

# Nutrition: The Key Driver in Women's Health

Neelima Dandamudi<sup>1\*</sup> and Gayatri Varikuti<sup>2</sup>

<sup>1</sup>Department of Pharmaceutical Analysis and Quality Assurance, Annamacharya College of Pharmacy, JNT University, Anantapur, India

<sup>2</sup>Department of Biochemistry, GITAM Institute of Science, GITAM University, Visakhapatnam, India

\***Correspondence to:** Neelima Dandamudi, Department of Pharmaceutical Analysis and Quality Assurance, Annamacharya College of Pharmacy, JNT University, Anantapur, India, E-mail: [neelimadandamudi@gmail.com](mailto:neelimadandamudi@gmail.com)

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## Introduction

Diet and nutrition are significant factors in maintaining good health throughout the human life. Nutrition plays a key role in determining chronic non-communicable diseases (NCDs) and occupies an important position in prevention activities [1]. Poor nutrition leads to several chronic diseases such as obesity, diabetes, gall bladder diseases, cardiovascular diseases, cancer and osteoarthritis etc.

It has been reported that, chronic diseases contributed approximately 60% of the 56.5 million deaths worldwide and approximately 46% of the global burden of disease in 2001 [1]. The prevalence of obesity has been rapidly expanding around the world in recent years in men and women [2].

Obesity is a complex multifactorial chronic disease and a marker of poor nutrition in both men and women. The drivers of obesity are non-predictable [3]. They exert in the early stages of growth and development and continuous exposure over the whole life. It is advisable that, whole foods should be added in dietary recommendations with an addition of more fruit and vegetables, whole pulses, nuts and seeds, less refined and highly processed foods [4].

A health promoting-dietary pattern is not only about a single nutrient, food, food group or combination of foods [5], but a combination of foods which together without smoking, regular physical activity, supportive social networks, and without stress leads to a good health.

Nutrition status of a person is greatly dependent on the quality and quantity of foods eaten. Nutrition substantially impacts the wellbeing status of a person and the quality of food is determined by the influence of environment, society and ecology.

It is sensible in looking nourishment or nourishment patterns instead of individual food supplements as the route forward in preventing diseases and promoting a healthy lifestyle. In terms of changes in food supply, working together with the food industry to create more advantageous nourishment items could assist consumers in making more beneficial choices. Additionally, more cross-disciplinary research would illuminate endeavors to improve the food supply and help reverse the pestilence of overweight or obesity.

## Understanding Unique Nutritional Needs for Women

Striving to equity the demands of family and work or school and confront media influence to look and eat in a particular way can make it challenging for any woman to manage a healthy diet. But the proper food can not only boost your energy, maintain your mood, and help you sustain a healthy weight, it can also be enormous aid through the various stages in a woman's life [6].

Being kids, boys' and girls' dietary supplements are mostly similar. However, when adolescence begins, women begin to develop different nutritional specifications. And as we age and our bodies go through numerous hormonal and physical modifications, so our nutritional needs remain to develop, making it essential that our diets emerge to fit these developing needs.

While women manage to require fewer calories than men, our requirements for particular minerals and vitamins are extremely higher. Hormonal fluctuations correlated with menstruation, child-bearing, and menopause suggest that women have a tremendous risk of anemia, vulnerable bones, and osteoporosis, lacking a larger intake of nutrients such as magnesium, iron, calcium, vitamin B9 (folate), and vitamin D [7].

## A Shortfall of the Nutritional Guidelines

As women, many of us are likely to ignoring our dietary demands. We may believe we're too occupied to eat, used to settling the requirements of our family initial, or striving to adhere to a strict diet that devises you low on essential nutrients and feeling irritable, starving, and low on stamina [8].

Women's distinct requirements are usually ignored by dietary research, too. Investigations favor relying on male subjects whose hormone levels are more steady and anticipated, thus seldom obtaining the results irrelevant or even deceiving to women's needs. All this can append up to severe shortfalls in your everyday nutrition.

While what achieves most suitable for one woman may not regularly be the best option for another, the essential point is to develop your dietary preferences around your vital nutritional requirements. Whether you're looking to grow your stamina and desire, Premenstrual syndrome (PMS), promote fertility, have a healthy pregnancy, or relieve the signs of menopause, these diet tips can assist you to stay healthy and energetic during your ever-changing life.



The supplements alone aren't enough because, in the past, women have frequently attempted to make up shortages in their diet through the usage of vitamins and supplements. Though supplements can be a beneficial defense against specific nutrient shortfalls, they can't neutralize for a treacherous or unhealthy diet.

## Essential Nutrients

There are a few basic essential nutrients required for women's which includes:

**Calcium:** Amongst other things, you require calcium to develop healthy teeth and bones, retain them healthy as you age, improve the heart's rhythm, and assure your nervous system functions accurately. Women are at a higher chance than men of developing osteoporosis, so it's essential to get lots of calcium, in alliance with vitamin D magnesium and to maintain your bone strength [9].

For adult women aged 19-50 years, the USDA advised daily intake of 1,000 mg/day. For women above 50 years, the suggested daily intake is 1,200 mg/day. Your body cannot devour more than 500 mg at any one time, and there's no advantage to exceeding the suggested daily intake [10].

**Magnesium:** The USDA suggested daily intake for magnesium is 320 to 400 mg/day. Magnesium is essential for several processes in the body, including improving nerve and muscle capacity, blood sugar levels, and blood pressure and obtaining DNA, protein, and bone [11].

