



**MEMORANDUM OF AGREEMENT**

**BETWEEN**

**UNIVERSITAS NEGERI MALANG**

**AND**

**UNIVERSITI MALAYA**

**FOR  
RESEARCH COLLABORATION  
(PROTEIN ENERGY DEFICIENCY)**

Ref Number: 7.5.24/UN32/KS/2024

This agreement is signed by the following parties:

**This Memorandum of Agreement (MoA) on Research Collaboration between Universitas Negeri Malang represented by Faculty of Sports Science having address at Jalan Semarang 5, Malang, Indonesia, hereinafter referred to as THE FIRST PARTY, and Universiti Malaya represented by Faculty of Sports and Exercise Science having address at Lembah Pantai, 50603 Kuala Lumpur hereinafter referred to as THE SECOND PARTY.**

THIS AGREEMENT is made on the 8 May 2024 with reference to MoA number 4.4.139/UN32/KS/2023. **THE FIRST PARTY** and **THE SECOND PARTY** hereafter shall collectively be referred to as **THE PARTIES**. This Memorandum of Agreement for Research Collaboration with topic **“Protein energy deficiency”** is developed and established between **THE PARTIES** under the following terms:

**1. PURPOSE AND OBJECTIVE**

- 1.1 The purpose of this Memorandum of Agreement is to support collaboration between **THE PARTIES** within the scope of this agreement mentioned in Article 2.
- 1.2 The objective of this Memorandum of Agreement is to develop research collaboration between **THE PARTIES**.

## 2. SCOPE

- 2.1 The scope of this Implementation of Agreement includes research collaboration between the faculty members and students of **THE PARTIES**.
- 2.2 **THE PARTIES** shall monitor the implementation of research collaboration at least once in 1 (one) year.
- 2.3 The research collaboration between **THE PARTIES** involves faculty members/lecturers and students, as follows:

Institution	Organizing Unit	Name of Faculty Members
Universitas Negeri Malang	<ol style="list-style-type: none"><li>1. Study Program of Bachelor of Public Health Science, Department of Public Health Science</li><li>2. Study Program of Bachelor of Nutrition, Faculty of Mathematics and Science</li><li>3. Study Program of Bachelor of Elementary School Teacher Education</li></ol>	<ol style="list-style-type: none"><li>1. Septa Katmawanti, S.Gz, M.Kes (Project Leader)</li><li>2. Yunita Rakhmawati, S.Gz., M.Kes</li><li>3. Ni Luh Sakinah Nuraini, S.Pd., M.Pd</li><li>4. Dea Aflah Samah</li><li>5. Oktavia Sri Wahyuni</li><li>6. Lorenza Arinda Saputri</li><li>7. Yuanda Putri Rizki Ramadhani</li><li>8. Amelia Salsabila Fitriani</li><li>9. Meyralda Dara Adisa</li></ol>
Universiti Malaya	<ol style="list-style-type: none"><li>1. Faculty of Sports and Exercise Science</li></ol>	<ol style="list-style-type: none"><li>1. Assc. Prof. Dr. Sareena Hanim Hamzah (Project Leader)</li></ol>

## 3. FUNDING

This research collaboration is funded by internal research grants of Universitas Negeri Malang. No monetary sharing is enforced in this agreement. However, The Parties will not to any other relevant collaborative research grant application within the two Parties. Should there be changes of funding arrangements, a separate and specific agreement shall be prepared and meet the approval of **THE PARTIES**. This grant covers all research activities in Indonesia and publication fee.

## 4. DURATION

- 4.1 This Memorandum of Agreement is effective from 8 May 2024 and valid until December 2025 or until the completion of the Project, whichever is earlier. This agreement may be extended in writing by both Parties.
- 4.2 Notwithstanding the effective period of the Agreement as specify under clause 4.1 above, the Project may be terminated earlier in accordance with this MoA.

