of study, epidemiology draws heavily on complex statistical analysis of observational studies. It includes some randomized trials, but generally not double-blind, placebo-controlled experiments. Populations differing in exposure(s) of interest and in outcomes of interest are compared. Study designs often struggle with confounding. Because statistical analysis results in correlations of varying strength between exposure and outcome, inference to cause of differential incidence is qualitatively different than for evaluating differences in double-blind, placebo-controlled experiments, where efficacy of a treatment can more straightforwardly be evaluated against a contrast condition.

The impossibility of "proving cause" gets a lot of attention from critics of epidemiological research, but the core problem involves making a strong inductive inference about the probable practical meaning of a correlation. (Hill 1965; Susser 1977) Finding a "significant"

[7] See Thompson (2011) for a description of how natural sugar in soft drinks can acquire a health halo.

[8] By the 1995 introduction to *PL* Rawls seems to have reconsidered his original 1993 emphasis on science, describing public reason as "principles, ideals, and standards that may be appealed to" (li); "science and common sense" now only appear as examples, along with public reason, of things that can fail to resolve a question. (lii) In his 1997 essay elaborating on the changes in public reason from what he had "sketched" in his 1995 "second introduction" (440f), the emphasis is on fair cooperation, reciprocity and civility among citizens and public figures. Although the incidental reference to "science and common sense" remains in the 1997 essay, that essay contains no positive indication that science has continued to be a centrally important component of public reason for Rawls subsequent to the 1993 version of *PL*.

correlation simply means that by correlation analysis, the observed correlation is not likely due to chance (it does not mean that a difference is of practical importance). The strength of a correlation (the same thing as strength of an association, per Hill (1965)) is a different measure, one that is important to consider in any evaluation of the prospect for a successful intervention. (Broadbent 2013, 137) Often correlations are described using terminology such as "linked to," "associated with," "explained by," and so forth. This language strongly suggests a causative relationship, and to the extent that it does it fails to address the nature of the evidence as correlation. Moreover, the strength of an association is not always provided when the statistical significance is emphasized, even though the strength of an association is of great practical significance.

An important aspect of epidemiological evidence is how the concept of incidence is expressed. If different levels of population exposure result in different incidence of a disease for two populations, we might simply say that population incidence is correlated with the difference in exposure in the populations. Often incidence is expressed by epidemiologists using the word "risk," not in the common sense usage, but as a term of the art to refer to incidence.[9] If incidence of a disease doubled when exposure was greater in a population, we could employ the epidemiological concept of "relative risk" to say that the risk (meaning incidence) was doubled (one way to describe the strength of the association). To say that relative risk *is* doubled is to suggest that it is a property not dependent on context; thus it entails a future counterfactual. Alternatively, if the incidence increases from 5 to 1000 persons to 10 in 1000 persons, we could also say that the incidence increased by 5 in 1000. These are the simplest ways to present the results as risk; epidemiologists have numerous other ways to present the observed difference, each of which emphasizes something different about the comparison.[10] (Broadbent 2013) The choice of how to express the results of an observational study could influence a judgment about whether the evidence justified action.

For determination of statistical significance a confidence level must be selected. That level might be chosen to reflect the importance of both a type I error (claiming significance when not warranted) and a type II error (failing to find significance when it is warranted). However, in observational studies there is also the prospect of a type III error: an incorrect inductive inference about statistical significance could result from not understanding the contribution of the background circumstances, including the way they might change over time or space. (Krieger 2011: 271) That is to say, results might easily be context-dependent. There is no statistical test associated with this type of error.

The methods and theory of epidemiology are in many ways qualitatively different from the empirical and theoretical basis of the natural sciences and the social sciences (Vineis 1998). Broadbent (2013:129) speculates that, "the broad shadow of physics has led some to believe that epidemiology should emulate physics, when in fact its strength lies in not doing so." If epidemiology is a science, it is hard to argue that it is an elaborate version of common sense, as some have argued for the natural sciences. Therefore, whether the accessibility notion for natural scientific evidence in public reason pertains to epidemiological evidence is unclear.

[9] In common usage, risk involves an estimate of the extent of a harm and the probability it will be experienced.

[10] Broadbent (2013) lists several measures of strength of an association, including the attributable fraction and population excess fraction. I refer the reader to Broadbent's thorough treatment of this topic.

