

Gethuk Marillo: The New Product Development of Anti-Cancer Snacks Utilizing Xanthonenes and Anthocyanin in Mangosteen Pericarp and Tamarillo Fruit

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Abstract : Nowadays, the presence of free radicals become a big concern due to its negative impact to the body, which can triggers the formation of degenerative diseases such as cancer, heart disease cardiovascular, diabetic mellitus and others. Free radical oxidation can be prevented by the presence of antioxidants. Naturally, the human body produces its own antioxidants. Because of the free radicals exposure are so intense, especially from the environment, it is necessary to supply antioxidants needed from outside, through the consumption of functional foods with high antioxidant content. Gethuk is one of the traditional snacks in Indonesia. Gethuk is made from cassava with minimal processing such as boiling, destructing, and forming. Gethuk is classified as a familiar snack in the community, so it has a potential for developing, especially into a functional food. The low content of antioxidants in gethuk can be overcome with the development of a product called Gethuk Marillo. Gethuk Marillo is gethuk with the addition of natural antioxidants from mangosteen pericarp extract which has a high content of xanthonenes, these compounds are classified into flavonoids and act as antioxidants in the body. Gethuk Marillo served along with tamarillo fruit sauce which is also high in antioxidants such as anthocyanin. The combination between 300 grams gethuk Marillo and sauce contain flavonoid about 31% of human antioxidant needs per day. Gethuk Marillo called as a functional food because of high flavonoids content which can prevent degenerative diseases namely cancer, as many studies that the xanthone and anthocyanins compounds can effectively prevent the formation of cancer cells in human body.

Keywords : Gethuk marillo, xanthonenes, anthocyanin, high antioxidants, anti-cancer

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