**Iron:** For adolescent women aged 14-18, the FNB suggested daily intake is 15 mg. For adult women aged 19-50, the FNB suggests 18 mg/day (27 mg if pregnant, 9 mg if lactating). For women above 51 years old, the suggested daily intake is 8 mg. Due to the volume of blood wasted through menstruation, women of childbearing age require more than twice the quantity of iron that men do even more extra during pregnancy and breastfeeding [12]. Iron supports to create the hemoglobin that transports oxygen in your blood. Still, many of us aren't getting approximately adequate iron in our diets, causing iron insufficiency anemia the common prevalent deficiency in women. Anemia can drain your energy, tired, and out of breath after even least physical exercise. Iron deficiency can also influence your mood, letting depression-like indications such as anger and trouble focusing [13].

**Vitamin B9:** For adolescent women aged 14-18, the FNB suggested a daily intake of 400 mcg DFE. For adult women aged above 19 years, the FNB suggested a daily intake of 400 mcg (600 mcg if pregnant, 500 mcg if lactating). Folate can considerably decrease the chance of neurological birth deformities when used before conception and when the first few weeks of pregnancy.

**Vitamin D:** Vitamin D is also essential to the proper metabolism of calcium. Vitamin D is a nutrient obtained in some foods that are required for health and to have strong bones. Adults aged 19-70 years requires 15 mcg (600 IU) daily. For adults aged 71 years and older require 20 mcg (800 IU) daily. For pregnant and breastfeeding women suggested intake is 15 mcg (600 IU) daily [14].

Also, each and every nutrient play a vital role in women's health.

To ease the menopause symptoms need to boost calcium intake, eating more good fats which include Omega-3 and omega-6 essential fatty acids can help boost hormone production in the body, also helps to balance mitigate hot flashes [15]. Soy products are high in plant-based estrogens, high in phytoestrogens which are similar to estrogen produced by the body. Studies suggest it may help to manage the menopausal symptoms [12].

Nutrition sensitive strategies were more frequently fulfilled in community-based perspectives; however, the proof of their influence on women's nutritional outcomes was less clear. This review aims to understand women's unique nutritional needs and the reliance on food systems, and to look at implied strategies and instances where advances in nutrition could be effected.

## References

1. Mutangadura GB (2002) The world health report 2002: reducing risks, promoting healthy life. *Agric Econ* 30: 170-172.
2. World Health Organization (2000) Obesity: preventing and managing the global epidemic. World Health Organization Technical Report Series 894: 252.
3. Ulijaszek S (2015) With the benefit of Foresight: Obesity, complexity and joined-up government. *BioSociet* 10: 213-228. <https://doi.org/10.1057/biosoc.2015.16>
4. Parodi E, De Lorenzo A (2003) Diet, nutrition and prevention of chronic diseases. WHO Technical Report Series, Geneva, Switzerland.
5. Katz DL, Meller S (2014) Can we say what diet is best for health? *Ann Rev Public Health* 35: 83-103. <https://doi.org/10.1146/annurev-publhealth-032013-182351>
6. Wolinsky I, Klimis-Tavantzis DJ (1996) Nutritional concerns of women. CRC Press, Florida, United States.
7. Das JK, Salam RA, Thornburg KL, Prentice AM, Campisi S, et al. (2017) Nutrition in adolescents: physiology, metabolism, and nutritional needs. *Ann N Y Acad Sci* 1393: 21-33. <https://doi.org/10.1111/nyas.13330>
8. Krummel DA, Kris-Etherton PM (1996) Nutrition in women's health. Jones & Bartlett Learning, Massachusetts, United States.
9. Dawson-Hughes B (1996) Calcium and vitamin D nutritional needs of elderly women. *J Nutr* 126: 1165S-1167S. [https://doi.org/10.1093/jn/126.suppl\\_4.1165S](https://doi.org/10.1093/jn/126.suppl_4.1165S)
10. Heaney RP, Recker RR, Saville PD (1977) Calcium balance and calcium requirements in middle-aged women. *Am J Clin Nutr* 30: 1603-1611. <https://doi.org/10.1093/ajcn/30.10.1603>
11. Flink EB (1980) Nutritional aspects of magnesium metabolism. *West J Med* 133: 304-312.
12. Hallberg L, Rossander-Hulten L (1991) Iron requirements in menstruating women. *Am J Clin Nutr* 54: 1047-1058. <https://doi.org/10.1093/ajcn/54.6.1047>
13. Jian J, Pelle E, Huang X (2009) Iron and menopause: does increased iron affect the health of postmenopausal women?. *Antioxid Redox Signal* 11: 2939-2943. <https://dx.doi.org/10.1089/ars.2009.2576>
14. Prentice RL, Pettinger MB, Jackson RD, Wactawski-Wende J, Lacroix AZ, et al. (2013) Health risks and benefits from calcium and vitamin D supplementation: Women's Health Initiative clinical trial and cohort study. *Osteoporos Int* 24: 567-580. <https://doi.org/10.1007/s00198-012-2224-2>
15. Ayers B, Forshaw M, Hunter MS (2010) The impact of attitudes towards the menopause on women's symptom experience: a systematic review. *Maturitas* 65: 28-36. <https://doi.org/10.1016/j.maturitas.2009.10.016>