Even accepting the pertinence of an accessibility approach, the scientific question is still complex. Evaluating the "strength of the evidence" requires judgment; furthermore, the strength of the evidence required to justify action depends on the circumstances. For example, in civil law a preponderance of the evidence may be sufficient for judgment. In criminal law DNA evidence may be sufficient if the probabilities are high enough to conclude a DNA match beyond reasonable doubt. Although the idea of scientific doubt or uncertainty has undoubtedly been invoked cynically to argue against policy action, at times doubt will be justified. The core of a scientific disagreement might involve judgment about how to understand an evidence-based argument that relies on inductive inference based on the strength of an association. How probable is probable enough? Invoking the accessibility standard may preclude later public deliberators from understanding that scientific judgments often involve interpretive inferences based on the primary scientific evidence.

In *PL* Rawls says that public reason alone is allowed in deliberation about matters of constitutional essentials and basic justice. (225) Barnhill and Bonotti would like to apply public reason more broadly (70n, 125). They do so by using an expansive notion of public reason.[11] Rawls is cautiously open to the possibility of invoking public reason in matters of ordinary legislation. (215) What the distinction is between basic justice and ordinary legislation Rawls does not make clear. M'hamdi (2021) says "it may be impossible to draw a principled distinction." In the spirit of pragmatism, I suggest that there is a continuum. Those matters that address political values core to the common political understanding will require public reason and are limited to it in deliberation, whereas when an issue is less central and when evidence becomes more important for resolving a question, the nature of public reason shifts to accommodate evidence more, even as it still benefits from deliberation according to core political values. The kind of judgment required to reach an appropriate outcome concerning a policy shifts accordingly, until in matters of ordinary legislation, the primary considerations are practical, emphasizing the evidence basis (and perhaps arguing over it) for an action. Policy matters concerning healthful eating are on this continuum, justifying a mix of the two elements of public reason for deliberation. Because public reason serves primarily to exclude certain unreasonable arguments from deliberation, it is always useful. However, given the wide variation in arguments about how to deploy scientific evidence to support a position, scientific evidence is unlikely to resolve a particular question to a single right outcome. But putting disagreements about scientific evidence aside, excluding arguments that attempt to invoke fundamental values not held in common has value.

The 2020 Dietary Guidelines for Americans and Public Reason

Although the title, *HEPPP*, specifically refers to *eating* and heath, the book uses a variety of related terms, including food, diet, and dietary patterns. *Healthy* is a strongly value-laden adjective.[12] It can lead to dichotomous thinking, as for example healthy vs. unhealthy

[11] Whether this expansive notion of public reason is justified in terms of *PL* may require clarification of the meaning of a "political value." Does the phrase refer to values and principles held in common, or to values more broadly?

[12] For precision in thought it would be best to avoid *healthy* as an adjective to describe food, diet, or eating, regardless of whether this use of healthy has become common usage. None of these things can be said to be healthy in the way an organism is healthy, although it is certainly arguable whether they engender health in the eater. Health and its cognates have a way of carrying moral approval to things, when in my opinion, it is

with reference to foods, diets, or eating. Barnhill and Bonotti use these contrasting terms throughout, even though in places they qualify the dichotomy,[13] and even acknowledge a gradient in healthfulness. Using dichotomous terminology can contribute to a moralizing perspective. In addition, relying on a dichotomy can be a strategy for simplifying a complex situation so as to reduce the need for nuanced judgment. The distinction among the terms food, diet (dietary patterns), and eating is important as well. From the first version (1980) of the Dietary Guidelines for Americans (DGAs) the relationship to health has been understood to involve diet, even as foods typically eaten comprise diets.[14] The strength of the evidence is strongest with respect to diets and dietary patterns. Analysis of diet is more scientifically straightforward than analysis of eating, at least partly because eating is a complex human practice that has social, psychological, and political aspects as well as nutritional importance. A strength of *HEPPP* is that it highlights political values and eating, not relying on considerations about nutritional health alone.

The current DGAs (USDA/DHHS, 2020) are the basis for Federal policy about diet and health. As the Introduction of the DGAs explains, the guidelines are based on the report of the Dietary Guidelines Advisory Committee. On receipt of the report, the DHHS and USDA work jointly to generate the DGAs. Specific Federal policies (e.g., the School Lunch Program) are mandated to take the DGAs into account. The report by the Advisory Committee evaluates the state of the highly complex science, drawing conclusions about the variable strength of the evidence concerning different questions they pose. The current DGAs focus on dietary patterns, not foods, and health.