## 5. OBLIGATIONS OF PARTIES

### 5.1 General Duties

- (a) Each Party/ Parties hereby undertakes to use all reasonable endeavours to perform and enable the other Party/ Parties to perform in time the tasks assigned to each Party/ Parties in the implementation of the Project in accordance with this Agreement.



- (b) Each Party/ Parties hereby undertakes to perform the task assigned to each Party/ Parties in proper manner and in accordance with good management practice and shall comply with the present laws and statutes.
- (c) Each Party/ Parties hereby undertakes to assist and cooperate with each other in the performance of the Project. Such assistance and cooperation shall include the provision of materials, facilities, data and information as may be reasonably required to satisfactorily perform the Project.

#### 5.2 Obligations of Universiti Malaya

- a) to consult and inform the First Party if there is any change of circumstances which may affect the implementation of the Project under this Agreement;
- b) to ensure that the PI and any other personnel appointed by the Second Party for the purpose of the Project coordinate their works/services with the First Party;
- c) to allow the use relevant data and/or proprietary information of information of the Second Party for the purpose of the project subject to terms and conditions stipulated in this Agreement; and
- d) to provide reports in accordance to deliverables as set out under this Agreement.

#### 5.3 Obligations of Universitas Negeri Malang

- a) to consult and inform the Second Party if there is any change of circumstances which may affect the implementation of the Project under this Agreement;
- b) to ensure that the PI and any other personnel appointed by the First Party for the purpose of the Project coordinate their works/services with the Second Party;
- c) to allow the use relevant data and/or proprietary information of information of the First Party for the purpose of the project subject to terms and conditions stipulated in this Agreement; and
- d) to provide reports in accordance to deliverables as set out under this Agreement.

### 6. CONFIDENTIALITY

- 6.1 **THE PARTIES** shall take reasonable actions to keep confidential all Confidential Information and shall not communicate or divulge to any person or body or entity any Confidential Information nor publish or cause to be published any Confidential Information, unless prior written consent of the Parties hereto has been duly obtained.
- 6.2 The obligations of confidentiality contained in this Agreement shall not apply to any Confidential Information which:
- (a) has been made public by the Disclosing Party or by others with the permission of the Disclosing Party;
  - (b) is independently received from a third party who is free to disclose it;
  - (c) is in the public domain or is a compilation of material in the public domain; or
  - (d) is required to be disclosed by order of court or any applicable government authority or under any applicable law.
- 6.3 Upon termination of this Agreement, the Receiving Party shall, upon the request of the Disclosing Party, return all Confidential Information (including all copies thereof) to the



Disclosing Party or destroy the same on Disclosing Party's instruction, within thirty (30) days after the termination or expiration of the term of this Agreement, whichever is earlier.

6.4 This clause shall survive and be full effect after the expiry or termination of this MoA.

## **7. OWNERSHIP OF INTELLECTUAL PROPERTY**

- 7.1 Each Party shall be the owner of all and any existing Background Intellectual Property in existence at the date of this Agreement or any Project Intellectual Property created, developed or reduced to practice solely by the personnel of the respective Party during the period of the Project (hereinafter referred to as the "Project IP of the Party"), and subject to this Agreement, each Party agrees not to use any of the Background Intellectual Property or Project IP of the Party belonging to the other Party except for the purpose of this Agreement.
- 7.2 Each Party grants the other a royalty-free, non-exclusive licence for the duration of the Project to use its Background Intellectual Property for the sole purpose of carrying out the Project. No Party may grant any sub-licence over or in respect of the other's Background Intellectual Property.
- 7.3 The Parties acknowledge that the Project Intellectual Property rights may arise from the implementation of the Project. Therefore, the Parties undertake and agree that the Project Intellectual Property is jointly owned by Universiti Malaya and the Universitas Negeri Malang.
- 7.4 Neither Party shall use, nor permit any person or entity to use the name, acronym, official emblem, logo, trade mark (or any variation thereof) or other Intellectual Property (hereinafter referred to as "Brand Materials") that is/are identified with or belongs to the other Party on any publication, document, paper, audio or visual presentation, or for publicity purposes, without first obtain the written consent of the other Party.
- 7.5 Any proposal for the commercialisation and/or patenting of the Project Intellectual Property shall be discuss in good faith and reduce in a separate written Agreement.

