



The whiteness of the Mediterranean Diet: A historical, sociopolitical, and dietary analysis using Critical Race Theory

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Abstract

The Mediterranean Diet (MedDiet) is widely accepted as a gold standard diet, yet its adoption and promotion as the healthiest cultural diet reflects systemic racism and inherently biased research rather than evidence-based science. This analysis establishes that while the Mediterranean region is multi-cultural and multi-ethnic, the MedDiet is a white diet. It also asserts that a lack of causal research and other methodologic issues in research about the MedDiet has resulted in a hyperfocus on the MedDiet over other cultural diets. Ultimately, promoting the MedDiet as a gold standard marginalizes people from non-white cultures by maintaining white culture as normative. In order to better serve and include Black, Indigenous, and People of Color, dietary recommendations need to become as diverse as the US population. Doing so will also improve cultural humility among professionals, beget anti-racist dietary research, and promote a more evidence-based dietary perspective.

Keywords: dietary recommendations; Mediterranean diet; cultural humility; racism; diversity and inclusion; critical race theory

Introduction

Adherence to the macronutrient profile of the Mediterranean diet (MedDiet) (e.g., high carbohydrate, low saturated fat) is correlated with a lower risk of cardiovascular disease, stroke, heart failure, cancer mortality, type 2 diabetes, overweight, and obesity (Altomare et al., 2013; Kuehn, 2019; Martinez-Gonzalez

& Martín-Calvo, 2016). The MedDiet is widely accepted as a gold standard diet and promoted by the United States (US) Departments of Agriculture and Health and Human Service's Dietary Guidelines (2015-2020 *Dietary Guidelines for Americans*, 2015). It is the only "cultural diet" (Willett et al., 1995) promoted by medical and health professionals affiliated with a non-US geographic region or culture. However, the adoption and promotion of MedDiet as the healthiest cultural diet reflects systemic racism and inherently biased research, rather than evidence-based science.

This analytic essay will establish that the MedDiet has the illusion of inclusion; while the Mediterranean region is multi-cultural and multi-ethnic, the MedDiet is actually a white¹ diet. Second, a lack of causal study designs and other methodologic issues in dietary research broadly as well as research about the MedDiet specifically has resulted in an unscientific hyperfocus on the MedDiet over other cultural diets. Third, that the MedDiet is promoted as a gold standard marginalizes and others² people from non-white cultures by maintaining white culture as normative. And, in essence, promoting the MedDiet as a gold standard falsely asserts that evidence indicates that a white diet is healthier than other cultural diets. In order to better include and serve Black, Indigenous, and People of Color (BIPOC), dietary recommendations need to become as diverse as the US population.

Theoretical framework

To shed light on the sociopolitical context that led to the adoption of the MedDiet and explore the inherent bias in health research requires a critical perspective. For this analysis, Critical Race Theory (CRT) will be used as the theoretical framework and lens for examination (Delgado & Stefancic, 2013). CRT draws on findings from many social and political movements to establish a central argument about how society structurally maintains racial/ethnic inequality and subordinates BIPOC. CRT argues this through five primary tenets.

First, racism is engrained in culture in the US. It is interwoven into societal systems, making it appear ordinary and socially accepted (Delgado & Stefancic, 2013). In that way, systemic racism is not obvious and to understand its impact requires an intentional examination of race and class (among other factors). Stated differently, white normativity is accepted because white is the dominant culture and to examine social norms requires challenging the white status quo. Second, CRT establishes that power in the US is overwhelmingly held by whites, leading to white dominance in social systems. This tenet is particularly important because it reveals the invisibility of systemic racism to the dominant

white population (Rollock & Gillborn, 2011). Third, CRT uses storytelling to as a mode of analysis, with particular importance given to the voices of BIPOC (Delgado & Stefancic, 2013). Especially relevant for this article, recreating the conditions that led to the adoption and promotion of the MedDiet requires a critical analysis of historical records and evidence to tell the story.