In the DGAs the narrative emphasizes that scientific evidence justifies the recommendations; what little is said concerning political or moral justification suggests an individualistic and utilitarian perspective. Other than putative reduced health care costs, there is little emphasis on the population-level benefits that might accrue from the recommendations being followed.[15] The executive summary says that the recommendations "can help people … reduce *the risk* of chronic disease."(my italics) It also uses the word *individuals* several times when apparently referring to the public. Both usages employ a rhetoric of individualism, consistent with the recommendations being aimed at recommendations for individuals to make beneficial dietary choices.

The actual scientific evidence is not in the DGAs, but in the 835 page report of the Advisory Committee. (Dietary Guidelines Advisory Committee 2020) The evidence base is so large and complex that the Advisory Committee relies heavily on systematic reviews of the body of potentially applicable research. For different questions the report grades the "strength of the evidence" (which is not the same as the strength of the associations) sepa-

human activities that should be evaluated. Thus as a reference to a practice, the term *healthy eating* is not as objectionable but still problematic. Interestingly, Aristotle uses *health* as his example in a discussion of core-dependent homonymy and equivocation that can result from it. (see Ward, 2008)The DGAs refer to healthy eating and healthy diets, but they contrast *healthy* to *less healthy* rather than *unhealthy*.

[13] See for example their footnotes on pp 5 and 73.

[14] The same approach is taken in the 1989 government compendium *Diet and Health* (National Research Council, 1989), independently of the DGAs from DHHS and USDA.

[15] In the Report of the Scientific Advisory Committee, Part B, Ch2, p2, we read: "The consequences of these chronic conditions affect all Americans, given their impact on quality of life, vulnerability to emerging infectious diseases, and the cost burden to society, particularly the health care system." This is one of the few places that a *societal* rational for improving health through diet is explicitly addressed with regard to the DGAs, and it is limited to an economic rationale. Whether this observation is the purview of a scientific committee evaluating scientific evidence is a separate question.

rately, as strong, moderate, limited, or "not assignable."(39) Study design is a consideration: randomized controlled trials count more than observational studies; prospective observational studies are weighted more than case-control observational studies. Perhaps the most positive conclusion concerning the questions posed by the Advisory Committee is in part D (Dietary Patterns), Ch 8, concerning question 8: "What is the relationship between *dietary patterns* consumed and *risk* of cardiovascular disease?" The conclusion is, "*Strong* evidence demonstrates that *dietary patterns* in adults and older adults characterized by vegetables, fruits, legumes, nuts, whole grains, unsaturated vegetable oils, and fish, lean meat or poultry when meat was included, are *associated with* decreased *risk* of all-cause mortality."(my italics in both) The conclusion concerns an associational relationship between exposure and outcome, based on differential incidence presented in the form of putative population-level "risk." Interestingly, there is no quantitative estimate of the reduction of risk (i.e., the strength of the association), which is information pertinent to the number of people who might benefit. (Broadbent 2013, 127) Apparently, it was enough of scientific challenge simply to document a consistent association.

The point of referring to the DGAs in the present paper is to show that the evidence relating diet and health is extremely complex, and scientific conclusions are strongest concerning certain dietary patterns. The DGAs proper contain recommendations based on the report of the DGAC, not the evidence. Since Federal policy related to diet and health is to be based on the DGAs, the relationship between policy and the scientific evidence will not be readily apparent to a well-educated layperson involved in policy deliberation.

DHHS and USDA use the Scientific Report to generate *guidelines*, in the form of the DGAs. By using the language of guidelines it would seem that DHHS and USDA believe that the evidence relating diet and health is best suited to policy recommendations rather than serving as the basis of coercive policy: particular policy proposals that rely on coercive state actions would seem to require stronger evidence. Excluding what is not reasonably justified is precisely the logic of public reason. Attempts by advocates to justify public policies, coercive or otherwise, based on firmly held but scientifically unsupported beliefs about the relationship between either diet or foods and health would be excluded by public reason. It would seem that the strength of the scientific evidence behind the DGAs is nowhere near sufficient to justify a coercive policy.

