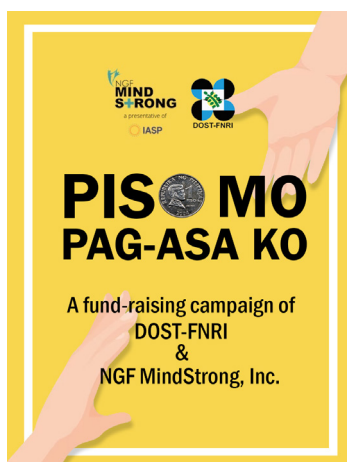


“PISO MO, PAG-ASA KO” A fund-raising campaign of DOST-FNRI launched on Valentine’s Day

✍ Chona F. Patalen, Senior Science Research Specialist, DOST-FNRI



Ribbon-cutting led by Hon. Renato U. Solidum, DOST Secretary, Dr. Imelda Angeles-Agdeppa, DOST-FNRI Director IV and Scientist IV, Jester C. Viriña, Supervising Administrative Officer and OIC, FAD, and other members of the DOST-FNRI Management Committee

“Kamusta ka?”

This is a very simple yet powerful question asked by Dr. Renato U. Solidum, Jr., Department of Science and Technology (DOST) Secretary, in his opening message to the staff of the DOST-FNRI during the launch of Piso Mo, Pag-asa Ko, on Valentine’s Day, February 14, 2023.

“*Piso Mo, Pag-asa Ko*” is a fund-raising activity and an initial undertaking of the DOST-FNRI, led by Dr. Imelda Angeles-Agdeppa, Director IV and Scientist IV, for the Nutrition and Mental Health

Program of the Institute. This Corporate Social Responsibility (CSR) campaign is the Institute’s simple way to promote nutrition and mental health in collaboration with the Natasha Goulbourn Foundation (NGF), Inc. through their HOPELINE. The NGF, Inc. is a non-profit organization whose primary goal is information awareness on the recognition, prevention, and intervention of depression, as well as on suicide and their societal impacts.

In the Philippines, mental health disorder ranks third among

the most common disabilities. About six million Filipinos suffer from depression and anxiety, consequently making the country the third in the Western Pacific Region to have the highest prevalence of mental health illness

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Director's Message



Warm wishes of success and happiness.

The DOST-FNRI welcomed 2023 by receiving the recognition for Maturity Level 2 for Rewards and Recognition in the Human Resource System under the Enhanced Program to Institutionalize Meritocracy and Excellence in Human Resource Management (PRIME-HRM) of the Civil Service Commission (CSC). And on February 27, 2023, the Institute successfully passed the CSC PRIME-HRM Level 2 Assessment of the four pillars of the Human Resource System, namely: 1) Recruitment, Selection and Placement (RSP), (2) Learning and Development (L&D), (3) Performance Management (PM), and (4) Rewards and Recognition (R&R).

One of the highlights of this quarter was the launch of "Piso Mo, Pag-asa Ko" on February 14, 2023, Valentine's Day. This is a fund-raising activity for the Institute's Nutrition and Mental Health Program inspired by the initiative of the Natasha Goulbourn Foundation (NGF) MindStrong, Incorporated. This corporate social responsibility (CSR) drive is DOST-FNRI's humble way to promote nutrition and mental health among its employees. On the same day, the DOST-FNRI also launched its official hymn to be played in all Institute's events.


On March 13-16, 2023, the Institute partnered with Duke University on the Training-Workshop on Gut Microbiome Analysis. Dr. Lawrence Anthony David, Associate Professor of Molecular Genetics and Microbiology, and Ms. Brianna Petrone, PhD Candidate, who served as the resource persons. The training comprised of lectures and hands-on activities in the NuGen Lab.

Moreover, the Institute, with funding support from the DOST Human Resource Development Program (DOST HRDP), spearheaded the conduct of Training-Workshop on the Application of the Technology Needs Assessment (TNA) Protocol for the Department of Science and Technology (DOST) Personnel on March 21-24, 2023. The TNA training aimed to capacitate DOST personnel on the step-by-step process of assessing the technology needs of MSMEs.

On top of these accomplishments, numerous meetings were conducted for possible collaborative studies. A visit from Congressman Nelson L. Dayanghirang and staff for school-based feeding program which was followed by another visit of Congressman Carlito Marquez and group whom they visited the FNRI facilities.

With these first quarter accomplishments, I am assured that the Institute will have a very productive 2023. These reflect my mantra of "Oneness is Success".

On behalf of the Institute's management and staff, I would like to express my sincere thanks to all for the continued support as we mark other milestone achievements in the quarters ahead!


Imelda Angeles-Agdeppa, Ph.D.
Director IV and Scientist IV

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News Flash

DOST-FNRI Unlocks Maturity Level 2 of PRIME-HRM Rewards and Recognition

✍ Dexter Y. De Leon, Senior Science Research Specialist, DOST-FNRI



On January 12, 2023, the DOST-FNRI received the certificate of recognition for obtaining Maturity Level 2 for Rewards and Recognition in the Human Resource System under the Enhanced Program to Institutionalize Meritocracy and Excellence in Human Resource Management (PRIME-HRM) of the Civil Service Commission.

