THE MARINERS' DIGEST

Vol.81 | April 2026

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On the Route from Japan to the Americas

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—Exploring Applications in the Maritime Industry

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By Non-Fiction Writer/ Soichi Hayashi Sr.

Daily Landscape

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Outstanding Photo of the Month

May the blue sky be the same as the sea

PHOTOGRAPHER'S NAME : Capt. Le Huu Minh

COMPANY : NYK SHIPMANAGEMENT PTE LTD

DATE AND PLACE : 24th Nov 2025/Indian Ocean – East of Madagascar

COMMENT : Sometimes we call them " Sea warriors."

Editor's comment

Here's a scene of inspection work being conducted under a beautiful blue sky. Working at heights on a ship can be nerve-wracking, so reliable crewmates are essential. These consistent daily efforts are the key to safe voyages.

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Front Cover: Energetic Crew of PACIFIC SPIKE

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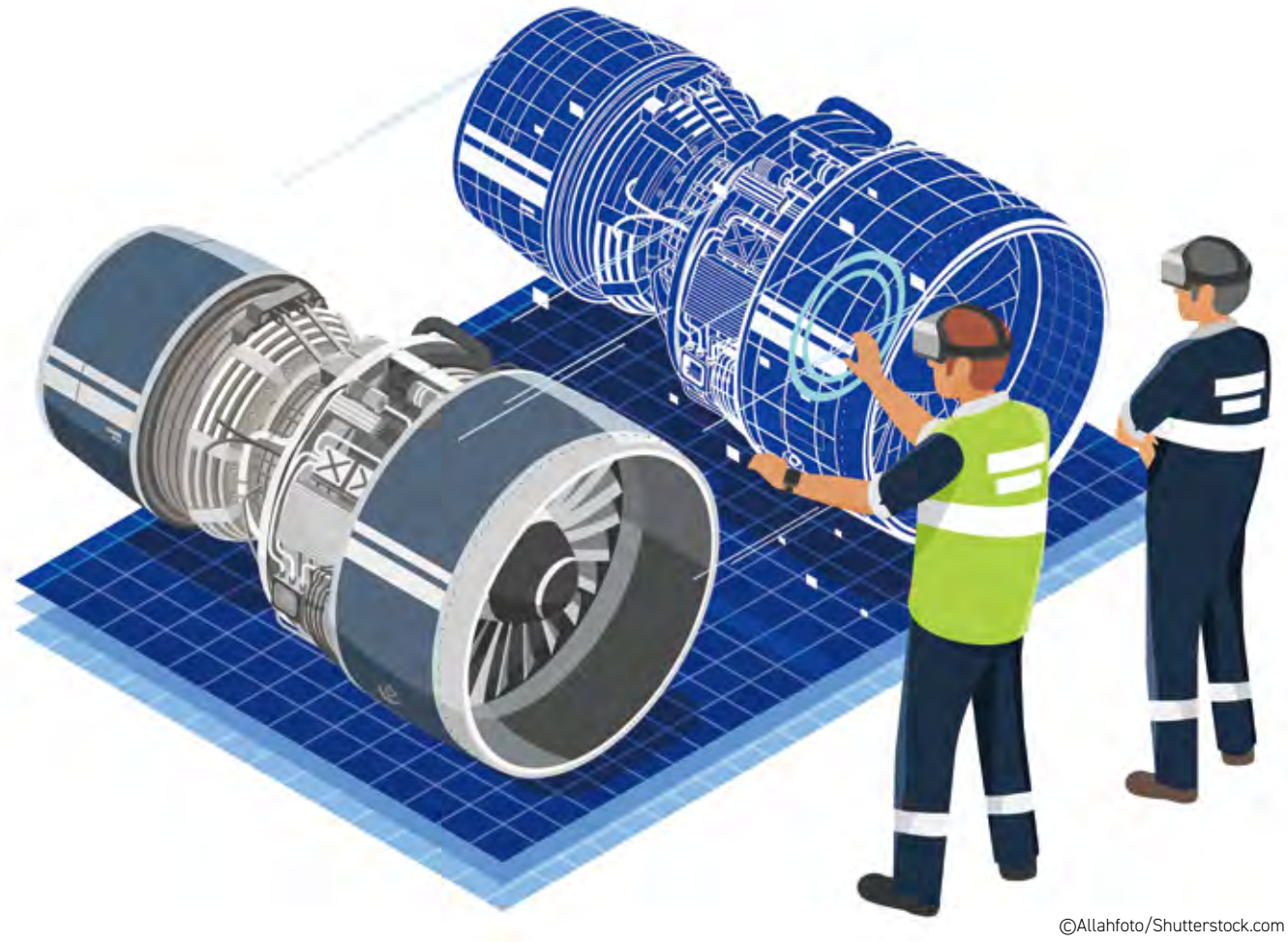
What Is Digital Twin Technology?
Exploring Applications in the Maritime Industry



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Digital technologies are evolving at an accelerating pace. Among them, digital twin technology, which replicates real-world environments in virtual space, has attracted attention across a wide range of industries. This article outlines its fundamentals and key applications.

Creating the Real World in Virtual Space

A digital twin is a technology that recreates a real-world environment on a computer based on data collected from physical assets. The name derives from the concept of constructing a "twin" of the real world in virtual space. Advances in the Internet of Things (IoT) and artificial intelligence (AI) have supported the development of this technology. Diverse data are acquired through IoT devices and transmitted in real time to cloud servers. Meanwhile, AI analyzes and processes them. As a result, physical space can now be reproduced almost instantaneously.

Digital twins offer several advantages. In manufacturing, they are expected to improve product quality. Traditionally, manufacturers needed to build physical prototypes and refine them repeatedly. In a virtual environment, however, simulations can be

repeated as many times as necessary. This approach enhances quality and shortens development time. When problems occur in products or production lines, data can be collected and analyzed in real time. Engineers can identify causes in virtual space. They then apply the findings to subsequent production and product design.

Urban development and public administration also use digital twins. They enable repeated simulations of disaster scenarios under conditions that would be difficult to reproduce. Authorities can test responses to large-scale earthquakes and other natural disasters in advance. This preparation helps reduce potential damage. In addition, if damage does occur, real-time data collection may help ensure the smooth distribution of necessary relief supplies and the coordination of recovery operations.

Adoption by Manufacturers and Governments

Several organizations have already implemented digital twin technology.

Daikin Industries, a major air conditioning equipment manufacturer, has been introducing a production management system using digital twins since 2020. The company collects biometric data, control data, temperature readings, and CO_2 levels from sensors installed on manufacturing lines. The system reflects these data in real time within a digital twin environment. It also uses predictive analytics to prevent major incidents before they occur.

