

CHAPTER 12

PHYSICOCHEMICAL AND ANTIOXIDATIVE PROPERTIES OF PRE-TREATED SLICE PEAR CULTIVAR DURING FROZEN STORAGE

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INTRODUCTION

Pears are a member of the Rosaceae (Rose) family and are often called pome fruits, which is a fruit with characteristic compartmented core. Asian pears are called “apple pears” because of their apple-like texture. Pears also are an excellent source of dietary fiber and a good source of vitamin C (Reiland & Salvin, 2015). Improvement of different techniques for preservation of food is very crucial as increasing demand for more natural and healthy products. Fruits also are acknowledged as a good and great source of antioxidants in the human diet (Gebczynski et al., 2017).

Short shelf life of fresh produce is often associated with enzymatic reactions that could lead to economic loss. Deterioration of fresh produce will lead to economic loss. Economic losses often occur resulting from spoilage of fresh produce during harvesting, transportation and storage. Besides, inappropriate processing methods result in fast deterioration in fresh produce. During processing of food, the nutrient value of food is always altered and will be reduced, which will lead to fast deterioration. Thus, pre-treatment of the fruits and freezing process will be one of the methods to prolong the shelf life of the products.

Frozen fruits have also gained popularity owing to its high quality and ease of preparation (Suzanne, 2014). Freezing could