The fourth and fifth tenets are 'interest convergence' and 'intersectionality.' Interest convergence asserts that persons with power (in this case, the dominant white) would only accept and allow shifts in discourse, policy, or practice for self-serving reasons (Ladson-Billings, 2004). Intersectionality establishes that individuals are complex and hold multiple identities (e.g., race/ethnicity, social class, gender, ability status). The combination of different identities can have a compounding negative impact when multiple systems of inequities are at play (Rollock & Gillborn, 2011). To these ends, CRT will be used in this analysis to explore the ways in which racism has shaped dietary preferences and research, leading to an overemphasis of the MedDiet and a racialized set of dietary recommendations.

The creation of the (white) Mediterranean diet

The MedDiet's popularity grew from a national interest in cardiovascular epidemiology, which quickly became associated with dietary health. By the 1940s, cardiovascular disease had become a public health crisis. It was the primary cause of mortality among US adults and, as a result, President Truman established the National Heart, Lung, and Blood Institute and funded the first longitudinal cardiovascular study, the Framingham Heart Study, in conjunction with Harvard University (Mahmood et al., 2014). In the 1950s and 1960s, a relationship between serum cholesterol and heart disease was established (Gofman et al., 2007; Keys & Fidanza, 1960). As a result, public health researchers and epidemiologists began studying the relationship between diet and heart disease. Jeremiah Stamler, a cardiology-focused epidemiologist was among the first to study dietary risk factors and in 1965 D. Mark Hegsted, developed and published the Hegsted equation (which predicts changes in serum cholesterol based on the foods an individual consumes) in 1965 (Oppenheimer & Benrubi, 2014; Pearce, 2009). Ancel Keys also began the longitudinal Seven Countries Study in the 1950s, which became the first study to show an association between

1 Throughout this article, *Black* and names of other non-white racial and ethnic groups are capitalized while *white* is not, so as to both elevate the shared community and identity denoted by the term *Black* and to squelch any connotations of supremacy associated with capitalizing *white* (Laws, 2020).

2 The 'others' refers to delineating differences between people or groups based on cultural differences in a way that subordinates those in the non-dominant (other) group (Miller, 2008).

dietary patterns (i.e., saturated fat consumption) of different cultures and cardiovascular disease (Keys et al., 1984).

In the Seven Countries Study, Keys compared the diets and health of 11,579 men aged 40-59 years in seven, mostly white or European, countries (US, Italy, Yugoslavia, Greece, Japan, Finland and the Netherlands). His cohorts were selected for diversity of their nutrient profiles; that is, the proportion of calories from fats and carbohydrates varied among groups (Blackburn, 2017). Keys found that participants from Italy and Greece, where diets were lower in saturated fat, experienced significantly lower incidences of and mortality from cardiovascular disease compared to participants from Northern Europe and the United States. Of note, Keys was criticized for collecting data from Greek participants during Lent (while they were fasting), which may have led to the acceptance of his results for the Italian diet but skepticism of his results of the Greek diet (Pett et al., 2017).

In the late 1960s and early 1970s, low-fat diets became the proposed solution to the high rates of cardiovascular disease in US adults (*In Defense of Food: Transcript*, 2015). The Senate Select Committee on Nutrition and Human Need was established in 1968 and tasked with investigating hunger and diet-related chronic disease (Oppenheimer & Benrubi, 2014). Stamler (who presented Keys's findings from the Seven Countries Study) and Hegsted were among several experts who worked with the Committee to ultimately publish the Dietary Goals for the United States, which suggested reducing overall fat, saturated fat, and cholesterol intake. The low-fat diet trend remained popular among US adults during the 1980s but evidentiary support waned (La Berge, 2008). By the 1990's, consensus within the scientific community was reached: a low-fat diet didn't produce the desirable health outcomes experts hoped it would. As a result, focus shifted from promoting low-fat diets to promoting the MedDiet (higher fat intake from unsaturated sources while maintain low saturated fat intake).