Toyota Motor Corporation utilized digital twin technology to shorten product development lead time. Specifically, it created 3D models of production

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equipment from the design stage and repeatedly simulated operations in virtual space to optimize the equipment and implement automation. By applying the insights gained to actual equipment, productivity was tripled, and lead time was reduced to one-third.

General Electric applies digital twins across sectors including healthcare and aviation. In aircraft engine maintenance, more than 200 sensors attached to each engine collect operational data in real time. The company builds a digital twin of each engine based on this information. AI analyzes engine conditions and recommends optimal inspection timing. This process prevents failures and significantly reduces maintenance costs.

Tokyo Metropolitan Government is also advancing digital twin initiatives. Its objectives include addressing population decline, aging demographics, climate change, and large-scale disasters. The government has published a 3D map on its official website. Although the functions remain limited, users can view real-time river data and the operating status of municipal buses.

The Tokyo Metropolitan Government plans to promote digital twin adoption by 2030. It also aims to use this technology in the future to support policy-making as well as decisions by residents and businesses in the city.

Applications in Ship Monitoring and Shipbuilding

How can digital twins be applied in the maritime industry?

ClassNK held a lecture on digital twins in January 2026. According to the presentation, one promising application lies in hull structure monitoring. Sensors installed on vessels continuously collect data on hull condition, loads, motion, and acceleration. Improvements in sensing technology, communication infrastructure, and data analytics now allow operators to monitor hull conditions in real time.

Data are analyzed in virtual space based on these inputs.

This analysis enables the prediction of hull responses and ship motions along planned routes. Fleet managers and navigators can use these forecasts to assess maneuvering risks. The same data also supports the optimization of cargo loading plans. Over the medium to long term, digital twins can predict structural deterioration trends. Managers can therefore implement planned maintenance strategies.

Digital twins also show potential in shipbuilding. Shipyards construct vessels using extensive design data and 3D models. After delivery, however, these data are often underutilized. In Japan, multiple shipbuilders and shipping companies are studying the shared use of such data within digital twin platforms. A single company cannot easily implement this approach alone. If multiple firms collaborate and share design data, they can establish a common digital twin framework.

For example, when considering the installation of energy-saving devices, shipbuilders' models can be combined with shipping companies' operational data. This integration allows verification of optimal equipment configurations. Such applications are expected to enhance vessel safety and improve maintenance efficiency.

Another potential application involves cargo loading operations. In this case, combining shipping companies' plans to maximize cargo capacity with shipbuilders' design data may enable the design of more efficient vessels.

Verification is also progressing in the construction of floating offshore wind power facilities, where broader adoption is anticipated. Offshore wind farms are located far from shore, which increases access time and cost. Favorable wind conditions often coincide with severe sea states. As a result, on-site work periods are limited. Delays in maintenance increase the risk of equipment failure.

By using digital twins, operators can estimate changes in structural components, mooring system conditions, fatigue progression, and expected service life in virtual space. They can assess equipment conditions before traveling offshore. This capability improves the accuracy of maintenance planning.

Digital twin technology excels in analysis and simulation. Its characteristics support production systems in manufacturing and address social challenges in urban management. Although technical issues and data-sharing challenges remain in the maritime sector, research and verification continue steadily. Digital twins are expected to play a transformative role in reshaping industries in the years ahead.

ON BOARD
PACIFIC SPIKE

On the Route from Japan to the Americas

PACIFIC SPIKE, general cargo ship, (GT: 20,506, LOA: 189.91) managed by NS United Kaiun Kaisha, Ltd, manned by 23 seafarers (23 Filipino) is in service of carrying Steel Rails from Japan to the Americas. The editorial group interviewed the seafarers through email.

Working at sea offers good opportunities, discipline, and a chance to see some countries while earning a living.

Captain

Bonifacio S. Francisco Jr.

—Please introduce yourself.

I am Bonifacio S. Francisco Jr., 51 years old from the province of Bulacan, Philippines, a licensed Master Mariner with extensive experience on ocean-going vessels, mostly bulk carriers. I am happily married and blessed with three daughters, who serve as my greatest motivation to perform my duties and responsibilities. Their support drives me to prioritize health and safety on board.

—What made you decide to become a seafarer?

I became a seafarer because our families have a maritime background that inspired me. I also wanted to support my family and to build a stable future. Working at sea offers good opportunities, discipline, and a chance to see some countries while earning a living. I was also drawn to the challenge of the job that requires dedication and a positive attitude to achieve professional goals.

—What is your career before getting the job at your present company?

I did not have any employment following my college graduation. I chose to enter a seafaring profession immediately as I was committed to building a long- term career at sea and to developing my hands-on experience aboard vessels.

—What is the usual route of this ship?

The vessel's trading pattern is usually from Japan for loading Steel Rails and for discharging cargo at various ports on the East and West Coasts of the United States, as well as the West Coast of Canada.

—When do you feel tougher while operating this ship?

The cargo ship feels toughest during bad weather and heavy seas, especially in open sea crossings. This requires proper securing due to the possible shift of cargo that may affect the stability of the vessel. It is also challenging while navigating in congested waterways like straits or river approaches, since there is heavy traffic and little room for error. Finally, emergency situations make operations especially tough, because quick decisions and strong coordination with all departments are critical.

—Has there been any change or improvement recently in ship operation?

Ship operations have seen steady improvement driven mainly by technology, efficiency programs and environmental regulations. Navigation and bridge systems have also advanced. Integrated bridge systems, automated routing, and weather optimization software are becoming more common. They improve safety and reduce crew workload, especially in congested ports and challenging weather conditions. Environmental compliance has become a major focus. To meet IMO emission targets and carbon intensity requirements, operators are adopting several measures. These include fuel-efficiency measures, hull coating improvements, wind assistance devices, and alternative fuels such as LNG or methanol. They are increasingly applied on newer vessels. These changes are reshaping voyage planning and engine management practices.

—What are you careful of to keep your health on this ship?

To keep my health on board, I pay close attention to both physical well-being and mental balance as life at sea can be demanding and isolated. First, I maintain a regular routine as much as possible getting enough rest despite busy schedules, staying hydrated and eating balanced meals. I also make time for daily exercise, simple stretching and walking on deck help maintain a good circulation. Command carries responsibility, so I keep communication open with officers and crew. I delegate properly and take short breaks when possible to clear my mind.

—Do you have any unique way to ease your stress on board?

Over the years I have developed a few simple but effective ways to manage stress on board even during busy voyages. I start by keeping a structured daily routine. Knowing when I will work, rest and take short breaks helps maintain balance and prevent mental fatigue. Early in the morning or in the evening, I sometimes spend a few quiet minutes on bridge wings just observing the sea and the horizon with fresh air. That calm moment is surprisingly effective in clearing my thoughts.

