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Supplementary Table 1: Household questionnaire

Field Label	Droplist or numbers or date
Record ID	
Do you agree to participate in the study?	1, yes 2, no
Please sign here	
Camp name	1, Jerash 2, Souf
Date-interview	DD/MM/YYYY
Are you a Palestinian refugee, registered at UNRWA with refugee number?	
Are you a Palestinian refugee from Syria?	
Gender of the caregiver (mainly mother)	1, male 2, female
Date of birth of caregiver (mainly mother)	DD/MM/YYYY
Marital status for the caregiver (mainly mother)	1, Married 2, Married (a man with one wife) 3, Married (a man more than one wife) 4, a widow 5, divorced 6, separate
How many people live in the house (individuals normally resident and/or share expenses of the house)	[]
How many adult men	[]
How many adult women	[]
How many children above 5 years old and below 18 years	[]
How many children below 5 years old	[]
Educational level of the Household representative (father)	1, Illiterate 2, Some reading and writing 3, primary school 4, secondary school 5, high school 6, vocational school 7, college/university (not completed) 8, University and above 9, other qualifications
Education level of his/her spouse (mother)	1, Illiterate 2, Some reading and writing 3, primary school 4, secondary school 5, high school 6, vocational school 7, college/university (not completed) 8, University and above 9, other qualifications
How many children between the age of (> 6 years and < 18 years) they go to school?	[]
Household has at least one chronic disease: i.e., stroke; heart diseases; cancer; mental health; diabetes type 1 or type 2; Hypertension	9, nobody 1, father 2, mother 3, uncles 4, aunts 5, grandfather 6, grandmother 7, sibling 8, other

Number of persons has at least one physical disability/ difficulty, living in the same household	[]
Type of Difficulty/ Disability	1, hearing 2, seeing 3, movement 4, remembering/ concentration 5, communication skills
Over the last 6 months, how many months did your family get a source of income, if any?	[]
Over the last 6 months, was this income steady (i.e., it was the same amount every month)?	1, yes 2, no
Is the head household employed?	1, yes 2, no
What is the occupation of the household representative?	14, Agriculture and fishing 1, work in plant 2, work in Construction 3, work in trade business; 4, repair of motor vehicles and motorcycles 5, work in Transportation or storage 6, work in hospitality or food 7, Professional, scientific or technical employee 8, Administrative or clerk employee 9, employee in Education sector 10, Human health and social work employee 11, own private business 12, UNRWA 13, other INGO and LNGO
Is the house owned or rented	1, owned 2, rented 3, other (temporary accommodation)
Do you have the following equipment in your house?	1, fridge 2, freezer 3, microwave 4, Stove 5, Oven
How much do you spend on a food item (grocery) on a weekly basis?	[]
Construction materials of the roof	1, Galvanized iron/aluminum 2, Tile concrete/clay tile 3, Half galvanized iron and half concrete 4, Wood 5, Others
Construction materials of the outer walls?	1, concrete/brick/stone/wood 2, Half concrete/brick/stone and half wood 3, Galvanized iron/aluminum
State of repair of the building/house	1, Needs no repair/ 2, needs minor repair 3, Needs major repair 4, Under renovation
During the last month, was there a time when you were worried you would not have enough food to eat because of a lack of money or other resources?	1, Rarely (once or twice in the past four weeks) 2, Sometimes (three to ten times in the past four weeks) 3, Often (more than ten times in the past four weeks)
Still thinking about the last month, was there a time when you were unable to eat healthy and nutritious food because of a lack of money or other resources?	1, Rarely (once or twice in the past four weeks) 2, Sometimes (three to ten times in the past four weeks) 3, Often (more than ten times in the past four weeks)
Was there a time when you ate only a few kinds of foods because of a lack of money or other resources?	1, Rarely (once or twice in the past four weeks) 2, Sometimes (three to ten times in the past four weeks) 3, Often (more than ten times in the past four weeks)