During these decades the Italian diet was also well-positioned to become popular in the United States. Italian Americans' prosperity was increasing; they were accepted as part of the white dominant group and their food was becoming ubiquitous in the US market. Historically, the popularity of Italian food rose and fell with waves of immigration. In the late 1700's, Northern

Italian food was well-regarded in Europe and in the US and by the late 1890's, it was incorporated into haute cuisine for wealthy US adults (Levenstein, 2002). Northern Italian immigrants arrived in the US as entrepreneurs with business acumen and high rates of literacy whereas Southern Italian immigrants arrived later, poorer, and in large numbers. As the perception of Italian immigrants worsened, the perception of Italian food worsened as well (Levenstein, 2002; McMillan, 2016). During the late 1800s and early 1900s, Italian Americans were not well-respected; they were ridiculed as "garlic eaters," Italian food was considered peasant food, and their dietary habits were disparaged (Levenstein, 2002; McMillan, 2016). Over a 30-year period at the turn of the 20th century, there were 50 documented lynchings of Italian Americans and numerous other racist policies imposed against Italian Americans in housing, policing, and employment (Woolf, 2015). By some, Italians were considered a separate race from Northern Europeans, assumed to be criminals, and viewed as a threat to homeland security (Gambino, 2000; Taylor, 2017).

However, Italian Americans had greater access to resources than other immigrant groups and were able to transition their "in between" racial identity to white (Scambray, 2013). Italian immigrants' access to land and capital was not equitably or equally available to non-white groups, particularly African Americans or Native Americans (Scambray, 2013). Italian winemakers, the most prosperous group of early Italian immigrants in California, began realizing success in the US market primarily because they were able build social and cultural capital (Scambray, 2013). At the same time, the US Food Administration (as it was known in the early 1900s), transitioned from bemoaning Italian food to celebrating and promoting it (Levenstein, 2002). As Italian food was promoted by food and health advocates, it became commonplace in US kitchens with the incorporation of various pastas and the innovation of Americanized Italian foods.

As Italian food increased in popularity, Italian immigrants became upwardly mobile and their racial status was formalized as white by the US government in WWII when they served as white troops in the then segregated Armed Forces. During the war, tinned spaghetti was served to soldiers, about half a million Italian Americans served in the military, and many soldiers were deployed to Italy, becoming more familiar with Italian food during their deployment, all of which

contributed to the acceptance of Italian food and Italian Americans (Mariani, 2011). Ultimately, this convergence of conditions (Italian Americans' greater access to resources, the positive regard for Italian food in the US, and the acceptance of Italian Americans as white) solidified the acceptance and assimilation of Italian food into the dominant white culture. Italian (white) food became synonymous with the MedDiet (Altomare et al., 2013), without consideration of other cultures in the Mediterranean region, making the MedDiet white by affiliation.

As the MedDiet increased in popularity, it was translated in 1993 into the Mediterranean Diet Pyramid (MDP) and its origin in white Mediterranean culture continued to be reinforced and restated (Altomare et al., 2013; Willett et al., 1995). The authors of the MDP, mostly white men affiliated with Harvard University (and in partnership with the non-profit organization Oldways), stated that the MDP was based solely on Italy and Greece and that it “describes a dietary pattern that is attractive for its famous palatability” (Willett et al., 1995), begging the question: famous among whom? It was famous among white Americans, who romanticize and exoticize the Mediterranean region (Gershon, 2018; O'Neill, 1994). Embedded in this quote is the assumption that everyone finds the MedDiet as famously palatable as the white dominant group, which upholds white norms as the status quo.

