

**FATTY ACID PROFILES IN DIFFERENT GRADES AND TYPE OF
CHICKEN EGGS**

FATIN AMIRAH BT ABDUL RASHID.

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ABSTRACT

FATTY ACID PROFILE IN DIFFERENT GRADE AND TYPES OF CHICKEN EGG

The objectives of this study were to identify the types of fatty acid composition present and to compare them between different grades of conventional chicken egg of A,B and C, village chicken egg and omega-3 enriched chicken egg. A total of 4 samples of each of types of chicken egg were analyzed by using Gas Chromatography-Mass Spectrum (GC-MS). The obtained result showed that saturated fatty acid (SFA), monounsaturated fatty acid (MUFA), and polyunsaturated fatty acid (PUFA) were all present in each of them. Total percentage of SFA composition in range (29.32%–38.65%) were analyzed from all chicken egg is lower than MUFA composition in range (36.33% – 43.58%) but higher than PUFA composition in range (20.45% – 27.66%). Grade A egg showed the most undetected fatty acid composition with highest total SFA percentage (38.65%) and the lowest total PUFA percentage (20.45%). Grade B showed the highest total percentage of PUFA (27.66%) while omega-3 enriched egg showed the highest percentages of the most essential omega-3 fatty acid of DHA (7.18%). But, overall all type of chicken eggs showed a balance ratio of essential omega-6:omega-3 except grade A egg which is can provide a good nutritional content for human body especially village chicken and omega-3 egg.

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