

**The Lord is
like a strong
tower, where
the righteous
can go and
be safe.**

Proverbs 18:10

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**Be alert,
stand firm
in the faith,
be brave, be
strong.**

1 Corinthians 16:13

CIDG arrests three over alleged electric meter tampering

The Philippine National Police Criminal Investigation and Detection Group (PNP CIDG) arrested three men in General Emilio Aguinaldo, Cavite for allegedly offering services to tamper with electric meters.

Authorities said the suspects were caught installing a resistor device into a Meralco owned electric meter to manipulate its recording mechanism and reduce electricity consumption, an alleged violation of Republic Act No. 7832 or the Anti Materials Pilferage Act.

In a statement, the CIDG said the three individuals were arrested in Sitio Cubao, Barangay Kabulusan on the afternoon of July 24

Electricity and Electric Transmission Lines or



Police confiscated the allegedly tampered electric meter, a resistor device, and several tools believed to have been

used for the activity. The three suspects were taken into police custody and are awaiting the filing of appropriate charges.

Garden City names contractors, consultants for Bacoor mixed use project

Property developer Golden Bay Prime Landholdings Inc. formalized its partnership with consultants that will help build Garden City, its planned mixed use development in Bacoor, Cavite.

The agreement

was signed during the company's Contractor Partnership Ceremony held on July 16 at Golden Bay Restaurant in Pasay City. The event brought together project consultants, construction partners, and company executives involved in the development.

Garden City is Golden Bay's first mixed use project, combining residential and commercial spaces across six 18 story towers. The company said the development is designed to blend modern urban living with open green spaces.

Operating Officer Jardin Wong said the partnership marks the beginning of a shared journey built on trust, confidence, and a common purpose. WTA Design Studio was named as the project's architectural partner and will oversee

Golden Bay Chief

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DIYARYO KABITENYO

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ARNULFO BARCO

(May 14, 1951 - September 2, 2024)
Founder

GENER BARCO

Publisher-Editor

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(GARDEN...from page 1)

the master planning and architectural design. Archipelago Builders Corp. was appointed as the general contractor, while R.B. Sanchez Consulting Engineers will handle structural engineering.

The project's mechanical, electrical, plumbing, and fire protection systems will be designed by M A A R K A Engineering Consultancy, while

MSTM Foundation Specialist Inc. will undertake the piling works.

Golden Bay said bringing together its design and construction partners marks an important milestone

as the project enters its next phase. The company expects to complete the turnover of Molave Tower in December 2028, followed by Yakal and Ipil-Ipil towers in 2029.

Why your diet and exercise might not be enough to stop diabetes

While eating a nutritious diet, losing weight, and becoming more physically active

groundbreaking research reveals that these lifestyle changes do not offer the same level of protection to everyone, creating a critical exception for individuals assigned to Tübingen's type 2 diabetes risk cluster 5. The findings, published in the scientific journal Diabetes by scientists from the German Center for Diabetes Research (DZD), the University Hospital Tübingen, and Helmholtz Munich, stem from a detailed re-examination of the Tübingen Lifestyle Intervention Program (TULIP), a study that initially separated at-risk individuals into six distinct clusters based on their likelihood of developing diabetes and the progression of related complications. Although clusters 3 and 5 were already identified as having an especially high probability of developing the disease, the latest analysis sought to determine if long-term weight loss and lifestyle-based

prevention could alter these outcomes across different risk groups. The researchers focused specifically on participants who achieved substantial weight loss and successfully maintained it over a nine-year monitoring period following a two-year lifestyle program, expecting to see universal improvements. However, the results were starkly different for cluster 5, where participants continued to experience rising blood sugar, a sharp decline in insulin production, and a consistently elevated risk of developing diabetes despite their efforts. Professor Norbert Stefan, the lead author of the study, highlighted the unexpected nature of these outcomes, explaining, "We were particularly interested in whether individuals in risk clusters 3 and 5 differed from those in other clusters with regard to improvements in blood glucose levels