—What are you going to do on next vacation?

On my next vacation, first and foremost I plan to spend quality time with my family since long voyages keep us apart. Resting properly, catching up on sleep and enjoying simple moments at home are always a priority. If time allows, I would like to do some light travel, preferably somewhere quiet in the countryside where I can truly relax and recharge. In addition to attend refresher course if company required.

—What does being a seafarer mean to your life?

It is a way of life that has shaped my character, values and purpose. It represents responsibility and discipline, knowing that the safety of the vessel, the cargo and every crew member depends on teamwork. Life at sea teaches patience, resilience, and adaptability. It does so especially when facing adverse weather, long voyages, or extended separation from family.

—Do you have any advice for young seafarers who want to become captain?

Becoming a captain is a long journey but it is one of the most rewarding paths in the maritime profession. Young seafarers who want to become captains should focus on basic seamanship and safety. They must continue studying maritime rules and technology. At the same time, learning from experienced officers will help them build strong leadership skills. They must stay disciplined, patient and always prioritize safety.

The profession taught me humility, respect for teamwork, and appreciation for both challenges and achievements that come with life at sea.

Chief Engineer

Emerson D. Agcaoili Jr.

—Please introduce yourself.

I am Emerson D. Agcaoili Jr., a 36-year-old from Floridablanca, Pampanga, Philippines, a Chief Engineer by profession for about 4 years, with 16 years of experience at sea, mostly on bulk carriers. I was first featured in The Mariners' Digest in 2010 as an engine cadet, so returning now feels like completing a journey. I am blessed with a loving wife and two sweet daughters who motivate me every day. They remind me that every contract has a purpose beyond the ship itself.

—What made you decide to become a seafarer?

My original plan was to study mechanical engineering since I enjoyed understanding machinery operations. However, a neighbor who worked as a seafarer shared his experiences and inspired me to take marine engineering instead. I became interested in the discipline, technical challenges, and the chance to support my family. Over time, it stopped being just a practical decision and became a passion, especially as I realized the importance of our role in global trade.

—What is your career before getting the job at your present company?

I did not have another profession before this because I entered the maritime industry immediately after finishing my studies. I started as an engine cadet and gradually advanced through experience, guidance from senior engineers, and continuous learning onboard. Each vessel became my classroom. I am especially indebted to our company and our former company's training director who gave us full support, patiently shared knowledge, and trusted us to perform our assigned duties. That guidance built my confidence and prepared me for my responsibilities as Chief Engineer.

—When do you feel tougher while operating this ship?

The most challenging moments are unexpected machinery failures during maneuvering or cargo operations. In such situations, time pressure is high, and accuracy matters most. The entire ship depends on the engine department's response. In those situations, calm leadership and teamwork are essential. Although stressful, successfully resolving problems brings strong professional satisfaction as we know safety schedule, and crew confidence depends on our decisions and actions.

—Has there been any change or improvement recently in ship operation?

Ship operations have improved significantly through modern monitoring systems and planned maintenance software. Engineers can now detect abnormalities earlier and prevent serious breakdowns. Communication with shore support is faster,

allowing better technical assistance. Safety culture has also strengthened, especially in risk assessment and environmental protection. Compared with earlier years in my career, operations today are more organized and efficient. They are also more supportive of safety and crew wellbeing.

—What are you careful of to keep your health on this ship?

I maintain my health through simple discipline: regular exercise, balanced meals like drinking blended fruits to start my day, and proper rest whenever schedule permits. I also managed my workload through planning and teamwork to reduce unnecessary stress. A clear mind and a healthy body are essential in engineering duties. Alertness and concentration directly affect onboard safety as well as work quality.

—Do you have any unique way to ease your stress on board?

During free time I enjoy playing sports like basketball with the crew as it improves camaraderie and relieves pressure. Sometimes we relax together over a few drinks while sharing stories after work. I also communicate with my family since internet onboard has becomes more available which keeps me motivated. A positive atmosphere onboard helps everyone cooperate better and makes long contracts easier for the whole team.

—How are you planning to spend your next vacation?

For my next vacation, I hope to travel with my family if God permits and spend meaningful time with them after months at sea. I also plan to personally handle and grow my small business while I am home, making sure operations run smoothly. In addition, I will rest properly, care for my health, and attend some training courses so I can return onboard prepared and focused for another safe contract.

—What does being a seafarer mean to your life?

Being a seafarer has shaped my character and life direction. It allowed me to support my family while teaching patience, discipline, and responsibility. From being a cadet featured in 2010 to serving as Chief Engineer today, the journey reflects perseverance and continuous learning. The profession taught me humility, respect for teamwork, and appreciation for both challenges and achievements that come with life at sea.

—Do you have any advice for young seafarers who want to become chief engineer?

Teaching young engineers has become my passions. I advise them to focus on learning rather than rushing promotion. Understand the machinery carefully, follow safety procedures, and read instruction manuals thoroughly. At the same time, respect experienced crew members, ask questions, and observe everything. Competence grows through patience and consistency. If they maintain a good attitude and responsibility, promotion will naturally come when they are truly ready for the role.

I want to consistently provide healthy, delicious meals that support crew morale and performance, and to serve safely and responsibly throughout my seafaring career.

Chief Cook

Jesmer S. Espinosa

—Please introduce yourself.

My name is Jesmer S. Espinosa. I am 37 years old and was born in the Pampanga, Philippines. I currently work as a Chief Cook on board in a bulk carrier. I come from a close-knit family that values hard work and good food. Their constant support and encouragement inspired me to pursue cooking as a profession, which eventually led me to build a fulfilling career at sea.

—How did you learn cooking before working on board this ship?

I learned cooking through a combination of formal training and hands-on experience. I studied basic culinary skills on shore and further developed them by working in different kitchens and on various vessels. Before joining this ship, I gained valuable experience cooking for crews of different nationalities, which helped me understand diverse tastes, preferences, and dietary requirements.

—What dishes are your specialties?

My specialties include preparing international crew meals such as Asian, Western, and Filipino dishes. I am confident in creating balanced daily menus, soups, pasta, rice meals, and fresh bread. I focus on serving nutritious, tasty food that helps keep the crew healthy, satisfied, and energized during long voyages.

—Do you think of any improvement on your cooking skills recently?

Yes, I believe my cooking skills have improved recently through daily practice and continuous feedback. I have become more efficient in meal planning, portion control, and reducing food waste. I also experiment with new recipes and focus on improving food presentation, while consistently maintaining high hygiene and safety standards in the galley.

—What do you mostly care about while cooking?

The things I care about most while cooking are cleanliness, food safety, and nutrition. I always ensure that meals are prepared hygienically and served on time. I also value crew satisfaction, so I adjust flavors and menus according to preferences while keeping meals healthy and well-balanced.

