

I conducted a literature review in my Writing in the Health Professions class this past Winter Quarter in 2023. I wanted to evaluate the influence of the Mediterranean diet on reducing cardiovascular disease risk factors in obese individuals. But I had neither conducted a literature review before nor knew the guidelines for doing so. I greatly utilized a guidebook from the UC Davis Library by Helen Aveyaard titled *Doing a Literature Review in Health and Social Care*. I crafted a basic skeleton for my review from this book's advice. But to start with, I needed to begin reviewing primary and secondary research to create a research matrix and annotated bibliography, synthesizing information from multiple sources.

The best resource I had for beginning my research was UC Davis Health Sciences Librarian Erik Fausak's class presentation on effective search practices and resources. I learned how UC Davis had many journal articles and books that I could check out or even digitize and search databases. I also learned to use appropriate search language to get the best results from said databases. I used UC Davis digitized library books and the PubMed and SCOPUS databases to get my primary list of research articles to begin reviewing. Additionally, I utilized the UWP 104F course guide to direct me in my research.

PubMed is a highly reliable and authoritative source funded by the National Institutes of Health. It includes research and papers from multiple peer-reviewed journals in the broader field of health and healthcare. Scopus is similar to PubMed but also includes linked references for each study, which enables easier access to snowball sampling to find relevant studies to the research question. Scopus also includes an additional 10,000 or so journals that PubMed does not. Search terms that were originally used include "Mediterranean Diet," "Obesity," "Cardiovascular Risk," and "Standard American Diet." I also used Boolean operators to minimize the appearance of articles that did not directly pertain to my research question and to create a more focused search. However, given the large number of studies related to either one of the four terms, the research question was modified to focus on the "adherence" to the specified diets to narrow the focus of the review, especially since an American Heart Association Scientific Article stated that there was little research on the role of dietary adherence.

Most studies that were reviewed or used in background research are within the past ten years, with the exception of certain key studies that may have been conducted before then and provide valuable insight into my research question. Only primary research with measurable clinical outcomes of reduced cardiovascular risk was included in the final review. Only randomized controlled trials, cohort studies, and meta-analyses were included in this literature review as these studies offer reasonably strong evidence that can undergo statistical analysis. Single-blind studies were preferred due to the reduction of bias and the effect of factors unrelated to the study's treatments. In the initial search for systematic reviews, only those that underwent a rigorous critical appraisal process with multiple reviewers were considered for this literature review. All studies selected for review were from reputable, peer-reviewed journals since these journals provide a trusted form of scientific communication.

Primary research articles must have included the grouping of study participants, randomly or not, to follow the Mediterranean Diet or a “standard” control diet that was similar to a Western or Standard American Diet. If the research included a comparison to the caloric restriction of SAD, it was included in this review. Further, participants had to be obese and/or have low-moderate cardiovascular risk. Studies with participants who actually had cardiovascular disease were less preferred, partly due to the effects of the reverse causation bias on the study results. Although, such studies offered insights into diet in reducing cardiovascular disease outcomes, which is a topic parallel to this review’s focus on risk.

The Joanna-Briggs Critical Appraisal Tools were used to objectively evaluate the studies being considered for inclusion. I used checklists specific to the type of research I was reviewing, which included cohort studies, randomized controlled clinical trials, and systematic reviews. For example, when evaluating cohort studies, I looked at whether the study identified confounding factors and the strategies used to deal with them. I also considered the credibility of the authors of the studies by looking at if the research came from a credible university or organization and did not have significant conflicts of interest (i.e. being funded by a pharmaceutical company) This methodology of literature search and appraisal yielded one systematic review and four primary research studies that were analyzed in this review.

Although I was unable to answer my research question, I am grateful to have discovered the sheer amount of resources and guidance that the library offers to students and members of the campus community. With the support of library staff, course guides, books, and databases, I was able to conduct a comprehensive literature review examining the effects of the Mediterranean diet on cardiovascular disease risk in obese individuals. Reflecting on the information I analyzed provided me with a sense of profundity that the work I was doing could help pave the way for new research in the field of dietary, cardiovascular, and bariatric – especially since there is limited research on this topic.