PRIME-HRM is a mechanism that continuously capacitate human resource management of government agencies toward HR excellence. It requires greater engagement between the human resource management section (HRMS), top management and the rank-and-file employees of the agency. PRIME-HRM has 4 HR

systems, namely: (1) Recruitment, Selection and Placement (RSP), (2) Learning and Development (L&D), (3) Performance Management (PM), and (4) Rewards and Recognition (R&R).

On December 19, 2019, the Institute was awarded with Maturity Level 2 for RSP and PM. While on December 16, 2022, the Maturity Level 2 of L&D was awarded to the Institute. With the recently obtained certification for Maturity Level 2 of R&R, the Institute has now four systems of PRIME-HRM with Maturity Level 2 or Process-Defined HRM. With all pillars at Maturity Level 2, the Institute is now eligible for PRIME-HRM On-site Assessment. The assessment

will determine the current status of the Institute's core HR systems, its strengths and opportunities for improvement. Successful assessment of the core HR systems will mean that the Institute will be given PRIME-HRM Bronze Award.

As DOST-FNRI prepares for the on-site assessment on February 2023, the mantra of the Institute's beloved Director, "Oneness is Success" will serve as guide and inspiration to all its human resource.■

The Gut Microbiome Training Workshop: DOST-FNRI and Duke University Partnership

✍ Michael E. Serafico, Supervising Science Research Specialist DOST-FNRI



A training-workshop on gut microbiome analysis was conducted in the Nutritional Genomics (NuGen) Laboratory and DOST-FNRI Library from March 13-16, 2023. Dr. Lawrence David and PhD candidate Brianna Petrone from Duke University facilitated the hands-on training among selected DOST-FNRI NuGen and Nutrient Requirement Unit (NRU) laboratory personnel. Lecture part of the training which focused on theoretical framework of the method and data analysis using R software

was participated in by technical staff from the Nutritional Biochemistry and Lifestage Nutrition Sections.

An alignment meeting was held on March 13, 2023 at the DOST Conference Room where Ms. Noelle Lyn Santos, Science Research Specialist II, one of the organizers and principal investigator of Supporting Adolescent Growth in the Philippines (SAGIP) project introduced DOST-FNRI. This was followed by the presentation of Ms. Petrone on Duke University's previous and current works on gut microbiome. The meeting revolved around possible project collaborations between the two institutions. More so, Duke trainers observed how FNRI analysts extract DNA from stool samples and identified similarities and differences with their protocol.

During the hands-on training, extracted DNA was checked for quality and identified readings that would need troubleshooting. Trainees amplified a DNA metabarcoding biomarker for plant food from extracted stool sample and reviewed practices for polymerase chain reaction (PCR) set-up to reduce contamination. Furthermore, extracted DNA was amplified and visualized through gel electrophoresis.

Topics discussed during the lecture included amplicon sequencing, use of R Studio package, alpha and beta diversity, ordinations, statistical analysis and visualization of results. The four-day training/workshop was concluded by a feedback report of the organizers with Dr. Imelda Angeles-Agdeppa, FNRI Director and awarding of the certificate of appreciation to the trainers. ■



DOST-FNRI Conducts the Training-Workshop on the Application of the Technology Needs Assessment (TNA) Protocol for the Department of Science and Technology (DOST) Personnel

✍ Lea B. Landicho, Science Research Specialist II, DOST-FNRI

The Micro-, Small- and Medium Scale Enterprises (MSMEs) are recognized for their important role in the continued advancement of a country's economy. In the Philippines, latest data shows that MSMEs comprise 99.51% of the business establishments and provide employment to 60% of the country's workforce. To be equipped in determining the appropriate Science, Technology, and Innovation (STI) needed by MSMEs, the DOST-FNRI, with funding support from the DOST-Human Resource Development Program (HRDP) and in partnership with the DOST-CALABARZON and Provincial S&T Office-Cavite, conducted the Training-Workshop on the Application of the Technology Needs Assessment (TNA) Protocol for the Department of Science and Technology (DOST) Personnel on March 21-24, 2023, Hortz Hotel and Resorts, Tagaytay City.

The TNA is a mechanism to determine the technological gaps in an enterprise and used as basis for determining appropriate DOST interventions. A total of 54 participants from the different DOST Central and Regional Offices, Research and Development Institutes (RDIs), and Councils attended the 4-day training-workshop. Dr. Imelda Angeles-Agdeppa, DOST-FNRI Director IV and Scientist IV, and Dir. Emelita P. Bagsit, DOST-



CALABARZON Regional Director, welcomed the participants. This was followed by a recorded message of support from Dr. Leah J. Buendia, DOST Undersecretary for Research and Development, a message of encouragement from Engr. Sancho A. Mabborang, DOST Undersecretary for Regional Operations and an inspirational message from Dr. Renato U. Solidum, Jr., DOST Secretary.

