



INTERMEDIARY REPORT TO THE NESTLE FOUNDATION

EMPOWERING WEEKLY IRON-FOLIC ACID (WIFA) SUPPLEMENTATION PROGRAM FOR ADOLESCENT SCHOOL GIRLS IN HIGH STUNTING AREAS (YEAR-2)



By:

Ali Khomsan
Hadi Riyadi
Vieta Annisa N
Guntari Prasetya
Annisa Rizkiriani
Ria Amelia
Mira Dewi



IPB UNIVERSITY
AND STIKES MITRA KELUARGA
MARCH 2025

INTERMEDIARY REPORT TO THE NESTLE FOUNDATION

EMPOWERING WEEKLY IRON-FOLIC ACID (WIFA) SUPPLEMENTATION PROGRAM FOR ADOLESCENT SCHOOL GIRLS IN HIGH STUNTING AREAS (YEAR-2)

By:

**Ali Khomsan
Hadi Riyadi
Vieta Annisa Nurhidayati
Guntari Prasetya
Annisa Rizkiriani
Ria Amelia
Mira Dewi**

**Department of Community Nutrition
Faculty of Human Ecology
IPB University
March 2025**

REPORT TO THE NESTLE FOUNDATION

☒ Intermediary Report

☐ Final Report

Project title	
EMPOWERING WEEKLY IRON-FOLIC ACID (WIFA) SUPPLEMENTATION PROGRAM FOR ADOLESCENT SCHOOL GIRLS IN HIGH STUNTING AREAS (YEAR-2)	
Date of Submission of this Report	March 21th, 2025
This report covers the period from (dd/mm/yy) to (dd/mm/yy)	26/09/2024 – 18/03/2025
Name(s) of person(s) responsible for grant application and report	Prof Dr Ali Khomsan
Institution	IPB University
Exact Address	Department of Community Nutrition IPB University Bogor 16680, Indonesia
Phone (including country code)	62-251-8625066
FAX (including country code)	62-251-8622276
e-mail	erlangga259@yahoo.com

I. Summary of the present status of the study

This study was conducted in Cianjur District, West Java Province, an area identified as a locus of stunting. The research began with a workshop attended by staff from the Health Office, Education Office, Public Health Centers, and targeted schools. During the workshop, discussions were held regarding the action research plan focusing on adolescent school girls, mothers, and teachers. Additionally, participants presented issues related to anemia in Cianjur District and the implementation of the Weekly Iron-Folic Acid (WIFA) Supplementation program in schools.

Data collection took place at the study sites, involving a total of 120 respondents (adolescent school girls) from several high schools. SMAN 1 and SMA PGRI served as the control group, while SMA 2 and SMA Pasundan were designated as the intervention group. Quantitative data collection was conducted among the respondents, their mothers, and the teachers responsible for the IFA Supplementation Program at the schools.

The analyzed baseline data indicates that the WIFA Supplementation Program has been implemented for more than 1–2 years. However, the distribution of IFA tablets to respondent still varies (weekly, monthly, or every semester), despite the recommendation that IFA should be provided weekly. Approximately 33.3%–55.0% of respondents did not consume the provided tablets due to reasons such as forgetting or concerns about side effects. The percentage of respondents with anemia ranged from 21.7% to 23.3%. Meanwhile, the average nutrition knowledge score among adolescent school girls remained low (52.3–54.0 out of a maximum score of 100), as did the knowledge score among teachers (51.5–57.0). Data on respondents' food habits revealed that the majority (55.0%–65.0%) only ate twice a day, while the percentage of respondents who had breakfast daily ranged from 43.3% to 50.0%. Additionally, nutrient intake data showed that most respondents did not meet the adequacy levels for energy, protein, and other essential nutrients.

Our research is strongly supported by local government-related institutions, and our local enumerators are bachelor's graduates from IPB University, ensuring they have experience in conducting field surveys on community nutrition. Currently, we are implementing an intervention program that involves education for respondents, mothers, and teachers. The intervention is expected to be completed by August 2025.

II. Research Description

Survey of Study Sites. A survey to determine high schools as the study sites was conducted by the research team after obtaining a research permit from Cianjur District's National Unity and Political Agency. The research team first visited Health Office, Education Office, and Public Health Centers in Cianjur District to get the initial information of WIFA supplementation in Cianjur and recommendation of schools that fit the research criteria, i.e., already implemented WIFA supplementation for more than 6 months. Based on the recommendation, selected high schools were: (1) SMAN 1 Cianjur, (2) SMAN 2 Cianjur, (3) SMA Pasundan, and (4) SMA PGRI. The selected schools are under Cianjur Public Health Center, Karangtengah Public Health Center, and Nagrak Public Health Center working areas. During the discussion with the schools' person in charge for WIFA supplementation program. It was decided that intervention group will be implemented in SMAN 2 Cianjur and SMA Pasundan, while control group will be implemented in SMAN 1 Cianjur and SMA PGRI. The research team then went to each school to get a list of respondents that will be sampled and arrange the schedule for data collection. Data collection took place in January 2025.

Survey Permit. Research permit was issued by Cianjur District's National Unity and Political Agency, an institution which has the authority to grant a research permit that will be sent to Health Offices, Education Offices, Public Health Centers, and schools as the study site. After research permit was issued, the research team visited all the study sites to explain the background, aim, and activities plan of the study to the subjects and asked their willingness to participate in the study. Ethical clearance was administered by the research team by sending the application form, proposal, and study protocol to Ethics Committee of Health Researches of University of Muhammadiyah Semarang (Number: 705/KE/09/2024). The documents for ethical clearance submission had been approved and the researchers could then begin the study activities as per the planned stages.

Study Approach in Local Sectors. The study approach was conducted by visiting local health and education offices, public health centers, and targeted schools in the study sites. Afterwards, the study was commenced with a workshop attended by representatives from the Health Office, Education Office, Public Health Centers, and selected schools. During the session, the researchers discussed the action research plan. District offices and schools also shared insights on anemia-related challenges in Cianjur District and reviewed the implementation of the Weekly Iron-Folic Acid (WIFA) Supplementation program in schools. Throughout the workshop, same understanding was obtained regarding the objective of the study, hence, their participation in the research activities can be optimized.

Developing Questionnaires. Study instruments in the form of questionnaires had been developed by researchers and the team. A systematic questionnaire consisted of closed questions to answer the objective of the study. The questionnaires were categorized according to the targeted respondents, including adolescent school girls, teachers, and mothers.

1. The questionnaire for respondents (adolescent school girls) consisted of variables as mentioned in Table 1. Each respondent was assigned to fill out and answer the questionnaire by themselves with the assistance of the enumerator team. Some variables (food intake and physical activity) had spent 2-3 days to be collected.
2. The questionnaire for teachers was subjected to teacher in order to determine their knowledge and attitude related to anemia and WIFA supplementation.
3. The questionnaire for mothers was subjected to mothers in order to determine their knowledge related to anemia and WIFA supplementation at the baseline and endline. For those mothers who have their daughter as the respondent in the intervention group, they will be asked to participate in the nutrition education and

cooking class series in order to compare their knowledge before and after the intervention regimen and fill in the questionnaires accordingly.

Table 1 Variable method matrix

No.	Targeted respondents	Item of questionnaire	Method of data collection	Time period of data collection
1	Adolescent school girls	a. Identity b. Characteristic of respondents c. Personal hygiene and sanitation d. IFA consumption practice e. Knowledge related to anemia and IFA supplementation f. Attitude related to anemia and IFA supplementation g. Anthropometric parameters h. Hemoglobin concentrations i. Food habit j. Food intake through 3 days of food records k. Food consumption frequency through food frequency questionnaire l. Physical activity through 2 days record	Self-administered questionnaires with assistance	- Item a – c: baseline data - Item d – l: baseline and endline data
2	Teachers	a. Identity b. Knowledge related to anemia and IFA supplementation c. Attitude related to anemia and IFA supplementation	Self-administered questionnaires with assistance	Baseline and Endline data
3	Mothers	a. Identity b. Characteristic of respondents (socio-economic) c. Knowledge related to anemia and IFA supplementation	Self-administered questionnaires with assistance	- Item a – b: baseline data - Item c: baseline and endline data

Notes: IFA, iron-folic acid.

Validity and reliability of questionnaires. As our best practice, we have had our questionnaire validated and measured its reliability. We have used our previous reference study conducted in Cianjur District, West Java, and the questionnaires have been modified according to the current objectives. Statistically, knowledge and attitude questionnaires regarding anemia and IFA supplementation consist of 53 items. At the first analysis, 39.6% of items were validated, 85.7% were validated at the second repeated analysis, and 100% were validated at the third repeated analysis (n=62). The reliability test showed that all items were considered to be reliable (Cronbach's alpha 0.767 at the 1st analysis, 0.892 at the 2nd analysis, and 0.830 at the 3rd analysis). After the development of validated questionnaires, training of the enumerator, tryout of the questionnaires by the enumerator, and a simulation of data entry were conducted.

Training of Enumerator, Questionnaires Tryout, and Simulation of Data Entry.

Training the enumerator was conducted to verify the same perception and understanding between researcher and enumerator regarding the set of questionnaires, its objectives, and the process of how to collect the data. The questionnaire tryout was conducted in certain locations based on the feasibility of the enumerator, and the sample respondents for the tryout were considered to be in similar criteria with targeted study respondents. The purpose of the tryout was to know the degree of feasibility of the instrument to be administered in the fields. Based on the

questionnaire's tryout, researchers redeveloped the instrument until it was ready for data collection. After compiling all the data collection, the enumerator and researcher conducted the simulation of data cleaning and entry; hence, each enumerator has the same understanding to do the data entry.