Scientific evidence pertains to only one aspect of public reason. Venkatapuram (2023) notes that it is a problem to unduly emphasize scientific considerations without including political ones. It would be helpful to make explicit the political justifications based on the in-common political values of public reason, both in the DGAs themselves and for justification of the policies based on the DGAs,. In my opinion, the importance of public political justification based on common political values is not presented as strongly as it should be in the DGAs. In *HEPPP* emphasis on public justification is more balanced, as the authors address both elements of public reason.

The Population Perspective

The challenges associated with reasoning based on epidemiological evidence are closely related to the challenges of understanding the difference between a population perspective and an individual perspective. (see Coggon, 2023, 18; John, 2023) Broadbent (2013:7)

speaks to "the centrality of population thinking." When we think, a la Rawls, of a political conception of justice within political liberalism, we are deploying values that pertain to the greater political good of the population of citizens, which constitutes a civic body. In contrast, a standard individualistic account sees a population good as a mere aggregate of individual goods. (Viens 2016)

A simple way to understand population health is as a static descriptive measure of some aspect of the health status of individuals, aggregated over a particular population. Although descriptive (and seemingly objective), the choice of what to measure is value laden. (Reid 2016; Schroeder 2017) Typically a measure will produce an estimate of the central tendency (mean, median, mode) and the variation (as standard deviation) around it. A large variation indicates large differences among individuals. Statistical analysis could also reveal variation within a population according to identifiable population sub-groups. Although subgroup-wise disparities in health status might be interpreted as inequities, this interpretation would be a political one, not be a scientific one. The inclination to address disparities might be considered an "epidemiological imperative." Whether disparities should be considered inequities, and whether inequities should be addressed are political questions. Addressing them may or may not be justified politically.

While a static measure of population health can be important for some purposes, a dynamic measure of an association between an exposure and an outcome over time can suggest how population health might be improved. Thinking only at an individual level would ignore social interactions over time among the individuals: such interaction could alter the environment over the period of the study. Thus, even if correlation is observed, a potential type III error (Krieger 2011) could confound the interpretation. A correlation might be missed, or an intervention might appear to fail when in actually it could have kept the problem from becoming even worse. As a result of this possibility, some have argued that epidemiology ought to take an ecological, or complex systems, approach in order to minimize this kind of error. (Susser 1998; Krieger, 2011)

A population-level intervention might aim to change the behavior of individuals, either by making recommendations to them or coercing them, and projecting an improved aggregate outcome (a future counterfactual, or prediction), assuming sufficient compliance. Alternatively, a population-level intervention might aim to modulate the environment. For recommendations to individuals, the individuals would be *responsible* for their choices, but for coercion or altering the environment, governments would be responsible.[16] The moral ramifications are much different for the two. Any perspective that only thinks of moral ramifications due to individual autonomy will have difficulty conceiving of how there may be other important contributions to adverse health. The form of liberalism that strongly favors an individual perspective is fundamentally at odds with the philosophy of public health, as well as much government policy more broadly. (Solomon 2014)

In addition to considering the kinds of intervention to improve population health, a more complete understanding of possible good outcomes of improved health at the population level would be helpful. Justification is typically in terms of an improved aggregated level of individual health or reduced health care costs overall. The first is necessarily individually

[16] Viens (2019) explores the idea of a "political determinant of health," including as determinants public policy decisions not made (see Coggon, 2012).

focused. The second is consequentialist in terms of purported economic benefit.[17] (Gostin 2003) Both miss an important aspect of value, as there are many positive social benefits of good individual health, and these are difficult if not impossible to understand in economic terms.[18]