## **8. ADVERTISING**

Either Party shall, in making any public statement regarding the Project, or in relation to any information, product, process or invention developed as a result of the Project, as the case may be, include in such public statement, an acknowledgement of the services and cooperation received from the other Party. However, each of the Parties undertakes that it shall not use the other Party name and logo in any such information, product, advertisement or publication without the prior written approval of the other Party.

## **9. PUBLICATION**

- 9.1 All materials prepared for publication by a Party (the "Submitting Party") shall be forwarded to the other Party for written permission to publish at least one (1) month prior to the submission for publication or disclosure to a third party, for which the written permission shall not be unreasonably withheld; and



- 9.2 If at any time during the said period of one (1) month the other Party requests the Submitting Party not to proceed with the publication or disclosure of the material in the form submitted, then the Submitting Party will either:
- (i) amend the material as requested by the other Party; or
  - (ii) delay the publication or disclosure until such time as the other Party reasonably deems such publication or disclosure to be possible or appropriate in view of any commercially sensitive information contained therein.

## **10. LIABILITY**

- 10.1 Each Party shall not be liable to the other Party for any loss nor damage arising from its failure to perform work on time or within estimated costs, provided that the said Party has used its reasonable endeavours in all respects.
- 10.2 Each Party shall indemnify and hold harmless the other Party against all demands, claims, liabilities, losses, damages, legal costs and other expenses of any nature whatsoever, including infringement of any third party intellectual property rights which may be asserted against or suffered by the other Party and which relate to or arise under this Agreement, but excluding any liability to the extent that results from the reckless misconduct or willful default of the other Party.

## **11. WARRANTIES**

- 11.1 The Parties shall ensure that the services and technical assistance provided by both Party/ Parties in relation to this MoA are provided with due care, diligence and skill reasonably expected of professional persons providing services of the kind described. The Parties makes no other warranty or assurances with respect to the services and technical assistance carried out in relation to this MoA or to its quality, accuracy or suitability for any purpose.
- 11.2 It is the duties of both Parties, to the best of their knowledge, to ensure that the IPRs related to the Project do not infringe any third party intellectual property rights, to avoid any claims, losses, damages and/or costs suffered in the event of a breach of existing third party intellectual property rights.

## **12. TERMINATION**

- 12.1 Notwithstanding anything contained in this MoA, any Party may terminate this MoA for any reason whatsoever by giving at least three (3) months prior notice in writing to the other Party and the Party shall consult each other to agree on a reasonable program of work for the notice period leading up to termination date.
- 12.2 If either Party commits a breach of this MoA, the other Party may request in writing that the breach be remedied. If the Party committing the material breach does not remedy it within sixty (60) days, then the other Party may terminate this MoA immediately without further notice.

- 12.3 The Parties agree that UM may immediately terminate this Agreement by notice in writing to Universitas Negeri Malang in the following circumstances:
- a. the making or filing of any application to liquidate or wind up Universitas Negeri Malang (other than for the purpose of reconstruction or amalgamation) under any law or government regulation relating to bankruptcy or insolvency whether by a third party or by Universitas Negeri Malang;
  - b. the appointment of a receiver or administrator over all or substantially all of the property of Universitas Negeri Malang; or
  - c. the making by Universitas Negeri Malang of an assignment or attempted assignment for the benefit of its creditors.
- 12.4 Any termination of this Agreement shall be without prejudice to the rights of the Party terminating to seek and obtain damages for any breach of this MoA by the other Party.
- 12.5 Upon termination or expiry of this MoA, the Parties shall forthwith cease all research works.
- 12.6 Termination shall not affect any right which either Party/ Parties has accrued up to and on the termination date.

