

CHAPTER I

INTRODUCTION

1.1 Background of The Study

Many modern culinary trends means that we don't always have control over what we eat. Several diseases or harmful germs typically grow from here, wreaking havoc on our systems. One minor indication is the formation of pimples on the face. Acne is a skin disorder characterized by an infection and inflammation of the individual oil glands. Common reasons of acne on human skin include hormonal fluctuations, heredity, menstrual periods, anxiety, hyperactivity sebaceous gland activity, hygiene, diet, and the consumption of cosmetics that stimulate the skin's oil glands (Mardhiyah & Rosalina, 2023). Acne is a skin ailment that is the most common problem observed both among adults and teenagers, and on average age of 17 to 25 years old (Yulianti, 2014).

As we know, Indonesia boasts a diverse range of vegetables and fruits. The wide range of fruit plant varieties provides numerous health benefits. Vegetables and fruit are essential element of a nutritious diet, and consuming them in adequate quantities on a regular basis might help avoid diseases including cardiovascular illness, malignancy, diabetes of the type 2 variety, and obesity in teenagers (Qibtiyah et al, 2021). Fruits contain numerous vitamins, minerals, and dietary fiber. Aside from that, lycopene, a component found in several fruits, can help treat acne. Lycopene contains antibacterial qualities that can combat the germs which trigger pimples on the skin. We can discover this lycopene component in tomatoes.

Lycopene in tomatoes contains corrosive qualities that can help to remove scars from acne and protect skin from damage from exposure to sunlight because it is an antioxidant that can fight radicals that are free (Pratiwi, 2018). Apart from tomatoes, lycopene can also be found in red vegetables and fruits such as guava. This is additionally supported by one publication, which states: "Lycopene is a vibrant red pigmentations rubberanoid, a kind of phytochemical

that is frequently discovered in the flesh of guavas or other the color red fruit” (Zahara et al, 2022).

Apart from tomatoes, lycopene is additionally found in red vegetables and fruits such as guava. This is also backed by one publication, which claims that “Lycopene is a powerful red pigmentation carotenoid, a type of phytochemical that is frequently discovered in guava fruit or the other red fruits” (Govaldi & Novelni, 2023). However, these fruits are frequently eaten raw, boiled, or juiced. Not only that, but some people dislike eating fruits because it tastes unpleasant. According to the journal, “Based on 2018 Basic Health Research Data, more than 95% of Indonesian teenagers consume less vegetables and fruit” (Salbiah, 2021).

As a result, the author would like to carry out analyzing so that fruits disliked by some individuals tends to be put to beneficial use and employed as a source of nutrition, along with as a snack that can be swallowed by acne sufferers. One technique to use those vegetables is to make fruit rolls.

1.2 Objectives of the Study

The objectives of this study are following below:

1. To find out the use of tomatoes and guava as a source of lycopene for acne-prone skin which is made into fruit rolls.
2. To find out how effective the lycopene content in tomatoes and guava is for acne-prone skin.