

## Nutrigenomic on Palm Phytonutrients

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*Nutritional genomics, or known as nutrigenomics, is the dietary effects on genome expression, such as protein expression, transcriptomics and metabolomics. Palm oil (*Elaeis guineensis*) has plenty of nutritional values that actually benefit its consumers. This oil is widely used in food production. It is not limited to cooking oil but includes applications such as margarine, shortening, vanaspati, bakery fats, flour confectionery, pastries, instant noodles and many others. Palm phytonutrients such as oil palm phenolics,  $\alpha$ -tocopherol and tocotrienol-rich fraction, have been proven to have vast nutritional benefits. To date, the latest review paper on palm oil nutrigenomics was published in 2023, reviewing journals published in vitro up to 2019. Hence, this review was done to update the recently published articles on the effects of palm phytonutrients, in general, in genetic modulations.*

*Keywords: Palm oil, nutrigenomic, nutrients, tocotrienol and carotenes.*