and the prevention of type 2 diabetes," and adding, "We were very surprised to find that, despite a large and sustained weight loss of 8% and after a very long follow-up period of 9 years, individuals in risk cluster 5 showed increasing blood glucose levels, declining insulin secretion, and a persistently high risk of type 2 diabetes." To understand why lifestyle intervention appeared to provide less protection for this specific group, the team investigated the underlying biological mechanisms, discovering that severe fatty liver disease likely played a major role by driving insulin resistance and impairing the ability of pancreatic beta cells to release insulin, which contributed to higher blood sugar levels regardless of the weight lost. These findings support earlier evidence suggesting that fatty liver disease and insulin resistance are the primary disease

processes affecting people in cluster 5, characteristics that may leave them especially vulnerable to both type 2 diabetes and cardiovascular disease. The results indicate that people in cluster 5 may not receive the same metabolic benefits from standard lifestyle interventions as people in other risk groups, even when they achieve substantial and lasting weight loss, particularly when researchers examined blood sugar regulation. Consequently, the study suggests that if future prospective research confirms these findings, the approach to diabetes prevention may need to become more personalized, with individuals possessing high-risk biological profiles such as cluster 5 requiring more intensive care or treatments specifically designed to address their unique metabolic problems rather than relying solely on diet and exercise.

RA Form No. 10.0 (LCRO)

Republic of the Philippines
Office of the Municipal Civil Registrar
Rosario, Cavite

NOTICE FOR PUBLICATION

CFN-0007-2026

In compliance with the publication requirement and pursuant to OCRG Memorandum Circular No. 2013-1 Guidelines in the Implementation of the Administrative Order No 1 Series of 2012 (IRR on R.A. 10172). Notice is hereby served to the public that **GLORINA J. NARDO** has filed in this office, a petition for ***Change of First Name*** from **MARIA GLORIN** to **GLORINA** in the Certificate of Live Birth of **MARIA GLORIN BUHAIN JUNTURA** at Rosario, Cavite and whose parents are **RICARDO HEBREO JUNTURA** and **PURIFICACION SOLIS BUHAIN**.

Any person adversely affected by said petition may file his written opposition with this office not later than **03 August 2026**.

(Sgd.) **MARIA ROSARIO C. SORIANO**
Municipal Civil Registrar

Publication : DIYARYO KABITENYO News Publishing Service
Dates : July 20 & 27, 2026

RA Form No. 10.0 (LCRO)

Republic of the Philippines
Office of the Municipal Civil Registrar
Rosario, Cavite

NOTICE FOR PUBLICATION

CFN-0008-2026

In compliance with the publication requirement and pursuant to OCRG Memorandum Circular No. 2013-1 Guidelines in the Implementation of the Administrative Order No. 1 Series of 2012 (IRR on R.A. 10172). Notice is hereby served to the public that **MA. NANNETH GALANO VASQUEZ** has filed in this office, a petition for ***Change of First Name*** from **MARIA NANNETH** to **MA. NANNETH** in the Certificate of Live Birth of **MARIA NANNETH BAUTISTA GALANO** at Rosario, Cavite and whose parents are **ANTERO GALANO** and **AMELIA ALBERTO BAUTISTA**.

Any person adversely affected by said petition may file his written opposition with this office not later than **03 August 2026**.

(Sgd.) **MARIA ROSARIO C. SORIANO**
Municipal Civil Registrar

Publication : DIYARYO KABITENYO News Publishing Service
Dates : July 20 & 27, 2026

Republic of the Philippines
Fourth Judicial Region
REGIONAL TRIAL COURT
BRANCH 114
CITY OF BACOR, CAVITE
2nd Floor, Main Square Mall, Molino Blvd.,
Bacoor City, Cavite
Email: **rtc1bcr114@judiciary.gov.ph**
Phone No: **0908-499-0181**

**IN RE: PETITION FOR THE
ISSUANCE OF A NEW OWNER'S
DUPLICATE COPY OF TRANSFER
CERTIFICATE OF TITLE NO. 167-
2023007139, LOST**