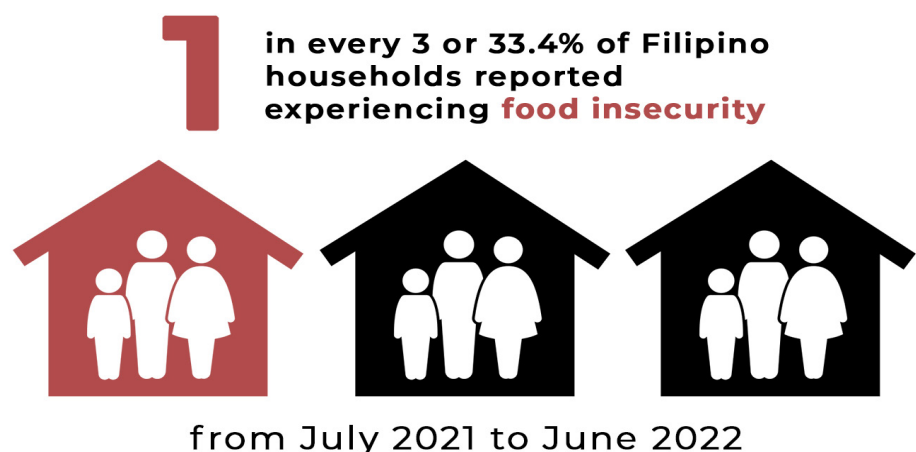
Former DOST-FNRI Director, Dr. Mario V. Capanzana served as the resource speaker. Day 1 focused on the discussion of TNA basics including its major components, steps, core business functions, forms, and assessment plans. Also, an orientation in preparation for the benchmarking and actual TNA visits was conducted. Participants were grouped into five (5).

On the morning of Day 2, all participants joined two (2) benchmarking visits at Swisspharma Research Laboratories, Inc. (Cabuyao, Laguna) and La Noceda Food Products, Inc. (Mendez, Cavite). In the afternoon, each group went to their respective assigned firm to conduct the actual assessment. The enterprises assessed were not just involved in food but also in metals and agriculture namely: (1) Belardo Coffee Enterprises (Amadeo, Cavite); (2) Mochill Dessert Shop (Silang, Cavite); (3) Magallanes-Samahang Magsasaka ng Kay-Apas at Medina (MAGSAMAKAME) Cooperative (General Trias, Cavite); (4) Amicitia Technologies Corp. (Silang, Cavite); and (5) Yubhel

Writers Pool Corner

1 in every 3 Pinoy households had moderate to severe food insecurity DOST-FNRI

✍ Nichole M. Bristol Science Research Specialist II, DOST-FNRI



About 1 in every 3 or 33.4% of Filipino households reported experiencing food insecurity from July 2021 to June 2022. Moreover, 2% out of the 33.4% of households experienced severe food insecurity – that is a household experienced either running out of food, hungry but did not eat, or went without eating for a whole day because they had no resources to get food in the past 12 months at the time of the survey. This is according to the 2021 Expanded National Nutrition Survey (ENNS) of the DOST-FNRI.

Household food insecurity in the 2021 ENNS was measured using the Food Insecurity Experience Scale (FIES). Respondents self-reported their food-related behaviors and experiences associated with increasing difficulties in accessing food due to resource constraints for the past year.

Food insecurity is defined by the United Nations Food and

Agriculture Organization (UN FAO) as the state in which people are at risk or actually suffering from inadequate food consumption to meet nutritional requirements. This is a result of physical unavailability of food, their lack of social or economic access to adequate food, or inadequate food utilization.

The survey further revealed that moderate to severe food insecurity during the survey was more evident among households with males as household heads, belonging to poor wealth status, and with more than 5 family members.

When asked about their food coping strategies, 8 out of 10 of the surveyed households purchased food on credit, 7 out of 10 borrowed foods from relatives, neighbors, or friends, 3 out of 10 adults restricted their consumption so that children can have enough, and 3 out of 10 bartered foods with other food items.

Meanwhile, the top non-food coping strategies of households during the survey period included getting loans from relatives (74.8%) or non-relatives and friends (55.9%), and asking assistance or aid from LGU (16%).

Some of the crucial socio-economic circumstances during the survey period that may have affected the proportion of food insecurity included inflation surge, surge in COVID-19 cases in the country, and the Russia-Ukraine war.

Proper nutrition is essential, especially during pandemics and calamities, to stay healthy and well-nourished by boosting immunity and avoiding contracting COVID-19 and other diseases.

Thus, part of the DOST-FNRI's interventions to help mitigate food insecurity are initiatives such as the Malnutrition Reduction Program (MRP), an integrated intervention strategy involving nutrition education and transfer of food technologies through its technology transfer program.

The DOST-FNRI also maintains the Oh My Gulay! which models the establishment of an edible garden in an urban government office. ■

May “*substitute*” ba sa sibuyas?

✍ Glenn Joy B. Abad, Project Technical Assistant IV, DOST-FNRI

“Dati umiiyak ka lang kapag hinihiwa mo ang sibuyas. Ngayon, bibili ka pa lang, napapaiyak ka na.”

“Kapag sinabihan ka bang “balat-sibuyas”, ibig sabihin ba ay “kutis-mayaman?””

Ilan lamang ito sa posts ng mga *netizens* sa *social media* tungkol sa pagtaas ng presyo ng sibuyas.

Biro man ito sa *social media*, mayroon naman itong malalim na pinanggagalingan. Ang isyu ng pagtaas ng presyo nito sa merkado ang dahilan kung bakit sari-sari ang komento ng mga tao sa *social media*.

