

**DETERMINATION OF LEAD, COPPER, ZINC, CALCIUM, AND
IRON IN EGGS YOLK AND EGGS WHITE IN DIFFERENT
TYPES OF EGGS BY FLAME ATOMIC
ABSORPTION SPECTROSCOPY**

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ABSTRACT

DETERMINATION OF LEAD, COPPER, ZINC, CALCIUM, AND IRON IN EGGS YOLK AND EGGS WHITE IN DIFFERENT TYPES OF EGGS BY FLAME ATOMIC ABSORPTION SPECTROSCOPY

The purpose of this thesis is to determine the heavy metals in chicken egg yolk and chicken egg white indifferent types of eggs by using Flame Atomic Absorption Spectroscopy. Four different types of chicken egg was chosen which are LTK Omega Plus chicken egg, NutriPlus Organic Selenium chicken egg , Tesco Choice fresh chicken egg and village chicken egg. Five different element was studies which are lead, copper, zinc, calcium and iron. For lead element, village chicken egg contain most higher of lead which is 26.50% rather than others. LTK Omega Plus chicken egg have about 26.02% of lead, followed by Tesco Choice fresh chicken egg which is 23.91% and NutriPlus Organic Selenium chicken egg have the lowest of lead contain which is about 23.56%. For copper elements, 42.86% of copper is found in Tesco Choice fresh chicken egg which is the highest copper content determination and 10.03% is found the lowest copper content determination in village chicken egg among the four types of chicken egg being studies. LTK Omega Plus chicken egg contains about 21.22% of copper and NutriPlus Organic Selenium chicken egg contains about 19.28% of copper. For zinc element, LTK Omega Plus chicken egg contains a highest zinc content which is 26.06% among the four types of egg being studies and NutriPlus Organic Selenium chicken egg and Tesco Choice fresh chicken egg contain the lowest zinc contains which is 24.49% in their total mass. Village egg contains the second highest value of zinc determination which is 24.95% among four types of chicken egg being studies. For calcium element, NutriPlus Organic Selenium chicken egg contains a highest calcium content which is 44.41% among the others and village egg contain the lowest calcium content between the others which is 17.26%. Tesco Choice fresh chicken egg contains a second highest calcium content which is 19.99% compared to between them and followed by LTK Omega Plus chicken egg which is 18.35%. For iron element, NutriPlus Organic Selenium chicken egg have the higher iron content which is 26.91% and LTK Omega Plus chicken egg have the lowest of iron content which is 23.02%. Village chicken egg have 25.63% of iron content and Tesco Choice fresh chicken egg have about 24.44% of iron content.