LRC CASE NO. 8843-2026-65

**SPOUSES JOSEPH Y. BARRON AND
RORIMA D. BARRON,**
Petitioners.

x-----x

ORDER

On June 16, 2026, petitioners, through counsel, filed this instant petition alleging among others that: (a) petitioners are the registered owners of a parcel of land covered by TCT No. 167-2023007139; (b) the title was kept inside an envelope in their residence; (c) sometime thereafter, petitioners discovered that the same can no longer be found; (d) the title can no longer be found despite diligent efforts to locate the same and an Affidavit of Loss was executed; and (e) the property was declared for taxation purposes. Petitioners are praying that the Court, after due notice and hearing, render judgment directing the Register of Deeds for the Province of Cavite, Bacoor City Branch to issue another Owner's Duplicate Copy of Transfer Certificate of Title No. 167-2023007139 with the same force and effect in lieu of the loss one.

Finding the petition to be sufficient in form and substance, the same is set for initial hearing on **September 29, 2026 (Tuesday) at 10:00 in the morning** at 2nd floor, Main Square Mall, Bacoor Boulevard (formerly Molino Boulevard), Barangay Bayanan, City of Bacoor, Cavite, at which date, place, and hour, any interested person may appear and show cause why the said petition should not be granted. **Petitioners SPOUSES JOSEPH Y. BARRON AND RORIMA D. BARRON are directed to personally appear on the scheduled hearing.**

Petitioners are directed to cause the publication of the copy of this Order at their expense once a week for three (3) consecutive weeks in a newspaper of general circulation in the Cities and Province of Cavite at least thirty (30) days prior to the scheduled date of hearing.

The Sheriff of this Court is ordered to post this Order in **six (6) conspicuous places** in the Province of Cavite, where the subject property is situated at least one (1) month prior to the aforesaid date of hearing, particularly at the bulletin boards of the following: (1) the main entrance of the Provincial Building of Cavite; (2) the main entrance of the City Hall Building of Bacoor City, Cavite; (3) the Hall of Justice of Bacoor City; (4) 2nd floor, Main Square Mall, Bacoor Boulevard (formerly Molino Boulevard), Barangay Bayanan, City of Bacoor, Cavite; (5) the Registry of Deeds, Bacoor City, Cavite; and (6) the Barangay Hall where the property is situated.

SO ORDERED.

IN CHAMBERS, this 22nd day of June, 2026 in the City of Bacoor, Cavite.

(Sgd.) **NIKKI ROSE DELA PENA ESPERANZA**
Presiding Judge

Copy Furnished:

SPOUSES JOSEPH Y. BARRON and RORIMA D. BARRON
Petitioner
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RTC OCC
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REGISTRY OF DEEDS - CAVITE
Public Respondent
Provincial Capitol
Trece Martires, City, Cavite

REGISTRY OF DEEDS - BACOR CITY
Public Respondent
Bacoor Government Center

Publication : DIYARYO KABITENYO News Publishing Service
Dates : July 27, August 3 & 10, 2026

with mutations acquired later in life, shaping the evolutionary path a tumor follows.

The discovery may help explain why people living in similar environments can face very different cancer risks. It also suggests that future approaches to cancer prevention and screening may need to consider inherited genetics and the diversity found across human populations.

mutations, accumulate inside cells. These changes can cause cells to multiply too quickly and ignore signals that normally tell damaged cells to die before they become dangerous. Environmental factors such as cigarette smoke and sunlight can increase DNA damage. Inherited genetic differences can also influence how many mutations build up and how cells respond to them. Yet people exposed to the same risks do not always experience the same outcome. Most smokers never develop lung cancer, while some people who have never smoked do. Scientists have long suspected that inherited genetics helps explain these differences, but obtaining direct evidence from human

Published in Nature, the mouse study also indicates that a patient's genetic background could affect how they respond to cancer treatments that damage DNA. This strengthens the argument for diagnostic and treatment strategies tailored more closely to each individual.

