



# SUSTAINABLE DEVELOPMENT GOALS

2 ZERO  
HUNGER



# Project for Diabetes Prevention



Students from the Community Intervention course in the Human Medicine program at Universidad Peruana de Ciencias Aplicadas (UPC) carried out educational projects focused on health promotion and prevention in 17 communities in San Genaro (Chorrillos).

After identifying the priority problems in the communities, the students, guided by their teachers, implemented projects for the promotion and prevention of type 2 diabetes, exercise, and healthy eating habits. Healthy food baskets were distributed.

This activity took place in a community with limited resources. The need was to design interventions that would improve healthy lifestyles to prevent this disease.



# Prevention of Childhood Anaemia



Students from the Medicine program developed an intervention project for the Prevention of Childhood Anaemia in children under 5 years old.

Virtual campaigns, training sessions, promotion, and follow-ups were carried out through activities such as virtual workshops, WhatsApp groups, and phone lists.

The intervention project took place in the AA.HH. San José-San Genaro II community in the district of Chorrillos on Saturday, June 25th, 2022.

It's worth mentioning that this community is located in an area classified as extremely poor, where cases of anemia occur from an early age.



# Prevention of Overweight in Women



Students from the Medicine program implemented the intervention project for the prevention of overweight and obesity “Todos contra el sobrepeso en San Genaro”. They conducted a physical activity workshop, telephone interviews, and an educational talk.

The purpose was to intervene in the reduction of the high incidence of overweight in adult women in the San Genaro de Villa area, in the district of Chorrillos.

There is an association between poverty and obesity. It has been found that low-income families are the most vulnerable. This is compounded by sedentary behavior and poor nutrition.



# Prevention of Childhood Obesity



Students from the Medicine program carried out the intervention project “Un niño llenito no es un niño sanito: Campaña contra la obesidad infantil” for the prevention of childhood obesity.

They conducted an in-person talk about healthy practices, habits, and virtual activities with the dissemination of videos and educational material. Information was provided about their rights to access healthcare, including access to nutritionists and other healthcare professionals.

This activity benefited 15 families (children aged 6 to 11) from the San Genaro de Villa community in Chorrillos.

As is known, the association between poverty and obesity is a concern and a social problem that affects many low-income communities.



# Prevention of Childhood Anaemia



Students from the UPC Medicine program executed a virtual project called "Luchando contra la anemia infantil" to reduce anemia in children under 3 years old, with the aim of ensuring that these children perform well academically in the future.

The work included videos, informative posters, and demonstrative sessions through Google Meet to interact with mothers.

The intervention took place in the AA.HH. San Genaro de Villa, in the district of Chorrillos, on Saturday, June 18th.





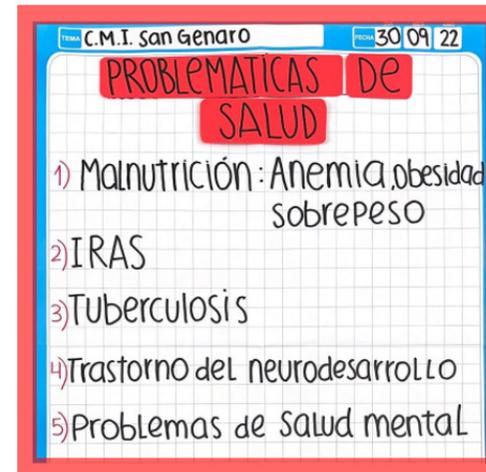
# Intervention to Decrease the Prevalence of Malnutrition in Children and Adolescents in the AAHH San Genaro de Villa

This intervention was carried out by students from the Community Medicine Externship, between September and October of the year 2022.

They conducted interviews with nearby schools and identified health issues in the children, family problems, and economic issues.

The purpose of the intervention was to conduct workshops to contribute to the reduction of the prevalence of malnutrition in children and adolescents in the AA.HH. San Genaro de Villa - Chorrillos.

Educational workshops, health campaigns, anaemia talks, mental health talks, and talks on overweight and obesity were conducted at the San Genaro community center and were directed at mothers. Nutritional assessments were carried out on the children and adolescents, and interviews were conducted with students from nearby schools.



# Reduction of Anaemia Prevalence, Incidence of Respiratory Symptoms, Obesity, and Overweight in Students within the Jurisdiction of CMI Manuel Barreto



Sixth-year students from the Community Health Externship in Medicine conducted an educational activity aimed at elementary and high school students at “Dolores Caverro de Grau” School in the district of San Juan de Miraflores.