Was there a time when you had to skip a meal because there was not enough money or other resources to get food?	1, Rarely (once or twice in the past four weeks) 2, Sometimes (three to ten times in the past four weeks) 3, Often (more than ten times in the past four weeks)
Still thinking about the last month, was there a time when you ate less than you thought you should because of a lack of money or other resources?	1, Rarely (once or twice in the past four weeks) 2, Sometimes (three to ten times in the past four weeks) 3, Often (more than ten times in the past four weeks)
Was there a time when your household ran out of food because of a lack of money or other resources?	1, Rarely (once or twice in the past four weeks) 2, Sometimes (three to ten times in the past four weeks) 3, Often (more than ten times in the past four weeks)
Was there a time when you were hungry but did not eat because there was not enough money or other resources for food?	1, Rarely (once or twice in the past four weeks) 2, Sometimes (three to ten times in the past four weeks) 3, Often (more than ten times in the past four weeks)
During the last month, was there a time when you went without eating for a whole day because of a lack of money or other resources?	1, Rarely (once or twice in the past four weeks) 2, Sometimes (three to ten times in the past four weeks) 3, Often (more than ten times in the past four weeks)

Supplementary Table 2: Child questionnaire

Field Label	Droplist or numbers or date
Date of birth	DD/MM/YYYY
Sex of child	1, male 2, female
Child weight in kg (above 2 years)	[]
Mother's weight (child below 2 years)	[]
Mother's weight with a child (child below 2 years)	[]
Length /height of the child in centimeters	[]
Does your child has any kind of morbidity	1, yes 2, no
Type of morbidity	1, diabetes 2, anemia 3, any kind of physical/mental disability 4, any kind of chronic disease (i.e., cancer, asthma) 5, Malaria, 6, respiratory tract infection 7, diarrheal diseases 8, Pneumonia
Did the mother continued breastfeeding her child until the age of 1 year (or current age if less than 1 year)	1, yes 2, no
Did you exclusively breastfeed your child until the age of 6 months?	1, yes 2, no
When did you introduce of solid, semi-solid or soft foods?	1, at 6months 2, after 6 months 3, before 6 months
Did your child eat the following food items in the past week?	1, grains (rice, wheat, corn, roots, oats) 2, legumes, beans and nuts 3, dairy products (milk, yogurt, cheese) 4, meat products (red meat, fish, poultry, liver, organs) and eggs 5, fruits 6, vegetables
24-Hr recall of the child diet	
1-bread, rice, noodles, pasta, burger, frekah or other foods made from grains	1, Yes 2, No 3, Don't know
2- potato, Pumpkin, carrots, squash, corn or sweet potatoes	1, Yes 2, No 3, Don't know
3- dark green leafy vegetables	1, Yes 2, No 3, Don't know
4- mango, grapefruits, apricots, Nectarine, watermelon, cantaloupe	1, Yes 2, No 3, Don't know
5- any other fruits or vegetables	1, Yes 2, No 3, Don't know
6- animal organs: Liver, kidney, heart, other	1, Yes 2, No 3, Don't know
7- meat: such as beef, lamb, goat, chicken	1, Yes 2, No 3, Don't know
8- eggs	1, Yes 2, No 3, Don't know

9- fresh fish, frozen fish, canned fish	1, Yes 2, No 3, Don't know
10- beans, peas, lentils, hummus, nuts, or seeds	1, Yes 2, No 3, Don't know
11- milk products: cheese, yogurt, or other	1, Yes 2, No 3, Don't know
12- oil, fats, or butter, or foods made/cooked with any of these	1, Yes 2, No 3, Don't know
13- sugary foods such as chocolates, sweets, candies, pastries, cakes, ice cream, or biscuits	1, Yes 2, No 3, Don't know
14 condiments for flavor, such as chilies, spices, herbs	1, Yes 2, No 3, Don't know
15- sugary drinks: canned juice, soda	1, Yes 2, No 3, Don't know
16- chips, salty snacks	1, Yes 2, No 3, Don't know
17- tea or coffee	1, Yes 2, No 3, Don't know
Did your child eat any solid, semi-solid, or soft foods yesterday during the day or at night?	1, if yes --then go back to food categories (1 to 17) and record foods eaten 2, No 3, Don't know
Did your child drink anything from a bottle with a nipple yesterday during the day or night?	1, Yes 2, No 3, Don't know

Supplementary File 3: Semi-structured interview guide for caregivers**A. Brief introduction/welcome**

Thank you for giving me some of your time today to discuss your child's health and nutrition. My name is Nada Abu Kishk, and I am conducting a study about the nutritional status of Palestinian Refugee children in the camp. This interview is only for the purposes of this research study, and the information that you share with me will not be shared with anyone outside of our research team. If you feel that you need to stop the interview at any time for any reason, you are free to do so. I am interested in learning about your own thoughts and experiences, so please feel free to share anything with me. This will help me learn a lot about my study. Do you have any questions for me before we begin?