Cancer begins when DNA errors, known as

Turn to page 4

Why the same DNA damage causes cancer in some people but not others

Scientists have uncovered the first direct evidence that inherited genetics can strongly influence cancer risk and help determine how tumors develop over time. The results show that the genes a person is born with can interact

R.A. Form No. 10.1 (LCRO)
(Devised 18 Aug. 2001)

Republic of the Philippines
Local Civil Registry Office
Province: Cavite
City of: Cavite

JULY 16, 2026

NOTICE FOR PUBLICATION

In compliance with section 5 of R.A. No. 9048 a notice is hereby served to the public that **NORMA B. POBLETE** has filed with this Office a petition for Change of First name from "**GRACE**" to "**NORMA**" in the Birth Certificate of **GRACE V. BERNAL** who was born on **APRIL 21, 1966** in **CAVITE CITY, CAVITE** and whose parents are **ANINIAS H. BERNAL** and **DOLORES T. VIRAY**.

Any person adversely affected by said petition may file his written opposition with this Office.

(Sgd.) **FLORDELIZA M. ALEJO**
OIC-City Civil Registrar

Publication : DIYARYO KABITENYO News Publishing Service
Dates : July 27 and August 3, 2026

Publication Notice
R.A 10172

Republic of the Philippines
Local Civil Registry Office
Province: Cavite
City of: Cavite

NOTICE TO THE PUBLIC

Date: July 21, 2026

CCE-0121-2026 R.A 10172

In compliance with the publication requirement and pursuant to OCRG Memorandum Circular No. 2013-1 Guidelines in the implementation of the Administrative Order No. 1 Series of 2012 (IRR on R.A 10172), Notice is hereby served to the public that **ERIC S. ESPINOZA** has filed with this Office, a petition for **correction of clerical error in the entry of sex** from "**FEMALE**" to "**MALE**" in the certificate of live birth of **JOHN CLARENCE V. ESPINOZA** at Cavite City and whose parents are **ERIC S. ESPINOZA AND ELENITA R. VISTAL**.

Any person adversely affected by said petition may file his written opposition with this office.

(Sgd.) **FLORDELIZA M. ALEJO**
OIC-City Civil Registrar

Publication : DIYARYO KABITENYO News Publishing Service
Dates : July 27 and August 3, 2026

(WHY...from page 1)

studies has been difficult. affect cancer risk.

People within and The research across populations grew out of years differ in their lifestyles, of international environments, and collaboration involving exposure histories. the University of Cambridge, the University of Edinburgh, and institutions across Europe and the US. These variations make it challenging to isolate the influence of genetic background from all the other factors that can The work was co-led by



Republic of the Philippines
OFFICE OF THE MUNICIPAL CIVIL REGISTRAR
Indang, Cavite



Publication Notice
R.A. NO. 10172

NOTICE TO THE PUBLIC

CCE-0065-2026

*In compliance with the publication requirement and pursuant to OCRG Memorandum Circular No 2013-1 Guidelines in the Implementation of the Administrative Order No 1 Series of 2012 (IRR on R.A. 10172), Notice is hereby served to the public that **JUANA L. VARGAS** has filed with this Office, a petition for **correction of entry in the date of birth** from **August 16, 1957** to **July 12, 1957** in the Certificate of Live Birth of **JUANA CRESTAL LONTOK** at Indang, Cavite and whose parents are **Cornelio Lontok** and **Maria Crestal**.*

Any person adversely affected by said petition may file his/her written opposition with this Office not later than **August 10, 2026**.

(Sgd.) **MERCIA A. CHAVEZ**
Municipal Civil Registrar

Publication : DIYARYO KABITENYO News Publishing Service
Dates : July 27 and August 3, 2026

Professor Duncan Odom, that found among human
Dr. Sarah Aitken and populations.

Professor Martin Taylor. Each mouse
Much of the received one dose of
experimental work took the liver carcinogen
place at the Cancer diethylnitrosamine
Research UK (CRUK) (DEN). DEN is present
Cambridge Institute in tobacco smoke and
at the University some processed foods.
of Cambridge. The It damages DNA in liver
researchers designed a cells and can create
method that allowed them mutations that start
to keep environmental tumor growth. Every
conditions consistent mouse received the same
and directly test whether dose at the same age, 15
genetic background days old, under carefully
changes how tumors controlled conditions.

They bred four to remove much of the
strains of mice with environmental variation
different levels of that complicates cancer
susceptibility to liver studies involving
cancer. Together, the humans.