The purpose was to contribute to the reduction of anaemia prevalence, incidence of respiratory symptoms, obesity, and overweight in students within the jurisdiction of the Manuel Barreto Maternal and Child Center.



# Campaign for the Prevention of Overweight and Obesity



The work was carried out by Medicine program students in the Community Center of the San Juan de Miraflores district, within the jurisdiction of the Trébol Azul Health Center.

This intervention plan, aimed at contributing to the reduction of overweight and obesity, had the purpose of empowering the population about their health status.

A situational health analysis was taken into account, and interviews were conducted with different social actors (Coordinator of the Vaso de Leche Program, president of the community kitchen, and a police officer from the police station). The community, health promoters, and UPC students participated.



# Health Campaign Targeting Students and Teachers of the Educational Institution 7099 Héctor Pretell Carbonell



Students from the Medicine program conducted a health campaign on healthy eating habits at the Héctor Pretell Carbonell Educational Institution, in the district of San Juan de Miraflores.

The purpose was to contribute to the reduction of malnutrition in students and teaching staff in terms of overweight and obesity.

In this way, it is intended that this intervention will impact the lifestyles of the population served.

Anthropometric assessment was performed on sixth-grade students, and education on healthy eating and physical activity was provided.



# Intervention in the Oral Health of the Mother-Child Pairing in Patients of the Gynecology Service at Santa Rosa Hospital in the District of Pueblo Libre



Dentistry students carried out a project to increase knowledge about oral health and nutrition in the first 1000 days of a baby and in pregnant mothers, in the Gynecology Service at Santa Rosa Hospital, in the District of Pueblo Libre.

The objective was to provide education on oral health and nutrition to pregnant mothers in the Gynecology Service.

The students created educational materials and evaluation instruments (educational sessions, pre-test and post-test questionnaires, flip charts, educational videos, brochures, and a checklist) to increase knowledge about the oral health of the mother-child pairing. The project was executed between April and June of 2022.



# Preventive Promotional Health Project “Alimentación adecuada para todos los integrantes de un entorno familiar en el distrito de El Agustino”



A preventive promotional health project was carried out in the District of El Agustino, “Alimentación adecuada para todos los integrantes de un entorno familiar en el distrito de El Agustino”.

After conducting the diagnosis, the project was designed and executed with the aim of educating about the benefits of adequate healthy nutrition and increasing knowledge about this topic.

After evaluation, appropriate healthy habits were implemented in the family environment. This project was carried out between the months of October-November.

*PROYECTO DE SALUD PREVENTIVO  
PROMOCIONAL “Alimentación adecuada  
para todos los integrantes de un entorno  
familiar en el distrito de El Agustino”*

*RESPONSABLE:  
-Marilyn Surichaqui Salinas*



# Health Campaign Against Malnutrition/Undernutrition, ADDs, Respiratory Diseases, Gastrointestinal, and Parasitic Diseases



Students from the Medicine program conducted a health campaign targeting patients and attendees of the “Trébol Azul” Health Center on November 5th, from 8 a.m. to 12 a.m.

Brochures, nutritious and cost-effective recipes, and pamphlets explaining the services offered by the Health Center were provided.

The purpose of the intervention was to improve the quality of life for the residents of the area.

A poster for a health campaign. It features a red border and a light pink background with decorative leaf patterns. The text is in red and black. At the top right is the UPC logo and name. The main title is in red, followed by a list of activities in black. The location, time, and date are listed below, along with a blue flower icon and the phrase '¡NO FALTES!' in red.

**UPC**  
Universidad Peruana  
de Ciencias Aplicadas

**GRAN CAMPAÑA DE SALUD CONTRA  
DESNUTRICIÓN/MALNUTRICIÓN, EDAS,  
ENFERMEDADES RESPIRATORIAS,  
ENFERMEDADES GASTROINTESTINALES Y  
PARASITARIAS.**

**DEGUSTACIÓN DE PLATOS NUTRITIVOS  
CHARLAS INFORMATIVAS  
ENTREGA DE MASCARILLAS GRATIS**

Lugar: C.S. "Trébol Azul"   
Hora: 8:00 am  
Día: 05 de noviembre  
**¡NO FALTES!**



# Preventive Promotional Health Project: “Una buena alimentación para una mejor vida saludable” in the District of La Perla, Callao

During 2022, students from the Dentistry program executed a health project with the purpose of intervening in inadequate healthy practices in the family environment of La Perla district, Callao, due to high stress levels, as well as lack of knowledge about types of diet.