Latham (2016) claims that an individual's improved health creates social benefits. He says that "each individual person's health is actually a 'public good' in the strictest economic sense," arguing that the social benefits of "my health" are experienced by me and everyone who interacts with me.[19] He could have extended this thought to argue that the overall social benefits of population health would be qualitatively distinct from the aggregate of individual benefits of individual healths. Although the argument that an individual's health is a public good in the strict welfare economics sense (steeped as welfare economics is in utilitarian thought) seems problematic, the idea that an individual's health has social-level ramifications suggests that individual health cannot be considered *only* an individual good. Extending Latham's claim about the social effects of an individual's improved health to include similar social effects for a large number of individuals' improved health would produce multiply interactive social-level benefits. The result would go far beyond the health benefits of each of those multiple individuals, to all those interacting with them, and further reverberating in a second-order way to a myriad of others throughout society. This synergistic scenario is one way that the *good* of population health would be other than a simple aggregate of the goods of individual health. It explains the good of health in both in social terms as well as in individual terms. Although population health may be measured statically by aggregation of qualities, the *value* of population health would be understood in a more complex way. The social value ramifications of population health might include families having more years to enjoy each others' company, longer and deeper friendships, or organizations of all types benefitting from the wisdom that accrues from members interacting while living longer lives. These are all "irreducibly social goods."(Taylor 1995) It would be worthwhile to explore how this brief list might be extended. Using Rawls' idea of the person as citizen in the domain of the political, this social good partly contributed to by good population health might be considered a "primary good" of the civic body, going beyond the idea that primary goods only pertain to individual citizens to enable them to fully function as citizens. (188)[20]

[17] The putative benefit of reduced health care costs to society, which seems obvious, has been questioned on economic terms (Russell 2009).

[18] Anderson (2009) argues strongly for non-utilitarian justification. In this respect, her argument is consistent with Rawls' initial thinking, which is a response to a dominant utilitarian mind-set.

[19] Arah (2009: 235) says, "neither individual nor population health is identifiable without informative contextualization within the other."

[20] The idea that the civic body might have primary political goods is worth exploring. Drawing on a political philosophy, e.g., political liberalism, might provide a framework for these. Walker (2018:12) thinks population health per se should be considered a social good.For an individual health is a natural good, not a political one. (Walker 2018:12) Speaking of a possible extension of his idea of primary goods, Rawls refers to "[institutions of…] health care" in *PL* (lvii, but not in the main text), and to "institutions of public health" (457) in his later essay. He does not consider health per se to be a political good.

Risk and Prevention: An Individualistic Bias?

Perhaps the most important thing about epidemiological studies is that "the unit of study is the population or group." (Krieger 2012: 647) Framing incidence as risk is a non-sequitur if we mean to say that a population, the unit of study, has a risk; if there is risk involved (an arguable point), it would accrue to members as individuals (another arguable point). If the incidence increased, that is a factual observation not related to risk that pertains to the population per se. The risk aspect only pertains to particular individuals in the population. Nevertheless, risk is often used in a technical sense in epidemiology, as a synonym for incidence. However, when population incidence is explained outside the discipline to individual members of the population, it is often presented as population risk. To understand this sense of risk as risk to an individual is a logical leap. Risk to a population is sometimes framed as "the risk," but this usage remains equivocal and may well be misleading from a common sense perspective.[21] Worse yet, it can seem to be a property rather than the context-dependent population-level outcome it really is.

Broadbent (2013: 7) points out that it is not clear "how population properties are related to individual ones." Relating the two relies on a tacit syllogism of the following type: (1) 50% of people in group X did Y. (2) I am a member of group X. (3) Therefore there is a 50% chance that I will do Y. Salmon (1984) describes the logical subtleties of the "statistical syllogism" tacitly employed in this process. [22]

My concern is that public communication of the scientific information relating food, diet, and health often gives a mistaken impression about the nature of the scientific evidence, in a way that conflicts with common sense understandings of key terms. In marketing of either dietary recommendations or food products it is not uncommon that putative population-level risk is personalized to the reader/consumer, as "your risk of CHD would be lower if you changed your diet," or "eating this breakfast cereal will lower your risk." Even in the DGAs the language of risk appears to be aimed at individuals. Perhaps that is a marketing strategy, thought to be effective as it plays to a cultural bias that focuses on individuals and individual interests rather than on population-level thinking. But even if the strategy is effective to some extent in achieving compliance, it is inconsistent with the central fact that epidemiological evidence concerns the behavior of populations, not individuals. In doing so it presents public health initiatives as something other than what they are. In doing so it confuses attempts at justification of public health initiatives to improve population health.[23]

[21] When risk is referred to without including the strength of the association, the practical value is not fully established. It is not possible to prioritize this "free-floating" risk among other risks of daily life.

[22] Salmon (1984) explains that a statistical syllogism differs from most syllogisms in that it is inductive rather than deductive (in contrast to what their syllogistic structure might suggest). McEvoy et al. (2014) describe the logical pitfalls of uncritically applying population-level cardiology evidence to individual cases. Rockhill (2005) generalizes these pitfalls.