Sampling and Baseline Data Collection. The minimum samples of this study were 120 respondents. Knowledge and attitude of anemia and WIFA supplementation was measured to school girls (142 subjects), their parents (142 subjects), and teachers from four schools (20 subjects), hence the eligible number of respondents who have participated in this study was 120 (school girls), 120 (mothers), 19 (teachers). In-depth interview was conducted with one Health Office officer, one District Office officer, two Public Health Center officers, the headmaster of the school, and two supervisor health units at each study site. Baseline data collection was carried out during the same period in January 2025. The type of data collected from this study were primary data collected using questionnaires, measurements, and in-depth interview and secondary data provided by offices and schools.

Analysis of Baseline Data. The data were analyzed descriptively to get early information on the characteristics of the subjects. The data includes: (1) socioeconomic characteristics of the respondent; (2) hygiene practice; (3) sanitation facility at home; (4) WIFA supplementation knowledge, attitude, and practice; (5) food consumption; (6) food habits; (7) WIFA program management; (8) WIFA coverage and consumption.

Development of Modules. The nutrition education modules developed in this study consist of two types: modules for respondents (adolescent girls) in type of video and modules for teachers, peer motivators, and parents. The nutrition education module for respondents is delivered in the form of short educational videos covering six main topics: anemia, WIFA (Weekly Iron and Folic Acid) supplementation, ways to overcome side effects and enhance WIFA supplementation effectiveness, balanced nutrition for adolescent girls, a healthy lifestyle, and understanding iron (Table 2).

Table 2 Nutrition education theme and topics for respondents

Theme	Week	Topics
1 st Month Anemia	1	What is anemia;
	2	Causes, symptoms, and consequences of anemia;
	3	Ways to prevent anemia;
	4	Ways to overcome symptoms of anemia
2 nd Month WIFA supplementation	5	What is WIFA supplementation;
	6	Benefits of WIFA supplementation;
	7	Dose and duration of WIFA supplementation;
	8	Hygiene and sanitation practice
3 rd Month Ways to overcome side effects and boosts WIFA supplementation effect	9	Possible side effects of WIFA consumption;
	10	Ways to overcome side effects of WIFA consumption;
	11	Healthy foods to boosts WIFA supplementation effects
	12	Healthy lifestyle to boosts WIFA supplementation effects
4 th Month Healthy adolescent school girls	13	Principle of balanced diet for adolescent school girls
	14	Healthy food menu for active teens
	15	Healthy snack for active teens
	16	Simple exercise for active teens
5 th Month Healthy lifestyle	17	Breakfast as a healthy lifestyle
	18	Healthy food menu for breakfast
	19	Understanding food label
	20	Understanding heme and non-heme iron
6 th Month Understanding Iron	21	Iron in the immune system and brain
	22	Iron requirement
	23	Iron content in foodstuffs and iron negative list
	24	Iron and special diet

Each topic consists of four videos, totaling 24 videos, which are uploaded to the TikTok application. Each video lasts one minute and is watched once a week, coinciding with IFA consumption day every Friday morning for six months. In addition to the videos, educational materials are also provided in printed form on the back of the monitoring card. The monitoring card is a compliance card for IFA consumption, which respondents fill out independently every week. This card is validated by teachers. Over six months, respondents receive six monitoring cards, each containing different educational materials that align with the topics in the videos.

The nutrition education module for teachers, peer motivators, and parents is designed as educational counseling material in the form of Microsoft PowerPoint presentations. This module covers three main topics, namely anemia, WIFA supplementation, and balanced nutrition and a healthy lifestyle for adolescents (Table 3). Counseling sessions are conducted three times, with more in-depth material compared to the modules for respondents. Additionally, during the third counseling session, a cooking class is conducted to provide practical skills in selecting food ingredients and cooking techniques that can enhance iron intake in daily diets.

Table 3 Nutrition education theme and topics for teachers, peer motivators, and parents

Time	Theme	Topics
1	Anemia	What is anemia; Causes, symptoms, and consequences of anemia; Ways to prevent anemia; Ways to overcome symptoms of anemia
2	WIFA supplementation	What is WIFA supplementation; Benefits of WIFA supplementation; Dose and duration of WIFA supplementation; Hygiene and sanitation practice Possible side effects of WIFA consumption; Ways to overcome side effects of WIFA consumption
3	Healthy adolescent school girls and healthy lifestyle	Principle of balanced diet for adolescent school girls Healthy food menu for active teens Healthy snack for active teens Simple exercise for active teens Breakfast as a healthy lifestyle Healthy food menu for breakfast Understanding food label Understanding heme and non-heme iron

Contribution of Others. These activities were fully supported by Head of Health Offices, Head of Education Offices, Head of Public Health Centers, and Headmaster of Schools. Their support was very meaningful for the implementation of study.

Several Temporary Results of Baseline Data.

School profile

➤ Profile of SMA Negeri 1 Cianjur

SMA Negeri 1 Cianjur is one of the state senior high schools located at Jalan Pangeran Hidayatullah No. 62, Cianjur, West Java. The principal is Dr. Agam Supriyanta, M.M.Pd, M.H. The school was founded in 1959 and has an accreditation A. The school has a land area of 23,500 m² and a building area of 12,275 m². The school's learning process uses the curriculum 2013, and there are three study programs, such as Language, Science, and Social Studies. The school is equipped with supporting facilities for learning and extracurricular activities, such as laboratories, libraries, sports fields, and multimedia rooms. The number of respondents is 1,363 people and the number of teachers is 76 people. SMA Negeri 1 Cianjur has many achievements in various fields, such as academics, sports, and arts.

➤ Profile of SMA Negeri 2 Cianjur

SMA Negeri 2 Cianjur is located at Jalan Siliwangi No. 16, Cianjur, West Java. The principal is Haruman Taufik Kartanegara, S.Pd., M.M.Pd. The school was founded in 1982 and has an accreditation A. The school has a land area of 14,500 m² and a building area of 7,500 m². The learning process at the school uses the 2013 curriculum. There are three study programs, such as Language, Science, and Social Studies. The school is equipped with complete supporting facilities for learning and extracurricular activities, such as laboratories, libraries, sports fields, and multimedia rooms. The extracurricular activities provided are Sports such as soccer, basketball, and volleyball; Arts such as music, dance, and theater; and Scientific work such as debate and olympiad. The school has 1,242 respondents and 65 teachers. The school has many achievements in various fields, such as academics, sports, and arts.

➤ Profile of SMA 1 Pasundan Cianjur

SMA Pasundan 1 Cianjur is a private high school located at Jalan Pasundan No. 31, Cianjur, West Java. The principal is Mr. Sapudin. The school was founded in 1961 by several educational figures, including Mr. Sobandi, Mr. Moch Muhtar, Mr. Duyeh Efendi, and Mr. Edi Suhenda. The school has accreditation A from the National Accreditation Board for Schools/Madrasahs (BAN-S/M). The school's learning process uses the 2013 curriculum. There are three study programs: Language, Science, and Social Studies. The school is equipped with facilities to support complete learning and extracurricular activities, such as laboratories, libraries, sports fields, and multimedia rooms. The school has around 1,000 respondents and 28 teachers. The school has achievements in fields such as academics, sports, and arts.

➤ Profile of SMA PGRI Cianjur

SMA PGRI Cianjur is a private high school located at Jalan Pangeran Hidayatullah No. 33, Cianjur, West Java. The principal is Drs. Tatang Sukmara. The school was founded in 1984 by the Indonesian Teachers Association (PGRI) Cianjur Branch. The school has A accreditation from the National Accreditation Board for Schools/Madrasahs (BAN-S/M). The school's learning process uses the 2013 curriculum. There are three study programs, namely, language, science, and social studies. The school has complete supporting facilities for learning and extracurricular activities, such as twenty classrooms, five laboratories, a library, a sports field, and a multimedia room. The school has around 800 respondents and 40 teachers. The school has achievements in various fields, such as academics, sports, and arts.

Characteristics of Respondents

This study involved 120 adolescent school girls, divided equally into a control group (60) and an intervention group (60). Respondents were from both public and private schools. The control group had more students from public schools (71.7%) than private schools (28.3%), while the intervention group had 60% from public schools and 40% from private schools.

The characteristics of respondents taken from this study were age, number of family members, pocket money, and communication money. The average age was similar in both groups— 16.3 ± 0.5 years in the control group and 16.4 ± 0.5 years in the intervention group. Most respondents had four or fewer family members (91.7% in the control group, 93.3% in the intervention group). The average household size was 2.7 ± 1.15 for the control group and 2.9 ± 0.92 for the intervention group. On average, weekly pocket money was IDR 241,333 in the control group and IDR 212,027 in the intervention group. Weekly communication costs averaged IDR 18,669 (control) and IDR 20,993 (intervention). Further details can be found in Table 4.