### **13. DISPUTE SETTLEMENT**

If there is a dispute between the Party/ Parties then:

- a) the Parties must discuss the dispute initially with a view to settling the dispute amicably; then
- b) In the event that the Party/ Parties are unable to agree on any settlement or arrangement, either Party/ Parties may take the dispute to a court of law.

### **14. OTHER MATTERS**

- 14.1 This Memorandum of Agreement can be amended, changed or modified upon mutual agreement in writing of **THE PARTIES** under mutually agreed terms and conditions.
- 14.2 No Party shall assign any or all of its rights under this MoA without the prior written consent of the other Party.
- 14.3 This MoA shall be read and construed according to the laws presently in force in Malaysia. The Parties agree to submit any dispute that may arise in relation to this MoA to the jurisdiction of the Courts of Malaysia following unsuccessful amicable settlement.
- 14.4 Nothing in this MoA shall be construed as establishing or creating a partnership or a relationship of master and servant between any of the Parties hereto or as constituting any Party as an agent or representative of the other Party for any purpose or in any manner whatsoever.



- 14.5 (a) The waiver by a Party in respect of any breach of a term of this MoA by the other Party shall not be deemed to be a waiver in respect of any other terms or of any subsequent breach of that term.
- (b) The failure of a Party to enforce at any time any term of this MoA shall in no way be interpreted as a waiver of such term.
- 14.6 This MoA constitutes the entire agreement between the Parties. Any prior arrangements, agreements, representations or undertakings are hereby superseded.
- 14.7 The Parties shall not be bound by any amendment of or addition to this MoA except where the Parties have agreed expressly in writing to be so bound.
- 14.8 (a) If either Party to this MoA is temporarily unable by reason of force majeure or the Government intervention to meet any of its obligations under this Agreement, and if such Party gives to the other Party a prior written notice of the event within fourteen (14) days after its occurrence, such obligations of the Party as it is unable to perform by reason of the event shall be suspended for as long as the inability continues.
- (b) Neither Party shall be liable for any unforeseeable event beyond its reasonable control not caused by the fault or negligence of such Party, which causes such Party to be unable to perform its obligations under this Agreement, and which it has been unable to overcome by the exercise of due diligence. If any force majeure delays or prevents the performance of the obligations of either Party for a continuous period in excess of ninety (90) days the Party not so affected may give notice to the affected Party to terminate this Agreement specifying the date on which termination will take effect.
- (c) The term "force majeure" as employed herein shall mean acts of God, strikes, lock outs or other industrial disturbance, war, insurrection, riots, epidemics, pandemics, landslides, earthquakes, storms, lightning, floods, civil disturbances, explosions, and any other similar events not within the control of either Party and which by the exercise of due diligence neither Party is able to overcome.
- 14.9 Other matters outside this Memorandum of Agreement shall be discussed by **THE PARTIES** and can be written in an Addendum attached as an integral part of this Memorandum of Agreement document.
- 14.10 This Memorandum of Agreement is developed for research collaboration and is established and signed by **THE PARTIES** in duplicate; all copies being equally authentic.

14.11 NOTICE - Every notice, request or any other communication required or permitted to be given pursuant to this MoU shall be in writing, in the English language and delivered personally or sent by registered or certified post via air mail or by courier or facsimile (which shall be acknowledged by the other Party) to the Parties at the address and facsimile number as stated below :

(a) If to Universiti Malaya : Assc. Prof. Dr. Sareena Hanim Hamzah  
Faculty of Sports and Exercise Science  
Email: sareena@um.edu.my

(b) If to Universitas Negeri Malang : Septa Katmawanti, S.Gz, M.Kes  
Department of Public Health Science  
Faculty of Sports Science  
Universitas Negeri Malang  
Email: septakatma.fik@um.ac.id

#### **15. COUNTERPARTS**

This MoA may be executed in any number of counterparts and by **THE PARTIES** on separate counterparts, each of which when executed and delivered shall constitute an original including in the form of electronic records and are executed electronically, but all the counterparts shall together constitute one and the same instrument.