The scientists then
strains represented sequenced the genomes
a degree of genetic of nearly 600 tumors.
diversity comparable to



REPUBLIC OF THE PHILIPPINES
PROVINCE OF CAVITE
MUNICIPALITY OF TANZA



Publication Notice
R.A.10172

NOTICE TO THE PUBLIC

Date: July 23, 2026

CCE-0129-2026 RA 10172

In compliance with the publication requirement and pursuant to OCRG Memorandum Circular No. 2013-1 Guidelines in the Implementation of the Administrative Order No.1, Series of 2012 (IRR on R.A. 10172), Notice is hereby served to the public that **JILIANE LINGON LEGASPI**, has filed with this Office, a petition for **CORRECTION OF ENTRY IN CHILD'S SEX** from "**MALE**" to "**FEMALE**", in the Certificate of Live Birth of **JILIANE LINGON LEGASPI**, who was born on 01 June 2006 at Tanza, Cavite of parents **DULCE BARAS LINGON & BOBBY AMONGO LEGASPI**.

Any person adversely affected by said petition may file his/her written opposition with this Office not later than **August 6, 2026**.

(Sgd.) **OFELIA U. ARGUSON**
OIC-Municipal Civil Registrar

Publication : DIYARYO KABITENYO News Publishing Service
Dates : July 27 and August 3, 2026

They examined changes processes such as
in gene activity and cell growth and cell
studied untreated mice differentiation. It is
to compare the rates involved in many forms
of spontaneous tumor of cancer.

formation among the four Although the tumors
strains. frequently activated the

Using these results, same broad pathway, they
the team reconstructed did not all evolve in the
the development of each same way. The specific
tumor, beginning with driver mutations that
the original mutation that appeared depended on
triggerred the cancer. the inherited genetics of

Tumors in all four each mouse.

mouse strains almost Those mutations also
always developed a driver changed the activity of
mutation that activated other signaling pathways
the same cancer- associated with cancer. In
promoting signaling addition, certain genetic
system, known as the backgrounds showed
MAPK pathway. a striking tendency

The MAPK toward whole-genome
pathway is a sequence duplication, an event in
of molecular signals which the complete set of
that regulates essential chromosomes is copied.

Scientists found two mysterious ‘ghost’ ancestors hiding in our DNA

Scientists found two mysterious ‘ghost’ ancestors hiding in our DNA among their DNA from unknown archaic humans. sequences. lineages in modern humans. "The super-archaic finding is particularly exciting because it reveals genetic contributions from a human lineage that lived over a million years ago, despite the absence of any sequenced DNA from that population," said Arjun Biddanda, a postdoctoral researcher at Johns Hopkins University and a co-first author of the study. Together, the findings suggest that early Homo sapiens lived alongside numerous related human groups in Africa and Eurasia during the past million years. These populations were genetically similar enough to have children together, leaving behind lasting biological traces. "With ancient DNA from Neanderthals and Denisovans and with these new genealogical methods, we are learning that mixture among human populations has been very pervasive across time, and that this is also likely to be true at ancient time scales," said Priya Moorjani, a Berkeley associate professor of molecular and cell biology. "We often think of human evolution as a branching tree, but new genomic data and analytical methods reveal a much more interconnected history -- more like a complex web of populations connected by repeated episodes of migration and mixing." Scientists still do not know the identities of the ghost and super-archaic populations. However, the estimated dates when they separated from other human lineages overlap with Middle Pleistocene Homo groups living in Africa around 800,000 years ago and Homo erectus populations living in Eurasia around 1.8 million years ago, respectively. Zhang, Biddanda, Moorjani and their colleagues published their findings online July 30 in the journal Science. Modern humans who left Africa roughly 50,000 years ago encountered Neanderthals and Denisovans in Eurasia and interbred with both groups. Although Neanderthals and Denisovans later disappeared, portions of their genomes survived in their modern human descendants. Scientists uncovered that inheritance by extracting and sequencing DNA preserved in Neanderthal and Denisovan fossils. Yet the genomes of living people also contained signs of much older episodes of interbreeding. Those signals were difficult to investigate because scientists do not have sequenced DNA from most other extinct hominins. To overcome that limitation, Moorjani's team created a technique called TRACE (TRacking Archaic Contributions via ARG Estimation). Instead of relying on ancient remains, TRACE searches for archaic genetic regions using complete genomes from present-day people.