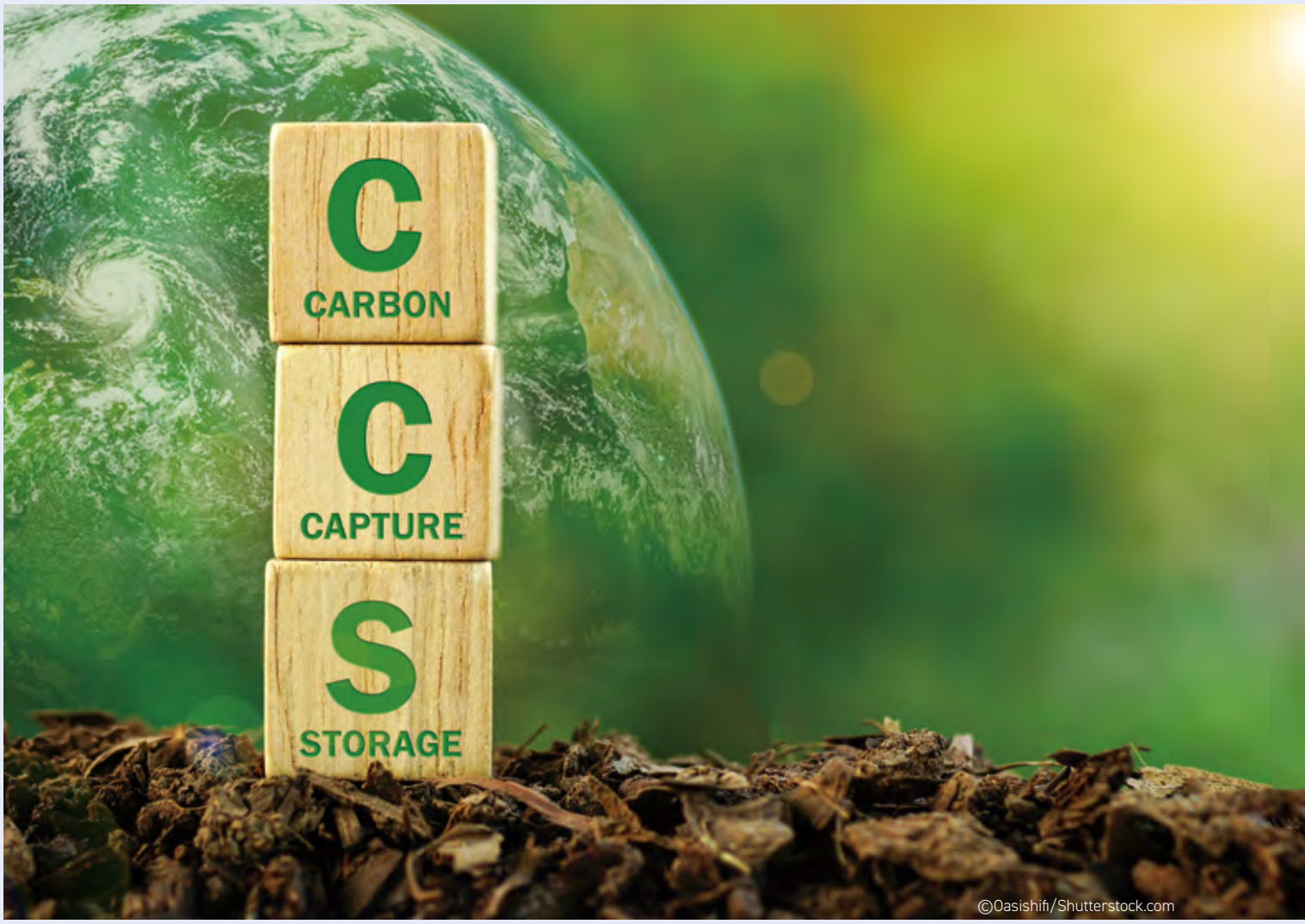
—How are you planning to spend your next vacation?

During my next vacation, I plan to spend quality time with my family and rest properly. I also want to improve my cooking knowledge by trying new recipes and learning more about healthy food preparation. Rest and family time help me return to work refreshed and motivated.

—What is your final goal as a cook?

My final goal as a cook is to continuously improve my skills and be recognized as a reliable and professional Chief Cook. I want to consistently provide healthy, delicious meals that support crew morale and performance, and to serve safely and responsibly throughout my seafaring career.

The Current State and Potential of CCS LCO_2 Carriers Indispensable to Projects



Climate change is one of the world's most pressing challenges. Two key countermeasures are the expansion of renewable energy and the use of high-efficiency thermal power generation. In this context, Carbon dioxide Capture and Storage (CCS) stands as an effective option. This feature summarizes CCS and highlights the role of LCO_2 carriers that support maritime transport.

Overview of CCS

CCS stands for Carbon dioxide Capture and Storage. It refers to a technology that captures CO_2 and stores it underground.

There are some heavy industries those institutions emit large volume of CO_2: thermal power plants, refineries, steelworks, chemical plants, and waste treatment facilities, etc. At the same time, these sectors are considered difficult to decarbonize. CCS captures CO_2 from such sources and injects it into stable underground permanent storage. The primary objective is to prevent CO_2 from being

released into the atmosphere. The technology is positioned as essential to achieving carbon neutrality.

The International Energy Agency (IEA) estimates that achieving global carbon neutrality by 2050 will require the injection and storage of approximately 3.8 to 7.6 billion tons of CO_2 per year. Current global capture capacity remains at about 50 million tons annually. Capacity is expected to expand to around 430 million tons by 2030. Storage capacity could reach approximately 670 million tons per year by 2030. Against this backdrop, research activities, demonstration projects, and commercial operations are advancing worldwide.