The students created virtual pre and post-test questionnaires on healthy practices, as well as an observation guide and a checklist. The target population was satisfied with the topics covered.

**RESULTADOS-EVIDENCIAS DE LA EJECUCIÓN**

**Cuestionario: “Alimentación saludable” Pre-test**  
https://forms.gle/yHeovzPXzkC3C6JJ9

**Cuestionario: “Alimentación saludable” Post-test**  
https://forms.gle/89JCuJ5zUEwdt8NKA

**Alimentación saludable: Pre-test**  
Se presentará 10 preguntas relacionado a la alimentación.

**Alimentación saludable: Post-test**  
Se presentará 10 preguntas relacionado a la alimentación.

**Respuestas:**  
[https://docs.google.com/file/d/1TGKF26qH1DFzq4dUifITV5qZHRZpPDEO/edit?usp=docslist\\_api&filetype=msexcel](https://docs.google.com/file/d/1TGKF26qH1DFzq4dUifITV5qZHRZpPDEO/edit?usp=docslist_api&filetype=msexcel)

**Respuestas:**  
<https://docs.google.com/spreadsheets/d/1Q1AQBtcpRwN4FC1Rx1N4EfgmKQ9gYZI0fofCRtGokk/edit>

**Link de 14 minutos sobre contenido:**  
[https://drive.google.com/file/d/1kllUxSwwQ5ONIZ9ILM\\_evoyMfHmt117/view?usp=sharing](https://drive.google.com/file/d/1kllUxSwwQ5ONIZ9ILM_evoyMfHmt117/view?usp=sharing)

# COVID-19 and Food Insecurity in Latin America and the Caribbean



**Authors:** Hernández-Vásquez, A., Visconti-Lopez, F.J., Chacón-Torrico, H., Azañedo, D.

**Abstract:** The objective was to determine the prevalence of household food insecurity (FI) in Latin America and the Caribbean (LAC) during the COVID-19 pandemic. Secondary analysis was performed using the waves 1 to 3 of the 2020 COVID-19 High Frequency Phone Surveys in 13 LAC countries. The countries with the highest FI in the first wave were Honduras (60.3%), Peru (58.1%) and Ecuador (57.9%). Likewise, the countries with the greatest differences in the prevalence of FI between the first and last waves in percentage points (PP) were Peru (-29), Guatemala (-27.7) and Bolivia (-21.8). LAC countries face a great burden of FI.

**Keywords:** Food insecurity COVID-19; Latin America.

Journal of Hunger and Environmental Nutrition, 07 Jun 2022

<https://doi.org/10.1080/19320248.2022.2086023>



# Analysis of the distribution of macronutrients of food baskets delivered by municipalities during the COVID-19 pandemic in Peru

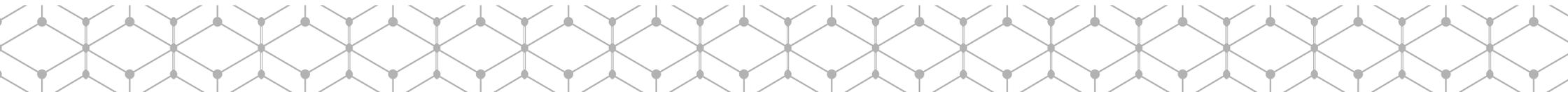


**Authors:** Morales-Cahuancama, B., Dolores-Maldonado, G., Hinojosa-Mamani, P., Bautista-Olortegui, W., Quispe-Gala, C., Huamán-Espino, L., Aparco, J.P.

**Abstract: Objectives.** To evaluate and compare the macronutrient distribution of the food baskets delivered by Peruvian municipalities during the COVID-19 pandemic according to the geographic domain and assigned budget level.

**Materials and methods.** Secondary analysis of the database “Consultation of Acquisition and distribution of basic necessities of the basic family basket” of the General Comptroller of the Republic. Stratified probability sampling was carried out. The caloric intake distribution was calculated according to macronutrients and compared with the Acceptable Intervals of Macronutrient Distribution (IADM) of the Nutrition Institute of Central America and Panama (INCAP) and the National Institute of Civil Defense (INDECI).