One of the unknown groups, described by the researchers as a ghost ancestor, interbred with modern humans in Africa more than 50,000 years ago. The encounter took place before the most recent major movement of Homo sapiens out of Africa and into Europe and Asia. DNA inherited from this lineage makes up approximately 1% of the modern human genome, an amount similar to the proportion inherited from Neanderthals. The ghost lineage separated from the ancestors of modern humans around 800,000 years ago, close to the time when Neanderthals and Denisovans also split from one another. However, the ghost population exchanged genes with modern humans at an earlier point than the Neanderthal and Denisovan encounters outside Africa. "Previous publications suggested that there might be ghost ancestry -- ancestry

from unknown archaic humans -- but they hadn't concluded whether this unknown ancestry is present only in Africans or not, and when this introgression event happened," said Berkeley graduate student Yulin Zhang, one of two first authors of the study. "We were actually able to find and map genomic locations in modern humans that are from this ghost lineage and show that this ghost ancestry is in all modern humans, not only in Africans." The researchers also detected genetic material from an even more ancient population, which they call a super-archaic ancestor. This hominin descended from a lineage dating back about 1.8 million years and appears to have interbred with Denisovans in Eurasia, probably more than 200,000 years ago. Denisovans later mixed with Homo sapiens, allowing a small portion of that super-archaic DNA to enter the genomes of modern

Misfolded insulin may be quietly driving diabetes

Much like paper must be folded into the correct shape to create an origami sculpture, proteins inside cells must form precise three-dimensional structures before they can function properly.

As prediabetes advances toward diabetes, this delicate process can begin to break down. Misfolded and defective proteins accumulate inside cells, creating stress that can damage the pancreatic cells responsible for producing insulin.

Researchers from Sanford Burnham Prebys Medical Discovery Institute and the University of Michigan reported new details about this process on June 1, 2026, in the Proceedings of the National Academy of Sciences. Their findings reveal how insulin-producing cells coordinate protein folding and what happens when that system

falls out of balance. The work suggests that strengthening the cellular machinery responsible for folding proteins could help protect these cells from damage.

Beta cells in the pancreas monitor blood sugar levels. When glucose rises, they respond by producing additional insulin, which helps return blood sugar to a normal range. As diabetes progresses, however, beta cells increasingly struggle to meet the body's demand for insulin.

Previous research has linked this decline to the misfolding of proinsulin, the precursor protein cells use to make insulin. Scientists already knew that improperly folded proinsulin accumulates during diabetes and places stress on pancreatic beta cells. What remained uncertain was which additional proteins help

control the process and how they work together.

"We knew that the system for preventing proinsulin misfolding depended on a chaperone protein called binding immunoglobulin protein and a number of cochaperones," said Randal J. Kaufman, PhD, a professor in the Center for Metabolic and Liver Diseases at Sanford Burnham Prebys and senior and corresponding author of the study.

"Our goal was to examine how these partner proteins coordinate proinsulin folding and remove any misfolded mistakes, as these steps are essential for the health of insulin-producing cells."

To study the interactions of binding immunoglobulin protein (BiP), the researchers genetically modified mice so that BiP in their beta cells carried an additional amino acid

chain called a peptide.

The added marker consisted of three copies of an eight-amino-acid sequence known as a 3xFLAG-tag. It acted like a molecular beacon, allowing scientists to detect and isolate BiP more easily during experiments.

The results pointed to an especially important role for p58IPK, one of BiP's cochaperone proteins.

When researchers genetically removed p58IPK from two different cell lines, misfolded proinsulin accumulated at higher levels. Tests in mice engineered not to produce p58IPK produced similar evidence. Their beta cells made smaller amounts of both proinsulin and insulin.

The team then restored p58IPK in one of the modified cell lines. Reintroducing the protein improved the cells' ability to fold

and transport proinsulin while reducing the accumulation of improperly folded copies.