More recently, the Mediterranean Diet Foundation's International Scientific Committee updated the MDP guidelines (Bach-Faig et al., 2011). The self-ascribed name 'International Scientific Committee' itself suggests inclusivity of diverse nationalities. Yet, the Committee doesn't include any members from African countries other than Morocco or anyone from Middle Eastern countries in the Mediterranean region; the majority are from Italy and Spain (“Who We Are,” n.d.). Since BIPOC from non-white Mediterranean cultures are mostly excluded from the 'International Scientific Committee' group, by definition it is neither diverse nor inclusive (*Racism Defined*, 2020). When revising the MDP, the group created a “simplified mainframe for all Mediterranean Cultures” and considered Mediterranean cultures in the following way: Spanish, Greek, Italian, Moroccan, Middle East, French, and Others (Bach-Faig et al., 2011). This separation and grouping essentially parses out and lists each European Mediterranean country individually, while including only a single African

country and lumping Middle Eastern countries together. In doing so, the International Scientific Committee has literally and figuratively othered most non-European Mediterranean countries. Finally, of the 10 languages into which the MDP is translated, nine of them are European dialects or English, which clearly does not make the MDP accessible to non-white populations. The MDP revision neither includes nor aims to serve non-white cultures.

Importantly, an analysis of the socio-political context reveals two main reasons that the MedDiet would not have been accepted if it were marketed as non-white (e.g., Middle Eastern or North African). First, white culture was (and continues to be) preferred, as it is dominant in the US (Morris, 2016). As such, any cultural diet other than one that is white would not be as readily accepted because it would represent a power shift to a subordinate group. Interest convergence, a central tenet of CRT (described above) clearly establishes that if a divergence from the white norm is not in the interest of the white dominant group, it will not be adopted (Delgado & Stefancic, 2013). In the case of the MedDiet, a reason to adopt a non-white diet does not exist. A reason to research, adopt, and promote a non-white diet *could* exist if research revealed some benefit to the white dominant group (e.g., lower health care costs); however, current research (described below) does not support such a reason. Second, the expressly negative perception, subjugation, and stereotyping of Middle Easterners and African Americans specifically makes it unlikely that those cultural diets would become normalized and aligned with white ideals (Morris, 2016; Semaan, 2014). Taken together, while there are many non-white cultures along the Mediterranean with dietary habits similar to the traditional Italian diet, the MedDiet is, in origin and in its current iteration, a white diet.

The illusion of inclusion: What the MedDiet is (and isn't)

Though the MedDiet may have originated in white Mediterranean culture, it is no longer representative of any particular culture from the Mediterranean region. Instead, the MedDiet is a fabricated dietary pattern; it is comprised of foods acceptable to white (European) Americans that seem to fit with the dietary principles of the Mediterranean region rather than actual foods consumed by Mediterranean cultures (Crotty, 1998). The MedDiet emerged as a desirable pattern based on

nutritionism (Scrinis, 2013), an approach to eating that reduces foods to nutrients (rather than focusing on foods themselves) and rebuilds a dietary pattern of foods that contain a seemingly desirable nutrient profile. In doing so, the *true* Mediterranean dietary pattern comprised of foods indigenous to the region became conflated with the MedDiet nutrient profile studied by Keys.

The MedDiet as a desirable nutrient profile

Keys's Seven Countries Study and subsequent research reduced the Mediterranean way of eating to a nutrient profile, which became the framework for today's MedDiet and MDP. Researchers have acknowledged the difficulty of characterizing the MedDiet in a way that is representative of the various meal patterns of the multicultural Mediterranean region and urged others to avoid using the term "Mediterranean Diet" until it was better defined (Ferro-Luzzi & Sette, 1989). Some have even discouraged reducing Mediterranean dietary patterns to a list of foods, taken out of context of the lifestyle more broadly (Crotty, 1998). However, an examination of the original MDP (Willett et al., 1995) and the current version (Bach-Faig et al., 2011) reveal that nutritionism and politics influenced the reconstruction of the MedDiet. That is, foods that fit the desirable nutrient profile were included and foods commonly consumed in the Mediterranean that did not meet the desirable profile were conveniently omitted.

