

ABSTRAK

PENGARUH PENAMBAHAN BERBAGAI VARIASI KADAR GULA TERHADAP KETEBALAN DAN KADAR SERAT NATA *DE CARROT*

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Nata merupakan selulosa yang dibentuk oleh bakteri *Acetobacter xylinum*. Bakteri tersebut dapat membentuk selulosa apabila ditumbuhkan dalam media yang mengandung gula. Penelitian ini bertujuan untuk menentukan kadar gula pada jus wortel, menentukan kadar gula pada nata *de carrot*, menentukan kadar gula yang optimal terhadap ketebalan dan kadar serat pada nata *de carrot*, mengevaluasi hasil nata *de carrot* terhadap ketebalan dan kadar serat. Penelitian ini bersifat eksperimental dengan penambahan gula 40g, 50g, 60g dengan 3 kombinasi dan 3 kali ulangan. Sebelum dilakukan variasi penambahan gula, dilakukan penetapan kadar gula pada jus wortel dengan metode *luff schoorl*. Hasil kadar gula pada jus wortel sebanyak 21,79%. Hasil kadar gula pada nata *de carrot* nata 1,2,3 berturut turut sebesar 20,29%, 18,90%, 20,23%. Hasil Penambahan gula yang optimal sebanyak 50 g menghasilkan ketebalan 1,49 cm, dan kadar serat 3,43%. Selanjutnya melakukan evaluasi terhadap nata *de carrot* dengan ketebalan nata 1,2,3 berturut turut sebesar 1,25 cm, 1,49 cm, 1,32 cm, dan kadar serat nata 1,2,3 berturut turut sebesar 2,45%, 3,43%, 2,94%.

Kata kunci: Nata *de Carrot*, Sukrosa, Analisis Gula.

ABSTRACT

EFFECT OF ADDITION OF VARIATIONS OF SUGAR LEVELS TO THICKNESS AND LEVELS OF NATA DE CARROT FIBER

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Nata is cellulose formed by the bacterium Acetobacterxylinum. These bacteria can form cellulose when grown in a medium containing sugar. This study aims to determine the sugar content of carrot juice, determine the sugar content of the nata de carrot, determine the optimal sugar content of the thickness and fiber content in the nata de carrot, evaluate the results of nata de carrot on thickness and fiber content. This study was experimental with the addition of 40g, 50g, 60g sugar with 3 combinations and 3 replications. Before variations in the addition of sugar, the sugar content of carrot juice was carried out by using the luff schoorl method. The results of sugar levels in carrot juice were 21.79%. The results of sugar levels in nata de carrot nata 1,2,3 in a row amounted to 20.29%, 18.90%, 20.23%. Results The optimal addition of sugar as much as 50 g resulted in a thickness of 1.49 cm, and fiber content of 3.43%. Furthermore, evaluating the nata de carrot with nata thickness 1,2,3 in a row amounting to 1,25 cm, 1,49 cm, 1,32 cm, and fiber content of the nata 1,2,3 in a row at 2,45%, 3.43%, 2.94%.

Keywords: *Nata de Carrot, Sucrose, Sugar Analysis.*