Table 4 Respondents Characteristics				
Characteristics (n=120)	Control		Intervention	
	n	%	n	%
School type				
- Public school	43	71.7	36	60.0
- Private school	17	28.3	24	40.0
Age				
- 15	0	0	1	0.8
- 16	39	32.5	31	25.8
- 17	20	16.7	28	23.3
- 18	1	0.8	0	0
Mean ± SD	16.3± 0.5		16.4±0.5	
Number of family members (persons)				
- ≤ 4	55	91.7	56	93.3
- 5-6	4	6.7	4	6.7
- >6	1	1.7	0	0.0
Mean ± SD	2.70 ± 1.15		2.90 ± 0.92	
Pocket money (IDR per week)				
- ≤ 70.000	1	1.7	2	3.3
- > 70.000 – 140.000	20	33.3	22	36.7
- > 140.000 – 210.000	14	23.3	21	35.0
- > 210.000	25	41.7	15	25.0
Mean ± SD	241,333± 157,031		212,027 ± 151,153	
Median	200,000		175,000	
Min ; Max	(46,667; 1,050,000)		(14,000;1,050,000)	
Communication cost (IDR per week)				
- ≤ 10.000	9	15.0	14	23.3
- > 10.000 – 20.000	30	50.0	28	46.7
- > 20.000 – 30.000	16	26.7	9	15
- > 30.000	5	8.1	9	15
Mean ± SD	18,669 ± 14,466		20,993 ± 19,764	
Median	14,000		14,000	
Min; Max	0;100,000		0;98,000	

Characteristics of Mothers of Respondents

Table 5 Mothers’ Characteristics

Characteristics of mothers	Control		Intervention	
	n	%	n	%
Age (y.o.)				
- <30	0	0.0	0	0.0
- 30 - 40	10	16.7	13	21.7
- 40 - 50	40	66.7	33	55.0
- >50	10	16.7	14	23.3
Level of education				
- Do not attend school	1	1.7	0	0.0
- Elementary school	10	16.7	11	18.3
- Junior high school	7	11.7	11	18.3
- Senior high school	18	30.0	27	45.0
- University	24	40.0	11	18.3
Occupation				
- Housewife	37	61.7	40	66.7
- Civil servant/Police/Military	9	15.0	9	15.0
- Private sector employee	2	3.3	0	0.0
- Laborer/Worker	0	0.0	2	3.3
- Entrepreneur/Trader	6	10.0	6	10.0
- Service worker (tailor. salon)	0	0.0	1	1.7
- Others	6	10.0	2	3.3

The majority of mothers in both groups were aged 40–50 years. In the control group, 16.7% were 30–40 years old, 66.7% were 40–50 years old, and 16.7% were over 50. The intervention group had a similar pattern, with 21.7% aged 30–40, 55% aged 40–50, and 23.3% over 50.

Mothers in the control group were mostly university graduates (40%), while those in the intervention group were predominantly high school graduates (45%). The distribution in the control group was: no formal education (1.7%), elementary (16.7%), junior high (11.7%), senior high (30%), and university (40%). In the intervention group: elementary (18.3%), junior high (18.3%), senior high (45%), and university (18.3%).

Mothers' occupations varied, but most were housewives (61.7% in the control group, 66.7% in the intervention group). Other professions included Civil Servants/Police/Military (15% in both groups), traders (10% in both), and private employees (3.3% in the control group). The intervention group also included factory workers (3.3%) and service workers (1.7%). Further details are provided in Table 5.

Characteristics of Teachers

This study also collected data on teachers' fields of expertise. In the control group, the distribution was as follows: Indonesian (30%), Economics (10%), Science/Biology (10%), Civic Education (20%), and School Health Unit Officer (10%). In the intervention group, teachers specialized in Indonesian (11.1%), Science/Biology (44.4%), Civic Education (11.1%), History (11.1%), Islamic Religious Education (11.1%), and School Health Unit Officer (11.1%).

Table 6 Teachers' Characteristics

Characteristics of teachers (n=19)	Control		Intervention	
	n	%	n	%
Field of study				
- Indonesian	3	30.0	1	11.1
- Economics	1	10.0	0	0.0
- Science or Biology	1	10.0	4	44.4
- Civic education	2	20.0	1	11.1
- History	0	0.0	1	11.1
- Islamic religious education	0	0.0	1	11.1
- Art and culture	1	10.0	0	0.0
- School health unit	1	10.0	1	11.1

Personal Hygiene Practice of Respondents

This study examined respondents' personal hygiene practices in both the control and intervention groups. In the control group, 65% always washed their hands, while 35% did so sometimes. In the intervention group, 45% reported always washing their hands, and 55% did so sometimes. Most respondents in both groups bathed twice daily. In the control group, 98.3% bathed twice, while 1.7% bathed once. In the intervention group, 83.3% bathed twice, 8.3% bathed once, and another 8.3% bathed three times daily.

The majority in both groups brushed their teeth 2–3 times daily. In the control group, 88.3% brushed 2–3 times, while 11.7% brushed more than three times. In the intervention group, 93.3% brushed 2–3 times, and 6.7% brushed more than three times. Most respondents washed their hair with shampoo 2–3 times per week. In the control group, 75% washed 2–3 times, 3.3% washed once, and 21.7% washed more than three times. In the intervention group, 85% washed 2–3 times, 6.7% washed once, and 8.3% washed more than three times.

Table 7 Respondents' Hygiene Practice

Personal hygiene practice	Control		Intervention	
	n	%	n	%
Washing hands with soap before eating				
- Always	39	65.0	27	45.0
- Sometimes	21	35.0	33	55.0
- Never	0	0.0	0	0.0
Frequency of bathing in a day				
- 1 time	1	1.7	5	8.3
- 2 times	59	98.3	50	83.3
- 3 times	0	0.0	5	8.3
Frequency of brushing teeth in a day				
- 1 time	0	0.0	0	0.0
- 2-3 times	53	88.3	56	93.3
- More than 3 times	7	11.7	4	6.7
Frequency of washing hair using shampoo in a week				
- 1 time	2	3.3	4	6.7
- 2-3 times	45	75.0	51	85.0
- More than 3 times	13	21.7	5	8.3
- Never	0	0.0	0	0.0
Cutting nails at least once a week				
- Yes	50	83.3	42	70.0
- No	10	16.7	18	30.0
Use personal towels				
- Yes	58	96.7	56	93.3
- No	2	3.3	4	6.7
Dry towels after use				
- Always	51	85.0	42	70.0
- Sometimes	7	11.7	18	30.0
- Never	2	3.3	0	0.0
Frequency of changing clothes in a day				
- 1 time	5	8.3	5	8.3
- 2-3 times	55	91.7	55	91.7

This study also examined respondents' hygiene habits, including nail cutting, towel use, and clothing changes. In the control group, 83.3% trimmed their nails at least once a week, while 16.7% did not. In the intervention group, 70% maintained this habit, while 30% did not. Most respondents in both groups used personal towels—96.7% in the control group and 93.3% in the intervention group. Among control group respondents, 85% always dried their towels after use, 11.7% did so sometimes, and 3.3% never did. In the intervention group, 70% always dried their towels, while 30% did so sometimes. In regard of clothing changes, both groups followed a similar pattern: 91.7% changed clothes 2–3 times a day, while 8.3% changed only once. Further details are available in Table 7.

Respondents' Sanitation Facilities at Current Residence

This study collected data on respondents' living arrangements and sanitation facilities. In the control group, most respondents (93.3%) lived with their parents, while 3.3% lived with siblings and another 3.3% in dormitories. In the intervention group, all respondents (100%) lived with their parents. In regard of drinking water sources, 80% of control group relied on refilled water, 15% used measured tap water, 3.3% used drilled wells or pumps, and 1.7% used unimproved spring water. In the intervention group, 63.3% used refilled water, 25% used measured tap water, 10% relied on drilled wells or pumps, and 1.7% used unimproved spring water.

Table 8 Respondents' Sanitation Facilities at Current Residence

Sanitation facilities at current residence	Control		Intervention	
	n	%	n	%
Water for drinking				
- Refilled water	48	80.0	38	63.3
- Metered tap water	9	15.0	15	25.0
- Drilled/pumped well	2	3.3	6	10.0
- Water springs (unimproved)	1	1.7	1	1.7
Water for bathing				
- Metered tap water	35	58.3	30	50.0
- Drilled/pumped well	23	38.3	29	48.3
- Water springs (unimproved)	2	3.3	1	1.7
Presence of bathroom				
- Present	60	100.0	60	100.0
- Not Present	0	0.0	0	0.0
Ownership of sanitation facility (bathing/washing/toilet place)				
- Private	58	96.7	59	98.3
- Public	2	3.3	1	1.7
Distance of septic tank to water source (if sanitation facility is owned privately)				
- < 10 meters	5	4.2	4	6.7
- ≥ 10 meters	54	45.8	27	45.0
- Water source is not drilled/pumped well	59	49.2	29	48.3
Presence of ventilation that can be opened				
- Enough	60	100.0	59	98.3
- Not enough	0	0.0	1	1.7
Garbage disposal				
- Garbage dump	60	100.0	58	96.7
- Rivers. Ditches. and others	0	0.0	2	3.3

This study examined respondents' access to sanitation facilities, including water sources for bathing, bathrooms, and waste disposal. In the control group, 58.3% used measured tap water, 38.3% relied on drilled wells or pumps, and 3.3% used unimproved spring water for bathing. Meanwhile in the intervention group, 50% used measured tap water, 48.3% used drilled wells or pumps, and 1.7% used unimproved spring water for bathing.

All respondents in both groups had access to a bathroom. Most had private sanitation facilities, with 96.7% in the control group and 98.3% in the intervention group. Among those with private sanitation, 45.8% of the control group and 45% of the intervention group had a septic tank at least 10 meters from their water source. In both groups, nearly half (control: 49.2%, intervention: 48.3%) used improperly drilled or pumped water sources.

All control group respondents had adequate ventilation, while in the intervention group, 98.3% reported adequate ventilation, and 1.7% found it insufficient. Waste disposal was mostly in garbage dumps (100% in the control group, 96.7% in the intervention group), though 3.3% of the intervention group disposed of waste in rivers, ditches, or other locations.