Ang sibuyas ay isa sa mga pangunahing sangkap sa pagluluto ng mga Pilipino lalo na sa paggisa. Lahok ang sibuyas sa mga pagkain tulad ng adobo, bistek, pinakbet, lumpia, sisig at marami pang iba na inihanda ng karamihan noong Pasko at Bagong Taon. Kung kaya ganoon na lamang ang reaksiyon ng mga tao sa mataas na presyo ng sibuyas.

Hindi lamang nakatutulong sa pagpapasarap ng mga pagkain ang sibuyas, tiyak din na may hatid itong sustansya sa katawan. Ayon sa *Nutritional Guidelines for Filipinos (2012)*, ang mga gulay, tulad ng sibuyas, ay mayaman sa bitamina at mineral na nakatutulong upang maiwasan ang mga sakit tulad ng *cancer*, *diabetes*, *obesity* at sakit sa puso. Nakatutulong din ang mga ito upang mapigilan ang pagkakaroon ng *micronutrient deficiencies*.

Batay sa *Philippine Food Composition Tables 2019*, ang isang



(1) tasa ng sibuyas ay nagtataglay ng 0.24 gramo ng fat, 1.36 gramo ng *protein* at 1.6 gramo ng *fiber*, at 32 *kilocalories* ng *energy*.

Tunay na napakahalaga ng sibuyas sa mga Pilipino, ngunit ano ang maaaring gawin habang mataas pa ang presyo ng isa sa paborito nating sangkap sa pagkain?

Kilala sa pagiging maparaan ang mga Pilipino, kaya naman marami na ngayon ang nagtanim sa kanilang hardin ng sibuyas. Ngunit, habang hinihintay pa ang pagtubo nito, maaari nating gamitin bilang mas murang alternatibo sa sibuyas ang *chives*, *leeks*, *spring onion* o *onion powder*.

Ang *chives* o kutsay ay kabilang sa mga berdeng gulay. At katulad ng sibuyas, ito ay puno din ng sustansya ngunit mababa sa *calories* at nagtataglay ng mga bitamina, mineral at *antioxidants*.

Ang *leeks* naman ay kabilang sa *allium family* katulad ng sibuyas

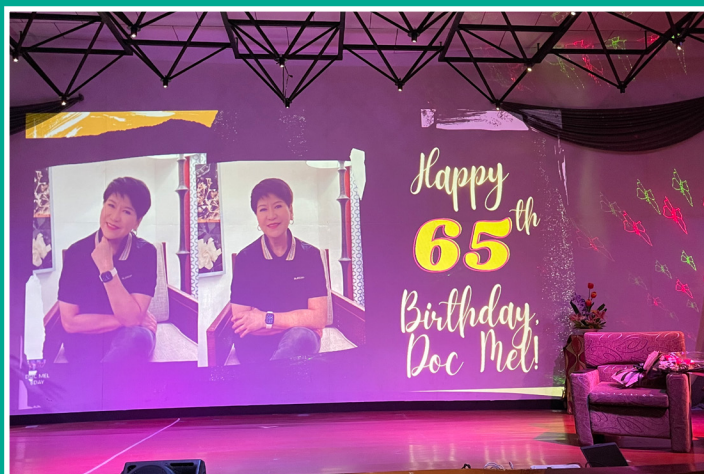
at bawang. Ito ay nagtataglay ng *flavonoids* na mayroong *antioxidants* at *anticancer properties*.

Samantala, ang *spring onion* o dahon ng sibuyas ay kilala rin bilang *scallion* o *green onion*. Nakatutulong ito upang mapababa ang *blood sugar level* at mapabuti ang *digestion* ng tao.

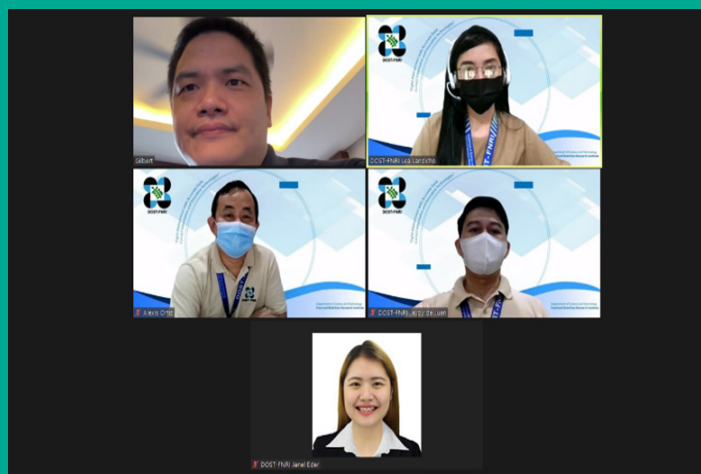
Ang huli ay ang *onion powder* na pinatuyong sibuyas at dinurog. Mayroon itong *antioxidants* at mabuti sa buhok, mga buto at puso.