#### **16. LIST OF SCEDULES**

The following schedules shall form part of this Agreement:

Annex 1: Proposal and milestone

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## Annex 1

### **Title: The effects of moltasa (moringa oleifera, glutamine, unhydrous glucose) supplementation on the intensification of haemoglobin, lymphocytes, and body weight in white rats induced by PEM**

Protein energy deficiency (PEM) is one of the problematic health conditions, where there is a lack of nutrition in the consumption of energy and protein substances. Based on the 2018 Global Nutrition Report data, the prevalence of stunting was 22.2%. With the increasing number of children under five experiencing malnutrition, it is related to a decrease in the quality of healthy, intelligent, productive human resources and contributes to determining the level of public health in Indonesia. Therefore, more intervention is needed as an effort to reduce and improve the nutritional status of toddlers and children. The raw materials contained in Moltasa Supplements consist of Moringa Oleifera or Moringa leaves, Glutamine, Glucose Unhydrate. Moringa leaves are plants that grow in dry, tropical, and subtropical areas, Moringa Oleifera is quite high in minerals, vitamins, iron, potassium, calcium and potassium. Thus, the extract has high potential to become a probiotic drink or food fortification to enrich nutrition. Meanwhile, glutamine will stimulate the production of glutathione (GSH) to intervene in increasing immunity in the body. Unhydrous glucose is used as a raw material for additives in food and beverages to provide energy for the body. The occurrence of high protein deficiency, resulting in toddlers and children with kwashiorkor cannot form globin which is the protein moieties of hemoglobin. Male white rats (*Rattus Norvegicus*) are a type of experimental animal that is widely used in biomedical research.

### Milestone, Date, and Responsibilities

<b>Milestone</b>	<b>Completion Date</b>	<b>PIC</b>
Construct the proposal and methodology	December 2023	Universitas Negeri Malang
Final proposal	February 2024	Universitas Negeri Malang
Data collection and Data analysis	July 2024	Universitas Negeri Malang
Manuscript writing	September 2024	Universitas Negeri Malang Universiti Malaya
First report manuscript writing	December 2024	Universitas Negeri Malang Universiti Malaya
Data collection and data analysis phase II	July 2025	Universitas Negeri Malang
Manuscript writing	September 2025	Universitas Negeri Malang Universiti Malaya
Final report and manuscript submission	November 2025	Universitas Negeri Malang Universiti Malaya
Evaluation and further research project	December 2025	Universitas Negeri Malang Universiti Malaya



EXECUTED by the Parties as an Agreement on the date first appearing.

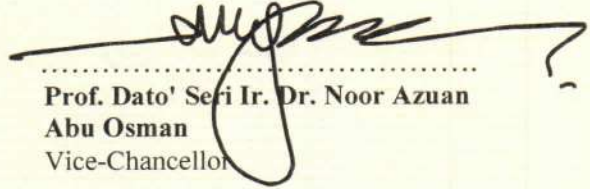
**THE FIRST PARTY,**

**THE SECOND PARTY,**



.....  
**Prof. Dr. Hariyono, M.Pd** *on' anu*  
Rector

Date: 8 May 2024



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**Prof. Dato' Seri Ir. Dr. Noor Azuan  
Abu Osman**  
Vice-Chancellor

Date: 28 February 2024

IN WITNESS THEREOF

For  
Universitas Negeri Malang



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**Dr. Sapto Adi, M.Kes**  
Dean  
Faculty of Sports Science

Date: 7 Mei 2024

For  
Universiti Malaya



.....  
**Asoc. Prof. Dr. Abdul Halim Mokhtar**  
Dean  
Faculty of Sports and Exercise Science

Date: 28 February 2024