However, p58IPK could not replace BiP's central role. Those improvements did not occur unless BiP was also present.

The researchers next investigated whether increasing BiP could compensate for the absence of p58IPK.

When cells produced extra BiP but lacked p58IPK, they showed only modest gains in proinsulin folding and its movement out of the cell. The improvements were substantially greater when both proteins were present at normal levels.

"Like a single tennis player trying to play a doubles match, we found that BiP cannot just go it alone in maintaining the proper folding of proinsulin," said Insook Jang, PhD, a staff scientist in the Kaufman

lab and lead author of the manuscript.

The investigators also identified additional partner proteins involved in folding and transporting proinsulin, as well as detecting and managing misfolded versions. More research will be needed to determine precisely how these proteins influence insulin production and the progression of diabetes.

"Our studies highlight that proinsulin folding is vulnerable to many of the same cellular stresses that cause beta cell failure in type 2 diabetes," said Kaufman.

Most existing diabetes medications do not directly correct the protein-folding problems that may contribute to beta cell failure. Instead, they primarily control the disease by helping tissues absorb more glucose or prompting the pancreas to release more insulin.

Daily multivitamin may help older adults stay independent

Maintaining the ability to handle everyday tasks without severe or limiting symptoms is an important part of quality of life in older age. New research suggests that taking a daily multivitamin may help support that independence.

After 3 years, adults who received a daily multivitamin had significantly better functional health scores than participants who took a placebo. Researchers say the results indicate that multivitamins may help older adults preserve their ability to function from day to day, potentially through benefits involving cognitive health, circulation, and physical endurance.

"What makes this work unique is our focus on functional health, how people actually feel and function in their daily

lives -- rather than just the prevention of major diseases," said Bayu B. Bekele, PhD, a postdoctoral fellow at the Georgia Prevention Institute of the Medical College of Georgia at Augusta University. "For older adults, these findings suggest that a daily multivitamin could be a helpful, low-risk addition to a healthy lifestyle to support physical well-being as they age, although it is not a substitute for a good diet or exercise."

Bekele presented the results at NUTRITION 2026, the flagship annual meeting of the American Society for Nutrition. He conducted the research with Yanbin Dong, MD, PhD, Regents' Professor of Medicine and Director of the Georgia Prevention Institute of the Medical College of

Georgia at Augusta University.

The analysis included data from more than 16,000 adults aged 60 years and older who participated in the COcoa Supplement Multivitamins Outcomes Study (COSMOS).

As part of COSMOS, participants were randomly assigned to receive a daily multivitamin, a cocoa extract supplement, both supplements, or neither. Placebos were given to the control group and to participants who received only one of the two supplements.

Following 3 years of supplementation, participants assigned to the multivitamin group reported significantly better functional health than those assigned to a placebo. The findings were based

on responses to the Kansas City Cardiomyopathy Questionnaire.

The strongest differences appeared in symptom burden and the clinical summary score. That summary score combines measurements of symptom burden and physical ability.

These results may have practical importance because functional health reflects whether people can continue performing routine activities without being held back by fatigue or other symptoms.

"Multivitamin use supporting heart health and overall physical function may help maintain the ability to perform everyday activities such as dressing, bathing, walking, climbing stairs, jogging or hurrying,

and completing household chores.

These benefits may be particularly relevant for individuals experiencing fatigue, shortness of breath or swelling in the feet, which can limit daily functioning," said Bekele.

Cocoa extract did not produce a significant improvement in functional health scores across the study population as a whole. However, it was associated with a significant benefit among participants with congestive heart failure.

Although the multivitamin findings are encouraging, researchers emphasize that supplements should not be viewed as replacements for a balanced diet or regular physical activity. People should also speak with a doctor before

beginning any new supplement.

Bekele presented the research on Monday, July 27, during the Vitamins and Minerals Oral Session in the Gaylord National Resort & Convention Center (abstract).

The study was supported by grant HL157665 from the National Institutes of Health.

Abstracts presented at NUTRITION 2026 were reviewed and selected by a committee of experts. However, they generally have not completed the same peer review process required before research is published in a scientific journal. The results should therefore be considered preliminary until they appear in a peer-reviewed publication.

