ABSTRACT

Sauces have the benefit of enhancing the flavor of anything people use. In fact, the main ingredient of the white cheese sauce is using full cream milk to create a creamy flavor. Nowadays, consumers started caring more about the environmental and animal-welfare effects. The significant environmental impact of milk production is another factor encouraging research and manufacturing of plant-based products. One of the parts that from plant-based is the oat. Oats (Avena sativa L.) are popular because they have good nutritional characteristics. This research aimed to develop a cheese-flavored sauce formulated with oat milk. Thereafter, compared the physicochemical and consumer acceptability of oat milk cheese sauce with the full cream cheese sauce as the control of this project. The null hypothesis was declined due to the control being still everyones favorite and the physicochemical still lacking compared to the control. All prototypes were significantly different ($p>0.05$) from the control in terms of viscosity. Then the pH value of all the prototypes seems to be significantly different from the control. The oat milk-based sauce tastes slightly more sour than the control. As the same goes on with the moisture content, each of the three prototypes has a larger value than the control making significant differences from the control. In the water activity, the majority of the prototypes had not a significant difference from the control. Consumers prioritize control over prototypes from a customer satisfaction standpoint. Nonetheless, the consumer preferred prototype two due to its balanced flavor.

Keywords: *Full Cream Milk, Oat Milk, Cheese Sauce, Physicochemical Properties, Sensory Evaluation*