Tara na at bisitahin ang mga suking palengke o *grocery stores* para sa mga alternatibo sa sibuyas at magluto ng masusustansyang pagkain para sa pamilya! ■

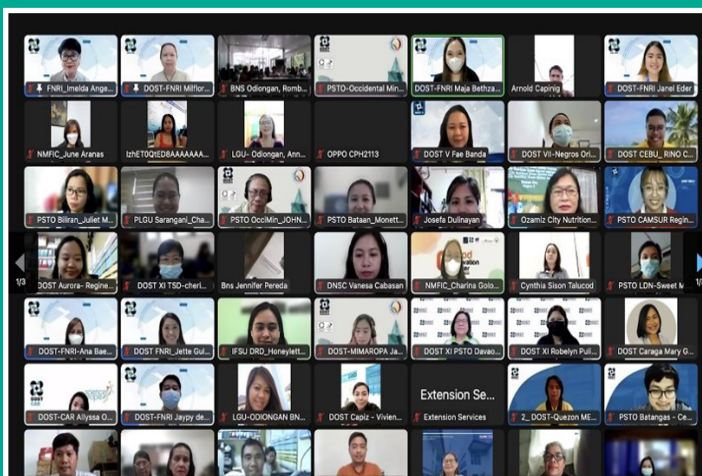
Photo News



A surprise royal themed birthday party for DOST-FNRI Director IV and Scientist IV, Dr. Imelda Angeles-Agdeppa was celebrated at the DOST-FNRI auditorium on January 26, 2023



DOST-FNRI BDU virtually met with Mr. Gilbert Uy, a manufacturer of food premixes from Meycauayan Bulacan, to discuss his interest in DOST-FNRI developed technologies on January 4, 2023.



The DOST – FNRI gathered more than 40 complementary food licensees during the “MRP: Hearing the Voices of the People” on January 18 to 19, 2023.



Meeting with New Pathways on February 9, 2023 at the DOST-FNRI, Bicutan



Launching of DOST-FNRI Hymn on February 14, 2023 at the DOST-FNRI, Bicutan



Institutional visit of Chinese Embassy Officials on February 23, 2023 at DOST-FNRI led by DOST Undersecretary for Research and Development Dr. Leah J. Buendia



Consultative meeting with food and nutrition experts to capacitate Kapatagan Food Innovation Center, February 20, 2023



Results of CSC -PRIME HRM Level 2 Assessment of DOST-FNRI, February 27, 2023



Congressional visit of Committee on Science and Technology House of Representatives on March 8, 2023 at DOST-FNRI



NUTRINET Representatives and MAHLAP Officers and Board of Trustees posing with the 35th MAHLAP National Congress participants on March 8-10, 2023, Whitewoods Hotel



DOST-FNRI, led by Dr. Imelda Angeles-Agdeppa, Director IV and Scientist IV (in black blazer, left of Sec. Gatchalian), paid a courtesy call to DSWD Secretary Rex Gatchalian (right of Dr. Agdeppa, in white long-sleeved shirt) and engaged in an exploratory meeting for the development of food products that will provide optimum nutrition and fight hunger in the country on March 15, 2023, DSWD Office Quezon City



Meeting with the personnel from Alaska Milk Corporation for the World Milk Day Campaign and Alaskarunungan on March 27, 2023

Momsie: Ready-to-go complementary food in sachet for kids

✉ Nichole M. Bristol, Science Research Specialist II, DOST-FNRI



Looking for ready-to-eat and compact complementary food for young kids? Then, you must try Momsie complementary food by the DOST-FNRI!

Momsie was developed through a partnership between the DOST-FNRI and the United Nations World Food Program (UN-WFP). It is a ready-to-eat complementary food designed to meet the nutritional requirements of children 6 months to 3 years old. Momsie is high in energy and protein with a rich nutty chocolate flavor that children will surely like.



According to the World Health Organization (WHO) in 2021, complementary foods are necessary to meet an infant's need for energy and nutrients. Around the age of six months, an infant is ready to eat other foods along with continued breastfeeding.

It is also recommended to increase the frequency of child's feeding – at least 2 to 3 meals per day for infants and 2 to 3 additional snacks for two to three years old children to sustain rapidly-increasing nutrient needs, the WHO added.

Adding complementary nutrients to food will gradually increase food consistency and variety. However, fortified complementary foods or vitamin-mineral supplements may be needed if food variety is lacking or even inaccessible, the WHO clarified.

Momsie is made from locally-available raw materials, like mungo, soybeans, and peanuts. It contains vitamins and minerals such as folate, iron, calcium, zinc, vitamin A, and vitamin C. It has a 1-year shelf life and costs around P32.00 per sachet of 25 grams.

The convenient and compact packaging offers portable nutrition in any kind of weather and for parents and caregivers who are busy and have no time to prepare complementary food for young children. It should be noted, however, that Momsie is not a complete meal and not a substitute for breastmilk.

Momsie is ideal during emergencies, disasters, and complementary feeding. This helps ensure that the nutrition of young children is not compromised both during normal conditions and calamities.

What are you waiting for? Take a taste and grab some Momsie Complementary Food which has a rich, nutty, and chocolaty flavor. The technology for Momsie Complementary Food is available in DOST-FNRI through technology transfer and commercialization. Become a complementary food technology licensee now! ■

Enhanced Nutribun by Mama Nene's Homemade Delights, now available in Bukidnon!

✍ Salvador R. Serrano, Senior Science Research Specialist , DOST-FNRI



Feeling nostalgic? Well, the Nutribun is finally back!