Scientists find a simple routine linked to less pain and depression

A consistent daily routine may offer meaningful benefits for both physical and mental health, according to new research from the University of Missouri. The study found that older adults who followed regular daily schedules reported less physical pain and fewer symptoms of depression, including those who experienced insomnia.

The findings suggest that everyday patterns, such as waking, eating, working, socializing, and going to bed at similar times, may support better overall well-being.

About half of adults age 60 and older experience symptoms of insomnia, according to the National Council on Aging. To examine how sleep difficulties relate to health and quality of life, Eunjin Tracy, an assistant professor in the

College of Education and Human Development, studied survey responses from 67 older adults. Of those participants, 37 had insomnia.

As researchers expected, the adults with insomnia generally reported more pain and stronger symptoms of depression. However, Tracy also identified an important pattern across the group. Participants who maintained regular daily routines tended to experience less pain and depression, regardless of how well they slept.

"Regardless of sleep quality, those who reported having a regular daily routine

had lower levels of physical pain and less depression compared to those without a daily routine," Tracy said. "If we are consistent with when we wake up, eat, work or study, interact with others and go to bed, those time cues help

synchronize our internal body clocks. Over the long term, that seems to be linked with improved health outcomes."

Regular activities provide signals that help regulate the circadian rhythm, the body's internal 24-hour timing system. This biological clock plays a major role in sleep, mood, and many other processes throughout the body.

"When we regulate our circadian rhythm well, our bodies function well, but if it gets too distracted, our bodies don't function as well," Tracy said.

Changes in sleep times, meals, or other daily activities can disrupt that internal timing system. Even relatively small differences between weekday and weekend schedules may create what researchers often call social jet lag.

Rice bran compound may help ease irritable bowel symptoms

A naturally occurring compound found in rice bran may influence how strongly the intestines contract, according to new research from Toho University.

The study, led by Dr. Keisuke Obara, Dr. Kento Yoshioka, and Professor Yoshio Tanaka of the Faculty of Pharmaceutical Sciences, found that ferulic acid (FA) can reduce intestinal smooth muscle contractions by blocking voltage-dependent calcium channels. The discovery could eventually support new dietary approaches for intestinal motility disorders such as irritable bowel syndrome (IBS) and inflammatory bowel disease (IBD).

Ferulic acid is a polyphenol found in many plant-based foods, especially whole grains and rice bran. It is already known for its antioxidant and neuroprotective effects, and previous research has largely examined how it may benefit the body more broadly.

Much less was known, however, about its effects on gastrointestinal motility, the coordinated

muscle activity that moves food and waste through the digestive system.

People with IBS and IBD can experience abnormal intestinal movement. In some cases, the gut contracts too much, while in others, movement is reduced. The researchers set out to determine whether FA could directly alter these contractions.

The team tested FA using guinea pig ileal longitudinal smooth muscle (ILSM). The compound significantly reduced contractions triggered by several signaling molecules, including acetylcholine, histamine, prostaglandin F2 α , and serotonin.

The inhibitory effect was reversible, meaning normal contractions returned after FA was removed. It was also concentration-dependent, with stronger effects appearing at higher concentrations.

The researchers found that FA acted in a noncompetitive manner. This suggests that it did not simply block the receptors used by the signaling molecules.

Instead, it appeared to interfere with a shared mechanism involved in muscle contraction.

Additional experiments using vascular smooth muscle cell models offered a possible explanation. FA reduced the rise in intracellular calcium caused by potassium chloride. Calcium entering smooth muscle cells plays a central role in triggering contraction.

The results indicate that FA suppresses this process by inhibiting voltage-dependent calcium channels, reducing the calcium signals needed for the muscles to tighten.

The findings suggest that FA may act as a natural regulator of intestinal motility. By calming excessive smooth muscle activity, it could potentially help people with diarrhea-predominant IBD.

The same effect may not be beneficial for everyone. In people with constipation-predominant IBS, or in healthy individuals, further slowing intestinal movement could make constipation or related symptoms worse.