

## Lifestyle, nutrition, and gender

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Dietary behavior and physical activity are the main determinants of individual lifestyle. An inappropriate nutrition and a sedentary lifestyle favor the onset of overweight and obesity, significant risk factors for cardiovascular diseases, type 2 diabetes and cancer which, altogether, are the main cause of mortality worldwide.

Dietary habits are acquired progressively, through a learning process that starts early in life and can be influenced by several factors, albeit differently in women vs men.

First of all, the hormonal differences between the sexes affect the metabolic fate of many nutrients, such as lipids. Male and female phenotypes are characterized by a different localization of fat depots, that accumulate in the upper body in men (abdominal area) and in the lower in women (glutes, thighs). The increase in abdominal visceral fat correlates with an increased risk for all obesity-related conditions;<sup>1</sup> consequently, men appear to be more susceptible to chronic degenerative diseases. On the other hand, women are able to accumulate a higher amount of subcutaneous fat, and present a lower basal metabolic rate (5-10%), because of the reduced muscle mass with respect to fat mass.

In addition, men present a high capability of metabolizing lipids for energy production, as well as neutralizing toxicants, such as alcohol, by the liver.

However, gender-related socio-cultural and economic factors can strongly influence lifestyle, by attributing social stereotyped roles to women and men. These factors include family context, religion, income class, rural vs urban geographical environment, advertising and media. Thus, gender can be considered as a main determinant of lifestyle.

A number of studies, carried out mainly in Western societies, have revealed significant differences in the dietary habits of women and men.<sup>2</sup> Women consume greater amounts of vegetables, fruit, legumes, and wholegrain cereals than men, who – on the contrary – prefer foods rich in fat and protein, and consume higher amounts of alcohol and sweetened and carbonated soft beverages. Generally, men's dietary habits are more prone to favor the onset of overweight and obesity, while women adhere to safer and less energy-dense dietary regimens, although they appear more inclined than men to eat cakes and candies.

Furthermore, the two genders are also characterized by a different determination to change their own dietary habits. Women easily adhere to healthy dietary programs, probably because they are a lot more convinced than men

of the pivotal role played by nutrition in preserving health. However, a greater concern among women about their own body image might also be a strong determinant.

Unfortunately, a healthy diet provides appreciable results much more slowly in women than in men, due to the former's lower ability to mobilize fat for energetic purposes. Consequently, losing weight is more difficult for women, who frequently quit a new diet to go back to their previous – and wrong – dietary habits. On the contrary, when men decide to modify their diet, they are more consistent in following the new nutritional plan.

Finally, due to several cultural stereotypes, some foods are considered more 'masculine', while others would be more 'feminine'. Red meat is in fact regarded as a man's food; salads, dairy products and candies are, instead, considered 'girlie' foods.<sup>3</sup>

In conclusion, every nutritional intervention aimed at promoting healthy lifestyles should take into account any sex/gender-driven differences able to affect the dietary habits and the relationship between nutrients and health.

### References

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