Public elementary school children in the 1970s to 1980s may very well recall the Nutribun distributed in class in the morning or during afternoon break for snacks.

As we apply modern food technology today, the bun was reformulated and is now called “Enhanced Nutribun” developed by the DOST-FNRI.

Enhanced Nutribun comes in different variants. First launched and produced by food technology licensees was the squash variant. This was followed by the carrot, yellow sweet potato, orange sweet potato and purple sweet potato variants.

Aside from helping respond to the COVID-19 pandemic, the incorporation of vegetables and root crops lessened the production cost of bread due to the rising cost of wheat in the global market.

Compared to the original Nutribun of the 1970s, the Enhanced Nutribun has a softer texture, natural color

and ingredients, uses locally-grown vegetables and root crops, and is richer in protein, carbohydrates, fats, vitamins, minerals and dietary fiber.

According to the 2018 Expanded National Nutrition Survey (ENNS) of DOST-FNRI, bread, like “*pandesal*”, is one of the sources of energy for around 1,455 school-age children.

“It is our pleasure in our cooperative to provide healthy snacks to kids. Also, we are happy to provide jobs to our indigenous people in our province. At the same time, they genuinely enjoy making Enhanced Nutribun”, says Ms. Paula Chiong, Business Manager of Mama Nene’s Homemade Delights during a

reaching-out session facilitated by DOST-FNRI.

The Enhanced Nutribun can be a profitable business venture and social service as well.

It has a captive market since the Department of Education (DepEd) orders it for its school-based feeding program, especially during the height of the pandemic.

Other government agencies, local government units (LGUs) and socio-civic organizations also conduct feeding programs that include the Enhanced Nutribun.

Enhanced Nutribun is now baking at Mama Nene’s Homemade Delights for ₱18.00 average price per piece for 120 grams and P25.00 average price per piece for 160 grams.

Mama Nene’s is located at Purok 5, Casisang, Malaybalay City, Bukidnon.

For inquiries, orders, and reservations, contact Ms. Paula Chiong, Business Manager of Mama Nene’s Homemade Delights. ■



Pinoy infants, young kids suffer from poor feeding

✍ Franzis Jayke P. Batallantes, Project Technical Assistant II , DOST-FNRI

The 2021 Expanded National Nutrition Survey (ENNS) of the DOST-FNRI revealed that poor feeding practices continue to be a significant challenge among Filipino infants and young children.

The survey pointed out that 6 out of 10 infants under 6 months old were exclusively breastfed. Continued breastfeeding of mothers for young children until they reach 2 years old was reported only among 4 out of 10 children.

However, majority or 80 percent (%) of infants during their 6th to 8th month received timely complementary food, the survey reported.

In spite of the availability of complementary foods, the energy intake of both infants 6-11 months old and young children 1 to 2 years old is highly inadequate. Majority of their energy and protein intakes come from milk, rice, *lugaw* or rice porridge, cereals, egg, and chicken that resulted into a less diverse diet.

Furthermore, preschoolers aged 3 to 5 years have significantly increased nutritional and energy requirements. While the ENNS discovered that their inadequacy in protein is low, the results also revealed that they have a high percentage of energy and micronutrient inadequacy.

Due to inadequate nutrition among infants and children, malnutrition is still rampant. Stunting is the most common type of malnutrition in the Philippines, followed by underweight, wasting, and being overweight-for-height.

During the first six months, the World Health Organization (WHO, 2018) recommends exclusive

breastfeeding to achieve optimal growth, development and health of the babies, which must be followed by continuous breastfeeding with the addition of appropriate, adequate, and safe complementary foods.

The WHO recommendation is supported by the messages of the Nutritional Guidelines for Filipinos (NGF) crafted by a Technical Working Group (TWG) led by the DOST-FNRI.

Nevertheless, according to the United Nations International Children's Emergency Fund (UNICEF, 2016), rates of exclusive breastfeeding decline steadily from birth to 5 months of age in every region of the world.

DOST-FNRI reiterates that if there is a continuance of poor food feeding practices the rate of malnourished children will sky rocket.

Hence, the Institute continues to

develop complementary foods supplemented with vegetables and transfers these technologies to qualified adoptors like the micro, small, and medium enterprises (MSMEs).

For instance, the DOST-FNRI's Rice-Mongo Instant Blend and Rice-Mongo-Sesame Blend are complementary food technologies developed to help combat malnutrition among Filipino children 6 months to 3 years old.

These complementary foods are high in protein, energy, and minerals. These can be simply prepared by adding boiled water to the Rice-Mongo Instant Blend, while the Rice-Mongo-Sesame Blend needs boiling in water for about 3 minutes.

Adding mashed fruits or boiled and mashed vegetables improves nutritional value, taste, and texture. These blends can provide 15% of the daily recommended energy and



Pinoy infants, young kids .. from p. 12

27% of the daily recommended protein intakes.

Aside from the Rice-Mongo Blends, the DOST-FNRI also developed the Rice-Mongo Curls and Rice-Mongo Crunchies that are nutritious alternative snacks for kids that are rich in protein, energy, and minerals.

