

8. Daily and frequent consumption of cabbage juice is effective in preventing and treating cancers of the breast, colon, liver, lung and ovary. The juice should be taken in small amounts of about 100 mL, three times a day, on an empty stomach.
9. Cabbage has slightly laxative effect, which is helpful in stimulating bowel movement. Glutamine amino acid in cabbage is gentle and cleansing on the digestive system.
10. Red cabbage is a rich source of anthocyanin pigments. This anthocyanin pigment acts as strong antioxidant. The red pigment is used as a natural food colorant. This color is recommended for use in beverages, chewing gums, candies, sherbets, dressings, yogurt and other fermented products.

## 1.4 CONCLUSION

The world's most urgent need is to increase the production and consumption of nutritious food, as billions of people suffering from severe malnutrition could potentially be saved. The production of good quality vegetables is the primary factor of commercial vegetable cultivation for better economic returns. It is chemical composition that plays the most crucial role in determining the quality of vegetables that is acceptable for consumption. The importance of a food-based approach for preventing micronutrient malnutrition has become widely accepted. Cabbage plays a very important role in the human diet, being the cornerstone of health and supplying us with a wealth of vitamins, minerals, fibres and carbohydrates. Therefore, it has assumed utmost importance after the discovery of phytochemicals and their strong antioxidant potential in scavenging free radicals. The antioxidant compounds viz. total chlorophyll,  $\beta$ -carotene, ascorbic acid and free radical scavenging activity in different leaf positions of white cabbage were studied. The outermost leaves had the highest total chlorophyll,  $\beta$ -carotene, ascorbic acid and free radical scavenging activity. Results indicated that white cabbage is a good source of antioxidants. There was significant variation among the nine cultivars studied. It may be due to many factors such as cultivar, maturity at harvest, growing conditions and the soil state. The knowledge of genetic variation will help devise improved breeding strategies for the production of high-quality cabbage cultivars with enhanced functional properties for the benefit of consumers and breeders. Most people remove the second or third outermost leaves of the cabbage and use the rest when cooking. As evident from this study, the outermost leaves possess the largest amount of nutraceuticals. So, the outermost leaves should not be removed from the head of cabbage. After thorough washing, they can be safely used for cooking. The nutritive value of cabbage is enhanced greatly by the presence of minerals and vitamins. Due to the presence of iodine in cabbage, this vegetable has become very important. Iodine is absent in the soil of many Himalayan and alluvial regions, when high land pressure has eroded the topsoil and the iodine content with it. There is potential for producing good-quality cabbage in the hills of western Himalayas. The productivity of cabbage is much higher; with an average yield potential of 500–600 q/ha, especially if they are grown from hybrid seeds and high-yielding varieties. It is therefore critical to increase its production through hybrids/varieties for global nutritional security.