Practice of IFA Consumption at School

History of receiving IFA supplementation

Table 9 presents the distribution of respondents (adolescent school girls) according to their history of receiving IFA supplementation. Respondents were asked to report their history of receiving IFA supplementation to the teacher, including the duration of time, frequency of receiving, and the number of IFA supplements taken within the last month.

Table 9 Distribution of Adolescent School Girls based on History of Receiving IFA Supplementation

History of receiving IFA supplementation	Control		Intervention	
	n	%	n	%
Time of receiving IFA supplement at school				
- Less than a year	0	0.0	0	0.0
- Within the last year (1 year)	0	0.0	0	0.0
- More than 1-2 year	60	100.0	60	100.0
Frequency of receiving IFA supplement				
- Every week	32	53.3	60	100.0
- Every month	14	23.3	0	0.0
- Every semester	14	23.3	0	0.0
Numbers of IFA supplement received within the last month				
- < 2 tablets	21	35.0	30	50.0
- ≥ 2 tablets	39	65.0	30	50.0
Mean ± SD	1.82 ± 0.87		1.87 ± 1.95	

Table 9 shows that all of the respondents in both groups (100%) have received IFA at school for more than a year. All of the respondents in the intervention group have received IFA supplements every week, while only 53.3% of the respondents in the control group have received it every week; the rest of them received it every month or even every semester. Within the last month, as many as 50% and 65% of the respondents in the intervention and control groups have received IFA supplements for more than 2 tablets. The previous study by Prasetya et al. (2022) reported that the majority of adolescent school girls in Cianjur Regency (76.8%) had received IFA every week.

History of IFA consumption

Table 10 reported the history of IFA consumption in adolescent school girls. Most respondents in both groups consumed the provided IFA tablets (66.7% versus 55.5%), and by the last week prior to the beginning of the study, as many as 85% of respondents in the control group and 45% of respondents in the intervention group had consumed the IFA supplement. As for the location to take IFA tablets, most respondents in both groups take IFA supplements at school (62.5% versus 69.7%), and some of them take it at home (30% in the control group versus 12.1% in the intervention group), while for those who consume it both at school and at home, were distributed among 7.5% of respondents in the control group and 18.2% of respondents in the intervention group.

During the last month, 50% of respondents in the control group consumed IFA supplements for more than 2 tablets, while in the intervention group as many as 66.7% of respondents consumed it for more than 2 tablets a month. Not so many respondents in both groups acknowledge the benefit after taking the IFA supplement. Only 45.5% of respondents in the intervention group mentioned that feeling fresh and well was the benefit after IFA consumption. There 42.4% of respondents chose that taking IFA supplements provides no benefit. In the control group, the response was quite similar, a few of respondents acknowledge it as feeling fresh and well (37.5%), while half of them responded as have no benefit.

Table 10 Distribution of Adolescent School Girls based on History IFA Consumption

History of IFA consumption at school	Control		Intervention	
	n	%	n	%
Consume the IFA tablets that have been provided				
- Yes	40	66.7	33	55.0
- No	20	33.3	27	45.0
Consume the IFA tablets that have been provided last week				
- Yes	34	85.0	15	45.5
- No	6	15.0	18	54.5
The location to consume IFA tablet				
- At school	25	62.5	23	69.7
- At home	12	30.0	4	12.1
- At school and home	3	7.5	6	18.2
The number of IFA tablets consumed during the last month				
- < 2 tablets	20	50.0	11	33.3
- ≥ 2 tablets	20	50.0	22	66.7
Mean ± SD	1.63 ± 0.81		2.24 ± 1.79	
Median (Min:Max)	1.5 (1:5)		2 (0:5)	
Benefits after IFA consumption				
- Feeling more excited	3	7.5	2	6.1
- Feeling fresh and well	15	37.5	15	45.5
- Not easy to feel sleepy	1	2.5	6	18.2
- More focus on learning	1	2.5	1	3.0
- Have no benefit	20	50.0	14	42.4
Feeling side effect after consumption				
- Yes	17	42.5	10	30.3
- No	23	57.5	23	69.7
Type of side effect				
- Nausea	11	64.7	6	60.0
- Vomiting	0	0.0	1	10.0
- Difficult to defecate	0	0.0	0	0.0
- Dizziness	12	70.6	9	90.0
- Iron-likely odor when belching	5	29.4	2	20.0

Related to the potential side effect after consumption, most of the respondents (57.5% versus 69.7%) regard it as having no effect after IFA consumption. For those who got the feeling for any side effects, nausea and dizziness were the common noticeable side effects. According to their practice, in order to overcome the side effect, most of the respondents in the intervention group chose to take the IFA supplement before sleep or after meals, while in the control group the answer was quite varied, such as consuming it after meal (41.2%), asking for suggestions from a friend (23.5%), consuming it along with a banana (11.8%), and even stop consumption of IFA (23.5%).

Table 11 Methods to Overcome the Side Effects

Methods to overcome the side effects	Control		Intervention	
	n	%	n	%
Stop consuming IFA supplement	4	23.5	1	10.0
Asking for advice from teacher	1	5.9	0	0.0
Asking for suggestion from friend	4	23.5	0	0.0
Consume IFA supplement before sleep	0	0.0	4	40.0
Consume IFA supplement after meal	7	41.2	5	50.0
Consume IFA supplement along with banana	2	11.8	3	30.0

Table 12 presents the history of compliance and the reasons why participants adhere to consuming the IFA supplement. The majority of respondents (60% in the control group versus 93.3% in the intervention group) obtained an explanation from the teacher regarding the IFA supplementation, and most of them mentioned that they got

the information regarding the benefits of the IFA supplement. The most selected reason for compliance was due to IFA benefit to prevent anemia, as considered by 85% of respondents in both groups. Some of the respondents took the IFA supplement due to teacher advice and recommendation by health workers. Conversely, the reason for those who were not willing to consume was due to forgetfulness, fear of side effects, and the unpleasant taste of the tablet. A previous study in Cianjur District also found that fear of the side effect, the tablet taste, and forgetfulness was the most common reason for non-adherence to WIFA supplementation (Prasetya, et al., 2022). A similar finding was also reported by a study in Bali that found that for those respondents who were not taking IFA supplementations, the reasons were due to the unpleasant taste of tablets, forgetfulness, losses, taking other drugs, and nausea (Handayani, et al., 2013).

Table 12 Distribution of Adolescent School Girls based on the Compliance for Taking IFA Supplement

Compliance	Control		Intervention	
	n	%	n	%
Obtaining the explanation from teacher regarding the IFA supplementation				
- Yes	36	60.0	56	93.3
- No	24	40.0	4	6.7
The message(s) obtained from teacher's explanation				
- Benefit provided from IFA supplement	36	100.0	52	92.9
- IFA dosage of supplementation	5	13.9	12	21.4
- Duration/length of time taking the IFA supplement	4	11.1	5	8.9
- The method to overcome the side effect of IFA supplement	6	16.7	16	28.6
The reason for compliance				
- Teacher's advice	22	36.7	17	28.3
- Recommendation from health workers	4	6.7	3	5.0
- To prevent anemia	51	85	51	85.0
The reason for non-compliance				
- Unpleasant taste of the tablet	10	16.7	15	25.0
- Feeling healthy	2	3.3	0	0.0
- Fear to side effect	28	46.7	25	41.7
- Fear for having adverse health effect	3	5.0	2	3.3
- Absence at school	3	5.0	8	13.3
- Forgetfulness	31	51.7	33	55.0
- Unnecessary	5	8.3	1	1.7.0
- Dark-colored stool	0	0.0	1	1.7
- Have no permission from family	1	1.7	3	5.0

Table 13 Crosstab Analysis between the Number of IFA Tablets Received and Consumed by Adolescent School Girls within the Last Month [n (%)]

IFA tablets received by adolescent school girls	IFA tablets consumed by adolescent school girls		Total
	<2 tablets	≥ 2 tablets	
< 2 tablets	26 (92.9)	2 (7.1)	28 (100.0)
≥ 2 tablets	5 (11.1)	40 (88.9)	45 (100.0)
Total	31(42.5)	42 (57.5)	73 (100.0)

Table 13 presents the crosstab analysis between the number of IFA tablets received and consumed by all total respondents. Respondents who received IFA tablets had less than 2 tablets within the last month; they also consumed less than 2 tablets. The more IFA tablets received by respondents the more IFA tablets consumed. In a previous study by Apriningsih et al. (2020), several factors related to high school female adolescents' compliance with consuming iron supplements were the student's age, knowledge, motivation, and self-efficacy; prior Hb level examination; school

organization to take IFA together; and teacher educating on the benefit of the iron tablet. Moreover, determination to take IFA tablets was highly associated with the school organizing respondents to take IFA tablets at school. It is suggested that building the teacher's capacity to educate respondents to consume WIFA supplements is essential.

Adolescent School Girls Nutritional Status

The average body weight of adolescent school girls is 52.2 kg versus 51.3 kg in the control and intervention groups, with an average height of 154 cm. These measures are preferable to the national average for Indonesian girls aged 16-18, who have an average body weight of 52 kg and a height of 159 cm. Adolescent schoolgirls' anthropometric measures can be seen in Table 14. Mid-upper arm circumference and waist circumference were measured, and their average was categorized in the normal criteria (≥ 23.5 cm and < 90 cm). Despite the anthropometric parameters, the hemoglobin concentration and blood pressure were examined at the beginning of the study, and it showed the average of normal hemoglobin concentrations (≥ 12 g/dL) and blood pressure in both groups.

