

Exotic berries as a functional food

ABSTRACT

Purpose of review: Berries and berry extracts are known to possess properties (i.e., phenolic acids, flavonoids, and anthocyanins) that make them important in disease prevention. Observational studies have shown that many berries may hold promise for public health. However, the long-term impact of berries intake on specific populations and their functionality claims has not been fully tested. In addition, although several biological effects which are based on epidemiological studies have been explained scientifically, the mechanism of their actions is not fully understood. Therefore, this review set out to address the issue of berries intake and their potential functionality. In addition, a glimpse of what the future may hold for the berries was highlighted. Recent findings: Many of the potential health benefits of berries have been associated with their specific chemical and biological properties including their ability to modulate enzymes as well as interact, and bind to proteins. Summary: General inspection of the literature suggests that berries, such as cranberries and goji, are efficacious in the treatment of urinary tract infection and seasonal influenza, respectively. Recent study on wild blueberries has shown that they possess protective effect against cardiovascular disease. In addition, other berries have been reported to possess the ability to inhibit cervical cells (HeLa cells), modulate postprandial glucose and insulin responses. However, there is a need to address the issue of safety, efficacy, and interactions of berries intake with other dietary components. Also, more research studies should be focused on the influence of biotechnology on the functionality of berries.

Keyword: Exotic berries; Functionality; Health claim