Monitoring the nutritional status of humanitarian workers in Gaza

**Description of the information system**

**Version:** 31 July 2025

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# Aim and objectives

This information system is being set up by organisations providing humanitarian services inside the Gaza Strip, with the technical and scientific support of the London School of Hygiene and Tropical Medicine (LSHTM). Its **aim** is to inform humanitarian decision-making, advocacy and diplomatic action to improve the lives of the affected population by providing real-time information on the nutritional status of humanitarian staff in Gaza.

While it is recognised that this sub-population may not be representative of the overall population (and may in fact have relatively higher socio-economic status), the system is intended to at least track the evolution of nutritional status within a **well-defined and accessible group** inside Gaza and thereby offer additional evidence for nutritional and food insecurity monitoring.

The system’s **specific objectives** are to:

1. Estimate average weight and body-mass index (BMI) change since pre-war (7 October 2023) levels;
2. Monitor the relative and absolute evolution of weight and BMI over time;
3. Describe differences in weight and BMI change by sex, age, governorate of residence, professional role and number of children dependents.

# Data collection and analysis

## Eligibility

All individuals working for the organisation in some capacity are eligible to take part in data collection. Depending on the organisation, this may include expatriates, national staff, consultants, casual (e.g. daily) workers and others. The term **staff** throughout this document implies **any of the above categories** and should not be interpreted as signifying any specific employment relationship between the individual and the organisation.

It is recommended that **expatriate staff** also join data collection, partly to monitor their own nutritional status, but also to attenuate Palestinian staff’s potential concerns about data confidentiality and other harms.

## Data structure

The dataset will be **longitudinal**, meaning that multiple weight measures will be collected for the same individuals, with a unique ID linking sequential observations to each individual (staff member). This is far preferable in terms of statistical analysis to collecting observations that cannot be linked over time.

## Requirements

The LSHTM has prepared a **generic ODK/Kobo data collection platform** that any organisation can adopt. This should work on any mobile phone, tablet or computer. Staff can enter data using two forms accessible from separate URLs on a web browser (see below). They are able to toggle between identical Arabic and English versions of the data collection instruments. It is also possible to enter data on a desktop or mobile ODK/Kobo app, which however needs to be downloaded first. The LSHTM can provide instructions for this alternative option if staff prefer it, or if staff prefer designating a few individuals who will enter data on their device on behalf of many people, which would be easier to do via a desktop app.

**When they first join the system**, staff members read the **information sheet** and provide **consent** (see Appendix); if they consent, they will be prompted to create a user ID (see below) and fill a brief **baseline questionnaire**: staff members will use a URL linking to the data collection screen for this one-off data collection. Staff need to be online when accessing this **first URL** on their browser. Even if they lose connectivity, the platform will allow them to complete the consent process and questionnaire and click submit: their submission will be queued and will be uploaded by their device when next connected to the internet.

Staff are also be provided with a **separate URL** that they will need to use each time they wish to record **new weight observations** for themselves or a colleague. Again, the first time they use the URL on their device, they will need to be online. Subsequently, they can be offline, and the data will be uploaded when the device next has an internet connection; it is also possible to close the browser tab after submitting data.

If staff delete their cookies or browsing history, it may be that they will once again need to be online when accessing either URL. However, they should not worry about losing data: this can only happen if the device is lost or breaks before uploading the latest weight observation. Even in these cases, data previously uploaded will be safe.

## Variables collected

**Baseline data collection:**

* Unique ID, specified once by each new participant: participants are given two options for this: (i) specify their 9-digit Palestinian national ID; (ii) specify the first initials of their name, last name, father’s name and mother’s name (e.g. Fatima Abdelwahab Salman Yasmeen), their date of birth (dd/mm/yy, e.g. 03/11/1978) and the first initial of their favourite Palestinian artist (e.g. Sliman Mansour; if none, use any letter of the alphabet), which in the above example will generate the following ID: FASY031178S. Whichever option they choose, they are reminded by the system to remember their ID.
  + Once an ID is selected, **staff have to use the same ID every time** they add a new observation.
* Date [today by default, but with option to select a different date in the past]
* Age [16-99y]
* Sex [M, F, other/prefer not to say]
* Governorate where you currently live [North Gaza, Gaza City, Deir al Balah, Rafah, Khan Younis]
* Role [expatriate staff, national staff, consultant/contractor, casual/daily worker, other, prefer not to say]
* Number of children aged below 10 years within Gaza that you are currently responsible for feeding on a daily basis [0 to 20]
* Estimated height in cm [100-230]
* Estimated weight before the war started in Kg, to nearest decimal [30.0 to 180.0]
* Weight today in Kg, to nearest decimal [30.0 to 180.0]