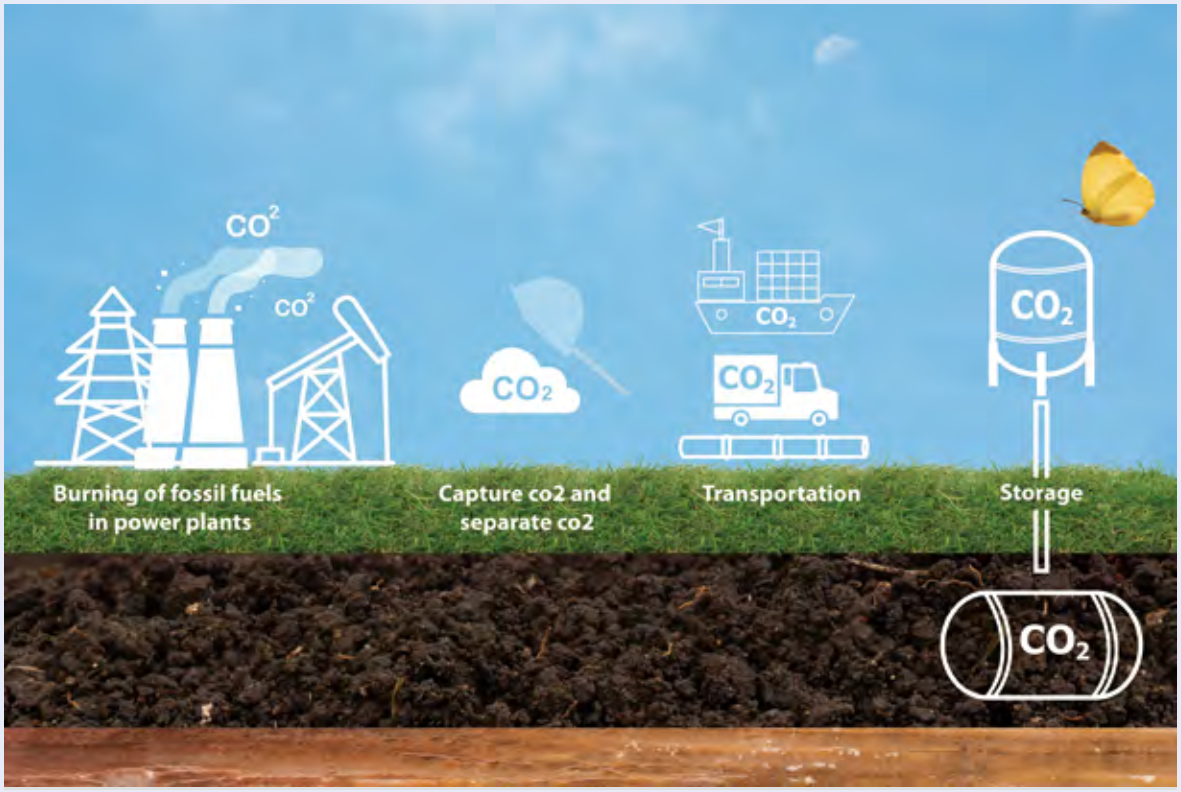
CCS Projects in Japan and Overseas

CCS projects are underway across many countries. About 50 projects are currently in operation. The United States has the largest number of projects, including those under construction or in planning. The Shute Creek Treating Facility in the Rocky Mountains has one of the world's largest CO_2 capture capacities. It reportedly captures about 7 million tons of CO_2 annually.

Canada is also expanding CCS deployment. A representative example is the Quest Carbon Capture and Storage Project. The project transports CO_2 through an onshore pipeline extending approximately 65 km. It injects the CO_2 into a saline aquifer at a depth of about 2,300 m for storage.

Japan has also advanced its efforts. In Tomakomai, Hokkaido, a CCS demonstration project conducted the country's first large-scale test. Its goal was to establish CCS technology.

Construction of the demonstration facilities took place from 2012 to 2015. CO_2 injection began in 2016, and cumulative injected volume reached approximately 300,000 tons by November 2019. In December 2025, test drilling commenced in preparation for commercial underground storage. Studies and project planning are also progressing in the Tohoku and Kyushu regions.



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Challenges Facing CCS

CCS development requires substantial investment. Capture and storage both demand significant capital. Technological innovation is essential to reduce costs.

Another critical issue is the development of a value chain for large-scale transport. Transport costs directly affect project viability. In Japan, maritime transport plays a vital role due to geographic conditions. Establishing reliable transport technologies will therefore be necessary.

Selecting appropriate storage sites is also crucial. Geological formations must include a storage layer deeper than 800 m, capped by an impermeable layer. Japan's storage potential is estimated at 150 to 240 billion tons. Practical utilization requires geological surveys and test drilling to identify suitable locations.

CO_2 Capture Technologies Beyond CCS

Other CO_2 capture technologies exist. One is Carbon dioxide Capture and Utilization (CCU). CCU refers to the use of captured CO_2 as a resource. It converts emitted CO_2 into products such as fuels or plastics.

Carbon dioxide Capture, Utilization and Storage (CCUS) integrate both concepts. It utilizes captured CO_2 while storing it when necessary.

LCO_2 Carriers: Essential for CCS Implementation

Transport infrastructure is indispensable to CCS. CO_2 is primarily transported via pipelines or ships. In Japan, only Kawasaki Kisen Kaisha, Ltd. ("K" Line) currently operates LCO_2 carriers for commercial CCS projects.

In December 2025, "K" Line announced the delivery of the newly built LCO_2 carrier "NORTHERN PHOENIX." The vessel is the third ship serving the Northern Lights project in Norway. The first vessel was delivered in November 2024, and the second in December 2024. All three vessel are managed by the London-based subsidiary "K" LINE Energy Shipping (UK) Limited. NORTHERN PHOENIX transports liquefied CO_2 captured outside Norway to the receiving terminal in Øygarden, western Norway.

Significance of Transporting CO_2 in Liquefied Form

CO_2 can be transported as a liquid, solid, or compressed gas. Liquefaction offers advantages in handling and transport efficiency. Solid CO_2, or dry ice, sublimates from solid to gas. This process can release CO_2 into the atmosphere, making it unsuitable for underground storage projects. Liquids are easier to handle and enable efficient cargo operations. However, liquefaction requires significant energy.

For long-distance transport, including between Japan and overseas destinations, shipping is a practical option. Pipelines are generally more cost-effective over short distances. Beyond roughly 200 kilometers, maritime transport is considered more economical.

Differences from Conventional Liquefied Gas Transport

Liquefied petroleum gas (LPG) and liquefied natural gas (LNG) are also transported in liquid form. However, their physical properties differ significantly from those of LCO_2. LCO_2 must remain at low temperature and under pressure. Deviation from these conditions may cause solidification. LPG and LNG may vaporize but do not solidify. This risk of solidification marks a key difference.

Ship design reflects this distinction. LCO_2 carriers are equipped with safety valves to maintain tank pressure. Excessive depressurization may trigger solidification. Designers must balance pressure control with prevention of solid formation. If solidification occurs, powdered CO_2 may clog piping. Structural measures must mitigate such risks.

Cargo handling also presents challenges. LCO_2 is a new cargo. Shipboard systems must align with terminal and port infrastructure. Integrated ship–shore facility development is required to ensure safe and efficient operations.

NORTHERN PHOENIX ©"K" Line

Crew Experience on Liquefied Gas Carriers

Can seafarers serve aboard LCO_2 carriers? A representative of "K" Line states that experience on LNG or LPG carriers is sufficient. Understanding the properties of CO_2 remains essential. CO_2 is non-flammable, yet its behavior during leakage differs from other gases. Crew members must learn dedicated response procedures. The company has established specialized training programs focused on CO_2.