Oldways, a partner organization of MDP authors, is partially funded by the Whole Grains Council, which receives funding from Barilla, Subway, Kellogg's, USA Rice Federation, Canada Bread, Tyson foods, and Quaker Oats, among others (*Whole Grains Council*, n.d.). It's not very surprising then that grains form the foundation of the MDP, despite evidence from the time of Keys's research that cereals (e.g., bread, rice, polenta, couscous) may have contributed as little as 36% of total calories for some cultures in the Mediterranean region (Ferro-Luzzi & Sette, 1989). In addition, evidence from Keys's own research indicates that some MDP foods recommended for weekly (poultry, fish, eggs) or monthly (red meat) consumption were actually consumed daily (Kromhout et al., 1989). For instance, in the 1960s Italians consumed about 155 grams or 5.47 ounces of red meat *per day*, which was higher than consumption in most other countries that Keys studied. Yet, consumption of meat (and rates of heart disease) was even higher in the US and since saturated fat consumption was assumed to

be the culprit, the MedDiet and MDP recommend less frequent consumption.

The MedDiet as promoted by health advocates was not based on actual consumption in Italy (or Greece) so much as it was a fictitious dietary pattern generated from a desired nutrient profile correlated with health. In this way, the MedDiet is not an actual way of eating for any Mediterranean culture(s); it is an idealized eating pattern created using foods that seem to have desirable nutrient profiles. The MedDiet doesn't exist outside of its construction in scientific literature.

Whitewashing the MedDiet to increase palatability

The foods recommended by the MedDiet are a subset of foods acceptable by white European/Americans, rather than foods of the region it purports to represent, perpetuating white normativity under the guise of inclusion. Many examples of this in the updated MDP exist. For instance, despite the French influence (as a result of occupation) across North Africa, potatoes never became a staple food for Africans or in the Middle East, yet is the only vegetable named and explicitly recommended for weekly consumption in the updated MDP (Bach-Faig et al., 2011; Buitelaar, 2003; Zubaida, 2003). Beans and pulses are staples in the Middle East and North Africa (Rawal & Navarro, 2019), but since Europeans and Americans consume about half as much, emphasizing pulses as daily staples in the MedDiet was an unlikely recommendation. Correspondingly, two servings are recommended for consumption weekly on the MDP (Bach-Faig et al., 2011). And, while vegetables and cereals are a base of many Mediterranean cultures' cuisines (Altomare et al., 2013), the MDP does not depict cassava/yuca, teff, or many other foods that fit the MedDiet nutrient profile and are indigenous to the Mediterranean region, but are uncommon in a white diet. Rather than presenting a true representation of one (or more) ways of eating for Mediterranean cultures, the MDP and MedDiet recommendations reflect the white social norms of the creators and populations they aim to serve.

That dietary recommendations are reflections of social norms rather than evidence-based truths is well-established in critical literature, despite being steeped in rhetoric suggesting recommendations are backed by science (Biltekoff, 2012). The process by which the US creates the Dietary Guidelines for Americans (DGA) is,

and has always been, political and obfuscated (Hite, 2017; Oppenheimer & Benrubi, 2014). Translating findings from the scientific evidence into recommendations is not a transparent process, in part because nutrition, as it relates to health promotion, is poorly understood (see the next section for more detail) and the work of food industry groups has impacted how science is communicated in the DGA (Hite et al., 2010). The social norms underscoring the DGA are not immediately evident. Much attention is paid to the lobbying work of the meat, dairy, and egg industries (Nestle, 1993, 2018). However, that those groups continue to fight for their place in the DGA reveals their lack of power. Conversely, powerful groups (e.g., corn, wheat, and soy) don't need to heavily lobby – their place at the table is assured because their food is widely accepted as healthy. For instance, in 2019, the National Cattlemen's Beef Association spent about 4.5 times as much lobbying as the National Association of Wheat Growers (*OpenSecrets*, n.d.). The degree to which meat, grain, or any other food is recommended (or not) is aligned with the group whose food products are perceived as healthy, as they are wielding the most power and influence.