**Ongoing data collection:**

* Unique ID, as above
* Date [today by default, but with option to select a different date in the past]
* Weight on the above date in Kg, to nearest decimal [30.0 to 180.0]

## Analysis and publication

An **automated data pipeline** automatically captures data from the server at daily intervals, pre-processes the date to remove implausible variables, and analyses them to generate the following **aggregate visualisations**:

* Mean, median and inter-quartile range absolute and percent reduction in weight and body mass index (BMI) from pre-war baseline.
* Proportion of staff with BMI in different WHO categories: underweight <18.5, normal 18.50 – 24.99, overweight ≥ 25, obese ≥ 30.
* Trends in the mean, median and inter-quartile range weight, BMI and percent weight change, by date.
* Modelled percent change in individual weight, based on an additive growth model.

Visualisations are available for the entire group of staff being monitored, but also according to the following stratifications: (i) by organisation, (ii) by sex, (iii) by age group (<30yo, 30-44yo, 45+yo), (iv) by governorate of current residence, (v) by staff role (any categories available), (vi) by number of children <10years old the staff member is responsible for feeding (0, 1, 2, ≥ 3).

All visualisations are automatically updated on a **publicly available website**.

## Confidentiality provisions

The following confidentiality provisions are built into the system:

* Data are uploaded onto a **secure server** that is compliant with UK Data Protection legislation and is being used for other sensitive studies, including storage of non-anonymised data;
* The **unique ID** specified by each participant, whichever option they choose, is **encrypted** at source, meaning that the variable as uploaded will not be either the Palestinian ID or the initials-date of birth composite ID, but rather an encrypted code that researchers receiving the dataset will not be able to decrypt;
* As no names or other uniquely identifiable variables are requested, data are therefore entirely **anonymised**;
* The public website enables members of the public to download graphs/tables but does not enable any access to the original source data.

## Ethics

The system may be considered part of routine monitoring for the purpose of occupational health and humanitarian advocacy: as such, we believe it is **exempt from institutional ethics review**. However, the LSHTM has applied for ethics approval so as to cover the likely eventuality that data from the system are subjected to additional statistical analyses and submitted for scientific publication. Once this approval is granted, the LSHTM can provide details of it to participating organisations that also wish to apply for internal ethics approvals.

# Procedures

## Before system launch

The following need to be in place:

* a calibrated **adult weight scale** set to kilograms in a visible, relatively secluded location (e.g. tea room, bathroom) within each office or building to which staff typically report at least once a day. It is recommended where possible that separate scales for women and men be made available, with a chair or stool for people to place any bags and take off or put on shoes.
* a designated staff member in each of the above locations, trained to calibrate the scale (if not electronic).
* one or more **designated member(s) of staff** who can answer questions by staff on the system, including data protection aspects.

## Procedures for system launch

When the system is launched, the following procedures should be followed:

* all staff should be **informed about the system** through suitable means (e.g. at morning briefings; through email, Whatsapp groups etc.); this information should be reiterated at least twice over the subsequent week; the links to the two ODK data collection screens (consent + baseline questionnaire; ongoing weight observations) should be shared at this stage.
* **key information** to emphasise to staff (see also Information Sheet below) includes the following:
  + this initiative is meant to give a voice to the lived experience of staff who are facing severe food insecurity, and make this information available publicly for advocacy purposes.
  + the data are not collected for the purpose of food aid registration: there is no immediate direct benefit to staff participating.
  + taking part in data collection is completely up to each staff member; there will be no monitoring of who is providing data or not, and not providing data will not change anything for staff.
  + staff can enter data on their mobile, their computer, or even someone else’s mobile/computer; they can use a different device on any given day; they just need the same URLs; the first time they use either the first or second URL, they will need to be online; thereafter, they can also be offline.
  + data entry should only take a few seconds; it would be great if staff enter their weight every day, but as often as possible would be good too. As soon as the device has an internet connection, the data will be automatically uploaded. Therefore, staff should take their weight and make sure to enter the information straight away, rather than trying to remember the number for later.
    - Before taking their weight, **staff must take their shoes off** and remove any heavy items (bags, coats) they may be holding or wearing, consistent with privacy and cultural preferences.
  + all the information will be anonymised and encrypted at the point of data entry, so that it will not be possible for anyone to identify staff from the data they provide.
  + we will generate analyses from everyone’s data and publish them automatically online, but also share these with the staff, so that you can also monitoring the evolution of the situation.
  + weight scales have been provided at each workplace [specify where / who can direct staff at each workplace]. If you have any questions about the system, please contact [specify whom].