Maintaining temperature and pressure onboard is critical to preserving the liquid state. Poor management increases the risk of solidification. Monitoring procedures resemble those on LNG and LPG carriers, as temperature and pressure control form part of routine operations.

LCO_2 Carrier Construction in Japan

The LCO_2 carriers operating in Europe currently have a cargo tank capacity of 7,500 m³. Larger vessels are anticipated. In January this year, "K" Line secured a charter contract for a 12,000 m³ vessel to serve Phase 2 of the Northern Lights project. According to the company, future long-distance routes may connect Japan or South Korea with Southeast Asia and Australia. In such cases, tank capacity of approximately 50,000 m³ may be required. Longer transport distances could drive vessel enlargement.

In Japan, three major shipping companies — "K" Line, Mitsui O.S.K. Lines, and Nippon Yusen Kabushiki Kaisha — have decided to invest in the design and development of LCO_2 carriers and ammonia-fueled vessels in cooperation with domestic shipbuilders.

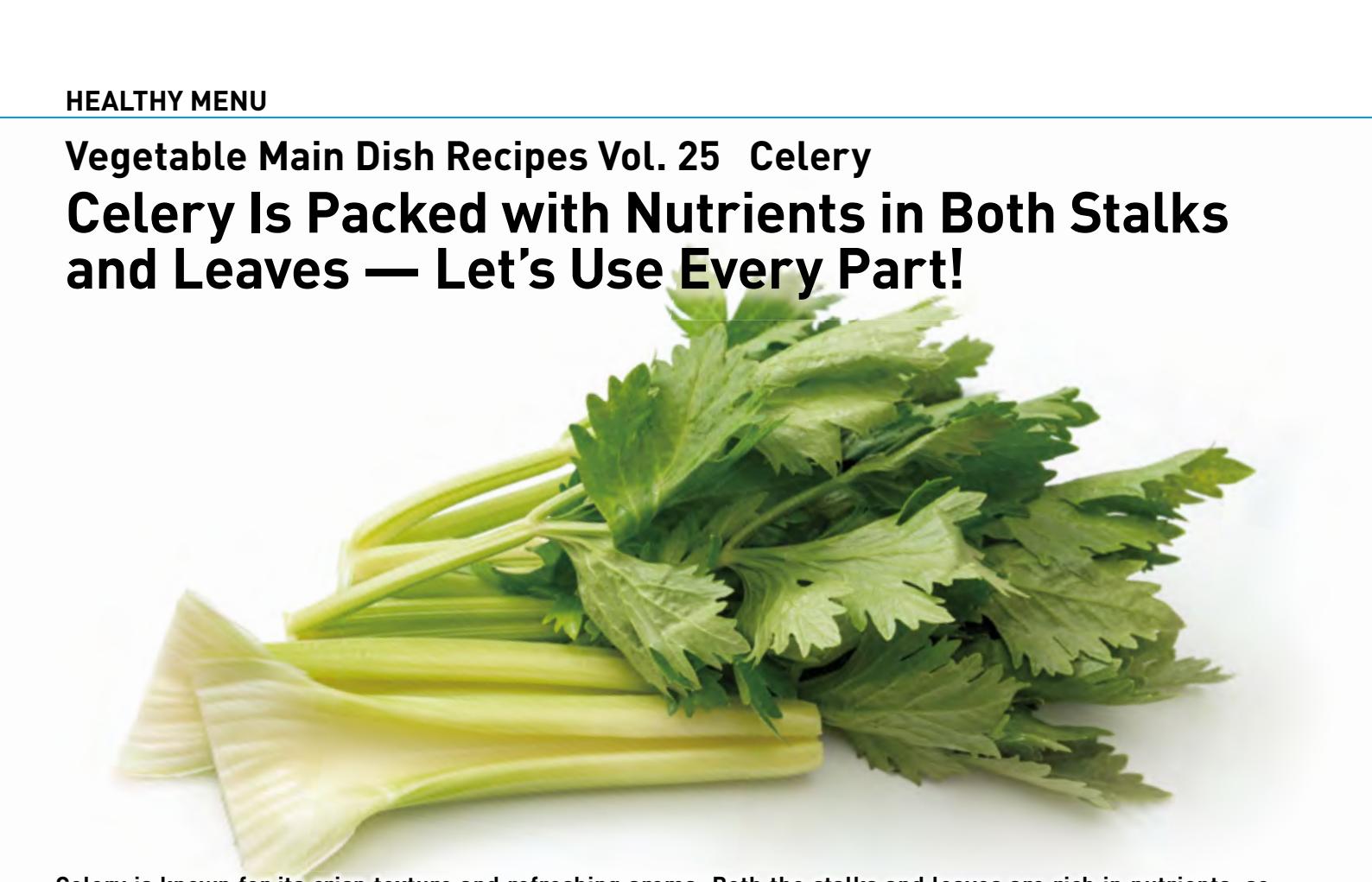
CCS-related business is expanding. Development of LCO_2 carriers is progressing steadily. Vessels are growing larger, and technology continues to advance.

LCO2 carriers are emerging as a new sector in maritime transport.

Seafarers will require both experience from conventional gas carriers and knowledge of CO_2 properties. LCO_2 carriers represent a new professional challenge at the forefront of transport supporting decarbonization. The expanding market may offer experienced seafarers a pathway to their next career stage.

Vegetable Main Dish Recipes Vol. 25 Celery

Celery Is Packed with Nutrients in Both Stalks and Leaves — Let's Use Every Part!



Celery is known for its crisp texture and refreshing aroma. Both the stalks and leaves are rich in nutrients, so make the most of every part and enjoy it all.

By Makiko Hei

About Celery

Celery leaves and stalks contain different types and amounts of nutrients, with the leaves being particularly rich. They provide antioxidant vitamins such as beta carotene, vitamin C, and vitamin E, which support immunity. The vitamins also may help reduce fluid retention and relieve fatigue. The leaves are also rich in potassium and contain B vitamins. So be sure to enjoy the leaves as well. The stalks, on the other hand, are high in dietary fiber, which supports gut health and slows the rise in blood sugar levels.

Celery's distinctive aroma comes from apiin and apigenin. They are polyphenols that may help regulate the autonomic nervous system and ease stress.

Nutritional Benefits

Nutrient	Effect
Potassium	Helps reduce swelling and supports healthy blood pressure
Beta carotene, Vitamins C and E	Provide antioxidant effects and promote healthy skin
Dietary fiber	Helps relieve constipation and may reduce the risk of lifestyle-related diseases
B vitamins	Support metabolism and aid in fatigue recovery

How to Choose

Select stalks that are thick, firm, and plump. Clear, well-defined strings on the surface of celery are a sign of freshness. The leaves should be crisp, glossy, and deep green.

