Pengaruh Pemberian Ekstrak Kacang Hijau *(Phaseolus Radiatus)* Terhadap Kadar Ferritin dan *Malondyaldehide* (MDA) Dalam Darah Tikus Wistar Putih *(Rattus Nurvegicus)* Anemia

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Abstrak

Anemia defisiensi besi merupakan masalah gizi yang sering terjadi di seluruh dunia. Dampak dari anemia defisiensi besi sangat besar terhadap penderita, diantaranya perdarahan, gangguan proses persalinan, prematuritas, serta BBLR. Kacang hijau mengandung tinggi protein, karbohidrat serta lemak yang dapat mendukung proses sintesis hemoglobin. Kadar zat besi akan berpengaruh terhadap kadar oksidan berupa *Reactive Oxigen Species* (ROS). Tujuan dari penelitian ini untuk mengetahui pengaruh pemberian ekstrak kacang hijau terhadap kadar ferritin dan kadar MDA pada tikus wistar anemia. Penelitian ini merupakan penelitian eksperimental dengan pendekatan *Randomized Post Test Only Control Group Design*. Jumlah sampel 25 ekor tikus wistar putih yang terbagi menjadi 5 kelompok perlakuan yaitu kelompok normal, kelompok control serta kelompok yang diberikan dosis ekstrak kacang hijau masing – masing 0,18g, 0,36g dan 0,72g. Hasil penelitian menunjukkan adanya penurunan kadar hemoglobin, setelah dilakukan perlakuan selama 14 hari diet rendah Fe masing – masing 40-55 persen serta terjadi peningkatan kadar ferritin masing – masing 28-38 persen tiap masing – masing kelompok sedangkan kadar MDA mengalami penurunan 18–24 persen pada masing – masing kelompok perlakuan. Hal ini menunjukkan perbandingan kadar ferritin dan kadar MDA memiliki pengaruh yang signifikan terhadap pemberian ekstrak kacang hijau yang ditunjukkan dengan nilai p value < 0,05 (p = 0,00).

Kata Kunci : Ekstrak Kacang Hijau, Kadar Ferritin dan Kadar MDA

Keterangan :

*** Pembimbing I**

**** Pembimbing II**

The Influence of Giving Green peal (Phaseolus Radiatus) toward Ferritin Level and *Malondyaldehide* (MDA) within The Anaemia White Wistar Mouse's Blood *(Rattus Nurvegicus)*

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Abstract

Iron deficiency anaemia is a common nutritional problem in the world. The impact of iron deficiency anaemia profound effect on patients; including bleeding, labour disturbances, prematurity and low birth weight. Green peal contains high in protein, carbohydrates and fats that can support the process of synthesis of haemoglobin. Iron levels will affect the levels of oxidants in the form of Reactive Oxygen Species (ROS). This study was aimed to know the influence of giving green peal extract toward *Ferritin* level and *MDA* rate. This research was an experimental with Randomized Post Test Only Control Group Design. The total samples were 25 white *Whistar* mice that consisted of 5 intervention groups; they are normal group, control group and the experiment groups that were intervened by green peal extract as much as 0, 18 gram, 0, 36 gram and 0, 72 gram. The result showed that there was a decreasing of haemoglobin rate after intervening as long as 14 days with low Fe diet was 40-55%, and 28-38% was increased in *ferritin* level. The MDA was decreased as much as 18 -24% in each intervention. There was a significant differentiation of giving green peal extract to *ferritin* and MDA level with p value <0,05 (p=0,00)

Keywords: Green Peal Extract, *Ferritin* and *MDA* level