[23] Something new in the 2020 DGAs is the claim that the dietary recommendations are applicable to *all* Americans, that everyone will benefit. This suggests something different from unidentifiable, statistical individuals benefitting by reducing population incidence. Although the rationale is not presented, the statement would seem to be based on a novel recent way of thinking about chronic disease: everyone is progressing toward the chronic diseases, and the development of new cases, summed as incidence, reflects a differential rate of progress among individuals. Thus as time goes by everyone is becoming less healthy with respect to each chronic disease. Concerning the meaning of differential incidence, there has long been a debate about the interpretation of this observation: whether higher incidence reflected cases that developed by chance or

The population-level analyses in public health have a deep affinity for the population level considerations in political philosophy. In effect, presenting population-level evidence in the form of individual risk leads to a sense of individual responsibility for individual risk. It leads to asking whether government should intervene in a paternalistic manner to help individuals change their behavior to reduce their risk. Framing the question suggests that the justification for a public health intervention is that individuals are not thought capable of being responsible for their own risk decisions. This approach can lead to individuals rejecting public health advice by insisting on exercising "personal responsibility" for their health. An alternate approach of emphasizing common political values through use of public reason in justification of public health policy may be a way of framing justification that shows consideration for population-level reasoning.

Another problem with communicating evidence as individual risk is that it can lead to moralization about personal food behavior. Public health advice states what one should do to be healthy. However, since some cases will develop among those who follow dietary advice, and many who do not follow the advice will not become cases, this personal-level moralization is misguided. This issue illustrates the importance of distinguishing between the causes of individual cases and the causes of population incidence. (Rose 1985) The primary justification for public health policy would be at the population level.

Like incidence, prevention in public health pertains at the population level. When prevention occurs, it is manifest as reduced future population incidence, understood as preventing (in an indeterminate way) a number of cases that would have occurred otherwise. Prevention in this sense is at the core of public health. One version of Rose's (1985) "prevention paradox" is that if an exposure resulting a small increase in incidence rate is experienced by a large number of persons, a large number of new cases would be expected despite the small strength of association. Public health interventions might be warranted to reduce the number of cases, despite the low strength of association. However, if in the marketing of the public health policy the rhetoric of prevention is presented to individuals as a reason for them to expect an individual benefit, that will be misleading. When the rhetoric of prevention is combined with risk, as "preventing the risk," the reasoning becomes even more muddled. Preventing "risk" in a population (reducing incidence) is not the same as preventing a particular event in an individual.[24] Population-level thinking about prevention suggests a mutual good, one experienced in common by a group, but not directly by particular individuals.

The Common Good in Political Liberalism, and Public Health Interventions Justified by it

The *common good* is a notoriously equivocal term. To use it as part of an argument it is necessary to specify which of several possible meanings is meant. Sulmasy's (2001) fourfold typology is a helpful place to start. An *aggregative common good* would include an

deterministically due to some as-yet unknown causes. The idea that within a population the cases that contributed to incidence were due to chance is consistent with the translation of incidence to risk in the population.

[24] Just as "risk" has a common sense meaning distinct from the technical meaning in epidemiology, so does "prevention." By common sense, an event that is prevented does not happen. The common sense meaning pertains to other than a population perspective. If misused, both risk and prevention can lead to laypersons misunderstanding the epidemiological evidence. However, the misuse might be effective for persuading them. Starfield et al. (2008) express concern about the use of the concept of prevention in public health.

egalitarian utilitarian version, in which distributive justice is featured. A *common common good* is based on items held in common, and sometimes available to all by overcoming a collective action problem. A *supercessive common good* is often considered illiberal, either factional or Hegelian. The fourth type, the *integral common good*, is the type closest to Rawls' vision of the right reasons for an overlapping consensus. Per Sulmasy, it "comes explicitly from mutual human interaction and cannot be divided into equally aggregative parts." (306) One sub-type is the *conditional integral common good*: it is instrumental in that it is what in a mutual association enables individuals to achieve goals. The good of a political conception of justice may lead to political stability (but per Rawls, not necessarily for the right reasons).[25] The other sub-type is the *constitutional integral common good*: the good experienced by individuals by being in a community of relationships. It is an irreducibly social good. The latter good is arguably part of what Rawls has in mind when he refers to the "right reasons" for supporting an overlapping consensus within political liberalism. In *PL* Rawls is particularly concerned about the politically destabilizing effects of comprehensive doctrines, especially ones based in religious belief. Any comprehensive doctrine would likely support a supercessive common good of the factional kind.