**Results.** At the national level, the median caloric intake of proteins was 7.7%; for carbohydrates it was 62.5%; and for fats it was 28.1%. The proportion of municipalities with protein deficit was 84%; Municipalities with excess carbohydrates



# Analysis of the distribution of macronutrients of food baskets delivered by municipalities during the COVID-19 pandemic in Peru

ranged from 16.5% (according to INCAP) to 35.9% (according to INDECI), and with excess fat, it was between 61.6% (according to INCAP) and 20.2% (according to INDECI).

According to INDECI, nationally only 9.2% of municipalities delivered baskets with an adequate distribution of macronutrients; Metropolitan Lima stands out with the highest proportions of adequate baskets, while in the Jungle region this percentage was less than 5%.

**Conclusions.** Most of the baskets delivered did not have adequate macronutrient distribution. Especially the baskets of municipalities outside of Metropolitan Lima or those that had smaller budget. Carbohydrates and fats were the nutrients that were included in excess, while proteins were deficient.

**Keywords:** Food Basket; Covid-19; Emergency Feeding; Disaster Vulnerability; Food Security; Perú (Source: MeSH)..

Revista Peruana de Medicina Experimental y Salud Publica, Volume 39, pages 06-14, 2022

<https://doi.org/10.17843/rpmesp.2022.391.9742>



# IoT system for life cycle and crop harvest monitoring in the agricultural sector in Peru

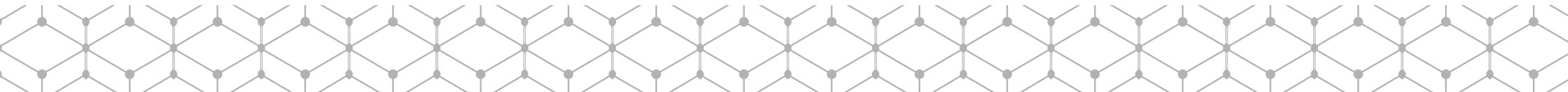


**Authors:** Salinas-Simon, C.; Robles-Yovera, A.; Burga-Durango, D.

**Abstract:** In recent years, the emergence of new technologies in agricultural practices has allowed efficient monitoring of almost any parameter (humidity, temperature, luminosity, etc.) to achieve efficient crop management and increase yield and quality. However, many companies still do not include smart farming on their fields. This leads to a loss on the potential benefits that can be generated by information technologies together with IoT (Internet of Things) and Cloud Computing paradigms. This paper presents SmartVid, which aims to systematize data acquisition procedures and address the problems that exist in precision agriculture. Field experiments provide convincing evidence that the application represents a step forward towards smart agriculture by enabling the use of low-cost and rapidly deployable technologies.

**Keywords:** Keywords: Cloud computing; meteorological variables; Monitoring system  
Conference Proceedings, 2022 Congreso Internacional de Innovación y Tendencias en Ingeniería, CONIITI 2022

<https://doi.org/10.1109/CONIITI57704.2022.9953723>



# Analysis of the water-food nexus for food security in a high Andean Community



**Authors:** Fiestas, M.-A., Gonzalez, S.-N., Gomez-Cunya, L.-A.

**Abstract:** Water and food are facing increasing demand worldwide. This increase is significant in mountainous regions where glaciers are melting, and water availability is in danger. Food demand has also increased with the population growth. This study sought to evaluate relationships between water supply and food demand in a community located in the Peruvian Andes mountainous region. The developed methodology reveals a practical way to identify future problems with food availability. Water supply was evaluated using historical precipitation data. On the other hand, water demand was estimated using meteorological data. Irrigated areas were determined using 2019 agricultural data from the local government. Food consumption was evaluated using a 2019 per capita regional consumption. Results show a water deficit for the current agricultural demand for ten out of the twelve months. The potato was the main crop being produced in the community, among sixteen studied crops. A high percentage of the time, many products were found do not satisfy local demand. For example, the potato was found to secure only fifty-five percent of the total local-demand fifty percent of the time. Current results can help the management of food security.

**Keywords:** IOP Conference Series: Earth and Environmental Science; 2022 8th International Conference on Environment and Renewable Energy, ICERE 2022 Virtual, Online ;VOL. 1121

<https://doi.org/10.1088/1755-1315/1121/1/012005>