Related to this, message No. 2 of the NGF discusses complementary

feeding practices, where mothers and caregivers can be guided on what foods to give their babies based on their age. For example, food for 6 months old: 2-3 tablespoons of cooked and mashed root crops, 2 1/2 ripe bananas, 3/4 cup mashed mongo, and 2 cups whole milk.

The DOST-FNRI encourages parents, individuals, and micro, small, and medium enterprises (MSMEs) as well as LGUs and

schools to refer to the NGF to learn more about an individual's health and nutrition. They are also potential adoptors of the complementary blends and snacks technologies to help address energy and micronutrient deficiency among children, as well as provide jobs, income and local revenue. ■

"PISO MO, PAG-ASA KO" A fund-raising campaign .. from p. 1



according to the World Health Organization (WHO) in 2017.

During the COVID-19 pandemic, it was found that 3.6 million Filipinos experienced mental health conditions based on a survey conducted by the Department of Health (DOH) on mental health, neurological and substance use disorders. Moreover, in the 2021 Young Adult Fertility and Sexuality Study (YAFS5), a nationwide survey on Filipino youth led by the University of the Philippines Population Institute, the youth was found to be in worse mental shape with depression symptoms, with percentage almost doubling during the middle of the pandemic in 2021 as compared to 2013 data. This is particularly true for those who often experienced loneliness, sadness, or being disliked by other people.

Moreover, about one in five adolescents and young adults aged 15 to 24 years have considered ending their lives.

"Did you know that every 40 seconds, a life is lost to suicide?"

A 60% increase in suicide rate has been recorded in the past 45 years globally and suicide attempts are much more frequent than actual suicides. In 2017, the suicide rate among children 10 to 14 years old has nearly tripled as compared to the rate in 2007.

As COVID-19 takes its toll on lives, suicides also rise. Because of this crisis, NGF, Inc., has dedicated its efforts to bringing depression to light, through the use of educational lectures, confidential crisis lines, and referrals to partner psychologists.

HOPELINE Philippines is a flagship program of the NGF, Inc. This is an emotional assistance crisis line available 24 hours a day, seven days a week. All proceeds of the DOST-FNRI **"Piso Mo, Pag-asa Ko"** fund-raising campaign will go to the **HOPELINE Ph 24/7** for the maintenance of their phone lines.

Another notable program of NGF, Inc. is the Mental Health and Resiliency Program

for Adolescents [**Katatagan ng Kalooban Tungo sa Pagsulong ng Kabataang Pilipino or Katatagan Program (KP)**].

The DOST-FNRI is collaborating with NGF, Inc., Department of Education (DepEd) Schools Divisions of Iloilo Province and Passi City, and the Office of Congressman Ferjenel G. Biron, MD, for the Monitoring and Evaluation (M&E) research component of the **Katatagan Program**, a program which was conceptualized in 2016 through the different experts in the field of mental health and is now dedicated to DepEd teachers and learners, grades 4 to 12 in the Province of Iloilo.



“PISO MO, PAG-ASA KO” A fund-raising campaign ..from p. 13

Responsive to the need of Generations Z and Alpha to adaptively handle the challenges of modern times, the Teachers' Manual for Emotional Resiliency and selfdirected learning modules for learners, grades 4 to 12, developed for the **Katatagan Program**, will be implemented starting this school year. The DOST-FNRI will carry out the M&E plan to determine progress or key milestones achieved by the learners and teachers, to spot bottlenecks in the implementation, and to document whether there are any unintended effects

from the implementation of the **Katatagan Program**. This study will be conducted by DOST – FNRI Research Team led by Director Imelda Angeles-Agdeppa, and works with select Team Members who are passionate and experts in both the technical and social dimensions of the research: Ms. Chona Patalen, Ms.Noellyn Santos, Mr. Jayson Paolo Labrador, and Mr. Carl Cabanilla.

With the hope of **Zero Suicide** especially among children and adolescents, we will work hand in hand to be connected, and carry

out in our own capacities, these advocacies to promote mental health resilience to communities.

If you think someone you know, a loved one, a relative, or a friend, is struggling with mental health conditions, let them know that they are not alone. You can always reach out to listen and let them know that they can seek help. We have the power to make a difference, just by asking **“Kamusta ka?”** ■

DOST-FNRI Conducts the Training-Workshop ..from p. 5



General Fabrication & Engineering Works (Carmona, Cavite).

Group discussion and preparation of TNA reports were held the following day. Presentations and critiquing started in the afternoon of Day 3. Discussions revolved around the enterprise's profile, strategic direction, management, technical, marketing, and financial aspects as well as the summary of findings and recommendations. Participants were also given an opportunity to ask questions and commented on the presentations of the other groups.

Overall, the participants expressed their appreciation for the entire training-workshop which is

beneficial to both seasoned and new assessors. Majority of them conveyed that the activity demonstrated practical steps in identifying relevant DOST assistance needed by an enterprise, far from the usual desk and laboratory work of some participants. The 4-day training-workshop was wrapped with the awarding of certificates and a closing message from Dr. Milflor S. Gonzales, DOST-FNRI Officer-in-Charge, Office of the Deputy Director and Chief SRS, TDSTSD.