Storage Method

Refrigerated

Storage period (guideline):
Leaves: 4 days / Stalks: 6 days

Celery loses moisture easily through its leaves, so separate the leaves from the stalks before storing. Cut the stems into manageable lengths if needed. Wrap each in damp paper towels, place them in a storage bag, and store upright in the refrigerator's crisper drawer.

Frozen

Storage period: About 1 month

Cut into convenient sizes, wrap in plastic film, and place in a storage bag. Finely chop the leaves and thinly slice or finely chop the stalks. Cook them directly from frozen when ready to use. They are ideal for stir-fries and soups.

Stir-Fried Celery and Pork Strips

A Celery-and-Pork Twist on the Classic Beef and Green Pepper Stir-Fry

Cooking time: 20 minutes

*Excluding the time to soak the celery

[Ingredients] 2 servings

160g celery (stalks)
200g pork loin (approx. 2-3mm thick)
1 teaspoon sesame oil

A 1/4 teaspoon salt
Pepper to taste
1 1/2 tablespoon *sake*
1/4 teaspoon garlic (grated)
2 teaspoons potato starch

B 1 tablespoon soy sauce
1/2 tablespoon black vinegar (or rice vinegar)
1 teaspoon sugar

[Preparation]
Separate the celery into leaves and stems, then soak stems in cold water for about 20 minutes to restore freshness.

*The leaves are not used in this recipe.

[How to cook]

1. Slice the pork into 5 mm wide strips and place them in a bowl. Add ingredients in (A) and mix well with your hands.

2. Use a knife to remove the strings from the celery, starting at the cut end. Cut into 5 cm lengths, then slice thinly along the grain into 2 mm thick pieces.

3. Add the sesame oil and the pork from (1) to a frying pan. Toss to coat the pork with the oil, then cook over high heat, stirring.

4. When the pork is about 80% cooked, add ingredients in (B). Finally, add the celery from (2). Stir-fry everything together until the celery softens, then serve.

2

4

Tips

- For the cold-start method in (3), where all the ingredients and oil are added before heating, a nonstick pan is recommended. When using an iron skillet, season the pork with (A), and toss it with a little sesame oil (not included in the recipe), then add it to a very hot pan.
- Heating slowly over low heat causes the celery to release too much moisture, so stir-fry quickly over high heat.
- You can also use beef or chicken instead of pork.

Egg Soup with Celery Leaves and Bacon

Get All the Nutrients from the Celery Leaves in One Comforting Bowl

Cooking time: 15 minutes

*Excluding the time to soak the celery

[Ingredients] 2 servings

2 stalks celery (60 g), upper stalks with leaves attached
100g onion
35g bacon
1 egg, beaten
1 tablespoon chicken bouillon powder
400ml water
1/2 tablespoon oil
1/2 tablespoon potato starch (dissolved in 1 tablespoon water)
Salt to taste

★Finishing
1 teaspoon sesame oil
Coarsely ground black pepper to taste

[Preparation]
Wash the celery and soak it in cold water for 20 minutes to improve the texture of the leaves. Drain well.

[How to cook]

1. Cut the leaves into 3 cm pieces and slice the stalks into 5 mm strips. Dice the onion into 1 cm cubes and cut the bacon into 7 mm strips.

2. Heat the oil in a pot over medium-high heat. Add the celery stalks, bacon, and onion, and sauté until the onion becomes translucent.

3. Add the water and chicken bouillon powder. Once it comes to a boil, remove from the heat and stir in the potato starch slurry. Mix gently, then bring it back to a boil and cook for 1 minute. Slowly drizzle in the beaten egg. When the egg puffs up, add the leaves, cover, and turn off the heat.

4. After letting it sit for 1 minute, taste the soup. Add salt if needed. Reheat, ladle into bowls, and season with black pepper and sesame oil.

3-1

3-2

Profile

Makiko Hei

I love vegetables. I try to handle them with care and cook them simply but luxuriously, with the motto “Let’s make our daily meals delicious regardless of the genre of the dishes.”
HP: https://vege3.jp/
Instagram: https://www.instagram.com/makichanshokudo/

Exceptional Sharpness: Curious to Try Japanese Kitchen Knives?

Japanese kitchen knives are prized the world over for their exceptionally sharp cutting edges. When a knife is truly sharp, it elevates both the flavor and the final presentation of a dish. Once you try using a Japanese kitchen knife, you'll immediately notice the remarkable precision and feel it offers.

Sharpness Determines Flavor

Japanese kitchen knives earn high praise from culinary professionals around the world, and one of the biggest reasons is their remarkable sharpness. A sharp blade glides through ingredients without requiring excessive force, producing clean and beautiful cuts. The difference becomes obvious with something as delicate as a tomato. A dull knife tears the flesh, leaving a ragged surface and causing juices to seep out. In contrast, a sharp knife creates a smooth, even cut because it crushes far fewer cells along the surface. As a result, it minimizes the loss of moisture and *umami*.

Sharpness also influences texture. When preparing *sashimi*, Japanese chefs use a long, specialized knife and slice in a single pulling motion. This prevents the fibers from breaking, giving the *sashimi* its characteristically smooth, silky mouthfeel.

Japanese Kitchen Knives : Heirs to Sword Craftsmanship

Since ancient times, Japanese swords have required an exceptionally sharp cutting edge—a necessity shaped by the *samurai* style of combat. From the 12th to the 16th centuries, battles were fought primarily with bows and spears, but when these failed to determine the outcome, warriors often engaged in close-quarters combat with swords. *Samurai* wore armor made of iron and leather, and only a sword with superior sharpness could strike through the gaps or hit vital points with a single decisive blow. The steel and forging techniques developed to meet these demands eventually became highly refined.

It is no coincidence that today's major kitchen-knife production regions overlap with the traditional sword-making centers. As the demand for Japanese swords declined with modernization, swordsmiths turned their skills toward crafting kitchen knives and other blades. Knives made using Japanese sword–making techniques are exceptionally sharp, highly

From left: *Takohiki* (Kanto-style *sashimi* knife), *Yanagiba* (*sashimi* knife), *Deba* (For butchering and filleting fish), *Ko-Deba* (small *deba* knife), *Kenmuki* (vegetable peeling knife for garnishes), *Usuba* (Kanto-style vegetable knife), *Kamagata Usuba* (Kansai-style vegetable knife) ©Mana LAURENT

From left: Chef's knife (*Gyuto*), *Santoku* knife, Petty Knife, Petty Knife Photo courtesy of Kamaasa Shoten

durable, and visually striking. Today, cities such as Seki in Gifu Prefecture, Echizen in Fukui Prefecture, and Sakai in Osaka Prefecture are renowned as leading centers of blade production.

