# Protocol Plant Based Diets Mental Health

# Systematic Review and Meta-Analysis Protocol: Plant-Based Diets and Mental Health Outcomes  
  
## Title  
Plant-Based Diets and Mental Health Outcomes: A Systematic Review and Meta-Analysis  
  
## Background  
Mental health disorders affect over 1 billion people worldwide, with depression, anxiety, and cognitive decline representing major public health challenges. Diet has emerged as a potentially modifiable risk factor for mental health, with plant-based diets receiving increasing attention due to their potential benefits for cardiovascular health, environmental sustainability, and chronic disease prevention.  
  
However, the relationship between plant-based diets and mental health outcomes remains controversial. Some studies suggest benefits through improved micronutrient intake and reduced inflammation, while others raise concerns about potential nutrient deficiencies affecting brain function. The evidence is scattered across diverse populations and study designs, making synthesis challenging.  
  
This systematic review will comprehensively evaluate the association between plant-based diets (including vegetarian, vegan, and plant-predominant diets) and mental health outcomes including depression, anxiety, and cognitive decline.  
  
## Research Question  
Do plant-based or vegetarian diets reduce the risk of depression, anxiety, or cognitive decline compared to omnivorous diets?  
  
## Objectives  
1. To systematically review evidence on the association between plant-based diets and mental health outcomes  
2. To quantify the pooled effect sizes for key mental health outcomes using meta-analysis  
3. To assess heterogeneity and identify sources of variability across studies  
4. To evaluate the quality and bias of included studies  
5. To provide recommendations for future research and clinical practice  
  
## Methods  
  
### Eligibility Criteria  
  
#### Participants  
- Adults aged ≥18 years  
- General population, clinical populations, or specific subgroups (e.g., vegetarians)  
- No geographic restrictions...