

Nutritional and Bioactive Compounds in Coconut Meat of Different Sources: Thailand, Indonesia and Vietnam

Chitraporn Ngampeerapong¹ and Visith Chavasit^{2*}

¹*Division of Food Science and Technology, Faculty of Engineering and Agro-Industry, Maejo University, Chiang Mai 50290, Thailand*

²*Food Cluster, Institute of Nutrition, Mahidol University, Nakhon Pathom 73170, Thailand*

*Corresponding author. E-mail: vchavasit@gmail.com, visith.cha@mahidol.ac.th
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ABSTRACT

*The ASEAN economic forum creates trade and exchange in agricultural produce among member countries. Due to seasonal shortages, coconut is one agricultural product that is traded among ASEAN countries. Although these coconuts are mainly of the same species (*Cocos nucifera* L.), differences in cultivation and environmental conditions may affect the chemical composition of the coconut meat, which can consequently affect on quality consistencies of the coconut meat-containing food products. Coconut meat samples from Thailand, Indonesia, and Vietnam were assessed for macronutrients and potential bioactive compounds. Results showed that macronutrients and antioxidant activity in the coconut meats of the studied countries were not so much different, except for total phenolic compounds in the coconut meat from Vietnam was 30% higher than the others. The phytosterol content mainly as beta-sitosterol was highest in the coconut meat from Indonesia. Fatty acids profiles from these sources had mostly the same patterns. Ninety percent of fat was comprised of saturated fatty acid, which 60% as medium chain fatty acid (C8-C13) and 30% as long chain fatty acid (> C14). The qualities coconut meats from the studied 3 countries were quite similar and should not cause any differences in the contents of macronutrients and bioactive compounds in the finished products.*

Keywords: Bioactive compounds, Coconut meat, Food industry, Macronutrients