

**THESIS**

**THE DIFFERENCE IN HEMOGLOBIN LEVELS AND  
NUTRITIONAL STATUS AMONG MAHASANTRI  
MONDAYS-THURSDAY FASTING AND NOT FASTING**



**Written by:**

**'Ainul Fithri Ramadhany  
NIM 422021728001**

**NUTRITION SCIENCE DEPARTMENT  
FACULTY OF HEALTH SCIENCE  
UNIVERSITAS DARUSSALAM GONTOR  
PONOROGO**

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UNIVERSITAS DARUSSALAM GONTOR



## APPROVAL SHEET

### APPROVAL SHEET THESIS DEFENCE

It is hereby stated that the thesis with the title:

**THE DIFFERENCE IN HAEMOGLOBIN LEVELS AND NUTRITIONAL STATUS  
AMONG MAHASANTRI MONDAYS-THURSDAY FASTING AND NOT FASTING**

Written by:

**\*Ainul Fithri Ramadhany  
NIM.422021728001**

It has been reviewed and recommended to meet scientific standards, in terms of both scope and quality.

It has been approved to be presented on: Wednesday, 16 April 2025

**Supervisor I**

Amilia Yuni Damayanti, S.Gz., M.Gizi  
NIDN. 0722078904

**Supervisor II**

Indahtul Mufidah, S.Gz., M.Gz.  
NIY. 180609

Approved by,

**Head of Nutrition Science Department  
Faculty of Health Science, Universitas Darussalam Gontor**

**Lulu\* Luthfiya, S.Gz., M.P.H.  
NIDN. 0718019203**

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## VALIDITY SHEET

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It is hereby stated that the thesis with the title:

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Written by:

**'Ainul Fithri Ramadhany**  
**NIM.422021728001**

Has been tested and approved & before the Thesis Examiner Board

On: Wednesday, 16 April 2025

**Supervisor I**

Amilia Yuni Damayanti, S.Gz., M.Gizi  
NIDN. 0722078904



**Supervisor II**

Indahtul Mufidah, S.Gz., M.Gz  
NIY. 180609



**Examiner**

Kartika Pibriyanti, S.KM., M.Gizi.  
NIDN. 0704029003



*Approved by,*

**Head of Nutrition Science Department**  
**Faculty of Health Science, Universitas Darussalam Gontor**



Lulu' Luthfiya, S.Gz., M.P.H.  
NIDN. 0718019203

UNIVERSITAS DARUSSALAM GONTOR

**ABSTRACT**

**THE DIFFERENCE IN HEMOGLOBIN LEVELS AND  
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THURSDAY FASTING AND NOT FASTING**

**‘AINUL FITHRI RAMADHANY**

**422021728001**

Nutrition problems occurred during the transition from adolescence to adulthood, including a decrease in hemoglobin levels and malnutrition. Female students in Islamic boarding schools who fasted experienced a reduction in meal frequency from three times a day to twice a day, without snacks in between. Insufficient nutrient intake can affect nutrient balance and lower hemoglobin levels. In addition to decreased hemoglobin levels (anemia), nutritional status can also lead to health problems. This study aims to assess the differences in hemoglobin levels and nutritional status between Islamic boarding school students observing Monday-Thursday fasting and those not observing it. The research employed a cross-sectional method with purposive sampling, involving 88 respondents, categorized into two groups: individuals fasting on Mondays-Thursdays and those not fasting. The sample size was determined using the unpaired categorical comparative formula. Primary data on hemoglobin levels were measured using the easy touch gchb device, primary data on nutritional status data were obtained through height and weight measurements, and dietary habits were using the sq-ffq questionnaire over the last three months, conducted over two weeks in February 2025. Data analysis was conducted using the Mann-Whitney test. The research results showed a significant difference in hemoglobin levels between the group that observed Monday-Thursdays for the past two months (6 times) and the non-fasting group, with the Mahasantri majority having normal hemoglobin levels  $p = 0.002$  ( $p < 0.05$ ). However, there was no significant difference in nutritional status between students fasted and those not fast, with  $p = 0.161$  ( $p > 0.05$ ). In conclusion, there is a significant difference in hemoglobin levels between students who fast on Monday-Thursdays for the past two months (6 times) and those not fast, whereas no significant difference was found in the nutritional status between the two groups.

**Keyword :** Hemoglobin levels, Mahasantri, Monday-Thursday fasting, nutritional status

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Ngawi, 16 April 2025

The Author



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## STATEMENT OF RESEARCH AUTHENTICITY

### AUTHENTICITY STATEMENT

It is hereby declared by,

Name : 'Ainul Fithri Ramadhany  
NIM : 422021728001  
Faculty : Health Science  
Study Program : Nutrition Science  
Thesis Title : The Different in Haemoglobin Levels and  
Nutritional Status With Mahasantri Mondays-  
Thursday Fasting and Not Fasting

I sincerely declare that the research contained in this thesis in my own work and does not belong to anyone else. This thesis has never been published before, except for some parts with original references.

If in the future it is found that this work is plagiarism, I am ready to be given administrative and academic sanctions

Ponorogo, February 28<sup>th</sup> 2025

Writer,



'Ainul Fithri Ramadhany  
NIM. 422021728001

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