Table 14 Adolescent School Girls' Anthropometric Measures

Variables	Control		Intervention	
	Mean	SD	Mean	SD
Weight (kg)	52.2	9.63	51.3	11.4
Height (cm)	154.4	5.23	154.6	4.94
Middle upper arm circumference (MUAC) (cm)	24.7	2.78	25.5	3.49
Waist circumference (cm)	74.4	7.6	76.3	10.16
Hemoglobin concentrations (g/dL)	12.8	1.5	12.7	1.43
Systole (mmHg)	112	11	111	12
Diastole (mmHg)	78	9	76	8

Table 15 Adolescent School Girls' Nutritional Status

Nutritional status	Control		Intervention	
	n	%	n	%
BMI-for-Age Z-score (BAZ)				
- Severely thin (Z score < -3 SD)	0	0.0	0	0.0
- Thin (-3 SD $\leq$ Z score < -2 SD)	2	3.3	3	5.0
- Normal (-2 SD $\leq$ Z score ≤ 1 SD)	45	75.0	45	75.0
- Overweight (1 SD $\leq$ Z score ≤ 2 SD)	11	18.3	8	13.3
- Obese (Z score > 2 SD)	2	3.3	4	6.7
Mean $\pm$ SD	0.09 $\pm$ 1.06		-0.13 $\pm$ 1.26	
Height-for-Age Z-score (HAZ)				
- Severely stunted (Z score < -3 SD)	1	1.7	0	0.0
- Stunted (-3 SD $\leq$ Z score < -2 SD)	9	15.0	10	16.7
- Normal (Z score ≥ -2 SD)	50	83.3	50	83.3
Mean $\pm$ SD	-1.24 $\pm$ 0.79		-1.21 $\pm$ 0.75	
Anemia category (g/dL)				
- Moderate anemia (8.0 - 10.9)	6	10.0	8	13.3
- Mildly anemia (11.0 - 11.9)	7	11.7	6	10.0
- Non-anemic (≥ 12)	47	78.3	46	76.7
Blood pressure (BP) (AAP 2017)				
- Normal BP ($\leq 120/80$)	48	80.0	44	73.3
- Elevated BP (120/80 - 129/80)	9	15.0	13	21.7
- Stage 1 Hypertension (130/80 - 139/89)	3	5.0	2	3.3
- Stage 2 Hypertension ($\geq 140/90$)	0	0.0	1	1.7
MUAC (%) (WHO-NCHS)				
- Wasting (70.1% - 84.5%)	5	8.3	10	16.7
- Normal (85% - 110%)	48	80.0	38	63.3
- Overweight (110% - 120%)	4	6.7	7	11.7
- Obesity ($> 120\%$)	3	5.0	5	8.3

After the measurement, the interpretation of nutritional status and the other parameters was determined. According to the nutritional status assessment towards the indicator of body mass index (BMI) for age, the majority of respondents have normal nutritional status (75%) in both groups. However, we still found some respondents who were categorized as overweight, thin, and obese individuals. Furthermore, based on height-for-age criteria, most of the respondents had normal nutritional status. There were ten respondents in both groups who were categorized as stunted (Table 15). The interpretation of hemoglobin concentrations was found that as many as 78.3% and 76.7% of respondents in the control and intervention groups were non-anemic, while 11.7% and 10% of respondents were categorized as mildly anemia, and there were 10% and 13.3% of respondents having moderate anemia (Table 15).

Adolescent School Girls' Nutrition Knowledge

The respondents' nutrition knowledge is categorized as low, moderate, and high. Table 16 shows that 75.0% of respondents in the control school and 93.3% of respondents in the intervention school have low nutrition knowledge. A considerable number of respondents mentioned that anemia could be detected by checking blood pressure (whereas it should be by checking Hb status), and very few were aware that anemia could occur due to worm infection. Additionally, respondents did not understand that anemia could negatively impact academic achievement. The average nutrition knowledge score was 52.3 in the control school and 54.0 in the intervention school, indicating a low score and the need to improve nutrition knowledge through educational interventions.

Table 16 Adolescent School Girls' Nutrition Knowledge

Level of knowledge	Control		Intervention	
	n	%	n	%
Low (score <60)	45	75.0	50	93.3
Moderate (score 60-80)	14	23.3	9	15.0
High (score >80)	1	1.7	1	1.7
Mean $\pm$ SD	52.3 $\pm$ 10.40		54.0 $\pm$ 8.98	

Mothers' Nutrition Knowledge

Table 17 shows the distribution of mothers' nutrition knowledge, where 51.7% of mothers in the control school and 65.0% of mothers in the intervention school have moderate nutrition knowledge. Additionally, a higher proportion of mothers with high nutrition knowledge was found in the control school (48.3%) compared to the intervention school (35.0%). Most mothers understand that anemia is not caused by low blood pressure. They are also aware that anemia can negatively impact their daughters' academic achievement. Moreover, a considerable number of mothers understand that vitamin C can help with iron absorption. Overall, the nutrition knowledge score of mothers in the control school (83.5) was higher than that in the intervention school (78.6).

Table 17 Mothers' Nutrition Knowledge

Level of knowledge	Control		Intervention	
	n	%	n	%
Low (score <60)	0	0.0	0	0.0
Moderate (score 60-80)	31	51.7	39	65.0
High (score >80)	29	48.3	21	35.0
Mean $\pm$ SD	83.5 $\pm$ 10.6		78.6 $\pm$ 11.8	

Teachers' Nutrition Knowledge

Table 18 shows teachers' nutrition knowledge, where none of the teachers fell into the high knowledge category. The percentage of teachers with low nutrition

knowledge was 50.0% in the control school and 66.7% in the intervention school. The average nutrition knowledge score of teachers was 57.0 in the control school and 51.5 in the intervention school. This indicates that teachers still need to improve their understanding of nutrition knowledge, considering that they are responsible for the IFA program at the school level. A significant number of teachers do not understand that anemia can be caused by worm infection. Additionally, many teachers are still unaware that IFA contains iron and folic acid.

Table 18 Teachers' Nutrition Knowledge

Level of knowledge	Control		Intervention	
	n	%	n	%
Low (score <60)	5	50.0	6	66.7
Moderate (score 60-80)	5	50.0	3	33.3
High (score >80)	0	0.0	0	0.0
Mean $\pm$ SD	57.0 $\pm$ 8.92		51.5 $\pm$ 11.12	

Energy and Nutrient Intake

The energy and nutrient intake of the respondents is presented in Table 19. In the control group, energy and nutrient intake was higher on weekends compared to weekdays. Conversely, in the intervention group, energy and nutrient intake tended to be higher on weekdays. When comparing the two groups, energy intake appeared to be higher in the control group, while the intake of certain nutrients, such as protein, vitamin C, iron, vitamin B6, folic acid, and vitamin B12, seemed relatively similar.

Table 19 Intake of Energy, Protein, Iron, Vitamin C, Vitamin B, and Folic Acid

Nutrients	Control				Intervention			
	Weekdays		Weekend		Weekdays		Weekend	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Energy (kcal)	1502	877.11	1608	727.37	1395	479.36	1372	518.44
Protein (g)	45.4	15.60	51.3	23.77	48.0	17.89	46.4	24.40
Vitamin C (mg)	24.38	36.64	33.68	56.13	21.21	21.05	28.15	46.42
Iron (mg)	6.85	5.45	8.64	8.42	6.74	5.11	6.13	3.91
Vit B6 (mg)	0.67	0.36	0.85	0.52	0.70	0.30	0.70	0.37
Folic Acid (mcg)	84.99	71.74	106.81	86.00	87.06	77.86	88.89	86.45
Vit B12 (mcg)	1.12	0.77	2.62	4.80	2.48	5.36	1.39	1.18

The adequacy of energy and nutrient intake is shown in Table 20. The data indicates that the average energy adequacy was only 74% and 66% in the control and intervention groups, respectively. The proportion of respondents who met the Recommended Dietary Allowance (RDA) was 85% in the control group and 95% in the intervention group. This means that most respondents were unable to meet their energy needs. Similarly, the average protein adequacy was only about 70% in both groups, with approximately 80% of respondents failing to meet the RDA. This suggests that the respondents' energy and protein intake was relatively low.

In addition to energy and protein adequacy, the intake of essential vitamins and minerals needed for hemoglobin formation—such as vitamin C, iron, vitamin B6, folic acid, and vitamin B12—was also low in both groups (Table 20). This is evident from the high proportion of respondents (over 80%, and in many cases above 90%) who did not meet the RDA for these nutrients. Therefore, based on their energy and nutrient intake, respondents in both groups are at risk of nutritional deficiencies, including anemia.

