

# ABSTRACT

<b>Title of Research Project</b>	: Development of Readymade Sauce Product from Water melon Rinds wast
<b>Author</b>	: Chaowalit Auppatak and Valaiporn Suttha and Jetniphath Bunyasawat
<b>Major</b>	: Food and Nutrition
<b>Faculty</b>	: Home Economics Technology
<b>Fiscal Year</b>	: ၂၀၁၆-၂၀၁၇

This research had objectives to study the proper amount of adding of unused water melon peel in products of tomato sauce, chili sauce, pizza sauce and seafood sauce. This research studied the nutritional value of sauce products and studied the acceptance of consumers towards sauce products. The test found about the study about proper amount of unused water melon peel in four kinds of sauce products. The researcher tested about acceptance of forty examinees who are instructors in field of Food and Nutrition, majoring Food and Nutritional science and majoring Food Service Industry, by using 9-point hedonic scale, by adding water melon peel into tomato sauce, at levels of 5, 10 and 15 per cent of all ingredients, It is found that the examinees accepted chili sauce at level of 15 per cent that is in the much favor level (၄). The chili sauce has been added with water melon peel at levels of 5, 10 and 15 per cent of total ingredients. It was found that the examinees accepted it at level of 9 per cent, that was from the level of moderate favor to much favor (၅-၄). The examinees accepted pizza sauce which has been added with water melon peel at level of 5, 10 and 15 per cent of all ingredients. It was found that examinees accepted at level of 15 per cent, which was in the level of much favor (၄). The examinees accepted seafood sauce which has been added with water melon peel at level of 5, 10 and 15 per cent of all ingredients. It was found that examinees accepted at level of 10 per cent, which was in the level from moderate to very much favor (၅-၄). When the researcher studied the physical features of sauce product, it was found that pH value at which was 2.5 degrees Celsius, was in range of 3.50, 3.55, 3.58 and 3.62. The viscosity value was 450cp, 550cp, 650cp and 750cp or centipoints, respectively.

Nutritional value of sauce product, it was found that tomato sauce which has been added with water melon peel for ๑๕ per cent, has total calory for ๗๐ per cent, protein for less than ๑.๒๕ per cent, fat for ๐ per cent, ash for ๑.๔๓ per cent, carbohydrate for ๑๗.๕ per cent and moisture amount of ๘๑.๑ per cent.

Chili sauce which is added with water melon peel for ๙ per cent, has total energy for ๗๑.๒ per cent; protein is less than ๑.๒๕ per cent, fat is ๐ per cent, ash is ๓.๘๕ per cent; carbohydrate is ๑๗.๘ per cent and it has moisture amount of ๗๘.๔ per cent.

Pizza sauce which is added with water melon peel for ๓๐ per cent, has total energy for ๑๔๕ per cent; protein is less than ๑.๒๕ per cent, fat is ๓.๔๙ per cent, ash is ๓.๑๘ per cent; carbohydrate is ๒๘.๕ per cent and it has moisture amount of ๖๔.๘ per cent.

Seafood sauce which is added with water melon peel for ๒๐ per cent, has total energy for ๙๑.๘ per cent; protein is ๑.๕๙ per cent, fat is ๐.๒๐ per cent, ash is ๔.๑๙ per cent; carbohydrate is ๒๐.๙ per cent and it has moisture amount of ๗๓.๑ per cent.

However, adding of water melon peel into four kinds of sauce products can be done, but it should be realized about chemical components of starting components, for example, moisture amount and carbohydrate. These components may affect physical features, for example, smell, flavor and texture. These features affect acceptance of products.

From technology transfer of sauce products from water melon rind at ๑๕๗/๑๖, moo ๙, Kao San housewife Group agricultural enterprise, Bang Plee, Bang Pla, Samut Prakarn. ๕๐ housewife Group agricultural there the level of satisfaction in every aspect.

**Keywords:** Water melon peel, tomato sauce, chili paste, pizza sauce and seafood sauce.