Barnhill and Bonotti make reference to the term *common good* on 22 different pages in the 218 pages of *HEPPP*. (Surprisingly, *common good* is not listed in the index.) After a mention on p 21, the term does not appear again until a footnote on p 107. Starting on page 119, 20 of the next 80 pages mention the term at least once. On nine of the pages the text refers explicitly to the common good in terms of health care costs, efficiency, or economic prosperity. This usage is not consistent with Rawls' non-utilitarian theory. Other usages tend to refer to a broadly political sense, one which at times might well be consistent with Rawls' political liberalism; however, a positive Rawlsian argument is not articulated. There is an opportunity here to make a stronger case for invoking the common good consistent with *PL* to further support the use of public reason for policy justification. Alternatively, the justification might be accomplished with reference to the common good.

Let us consider Rawls's population-level political perspective; he considers the citizen to be the mediating link between the individual and the collective body. In lecture V of *PL* Rawls discusses "permissible conceptions of the good." These conceptions are not illiberal in that they are not based on a comprehensive doctrine. Rawls distinguishes between "society, citizens as a collective body" and "citizens as individuals." (189) Permissible political conceptions of the good pertain to the good of political society when society is "well-ordered," itself "a good that citizens realize both as persons and as a corporate body." (201) This latter good is said to pertain "in a second way." Although he seems tentative about actually labeling it, he goes on to describe the nature of the collective good of political society, a good beyond the individual level and pertaining to the population level. It is a *social good*, "realized through citizens' joint activity in mutual dependence on the appropriate actions taken by others." (204) He seems to anticipate criticism of this social good, saying this good is "no more mysterious" than the mutual pleasure of well-performed teamwork toward a goal. What he describes is an example of what Taylor (1995) calls "irreducibly social goods." A social or population-level perspective is required to see it. In his 1997 essay, "The idea of

[25] Gray's (1995) "agonistic liberalism" could be said to stop at the level of Sulmasy's conditional integral common good. He is satisfied with agreement to abide by rules of a constitution in order to establish a *modus vivendi*. His view is sometimes characterized as political realism. The contrast with Rawls' political liberalism crystallizes around this point. Westphal (2019) proposes agonism as a "theory of conflict resolution."

public reason revisited," he says that this political good is something like "Catholic views of the common good and solidarity when they are expressed as political values" (rather than as part of a comprehensive doctrine). (452) This political good could be termed the *political common good*, a close relative of Sulmasy's *constitutive integral common good*.

Public reason can be thought of as a public performance component of political liberalism that contributes to building and maintaining this corporate good.[26] In Rawls' rationale for public reason, one higher-level reason for public justification in terms of political values in common is an educational one (236, 481), to remind citizens about what they have in common as being the condition of the possibility of a stable liberal democracy that is stable for the right reasons. I believe it is in this respect that Barnhill and Bonotti's emphasis on public reason is most important, more so than for resolving any particular healthful eating policy deliberation, and more so than allowing scientific evidence according to the notion of accessibility. Public reason focuses deliberation according to a population-level perspective of values and principles in common.

In *The Common Good and Constitutional Democracy* Rhonheimer (2013) has two essays that speak to the question of public reason in Rawls (Chs 7 and 8) and one on the common good (Ch 3), "The democratic constitutional state and the common good." Although he does not use Sulmasy's typology, his arguments are entirely consistent with those above. He sees an unresolved tension in Rawls, pointing out that the independent individual person is inconsistent with the person who should give allegiance to an overlapping consensus for the "right reasons." Perhaps it is Rawls' notion of the political person as citizen which simultaneously embodies this tension and has the potential to resolve it, as citizens function as individuals and also are constitutive of the civic body.

We might understand two levels of the political common good: (1) of the good of stability that comes from recognizing the limitations given by public reason, and (2) the ongoing experienced social good embodied in the entity that is stable as a result of 1. Rawls suggests that it may happen that the first level might lead to the second, once the values become an accepted part of the culture.(168, 208) Thus the first level might be Sulmasy's conditional integral common good, providing the necessary conditions for approaching the good, while the second kind might be the constitutive integral common good, the good that is the good of liberal political society. This reasoning is consistent with Anderson's (2009) distinction between instrumental and intrinsic values of democracy.[27] Diggs (1973:284) says the common good is a fundamental concept of social morality, in the context of a "developed moral and political philosophy." Rawls' political liberalism provides such context, and the present essay attempts to present an idea of the common good as an important policy justification within it.