The dominant white have always had the most power in the US food system which, over time, resulted in the systematic exclusion of BIPOC from accumulating wealth, power, and social capital (Billings & Cabbil, 2011). Native Americans were forced off land so colonists could enslave Africans to grow important crops; Black farmers were routinely denied loans for farms and were forced onto other people's land for sharecropping; Mexican, Japanese, and Filipino became migrant farm workers rather than farm owners (Billings & Cabbil, 2011). While poor whites also worked on farms, the opportunity to achieve economic and social mobility was available in ways that it was not to BIPOC. Overt racism in policies and practices has largely been curtailed in public spaces but the legacy of racism was never corrected and white people continue to hold a disproportionate amount of power in the production and distribution of food (Billings & Cabbil, 2011). By extension, the dominant white have a greater impact on the food landscape and dietary recommendations, which ensures the MedDiet and MDP recommendations remain focused on foods familiar to and accepted by white Americans.

The logical fallacies underpinning the MedDiet as a scientific gold standard

Keys's findings led to many correlational studies that found a relationship between the MedDiet's nutrient profile and positive health outcomes, particularly when coupled with an active lifestyle (2015-2020 *Dietary Guidelines for Americans*, 2015; Altomare et al., 2013; Martinez-Gonzalez & Martín-Calvo, 2016). However, indicating that the MedDiet is healthier or better than other cultural diets is scientifically problematic because a) there is, at best, weak evidence about dietary health in general and no evidence indicating the MedDiet is healthier than non-white cultural diets; and b) biased study designs are the foundation of dietary research, including Keys's Seven Countries Study, limiting the generalizability of claims about the MedDiet.

The “unscientific” healthy diet

Keys's study had a tremendous impact on health research and nutritional epidemiology (Blackburn, 2017) but was based on assumptions and overstated conclusions, like much of the epidemiological research that followed. Keys uncovered a correlational relationship between saturated fat and coronary heart disease but concluded that “mean serum cholesterol is the major risk factor in explaining cross-cultural differences in CHD” (Menotti et al., 1993, p527). Concluding a single major risk factor from a limited epidemiologic study is quite an overstatement, given that only five variables were analyzed. Since correlational relationships can be found between unrelated variables, follow up research employing causal study designs was warranted. In the instance of the MedDiet, however, a large sample randomized controlled trial, or other causal study design was never employed to explore correlational findings.

On the contrary, Keys's findings led to a plethora of correlational research confirming health outcomes associated with adherence to the MedDiet. This research trajectory begs the question: have researchers objectively established that the MedDiet is a dietary pattern that prevents disease or is nutrition science suffering from decades upon decades of confirmation bias? Asserting that evidence supports a singular healthy eating pattern to prevent disease is constructed on weak evidence and its communication via the US DGA is built on false assumptions, political influence, and “unscientific beliefs” (Brown et al., 2014; Hite, 2017, 2018). Unscientific beliefs are those held as

“generalizable fact without substantial scientific supporting evidence” (Brown et al., 2014, p 563) and include treating associations in epidemiological research as causal. As the US DGAs are a political document, it is morally questionable to communicate unscientific or politicized information as fact about disease prevention (Hite, 2017). While evidence about what constitutes a healthy dietary pattern may be equivocal, it is clear that evidence supporting the dietary recommendations in the DGA is substantially lacking.

Perhaps even more importantly, methodologically rigorous research supporting the MedDiet as the healthiest *cultural* diet is lacking as well. No large sample, causal, cross-cultural research was conducted comparing the health of different populations based on their traditional diets. Even in the case of the traditional Middle Eastern and North African dietary patterns, which are very similar to the traditional Italian and Greek dietary patterns (Aljefree & Ahmed, 2015), research has not been conducted to compare the nuances. The nuances, however, are especially important when asserting that one cultural dietary pattern is healthier than another. For example, when Keys's study was performed, per capita consumption of meat was lower in Algeria, Egypt, Libya, Morocco, and Tunisia than in Greece or Italy (Helsing, 1995); yet, the associations Keys revealed were not further explored in other cross-cultural causal research (within the Mediterranean region or abroad). If the dietary pattern associated with the lowest incidence of heart disease was truly sought, unbiased researchers would have explored Keys's findings in these (or other) non-white populations with lower meat consumption. As white normativity seeks to establish and re-establish whiteness as the ideal (Morris, 2016), it seems that once a white diet was found to be correlated with health, no additional cross-cultural comparative research was conducted. As a result, it is wholly unscientific to assert that the MedDiet is healthier than other cultural dietary patterns.