Introductory questions:

1. Could you please describe to me what a typical day looks like for you?

Main, topic-focused questions:

2. Tell me how your family obtains food on a regular basis?
3. What are the types of food your family usually obtain?
Follow up: Is this the kind of food that you want to obtain?

Child-specific

Now I would like to ask you some questions about your family, your children, and (name of child) in particular. Thinking about (name of child):
(big picture question)

1. Describe for me what does your child usually eats throughout the day. Please walk me through his/her daily eating routine from morning to bedtime?

Probe for: What child eats; Where eat; Who prepares food (note: make sure these are covered)

(details question)

1. What do you think about the quantity of food that (name of child) eats?
Probe: perception of child-eating practices, feeding practices, etc.
2. What do you think about the quality of the foods that (name of child) eats?
Probe: How do you assess the quality of food?/ How do you determine if a food is good quality for your child?
3. How would you know if your child didn't have enough food? (Probe for an example of when that has happened.)
4. How can you know that your own child is well-fed? (Ask for an example.)
5. What are your main concerns about your child's food intake?

For families who have a malnourished child:

1. What worries you most about (child?) Probe for what can/cannot be done?
2. How does your family perceive (child?) How about your neighbors/community?
3. What hopes do you have for (child?)

For families who have a non-malnourished child:

1. How do you manage to keep your (child) well nourished? Probe for what helps. Probe for who helps.
2. Thinking to the future, what thoughts do you have about (child's) nutrition?
3. What hopes do you have for (child?)

Food security questions (open-ended)

For families who are food insecure:

1. What are the challenges your family faces in obtaining enough food?
2. How do you cope with those challenges?
3. In your view, does your family have enough to eat? Probe for how she makes that determination. If not, how does that affect your family (especially children)?
4. How is food distributed across members of your family?

For families who are food secure:

1. How do you manage to keep food on the table? What helps your family be able to do that?
2. How does having enough food affect your family?
3. Do you have any concerns about keeping food on the table?
4. Please describe any challenges that your family has in obtaining food.

Closing questions

1. What advice would you give if any mother had come to you with the same circumstances?
2. Is there anything that I should know about your children's health and nutrition status?

Supplementary File 4: Interview Guide for UNRWA focus groups**A. Brief introduction/welcome**

Thank you for giving me part of your time to attend the focus group. My name is Nada Abu Kishk, and I am a Master's student doing a study about the nutritional status of Palestine refugee children in UNRWA's in Palestine refugee camps in Jordan. This focus group is only for the study purposes, and all the information given from you today, will not be shared with anyone outside the research team. If you feel that you need to stop anytime for any reason, please do so. Do you have any questions before we start our interview together?

Introductory questions:

Please introduce yourself to the group and tell us what you do in the UNRWA/ LFO department.

Main, topic-focused questions:**A. Perception about general issues of the camps settings****General issues:**

1. What are the general issues and problems facing the camp (Jeresh and Souf)?
2. What are the major infrastructure challenges in the camp (Jeresh and Souf)?
3. What are the biggest problems related to the mentioned camps that might affect children's health?

Food security:

Now, I have questions about family access to food in the camps.

1. How do families in the camps obtain food? (i.e., e-vouchers)
(probe) How do families in the camp pay food?
2. Can you tell me about the food quality in the camps? And What about food diversity?
From your experience, do families have enough food on the table.
 1. Think about families that do have enough food, what helps them access that food?
 2. Think about families who do not have enough food. What are the obstacles they face in accessing food?
4. How has food security for Palestine Refugees in the camps changed over time, and a follow- the question is that "why did the situation got better or got worse" "how do you explain that change"?

B. Perception of the children's diets

5. Do you see children in the camps go hungry?
6. Can you describe for me children's diet?
7. What types of foods are they eating?
8. Why do you think children are eating this type of food?
9. In your opinion, what are the effects of these diets on children's health?
10. Who determines what does the child eats?
11. What can improve children's diet in terms of quality, and how about the quantity?