## Procedures after system launch

After the system is launched:

* check regularly (at least once daily) that the **weight balances are functional** and (if manual) well-calibrated.
* **remind staff** once a week to enter their data and encourage any new employees to join the system.
* make sure that, for those who don’t have internet access, at least some of the key graphs showing trends are printed or otherwise shared. Make some time for **feeding back information to staff**.
* **any staff who leave Gaza** (e.g. for annual leave in the case of expatriates) should stop entering weight information until they return to Gaza.
* if there are **any concerns from staff** or other problems with the system, please email [Zeina.Jamaluddine@lshtm.ac.uk](mailto:Zeina.Jamaluddine@lshtm.ac.uk) cc [Francesco.Checchi@lshtm.ac.uk](mailto:Francesco.Checchi@lshtm.ac.uk) in English or Arabic.

# Appendix: Information sheet and online consent statement

## Participant informant sheet organisation-generic: to modify for each organisation

**Version:** 31 July 2025

**Title of the project:** Monitoring the nutritional status of humanitarian workers in Gaza

**Introduction**

You are invited to take part in a project to monitor the nutritional situation of humanitarian staff in Gaza. For the purpose of this project, the definition of “staff” includes expatriates, national staff, consultants, casual (e.g. daily) workers and others. Participation is entirely voluntary. Please review this information carefully. Feel free to ask anything that is unclear, talk to others if you wish, and take your time to decide.

**Who is organising and funding this project?**

The project is implemented by your organisation with the support of the London School of Hygiene and Tropical Medicine (LSHTM), a university in the United Kingdom. There is no specific funding source for this study.

**What is the purpose of this project?**

This project aims to monitor the nutritional status of the organisation’s staff currently working in Gaza by tracking their weight.

**Why have you been asked to take part?**

You are being invited to take part in this project because you are currently working for the organisation in Gaza in some capacity.

**Do you have to take part?**

No. Participation is entirely voluntary and will not affect your employment or your rights as a staff member. To take part, you need to actively opt in. Your employer will not know whether you opted in or opted out.

**What will happen to me if I take part?**

If you agree to participate, you will be asked to complete a very short questionnaire with basic information on yourself. You will then be asked to log your weight on a daily basis, or as often as you can. Only electronic data will be collected. Data can be entered via phone or computer, even when you are offline. Although daily entries are not required, they are recommended to help track changes over time. Recording and entering your weight should take about a minute.

**What are the possible benefits of taking part?**

There are no direct benefits to you from taking part in this project. However, the findings are likely to be used by your organisation and others to take decisions on nutrition and food security strategies, and to advocate for improved access to humanitarian assistance across Gaza.

**What are the possible risks and disadvantages?**

We do not expect you to experience any risks or disadvantages from participating in this project.

**What will happen with your data?**

Once you submit data, these will be uploaded to the internet as soon as the device has an internet connection. LSHTM researchers will analyse the data and produce graphs and tables to describe the evolution of the nutritional situation of the organisation’s staff. Each time new data are uploaded, the graphs and tables will be updated on a public online website, which you can also access. This website will only show group-level summaries, for example averages by job role, sex, age, or area of residence. It will not show individual data or allow individual data to be downloaded from the website.

The data you provide might also be used by your organisation and others to support decision-making around nutrition, food assistance, and humanitarian response. Researchers may also analyse and publish the anonymised data to better understand the nutritional situation in Gaza, including by estimating how much food was available to the population. These findings may be published in reports or scientific articles.

**Confidentiality**

The system only generates completely anonymised data, meaning it will not be possible from the dataset to identify your records or identity. You will need to create an ID when you first log into the system, but this ID will be encrypted before it is uploaded. Please keep a record of your ID, as you will need it each time you log your weight. Data will be stored on a secure cloud server at the LSHTM, which only designated LSHTM researchers have access to. No identifying information will ever be used in publications or shared outside the research team.

**Can I change my mind about taking part?**

Yes: if you do not wish to continue providing information to the system, you can simply stop entering data without any repercussions. If you want your data to be removed from the database, please get in touch with your designated contact person in the organisation, who will guide you on how to do this.

**How will we use information about you after the project ends?**

The fully anonymised data may be made available online subsequent to your organisation’s approval and will be stored on the LSHTM server for up to 10 years, then deleted.

**Who should I contact for further information?**

Please feel free to contact the focal points for this project within your organisation, which someone will have communicated to you. If you wish to complain about this project or are unhappy with any aspect of it, please get in touch with the relevant contact person within your organisation who can receive staff complaints.

