

## **Recommendations for future research**

The following recommendations emerged from the present study to deepen understanding and guide effective nutrition interventions

- Future studies should use longitudinal and cross sectional designs to follow subjects over protracted times. By helping to evaluate the long-term viability and efficacy of dietary interventions on PCOS symptoms, this types of study will enable researchers to spot any delayed effects that might not be clear-cut in more limited studies.
- It is imperative to widen the demographic focus of future research to incorporate women from all cultural, ethnic, and socioeconomic backgrounds. This will help to clarify how various lifestyle choices and cultural behaviors affect the frequency and management of PCOS, therefore improving the relevance of results for many communities.
- Examining the genetic inclination to PCOS could expose significant risk factors and hereditary linkages. To better know how genes could affect hormone imbalances, metabolic problems, and general PCOS vulnerability, future research should incorporate family history assessments and genetic testing.
- Research on the psychological aspects of living with PCOS should look at anxiety, depression, and body image problems. Knowing these factors can result in more all-encompassing treatment plans including dietary and lifestyle changes together with mental health care.
- By means of mobile health technologies—apps for measuring nutritional intake and physical activity can improve the study participant involvement and adherence to interventions. Future research should look at how well these tools help women with PCOS adopt better lifestyles.
- Working together among nutritionists, endocrinologists, psychologists, and fitness professionals, interdisciplinary approaches can produce thorough treatment regimens catered to specific need. Future studies should concentrate on creating multidisciplinary projects addressing the several aspects of PCOS.