“Healthy” for whom? Racial selection and healthy user bias

Bias also exists in who researches and who is studied; historically, white male researchers study White men (Iglehart, 2014; Oh et al., 2015). As a result, immense disparity exists in the research on white and non-white cultural diets. For example, a cursory 2019 PubMed search of “Mediterranean diet” yields 6,426

results whereas a search on “traditional Chinese diet,” “traditional African diet,” and “traditional Mexican diet” combined yield only 2,355 results. In these results, the privilege of whiteness is evident – a white diet is preferred by whites, the dominant group, which biases research toward desirable white diets. Selection bias inherent in Keys's study and other health research has resulted in a myriad evidence about European diets consumed by white men but little evidence about non-white diets in diverse samples (Fisher & Kalbaugh, 2011). Since modern medical and health studies were, at the time of Keys's study, primarily conducted in the United States and Europe using white male participants (Oh et al., 2015), the results are not necessarily generalizable to all populations. This selection bias is, in part, related to the perception of the white dominant group that white men are the neutral category of human and are used to create standards (Morris, 2016).

In nutritional epidemiology more specifically, US dietary recommendations are based on a handful of observational, prospective cohort studies, conducted in populations with a preponderance for health (e.g., Nurses' Health Study, the Health Professionals' Follow-up Study, and the Physicians' Health Study) (Hite, 2018). That is, the populations studied included white participants, of middle class or average socioeconomic status, many of whom were health professionals themselves (Hite, 2018), introducing additional layers of potential bias. Health professionals may be more oriented toward health in than the average person (leading to many healthy behaviors, producing the healthy user effect) (Shrank et al., 2011). Health professionals may also be influenced to complete food frequency questionnaires or other health-related surveys in a socially desirable way (Hebert et al., 1995), and/or, may experience recall bias on food frequency questionnaires (Hite, 2018). Notably, leading researchers promoting both the MedDiet and nutritional epidemiology have acknowledged the skewness of study samples toward white, health-conscious participants and the difficulty in collecting accurate dietary information (Hite, 2018). In response, nutritional epidemiologists argue that they have statistically controlled for those assumptions and biases (Satija et al., 2015; Spiegelman, 2016) rather focusing on obtaining a sample more representative of the diverse US population or employing more rigorous methods of data collection.

Though it may be more difficult to recruit BIPOC participants due to distrust of researchers, provider perceptions, and access to care (Fisher & Kalbaugh, 2011), more research is critical to understanding if the correlations uncovered in epidemiologic studies in white participants are generalizable. Some of the earliest literature on the differences between Black and white US adults is rooted in the assumption that socioeconomic differences were the primary cause of racial/ethnic health disparities (Williams & Sternthal, 2010). And while there are many social determinants of health associated with poor health outcomes, the influence of biology on health has long been debated by sociologists and health professionals (Braveman & Gottlieb, 2014; Williams & Sternthal, 2010). Some have even argued that “if racial differences in health are caused by inherent genetic differences, then social policies and structures that initiate and sustain the production of disease are absolved from responsibility” (Williams & Sternthal, 2010, pS17-S18). In contrast, I suggest that if racial differences in health are caused, in part, by genetic differences, then the racism inherent in current practices will be revealed and the white dominant group will be expected to produce an additional body of research investigating health in non-white populations, which would require substantial time and resources. In doing so, the dominant white would be forced to acknowledge (albeit passively) the pervasiveness of racism in the current mode of conducting health research. Such an acknowledgement would also confirm the normativity of Whiteness and for these reasons, wouldn’t happen.