## Consent statements

|  |  |
| --- | --- |
| **Statement** | **Yes/No** |
| I have read the information sheet dated 31st July 2025 for this project and I have or can access a copy of it if needed. |  |
| I understand that my consent is voluntary and that I am free to withdraw this consent at any time without giving any reason and without my job or legal rights being affected. |  |
| I understand that results from the project may be published in scientific journals or reports, without the use of any information that could identify me. |  |
| I agree to take part in this project by providing data on myself. |  |

**استمارة المعلومات وبيان الموافقة الإلكترونية**

## **معلومات المشارك**

**2025 يوليو 31 نسخة**

**عنوان المشروع: متابعة الحالة الغذائية لعمّال الإغاثة الإنسانية في قطاع غزة**

**المقدمة**  
تمت دعوتك للمشاركة في مشروع لمتابعة الوضع الغذائي لعمّال الإغاثة الإنسانية في قطاع غزة. يشمل تعريف عمّال الإغاثة الإنسانية في هذا المشروع "الموظفين والموظفات" الأجانب، الموظفين والموظفات الفلسطينيين ، المستشارين والمستشارات، العمّال المؤقتين (مثل العمّال اليوميين) وآخرين ممن يشاركون في الاستجابة الإنسانية. إن المشاركة في هذا المشروع طوعية بالكامل. يرجى منك قراءة هذه المعلومات بعناية. لا تتردد/ي في طرح أي أسئلة عن النقاط غير الواضحة، كما يمكنك مناقشة قرار المشاركة مع من حولك إذا أردت، لذا نطلب منك أخذ الوقت الكافي في اتخاذ القرار.

**من يقوم بتنظيم وتمويل هذه الدراسة؟**  
يتم تنفيذ المشروع من قبل المنظمة بدعم من كلية لندن للصحة العامة والطب الاستوائي، وهي جامعة في المملكة المتحدة. لا يوجد مصدر تمويل محدد لهذه الدراسة.

**ما هو هدف هذه الدراسة؟**  
تهدف هذه الدراسة إلى متابعة الحالة الغذائية لموظفي وموظفات المنظمة العاملين حالياً ي قطاع غزة من خلال تتبع أوزانهم في ظل استمرار الحظر على دخول المواد الأساسية والمساعدات الإنسانية إلى القطاع.

**لماذا تمّت دعوتي للمشاركة؟**  
تمّت دعوتك للمشاركة في هذا المشروع لأنك تعمل/ين حالياً مع المنظمة في قطاع غزة بأي صفة كانت.

**هل تجب عليّ المشاركة؟**  
لا، نؤكد أن المشاركة طوعية بالكامل ولن تؤثر على وظيفتك أو حقوقك كموظف/ة . كما أن مدراءك في المنظمة لن يعرفوا ما إذا كنت قد وافقت أو رفضت المشاركة. في حال قررت المشاركة في المشروع نطلب أن تستمرّ بالمشاركة بنشاط.

**ماذا سيحدث لي إذا قررت المشاركة؟**

إذا وافقت على المشاركة، سيُطلب منك تعبئة استبيان قصير يحتوي على معلومات أساسية عنك. بعد ذلك، سيُطلب منك تسجيل وزنك يومياً أو حسبما تستطيع. سيتم جمع البيانات إلكترونياً فقط. يمكن إدخال البيانات عبر الهاتف أو الكمبيوتر، حتى إذا كنت غير متصل بالإنترنت. على الرغم من أن إدخال البيانات يوميًا ليس إلزامياً، إلا أنه يُوصى به لمتابعة التغييرات على مر الوقت. سيستغرق تسجيل وإدخال وزنك حوالي دقيقة واحدة.

**ما هي الفوائد المحتملة من المشاركة؟**  
لا توجد فوائد مباشرة لك من المشاركة في هذا المشروع. لكن من المحتمل أن يتم استخدام النتائج من قبل المنظمة وآخرين لاتخاذ قرارات حول استراتيجيات التغذية والأمن الغذائي، وللدعوة إلى تحسين الوصول إلى المساعدات الإنسانية في قطاع غزة.

