Page 1/15 Abstract The current study was designed to prepare whey-carrot-based functional beverages and studying the effect on physicochemical properties during the 28 days of storage period. Different ratio of whey and carrot juice were selected for preparation of the six formulations, out of which based on the sensory acceptance only three were selected for the further storage studies (sample 1 45:55, sample 2 50:50, and sample 355:45 of carrot juice to whey ratio). During 28 days of storage, the developed beverage samples revealed a significant increase in reducing sugars, total phenolic content, and acidity. The pH, sweetness, and acceptance percentage of the beverage found to be decreased with storage period. It was also found that there is not change in the properties of the beverage storage with and without the preservative. It was revealed that beverage with less proportion of carrot juice is more acceptable quality. The results also suggest that whey can be used with fruit and vegetable to create whey-based beverage