Nonetheless, to suggest that inequities stem from social determinants of health rather than from biologic differences presumes there are no relevant or distinguishable genetic or biologic characteristics relevant to health. Yet, biological differences between races/ethnicities in factors related to weight and BMI (e.g., body size, body shape, distribution of body mass) (Heymsfield et al., 2016) and physiology (e.g., insulin sensitivity, insulin resistance) (B. A. Gower & Fowler, 2020; Barbara A. Gower et al., 2003) have been proposed as potential modifiers of the relationship between diet and body weight (Zamora et al., 2010). In addition, adherence to the DGA as a means to prevent disease is assumed to have a positive impact on health outcomes for all races and ethnicities but has been shown to have a poorer impact on Blacks as compared to whites (Zamora et al., 2010). One potential mechanism for this may be the dietary guidelines’ focus on carbohydrates and in this

light, the MedDiet (also based on a carbohydrate-rich dietary pattern) may not be advisable to promote health or prevent disease for everyone. While some studies have been done to examine the impact of the MedDiet on racially and ethnically diverse samples (though these are still limited to Black and Hispanic samples and exclusive of Asian and Native American populations), findings indicate that the MedDiet may not have a long-lasting cardioprotective effect for those groups (Sotos-Prieto & Mattei, 2018).

Assuming that findings from large scale epidemiologic studies using a sample of moderately affluent, educated white health professionals are generalizable to everyone marginalizes non-white persons while maintaining a white norm. Essentially, the biased assumption is that if it is true for white people, it must be true for non-white people, which is not in the interest of the health of BIPOC and is, very clearly, another unscientific belief. In sum, evidence is not clear that adherence to the MedDiet is healthy, that potential benefits of the MedDiet are generalizable across racial and ethnic groups, or that any dietary patterns presumed to be healthy are, in fact, healthy for BIPOC.

Conclusion

The popularity of the MedDiet among health professionals is based on an idealized depiction of the white Mediterranean region backed by weak epidemiological evidence operationalizing a reductionist dietary perspective, promoted by the US DGA. The MedDiet’s reputation as a gold standard cultural diet is not warranted and does not provide inclusive recommendations for diverse populations, like that of US adults. The quality of non-White cultures’ diets or specific foods commonly consumed (though understudied) may be just as healthy as the MedDiet. Though many cultures have shifted to a more Westernized dietary pattern making research on traditional cultural diets difficult (Kuehn, 2019), it is critical to continue to explore differences in dietary habits equitably and with consideration for historical racial prejudices.

Moreover, understanding the MedDiet as a White diet and how it maintains systemic racism and white normativity should give pause to its promotion. Privilege, power, and white normativity has biased researchers and health professionals to prefer a White, Euro-centric diet. white or European food is perceived as better than other cultures’ food because of the race, class, and

cultural perceptions of them (Ray, 2016). This bias for white food makes it even more likely that an acceptable 'gold standard' diet would be one that aligns with white normative culture; a white diet is implicitly preferred as the standard because it maintains said normativity (Morris, 2016). As such, an inherent preference for a white diet coupled with multiple biases in research led to the systematic exclusion of dietary research about cultural diets and in dietary recommendations. Given that the foundational research of the US DGA is correlational and weak, causal relationships between diet and health outcomes remain unclear. Therefore, to establish the MedDiet as the healthiest cultural diet, based on the findings of correlational research largely focused on white cultures, is unscientific and inherently racist.

Understanding these facets and the limitations of the generalizability of the MedDiet can help health professionals and policymakers provide more inclusive recommendations to better serve the diverse US population. A greater range of dietary recommendations can both promote health and a more equitable representation of different cultures. It is important to continue to improve cultural humility in the US health system, conduct rigorous dietary and health research that explores health in diverse samples, and incorporate positive aspects of non-white cultures' diets into dietary recommendations. Critical analyses that unveil systemic racism and the normativity of whiteness in health and diet research are necessary to creating a just and equitable system that promotes public health *for all*.

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