MSMEs contribute to the country's job generation, wealth creation, and sustainability. These are 3 of the 4 pillars set by DOST in focusing its programs on areas where STI can

make a significant impact on our country's economic agenda. Hence, the TNA training-workshop serves as a catalyst to spur appropriate technological interventions across regions and provinces, delivering the message of One DOST4U right to the doorsteps of its clientele. ■

CONGRATULATIONS!

Newly promoted and original appointment staff



January 18, 2023
Rosemarie J. Dumag
(Chief Science Research Specialist | NFRDD)



January 23, 2023 (from left to right)
Mary Joyce M. Caranto (Administrative Assistant III | OD)
Aldrin Paul S. Afuang (Science Research Specialist I | SLG)



February 16, 2023 (from left to right)
Dexter Y. De Leon
(Senior Science Research Specialist | TDSTSD)
Vannizsa I. Ramas
(Senior Science Research Specialist | NFRDD)



March 13, 2023 (from left to right)
Eirene Agustin B. Arnejo (Science Research Specialist I | NFRDD)
Riva Phylline Aguilar (Administrative Aide VI | FAD)
Junnlit Loraine B. Rivera (Science Research Specialist I | SLG)
Christelle Lois T. Bayalas (Science Research Specialist I | TDSTSD)
Rochelle J. Besmonte (Administrative Aide IV | OD)




March 17, 2023 (from left to right)
Nichole M. Bristol (Science Research Specialist II | TDSTSD)
Leticia H. Cuaterno (Administrative Officer I | FAD)
Amster Fei P. Baquiran (Senior Science Research Specialist | NFRDD)
Allyssa Mae C. Tungol (Science Research Specialist I | NFRDD)

Library Acquisitions


Glenn Joy B. Abad, Project Technical Assistant IV, DOST-FNRI

Feedback from the Reader

FN HD 9000.5 A33 2022	<p>Does plate waste matter? : a two-stage cluster to assess the household plate waste in the Philippines</p> <p>by Imelda Angeles-Agdeppa, Marvin Bangan Toledo and Jezreel Ann Taruc Zamora</p> <p>BMC Public Health</p> <p>1-13 Figures and tables</p>
	<p>1. plate waste 2. food weighing 3. food security 4. food secure 5. food insecure 6. food consumption I. Agdeppa, Imelda Angeles II. Toledo, Marvin Bangan III. Zamora, Jezreel Ann Taruc</p>
FN RA 645.N87 A33 2021	<p>Dietary risk factors of physical growth of Filipino school-aged children</p> <p>by Imelda Angeles-Agdeppa, Taro Nakamura, Mayu Sugita, Marvin Bangan Toledo, Pamela Castillo Sampaga and Jezreel Ann Taruc Zamora</p> <p>Research Square</p> <p>1-22 Tables</p>
	<p>1. child malnutrition 2. stunting 3. underweight 4. wasting 5. obesity 6. protein 7. Adequacy 8. utilizable protein I. Agdeppa, Imelda Angeles II. Nakamura, Taro III. Sugita, Mayu IV. Toledo, Marvin Bangan V. Sampaga, Pamela Castillo VI. Zamora, Jezreel Ann Taruc</p>



Republika ng Pilipinas
KAGAWARAN NG KALUSUGAN
NATIONAL NUTRITION COUNCIL-REGION III
Corner Main Gate, Villa Victoria Subdivision
Lazatin Boulevard, Barangay Dolores
City of San Fernando, 2000 Pampanga



March 28, 2023

DR. IMELDA ANGELES-AGDEPPA
Director IV and Scientist IV
DOST-FNRI
General Santos Avenue, Bicutan,
Taguig City

Dear DR. ANGELES-AGDEPPA:

Warm greetings from the *National Nutrition Council Region III (NNC-R3)*!

We at the NNC-R3 would like to thank you for providing us with a copy of your coffee-table book, **DOST-FNRI: 4Cs @ 75**, we highly appreciate your thoughtful gesture. We would also like to extend our warmest congratulations to the Institute for this crucial milestone of celebrating your 75th year anniversary – indeed, your good Institute is exquisitely tough and multi-faceted like a diamond.


Apart from that, we are grateful and more than honored to be part of your shining journey. The **clarity** that DOST-FNRI upholds paved the way for various innovations in food and nutrition research which made a **cut** above the rest. Through those innovations, the NNC is able to formulate policies, programs, and activities that would allow us to fulfill our mandate of proper nutrition for the Filipino citizenry and international commitment to Zero Hunger. We at NNC-R3 shares with the joy of the Institute as you wave the flying **colors** of your achievements during the past 75 years. Together, may we move forward to creating more **carats** – social and economic impacts in the nutrition sector and for the betterment of the nation.

We look forward to a continued journey with DOST-FNRI over time. We are one with you in promoting “*Science for the People*” as we accordingly ensure “*Nutrisyong Sapat, Para sa Lahat*”.

It has been our pleasure to be able to receive this token of appreciation from you. Again, our heartfelt congratulations to DOST-FNRI!


Thank you very much and we wish you all the best in the many more years to come.

Sincerely,


ANA MARIA B. ROSALDO
Nutrition Program Coordinator, NNC-Region III

“New normal na nutrisyon, sama-samang gawan ng solusyon.”

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Wastong Nutrisyon
Awarer, Safer at Pangunahin

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