Recent studies deal with the increased consumption of fresh and processed fruits and vegetables, as well as increasing search for products that require less preparation time. The aim of this study was to evaluate the losses during processing of fresh vegetables, compare the cost of purchasing fresh vegetables and frozen processed ones and discuss the advantages and disadvantages of using the latter in a food service of a large company. There were evaluated frozen processed cauliflower and broccoli. The costs of weight, considering the correction for its net income, were compared to the cost of fresh vegetables. The preparation of fresh broccoli resulted in an average loss of 34.28% and cauliflower showed higher mean loss, 40%. Taking into account the cost of purchasing vegetables and sanitizing and the preparation and sanitation, and reducing power for their preparation, because the bleaching before freezing reducing the cooking time, the cost of fresh vegetables were 2.27 times higher to broccoli and 1.96 higher to cauliflower when compared with frozen vegetables. The adoption of frozen processed vegetables, besides increasing productivity by allowing optimization of manpower for other activities contributes to better hygiene and sanitary control in food service as well as allows for greater cost control, especially in places with frequent changes the number of meals.