Table 20 Adequacy Level of Energy and Nutrients

Intake	Control		Intervention	
	n	%	n	%
Energy (kcal)				
- <100% RDA	49	81.7	57	95.0
- ≥100% RDA	11	18.3	3	5.0
Mean ± SD	74.1 ± 30.21		65.9 ± 19.15	
Protein (g)				
- <100% RDA	48	80.0	49	81.7
- ≥100% RDA	12	12.0	11	18.3
Mean ± SD	74.4 ± 2.33		72.7 ± 26.25	
Vitamin C (mg)				
- <77% RDA	53	88.3	54	90
- ≥77% RDA	7	11.7	6	10
Mean ± SD	38.7 ± 55.1		32.9 ± 34.76	
Iron (mg)				
- <77% RDA	59	98.3	58	96.7
- ≥77% RDA	1	1.7	2	3.3
Mean ± SD	51.6 ± 35.5		42.9 ± 26.36	
Vit B6 (mg)				
- <77% RDA	41	68.3	49	81.7
- ≥77% RDA	19	31.7	11	18.3
Mean ± SD	63.2 ± 31.1		58.3 ± 21.99	
Folic Acid (mcg)				
- <77% RDA	59	98.3	59	98.3
- ≥77% RDA	1	1.7	1	1.7
Mean ± SD	24.0 ± 16.3		21.9 ± 15.07	
Vit B12 (mcg)				
- <77% RDA	52	86.7	54	90
- ≥77% RDA	8	13.3	6	10
Mean ± SD	46.8 ± 62.6		48.4 ± 70.48	

Food Habits

The findings indicate that most respondents consume meals twice a day (55.0% in the control group and 65.0% in the intervention group), while a small percentage only eat once a day (8.3% in both groups). This suggests a potential risk of inadequate nutrient intake, particularly for adolescent girls who require higher iron levels. Regarding lunch and dinner composition, the majority consume rice with side dishes and vegetables (55.0% in the control group and 51.7% in the intervention group). However, the proportion of those who include fruits in their meals remains relatively low (20.0% and 10.0%, respectively), highlighting the need to promote fruit consumption as part of a balanced diet.

Breakfast habits reveal that most respondents always breakfast everyday (43.3% in the control group and 50% in the intervention group). The most commonly consumed breakfast food is rice (43.3% and 42.5%), followed by Bread (16.7% in both groups), and chicken porridge (15.0% and 13.3%). Notably, milk consumption at breakfast is low (18.3% and 7.5 %), which may affect calcium and nutrient intake.

In terms of daily water intake, most respondents drink an adequate amount, with over 6 glasses per day. However, a portion of them still consume less than 6 glasses (26.7% in the control group and 40.0% in the intervention group), which may increase the risk of dehydration and impact metabolism. Regarding milk consumption, most respondents consume it only 2-3 times a week (68.3% and 70.0%), while daily milk consumption remains low (8.3% and 5.0%). This insufficient milk intake could contribute to deficiencies in calcium, protein, and iron, which are essential for adolescent growth and development.

Additionally, meal-skipping behavior is evident among respondents, particularly

for breakfast (35.0% in both groups), lunch (21.7% and 16.7%), and dinner (35.0% and 41.6%). The primary reason for skipping meals is Less appetite (46.7% and 63.3%). Furthermore, a small percentage of respondents practice intermittent fasting based on Islamic traditions (35.0% and 23.3%), while the majority do not.

Table 21 Food Habits of Adolescent School Girls

Questions	Control		Intervention	
	n	%	n	%
Eating frequency (per day)				
- 1x	5	8.3	5	8.3
- 2x	33	55.0	39	65.0
- ≥3x	22	36.6	16	26.7
Mean±SD	2.3±0.67		2.2±0.69	
Composition of food menu for lunch and dinner				
- Rice + Side Dishes	14	23.0	21	35.0
- Rice + Side Dishes + Vegetables	33	55.0	31	51.7
- Rice + Side Dishes + Vegetables + Fruits	12	20.0	6	10.0
- Other	1	1.7.0	2	3.3
Breakfast habits frequency				
- Always (every day)	26	43.3	30	50.0
- Sometimes (2-3x /week)	30	50.0	23	38.3
- Never	4	6.7	7	11.7
Menu consumed for breakfast (respondents can choose more than one options)				
- Rice	52	43.3	51	42.5
- Bread	20	16.7	20	16.7
- Cereal	2	1.7	1	0.8
- Milk	10	8.3	9	7.5
- Noodles/Vermicilli	5	4.2	4	3.3
- Chicken Porridge	18	15.0	16	13.3
- Rice cake/lontong	3	2.5	2	1.7
- Fried foods (fritters)	7	5.8	13	10.8
- Other	3	2.5	4	3.3
Drinking water intake (glass per day)				
- ≤3	6	10.0	10	16.6
- 4-5	10	16.6	14	23.4
- 6-7	10	16.7	14	23.3
- 8-9	20	33.4	16	26.7
- >9	14	23.3	6	10.0
Mean±SD	7.3±2.5		6.3±2.3	
Milk consumption habits				
- Always (every day)	5	8.3	3	5.0
- Sometimes (2-3x /week)	41	68.3	42	70.0
- Never	14	23.3	15	25.0
Skipped meals				
- Breakfast	21	35.0	21	35.0
- Lunch	13	21.7	10	16.7
- Dinner	21	35.0	25	41.6
- None	5	8.3	4	6.7
The reason of skipping meals				
- To reduce food consumption	3	5	1	1.7
- Limited time	14	23.3	9	15.0
- To decrease body weight	12	20.0	9	15.0
- Less appetite	28	46.7	38	63.3
- None	3	5.0	3	5.0
Accustomed to intermitten fasting (Monday and Thursday fasting according to Islam)				
- Yes	21	35.0	14	23.3
- No	39	65.0	46	76.7

Food Frequency

Table 22 presents the frequency of food consumption among adolescent schoolgirls, categorized into iron food sources, iron enhancers, and iron inhibitors. In both the control and intervention groups, chicken is the most frequently consumed iron source, with an intake of 6.48 ± 5.53 times per week in the control group and 5.35 ± 3.84 times per week in the intervention group. Eggs are also consumed frequently, with a mean intake of 7.10 ± 3.86 in the control group and 6.78 ± 3.71 in the intervention group. However, the consumption of red meat sources such as beef (1.27 ± 2.13 vs. 1.26 ± 2.39), goat meat (0.28 ± 1.80 vs. 0.14 ± 0.41), and chicken liver/gizzard (1.23 ± 2.84 vs. 1.05 ± 1.51) is quite low in both groups. Seafood consumption is also infrequent, with sea fish consumed 0.92 ± 2.52 times per week in the control group and 0.68 ± 1.30 times per week in the intervention group. The low intake of heme iron-rich foods, particularly red meat and organ meats, may contribute to a higher risk of iron deficiency in these adolescents.

Table 22 Iron Food Source, Enhancer, and Inhibitor Consumption Frequency of Adolescent School Girls

Foods (times/week)	Control	Intervention
	Mean $\pm$ SD	Mean $\pm$ SD
Type of Iron Food Source		
Chicken	6.48 ± 5.53	5.35 ± 3.84
Beef	1.27 ± 2.13	1.26 ± 2.39
Goat meat	0.28 ± 1.80	0.14 ± 0.41
Sea fish	0.92 ± 2.52	0.68 ± 1.30
Egg	7.10 ± 6.59	4.38 ± 3.43
Chicken liver/gizzard	1.23 ± 2.84	1.05 ± 1.51
Shrimp	0.80 ± 0.95	0.59 ± 1.24
Squid	0.80 ± 1.37	0.71 ± 1.19
Shells / clamps	0.66 ± 1.95	0.28 ± 0.72
Spinach	1.85 ± 3.36	1.20 ± 1.47
Water spinach	1.82 ± 2.87	1.40 ± 1.52
Mustard greens	1.38 ± 1.98	1.35 ± 1.93
Cassava leaves	0.32 ± 0.82	0.33 ± 0.68
Broccoli	1.22 ± 1.86	0.98 ± 2.13
Iron Enhancer		
Guava	0.88 ± 2.33	0.51 ± 1.10
Papaya	1.99 ± 4.19	1.39 ± 2.32
Mango	2.68 ± 3.04	1.62 ± 2.11
Pineapple	1.11 ± 2.56	0.34 ± 0.52
Orange	2.41 ± 3.50	1.78 ± 2.57
Strawberry	1.21 ± 4.07	0.60 ± 1.05
Melon	1.16 ± 1.82	0.93 ± 1.95
Banana	3.27 ± 4.11	2.94 ± 3.01
Iron Inhibitor		
Tea	2.05 ± 4.54	3.52 ± 5.08
Coffee	2.05 ± 2.52	0.99 ± 2.14

Iron enhancers, such as vitamin C-rich fruits, are essential for increasing iron absorption. The table shows that papaya is consumed 1.99 ± 4.19 times per week in the control group and 1.39 ± 2.32 times per week in the intervention group, while mango consumption is 2.68 ± 3.04 in the control group and 1.62 ± 2.12 in the intervention group. Similarly, pineapple intake is 1.61 ± 2.84 vs. 1.04 ± 2.00 , and orange intake is 2.41 ± 4.30 vs. 1.78 ± 2.57 in the control and intervention groups, respectively. The control group generally has a higher intake of iron-enhancing fruits than the intervention group. Despite this, the variation in fruit consumption suggests that not all respondents are regularly benefiting from these enhancers, which may

affect their iron absorption. Increasing the intake of vitamin C-rich fruits could be an effective dietary strategy to improve iron status in both groups.

Iron inhibitors, such as tea and coffee, can reduce iron absorption, particularly non-heme iron from plant sources. The data shows that tea is consumed 2.05 ± 4.54 times per week in the control group and 3.52 ± 5.08 times per week in the intervention group, while coffee is consumed at a similar rate (2.05 ± 2.52 vs. 0.99 ± 2.14). The higher tea consumption in the intervention group may contribute to lower iron absorption, especially considering their already lower intake of iron-rich foods and enhancers. Given the overall dietary patterns observed in the table, both groups may be at risk of inadequate iron intake, potentially leading to iron deficiency and anemia. Strategies to improve iron intake should focus on increasing the consumption of iron-rich foods while reducing the intake of inhibitors such as tea and coffee, particularly around meal times.