[26] Neufeld (2019) argues that it is through public reason that the good of Rawls's corporate political body is maintained.

[27] Rawls (1955) argues that as a form of practice, institutions must have rules, and that these define the practice. Breaking these rules is failing to practice the practice. However, in this work he does not speak to how a practice might be evaluated. Searle (1964) distinguishes between regulative rules and constitutive rules. His constitutive rules are what is required for an institution to exist. He also does not speak to the goodness of the institution, which may provide the motivation for people to support it. *Constitutive* in Sulmasy's constitutive integral common good means something different, it is a constitutive *good* in the sense of what motivates allegiance. Rawls' rules of practice and Searle's constitutive rules are what Sulmasy calls conditional in that they establish the conditions for the institution to exist.

Barnhill and Bonotti's economic sense of the common good is something else entirely. That is not to say that it cannot be considered a societal good, only to say that it is qualitatively different than what is arguably Rawls' political common good. Getting past the instrumental economic sense is important in order to see the larger political common good. Rawls does not consider "effectiveness and efficiency" to be political values. (454)

Solomon (2014) argues that modernity has difficulty with the idea of the common good for two reasons: (1) the central problem of ethics is thought to be the conflict between egoism and altruism, and is focused on the individual actions, and (2) institutional features of life are not "deep features" and may be explained in terms of "individual human satisfaction." Both valorize the individual perspective, and neither depends on a conception of the good. Neither makes the good of the population a primary concern. Thus both Rawls' vision of political liberalism and the efforts of public health tend to flow against this cultural tide. One can only hope, with Rawls (168, 208), that a mere *modus vivendi* might transform into a *modus vivendi* accepting rules of a constitutional *modus vivendi*, and it might further develop into a principles- and values-based overlapping consensus in which the good of the political common good, Sulmasy's constitutive integral common good, is recognized.[28]

Conclusion

In this concluding section I briefly address the specific question of political justification of healthy eating policy. The most readily justified eating-related policies would not involve individual intervention concerning consumer choices but rather population-level intervention. They would step outside the model of individuals being solely responsible for their choices and for the putative health outcomes of them. Examples would be programs that changed the environment so that it became easier for all citizens to choose healthful foods. Although these policies might ameliorate some problems of social justice, their primary justification would be in terms of Rawlsian political justice (180), providing an environment that ensures citizens equal access to healthful foods as a primary good. As a primary good, access to healthful foods would contribute to citizens being able to function fully as citizens. By this I do not mean simply for citizens to be functional individuals; rather I mean that the primary good would pertain not only to individual citizens but also to the collective civic body.

For a full justification of a public health policy it is important to consider not just population-level health, but also the political and social good that results from improved population-level health. As such, it might resonate with the justification of a liberal democratic form of government in that a population-level understanding of the political common good plays a central role. Both for population-level health and for the political body, some balance of the good of citizens individually and collectively is the goal.

Concluding with respect to *HEPPP*, the idea that justification of public policy should be with reference to a political philosophy is an important contribution. The emphasis on considering a broad range of values is another strength, even when these are not the same as the fundamental political values that underlie public reason but are those that are of practical

[28] While this paper was in the final stages of review, the author became aware of the recently published *John Rawls and the Common Good*, edited by Luppi (2022). The book is a collection of essays on this theme, based on diverse arguments distinct from that in the present paper.

importance for the success of an intervention. The broad view of public reason is problematic in that it leads to an emphasis on accepting an accessibility notion of standards for evidence when the epidemiological evidence is highly complex and differs in important ways from evidence in the natural sciences. Confusion among the public concerning incidence, risk, and prevention is a particular concern. Perhaps the most pertinent aspects of invoking public reason are (1) the importance of referring to fundamental principles and values, and (2) the rejection of unscientific evidence. Emphasizing the former aspect of public reason in this particular area of public health policy might enhance visibility of this justification of public policy in general, possibly contributing to changes in prioritization of potential public policies.

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