**ما هي المخاطر والسلبيات المحتملة؟**  
 من غير المتوقع أن تواجه أي مخاطر أو سلبيات من المشاركة في هذا المشروع.

**ماذا سيحدث لبياناتي؟**  
بمجرد إدخال البيانات، سيتم تحميلها إلى الإنترنت حين يتصل الجهاز بالإنترنت. سيقوم ا فريق البحث في المنظمة بتحليل البيانات وإنتاج رسوم بيانية وجداول لوصف تطور الوضع الغذائي لموظفي وموظفات المنظمة. كلما تم تحميل بيانات جديدة، ستُحدَّث الرسوم البيانية والجداول على موقع إلكتروني عام يمكنك الوصول إليه أيضاً. سيعرض هذا الموقع ملخّصات على مستوى المجموعات المشاركة بالمشروع فقط، مثل المتوسطات حسب المنصب الوظيفي، الجنس، العمر، أو منطقة الإقامة. لن تظهر البيانات الفردية على هذا الموقع الالكتروني وبالتالي من غير الممكن تحميل البيانات الفردية من الموقع.  
كما يمكن استخدام البيانات من قبل منظمتك وجهات أخرى لدعم اتخاذ القرارات حول التغذية والمساعدات الغذائية والاستجابة الإنسانية. كما قد يقوم فريق البحث بتحليل البيانات مجهولة الهويّة ونشر النتائج لفهم أفضل للوضع الغذائي في قطاع غزة، بما في ذلك تقدير مقدار الطعام الذي كان متاحاً بشكل حقيقي للسكان. قد تُنشر هذه النتائج في تقارير أو مقالات علمية.

**الخصوصية والسرية**  
يوفر نظام البيانات بيانات مجهولة الهوية بالكامل، مما يعني أنه من غير الممكن تحديد سجلاتك أو هويتك من خلال مجموعة البيانات. ستحتاج إلى إنشاء معرّف عند تسجيل الدخول لأوّل مرة إلى النظام، ولكن سيتم تشفير هذا المعرف قبل تحميله. يرجى منك الاحتفاظ بسجل المعرّف الخاص بك، حيث ستحتاج إليه في كل مرة تقوم فيها بتسجيل وزنك. سيتم تخزين البيانات على خادم كلية لندن الآمن، والذي يمكن الوصول إليه من قبل الفريق البحثي. لن يتم استخدام أي معلومات تعريفية في المنشورات أو مشاركتها خارج فريق البحث.

**هل يمكنني تغيير رأيي بشأن المشاركة؟**  
نعم: إذا كنت/ي لا ترغب/ين في الاستمرار في تقديم المعلومات إلى نظام البيانات ، يمكنك ببساطة التوقف عن إدخال البيانات دون أي تبعات تذكر. إذا كنت ترغب/ين في حذف بياناتك بالكامل، يمكنك التواصل بالشخص المعني (انظر/ي أدناه) مع اسم المستخدم الخاص بك، وسيتم حذف بياناتك نهائيًا من النظام. هذا الأمر يعود لك بشكل كامل ..

**كيف سيتم استخدام المعلومات عني بعد انتهاء المشروع؟**  
قد تُتاح البيانات مجهولة الهوية بالكامل عبر الإنترنت بعد موافقة منظمتك، وسيتم تخزينها على خادم كلية لندن الآمن لمدة تصل إلى 10 سنوات، ثم يتم حذفها.

**كيف يمكنني الحصول على مزيد من المعلومات؟**

لا تتردد/ي في التواصل مع الشخص المسؤول عن تقديم التوضيح. إذا كنت ترغب في تقديم شكوى بشأن هذا المشروع أو في حال عدم رضاك عن أي جانب منه، يرجى التواصل مع الشخص المسؤول عن تقديم التوضيح

**بيان الموافقة**  
عنوان المشروع: متابعة الحالة الغذائية للعاملين في المجال الإنساني في غزة  
شكرًا لك على التفكير في المشاركة في هذا النظام لجمع البيانات. إذا كانت لديك أي أسئلة تتعلق بورقة المعلومات أو الشرح الذي تم تقديمه لك، يرجى الاتصال بالنقطة المعنية المدرجة في ورقة المعلومات وطرح أسئلتك قبل اتخاذ قرارك بشأن تقديم الموافقة.

|  |  |
| --- | --- |
| **نعم/لا** | **البيان** |
|  | لقد قرأت ورقة المعلومات بتاريخ 31 يوليو 2025 لهذا المشروع ولدي أو يمكنني الوصول إلى نسخة منها إذا لزم الأمر. |
|  | أفهم أن موافقتي طوعية وأنني حر في سحب هذه الموافقة في أي وقت دون إعطاء سبب ودون التأثير على عملي أو حقوقي القانونية. |
|  | أفهم أن نتائج المشروع قد تُنشر في مجلات علمية أو تقارير دون استخدام أي معلومات قد تحدد هويتي. |
|  | أوافق على المشاركة في هذا المشروع من خلال تقديم البيانات عن نفسي. |