Physical Activity

The physical activity levels of the respondents are presented in Table 23. The table shows that the average Physical Activity Level (PAL) of the respondents ranged from 1.43 to 1.48 in both groups. There appeared to be no difference between weekdays and weekends. Since the respondents' PAL ranged only from 1.43 to 1.48, their physical activity is classified as inactive according to the National Academies of Sciences, Engineering, and Medicine (NASEM) 2023, formerly known as the Institute of Medicine (IOM). According to NASEM, a person is categorized as inactive when their PAL falls within the range of $1.0 \leq \text{PAL} < 1.57$ (NASEM 2023).

Table 23 Physical Activity

Physical activity level	Control				Intervention			
	Weekdays		Weekend		Weekdays		Weekend	
	n	%	n	%	n	%	n	%
Very light activity (PAL <1.40)	20	33.3	25	41.7	8	13.3	19	31.7
Light activity (PAL 1.40-1.69)	39	65	27	45.0	48	80.0	38	63.3
Moderately active (PAL 1.70-1.99)	0	0.0	6	10.0	3	5.0	2	3.3
Vigorously active (PAL 2.00-2.40)	1	1.7	2	3.3	1	1.7	1	1.7
Mean $\pm$ SD	1.43 ± 0.09		1.47 ± 0.20		1.48 ± 0.12		1.47 ± 0.15	

This raises the question of whether low physical activity is related to low energy and nutrient intake. It is suspected that due to insufficient energy intake, the body adapts by reducing physical activity and lowering basal metabolism. As a result, it may appear that energy intake is sufficient, but this adaptation could have negative effects on physical health, such as menstrual disorders, loss of muscle mass, and other issues.

Potential Negative Deviance. Initially, the research respondents were to be proportionally distributed across public and private school locations. However, due to the limited number of respondents in private schools, most research respondents came from public schools. This may result in potential negative deviance.

Unexpected problems. No unexpected problem was found during research activities

III. Publications

One publication based from the data conducted in baseline study was expected to be published by the end of March in Pontianak Nutrition Journal, an Indonesian national journal. The title of the article is "Frequency of Consumption of Iron Source, Enhancer, and Inhibitor Foods in Adolescent School Girls".

IV. Summary of the expenses during the report period (26 September 2024 – 18 March 2025) (In the preferred currency and US \$ for the total)

4.1. Summary of the financial statement from the Administrative Offices of the University/Institution

This report can be enclosed to this report and/or mailed separately to us by surface mail.

4.2 Gross salaries Additional blocks may be added if needed.

		Gross salary to charge of other funds	Gross salary to charge of the Nestlé Foundation
Name (if already known)		None	1 st year
Degree		-	-
Function		-	-
Occupation (%)	Total:		

GROSS SALARIES:	Total:	-	-
------------------------	---------------	---	---

4.3. Breakdown of positions and salaries for the report period

No	Personel	Number	Duration		Amount (US \$)	Total Amount (US \$)
1	Academics	-	-	-	-	-
2	Research assistants					
	- Catur Dwi Anggarawati, SP	1	7	month	200	1400
	- Nabila Sukma Priyatnasari, S.Gz	1	7	month	200	1400
3	Health field assistants					
	- Sosa Novinuryani Putri	1	6	month	100	600
	- Bayu Kresna Nugraha	1	6	month	100	600
	TOTAL (In the preferred currency and US \$ for the total)					4.000

4.4. Breakdown of major equipment for the report period

No	Item	Number	Unit	Amount (US \$)	Total Amount (US \$)	Location of the equipment
2	Monitoring card					
	- OK PRINT: Monitoring Card	1	packages	4	4	Printing office
	- OK PRINT: Monitoring Card	1	packages	159	159	Printing office
	TOTAL (In the preferred currency and US \$ for the total)				163	

4.5. Breakdown of operating expenses during the report period

No	Item	Number	Unit	Amount (US \$)	Total Amount (US \$)	Location of the equipment
I	RESEARCH PREPARATION					
1	Research sites survey and permit (per diem and meals, 3 researchers, 3 days)					
	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	28	28	Campus-Research studi site (Schools)
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	28	28	
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	28	28	
	- Annisa Rizkiriani, SGz, Msi	1	man-day	28	28	
	- Guntari Prasetya, SGz, MSc	1	man-day	28	28	
	- Ria Amelia, SSi, M.Imun	1	man-day	28	28	

2	Research socialization at schools (per diem and meals, 3 researchers, 3 days)					
	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	28	28	Campus- Research studi site (Schools)
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	28	28	
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	28	28	
	- Guntari Prasetya, SGz, MSc	1	man-day	28	28	
	- Ria Amelia, SSi, M.Imun	1	man-day	28	28	
3	Coordination preparation meetings (per diem and meals, 6 researchers, 2 days)					
	Coordination Preparation Meetings-1					Bogor District
	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	22	22	
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	22	22	
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	22	22	
	- Annisa Rizkiriani, SGz, MSi	1	man-day	22	22	
	- Guntari Prasetya, SGz, MSc	1	man-day	22	22	
	- Ria Amelia, SSi, M.Imun	1	man-day	22	22	
	- Resto Taman Koleksi; Halfday meeting	1	package	68	68	
	Coordination Preparation Meetings-2					
	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	22	22	
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	22	22	
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	22	22	
	- Annisa Rizkiriani, SGz, Msi	1	man-day	22	22	
	- Guntari Prasetya, SGz, MSc	1	man-day	22	22	
	- Ria Amelia, SSi, M.Imun	1	man-day	22	22	
	- Resto Taman Koleksi; Halfday meeting	1	package	92	92	
	Coordination Preparation Meetings-3					
	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	22	22	
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	22	22	
	- dr. Mira Dewi, M.Si, PhD	1	man-day	22	22	
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	22	22	
	- Annisa Rizkiriani, SGz, Msi	1	man-day	22	22	
	- Guntari Prasetya, SGz, MSc	1	man-day	22	22	
	- Ria Amelia, SSi, M.Imun	1	man-day	22	22	
	- Resto Taman Koleksi; Halfday meeting	1	package	69	69	
	Coordination Preparation Meetings-4					
	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	22	22	
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	22	22	
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	22	22	
	- Annisa Rizkiriani, SGz, Msi	1	man-day	22	22	
	- Guntari Prasetya, SGz, MSc	1	man-day	22	22	
	- Ria Amelia, SSi, M.Imun	1	man-day	22	22	
	- Resto Taman Koleksi; Halfday meeting	1	package	57	57	
4a	Training of interviewers:					
	a. Researchers (per diem and meals, 6 researchers, 1 day)					

	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	22	22	Campus
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	22	22	
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	22	22	
	- Annisa Rizkiriani, SGz, Msi	1	man-day	22	22	
	- Guntari Prasetya, SGz, MSc	1	man-day	22	22	
	- Ria Amelia, SSi, M.Imun	1	man-day	22	22	
	b. Interviewers (per diem and meals, 4 interviewers, 1 day)					
	- Fadhillah Nur Valentine, S.Gz	1	man-day	22	22	Campus
	- Alfina Mujtahidah Zaen, S.Gz	1	man-day	22	22	
	- Nabila Sukma Priyatnasari, S.Gz	1	man-day	22	22	
	- Wahyuni Wulan Oktaviani, S.Gz	1	man-day	22	22	
	c. Halfday meeting					
	- Resto Taman Koleksi; Halfday meeting	1	package	102	102	
4b	Questionnaire try out:					
	a. Researchers (per diem and meals, 2 researchers, 1 day)					
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	22	22	Campus
	- Annisa Rizkiriani, SGz, Msi	1	man-day	22	22	
	b. Interviewers (per diem and meals, 4 interviewers, 1 day)					
	- Fadhillah Nur Valentine, S.Gz	1	man-day	22	22	Campus
	- Alfina Mujtahidah Zaen, S.Gz	1	man-day	22	22	
	- Nabila Sukma Priyatnasari, S.Gz	1	man-day	22	22	
	- Wahyuni Wulan Oktaviani, S.Gz	1	man-day	22	22	
	SUB-TOTAL I				1.598	
II	RESEARCH IMPLEMENTATION					
5	Workshops of WIFA Supplementation Program:					
	a. Researchers (per diem: 6 persons, 1 day, 2 times)					
	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	22	22	Cianjur District
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	22	22	
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	22	22	
	- Annisa Rizkiriani, SGz, Msi	1	man-day	22	22	
	- Guntari Prasetya, SGz, MSc	1	man-day	22	22	
	- Ria Amelia, SSi, M.Imun	1	man-day	22	22	
	b. Participants (per diem: 16 persons, 1 day, 2 times)					
	- Ajeng Agustianty Putri, <i>et al.</i> : Workshop participants	1	package	119	119	Cianjur District
	c. Full day Meeting (22 participants, 1 day, 2 times)					
	- Grand Bydiel Hotel, Cianjur: Full day Meeting	1	package	318	318	Cianjur District
	- Grand Bydiel Hotel, Cianjur: Accommodation for researchers	1	package	186	186	
	d. Speaker (3 persons, 1 day, 2 times)					

	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	47	47	Cianjur District
	- Badriah, M.Pd	1	man-day	47	47	
	- dr. Cecep Juhana, MKM	1	man-day	47	47	
	- dr. Nenden Evi Wulandari	1	man-day	47	47	
	- Mulyana Soleh, M.Pd	1	man-day	47	47	
	- Jejen, S.Pd	1	man-day	47	47	
	e. Moderator (1 person, 1 day, 2 times)					
	- Guntari Prasetya, SGz, MSc	1	man-day	44	44	Cianjur District
	f. MC (1 person, 1 day, 2 times)					
	- Anita Mariska, AMG	1	man-day	25	25	Cianjur District
6	Nutrition Education and Behavioural Change Intervention for Teachers (10 persons) and Peer Motivators (10 persons)					
	a. Researchers (per diem and meals, 3 researchers, 3 times, 2 schools)					
	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	28	28	Schools
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	28	28	
	- Guntari Prasetya, SGz, MSc	1	man-day	28	28	
	- Vieta Annisa Nurhidayati, SGz, MSc	1	man-day	28	28	
	c. Consumption (25 persons, 3 times)					
	- Larisa Kue: Snack for Nutrition Education-1	1	package	60	60	Schools
	- Larisa Kue: Snack for Nutrition Education-2	1	package	53	53	
	- Larisa Kue: Snack for Nutrition Education-3	1	package	53	53	
7	Nutrition Education and Behavioural Change Intervention for Mothers (60 persons)					
	a. Researchers (per diem and meals, 3 researchers, 3 times, 2 schools)					
	- dr. Mira Dewi, MSi, PhD	1	man-day	28	28	Schools
	- Ria Amelia, SSi, M.Imun	1	man-day	28	28	
	- Annisa Rizkiriani, SGz, Msi	1	man-day	28	28	
	b. Instructors for cooking class (1 person, 1 time, 2 schools)					
	- Salsa Bella Hanim Narosati	1	man-day	93	93	Schools
	d. Consumption for mothers nutrition education and behavioural change intervention (66 persons, 3 times)					
	- D'Chio: Snack for Nutrition Education-1	1	package	76	76	Schools
	- D'Chio: Snack for Nutrition Education-2	1	package	54	54	Schools
	- Mirasari: Snack for Nutrition Education-3	1	package	53	53	Schools
8	Data Collection					
	a. Lodging for baseline and endline data collection (4 interviewers, 2 times, 10 days)					

	- Wisma Intan: Lodging for baseline Hb analysis	1	package	23	23	Cianjur District
	- Wisma Intan: Lodging for baseline data collection	1	package	239	239	Cianjur District
	b. Baseline and endline data collection (per diem, 4 interviewers, 2 times, 10 days)					
	- Fadhilah Nur Valentine, S.Gz	10	man-day	22	220	Schools
	- Alfina Mujtahidah Zaen, S.Gz	10	man-day	22	220	
	- Nabila S. Priyatnasari, S.Gz	10	man-day	22	220	
	- Wahyuni W. Oktaviani, S.Gz	10	man-day	22	220	
	c. Baseline and endline Hb analysis (2 times x 120 subjects)					
	- Baseline Hb analysis tools	1	package	302	302	Online store
	- Guntari Prasetya, SGz, MSc	1	man-day	28	28	Schools
	- Ria Amelia, SSi, M.Imun	1	man-day	28	28	
	d. Supervision (per diem and meals, 6 researchers, 2 times, 1 day)					
	Supervision-1					
	- Vieta A. Nurhidayati, SGz, MSc	1	man-day	28	28	Schools
	- Annisa Rizkiriani, SGz, Msi	1	man-day	28	28	
9	Follow Up Monitoring					
	Follow up monitoring (per diem and meals, 6 researchers, 1 times, 2 days)					
	- Prof. Dr. Ir. Ali Khomsan, MS	1	man-day	28	28	Schools
	- Prof. Dr. Ir. Hadi Riyadi, MS	1	man-day	28	28	
	- Guntari Prasetya, SGz, MSc	1	man-day	28	28	Schools
	- Ria Amelia, SSi, M.Imun	1	man-day	28	28	
	SUB-TOTAL II				3.412	
	TOTAL (In the preferred currency and US \$ for the total)				5.009	

4.6. Breakdown of travel expenses for the report period

No	Activity	Number	Unit	Amount (US \$)	Total Amount (US \$)	Destination
I	RESEARCH PREPARATION					
1	Transport for research sites survey and permit-researchers (1 package, 3 days)					
	- Purwa Rent-Car (1 package, 1 day)	1	package	99	99	Campus-Research site-Campus
	- Purwa Rent-Car (1 package, 1 day)	1	package	99	99	
2	Transport for research socialization at school-researchers (1 package, 3 days)					
	- Purwa Rent-Car (1 package, 1 day)	1	package	99	99	Campus-Research site-Campus
	- Sahabat Rent-Car (1 package, 1 day)	1	package	99	99	
II	RESEARCH IMPLEMENTATION					
3	Workshops of WIFA Supplementation Program:					

	Transport for WIFA workshop-researchers (1 packages, 2 days)					
	- Purwa Rent-Car (1 package, 2 day)	2	package	99	198	Campus- Research site- Campus
	- Sahabat Rent-Car (1 package, 2 day)	2	package	99	198	
4	Nutrition Education and Behavioural Change Intervention for Teachers (10 persons) and Peer Motivators (10 persons):					
	a. Transport for nutrition education-researchers (1 package, 3 times, 2 schools)					
	- Purwa Rent-Car (1 package, 1 day)	1	package	99	99	Campus- Research site- Campus
	- Sahabat Rent-Car (1 package, 1 day)	1	package	99	99	
	- Sahabat Rent-Car (1 package, 1 day)	1	package	99	99	
	b. Local Transport for participants (20 persons, 3 times)					
	- Nurhalimah, et al: Local transport for Nutrition Education-1	1	man-days	139	139	Research site
	- Nuraeni S, et al: Local transport for Nutrition Education-2	1	man-days	126	126	
	- Nuraeni S, et al: Local transport for Nutrition Education-3	1	man-days	139	139	
5	Nutrition Education and Behavioural Change Intervention for Mothers (60 persons):					
	b. Local transport for participants (60 persons, 3 times)					
	- Irma, et al: Local transport Nutrition for Education-1	1	package	212	212	Research site
	- Irma, et al: Local transport Nutrition for Education-2	1	package	212	212	
	- Detti Kusuma, et al: Local transport for Nutrition Education-3	1	package	305	305	
6	Data Collection:					
	a. Local transport for baseline and endline data collection interviewers (4 interviewers, 10 days, 2 times)					
	- Fadhillah Nur Valentine, S.Gz	10	man-day	9	90	Schools
	- Alfina Mujtahidah Zaen, S.Gz	10	man-day	9	90	
	- Nabila S. Priyatnasari, S.Gz	10	man-day	9	90	
	- Wahyuni W. Oktaviani, S.Gz	10	man-day	9	90	
	b. Round trip transport for baseline and endline data collection (Bogor-Location of study site-Bogor: 2 days x 2 times x 1 package)					
	- Sahabat Rent-Car (1 package, 1 day)	1	package	99	99	Campus- Research site- Campus
	- Sahabat Rent-Car (1 package, 1 day)	1	package	99	99	
	c. Transport for baseline and endline Hb analysis (1 package,					

	4 days)					
	- Purwa Rent-Car (1 package, 2 day)	2	package	99	198	Campus- Research site- Campus
	d. Transport for supervision (2 times, 1 package, 1 day)					
	- Purwa Rent-Car (1 package, 1 day)	1	package	99	99	Campus- Research site- Campus
7	Follow Up Monitoring:					
	Transport for follow up monitoring-researchers 1 package, 2 days)					
	- Purwa Rent-Car (1 package, 1 day)	1	package	99	99	Campus- Schools- Campus
	- Purwa Rent-Car (1 package, 1 day)	1	package	99	99	
	TOTAL (In the preferred currency and US \$ for the total)				3.275	

4.7. Breakdown of other expenses for the report period

No	Activity	Number	Unit	Amount (US \$)	Total Amount (US \$)	Destination
1	Reward/gift for participant (endline data collection)					
	- Syafika Nur Amalia, <i>et al.</i> : Reward/gift for questionnaire try out	1	package	12	12	Campus
	- Dahyah, <i>et al.</i> : Reward/gift for teachers (baseline)	1	package	133	133	School
	- Kantya M, <i>et al.</i> : Reward/gift for school girls (baseline)	1	package	601	601	School
2	Reward for school (4 package)					
	- Vani Aprilia, <i>et al.</i> : Reward/gift for teachers (baseline)	1	package	116	116	School
	- Vani Aprilia, <i>et al.</i> : Reward/gift for teachers (baseline)	1	package	66	66	
3	Ethical clearance					
	- Prof. Dr. Ir. Ali Khomsan, MS: Ethical clearance	1	package	20	20	Ethics Committee
4	Stationery					
	- Prof. Dr. Ir. Ali Khomsan, MS: Stationery	1	package	314	314	Campus
5	Journal Publication					
	- Prof. Dr. Ir. Ali Khomsan, MS: Journal Publication	1	package	225	225	Campus
	TOTAL (In the preferred currency and US \$ for the total)				1.487	

4.8. Summary of budget for the report period

(In the preferred currency and US \$ for the total)

Period	Total Budget (US \$)							TOTAL (US \$)
	Salary (is)		Travel & subsistence	Minor equipment	Major equipment	Operating expenses	Others	
	Grant- Holder	Other personnel						
1	-	4.000	3.275	0	163	5.009	1.487	13.934
2	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-
TOTAL	0	4.000	3.275	0	163	5.009	1.487	13.934

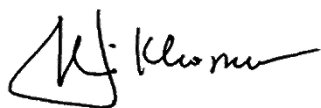
Partition of installments:

1st installments (70% of total budget) : US \$ 24,195 = IDR 365.150.940 (September 26, 2025)

2nd installments (20% of total budget)

3rd installments (10% of total budget)

Principal Investigator



Prof. Dr. Ir. Ali Khomsan, MS

Dean

Faculty of Medicine IPB University



Dr. dr. Ivan R. Sini, Sp. OG