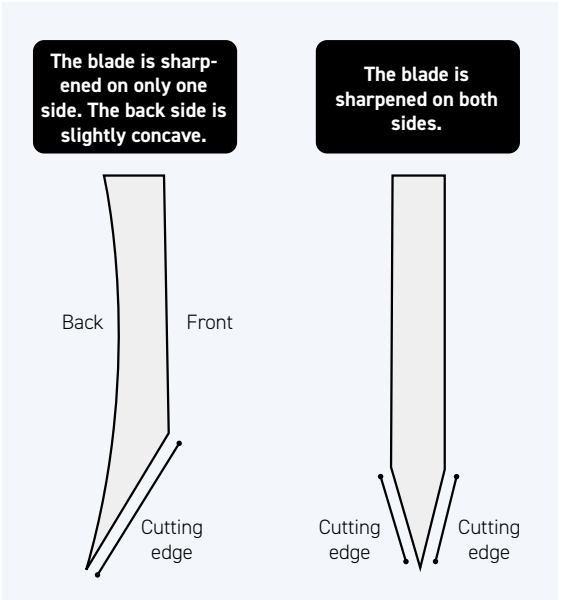
Japanese-style Knives for *Washoku* and Versatile Western-style Knives

Next, let's take a closer look at these famous knives. Broadly speaking, they fall into two categories: Japanese-style kitchen knives and Western-style kitchen knives.

Japanese-style kitchen knives evolved alongside *washoku*, traditional Japanese cuisine. Their most distinctive feature is the blade structure. They are single-bevel, with steel applied to only one side—much like a Japanese sword. This single bevel reduces friction and resistance during cutting, making the knives ideal for highly precise tasks. However, they also require specific cutting angles and pressure, which take time and practice to master. Because the blades are thin and extremely sharp, forcing them through hard ingredients such as pumpkin can cause chipping. Another hallmark of Japanese-style knives is their wide variety of specialized forms, each designed for a particular task. Examples include the *yanagiba* for slicing *sashimi*, the *deba* for filleting fish, the *usuba* for cutting vegetables, and the *sobakiri* for slicing buckwheat noodles.

Western-style kitchen knives, on the other hand, refer to knives commonly used in Western cuisine. They are typically double-bevel and symmetrical. Unlike Japanese-style knives, Western knives are highly versatile, allowing one knife to handle a range of tasks—slicing, peeling, chopping—across a range of ingredients, from meat and fish to different vegetables. The standard knife is the chef's knife (*gyuto*), often paired with the smaller, more precise paring knife (petty knife).

In Japan, the *Santoku* knife is widely used. It features a wider blade and a shorter cutting edge than the chef's knife. This design was developed specifically for Japanese home kitchens, making it easy to handle and suitable for everyday cooking.



Blade cross section: Single-bevel (left) and double-bevel (right)

Tips for Choosing the Right Kitchen Knife

As mentioned earlier, Japanese-style and Western-style kitchen knives each excel in different areas. Therefore, the first step in choosing a knife is to clearly identify how you intend to use it. The ideal knife shape varies depending on whether it will be used for professional work or everyday home use. Next, consider the blade material. Knife steels are broadly categorized into carbon steel and stainless steel. Carbon steel is easy to work with and can achieve a finer, sharper edge, but it rusts easily and requires regular maintenance. Stainless steel is more resistant to rust and easier to care for. Understanding the characteristics of each material will help you make an informed decision. If possible, also check how the knife feels in your hand. Pay attention to the weight, the thickness and material of the handle, and the overall balance to determine whether it fits comfortably and naturally.

A high-quality knife achieves superior sharpness through excellent steel, proper heat treatment, and precise grinding to a thin edge. These processes require advanced skill and labor, which naturally increases the price. However, the most expensive knife is not always the best choice. What matters most is selecting a knife that suits your specific needs and cooking style.

Keep it Sharp to Maintain Peak Cutting Performance

Even with the best knives, continued use will eventually lead to chipping and dulling, so regular sharpening is essential. Sharpening requires three things: a whetstone, water, and a non-slip mat to keep the stone stable. To begin, soak the whetstone in water to prevent slipping and ensure smooth sharpening. Then, place the blade against the stone and move it evenly back and forth, sharpening the entire edge from the tip to the heel.

Sobakiri (Soba Knife) – A wide, rectangular knife specially designed for cutting *soba* noodles evenly and cleanly after the dough has been rolled and folded. ©PIXTA

Using a sharpener is another quick way to restore sharpness, and it is perfectly adequate for everyday maintenance. However, most sharpeners commonly sold in Japan are designed for double-edged kitchen knives. Only a few shops carry sharpeners suitable for single-edged Japanese-style knives, so use caution when purchasing one specifically for Japanese knives. Another option is to have your knife professionally sharpened.

Sharpening and continuing to use a kitchen knife reflect a uniquely Japanese philosophy of cherishing one's tools. Through repeated care and maintenance, the knife gradually becomes a trusted partner in the kitchen.

If You're Buying Japanese Kitchen Knives

Kamaasa Shoten, now in its 118th year, is a long-established specialty store for professional cooking tools. In addition to its shops for cookware in Tokyo's Kappabashi district, it also operates a dedicated store for kitchen knives.

Inside the knife shop, roughly 60 types of knives—about 1,000 in all—line the walls and display cases, each carefully selected from renowned production regions across Japan. The store has a large and loyal client base of professional chefs, but it remains welcoming to home cooks as well. The expert staff will offer thoughtful recommendations based on your intended use and budget, and customers can handle and test each knife before making a purchase.

In recent years, the number of international visitors has grown, with many becoming repeat customers who make it a point to visit every time they're in Japan. The complimentary engraving service is also popular, allowing customers to personalize a knife they will cherish for years. The specialists here provide detailed guidance on daily maintenance, and customers can even bring their knives to the Paris and New York branches for professional sharpening.

▶Kamaasa Shoten, Knives and Kitchenware Specialty Store

Photo courtesy of Kamaasa Shoten

Stay Safe, Stay Strong : Real Stories and Smart Tools for Seafarers' Health at Sea

Capt. Hiroka Suzuki, Loss Prevention Executive, Gard (Japan) K.K.

Highlight

- To prevent injuries on board, always follow safety procedures during work and pay close attention to your physical condition. Proper meals, adequate hydration, and as much exercise as possible are essential.
- Mental health also requires attention. Fatigue and stress can lead to mistakes and serious consequences. If a colleague seems to be struggling, reach out to them. And if you are struggling, don't hesitate to ask for help.
- If you notice anything unusual in yourself or others, be sure to report it.

Why your health and safety matter - every day, every voyage!

Introduction: why this matters to every seafarer

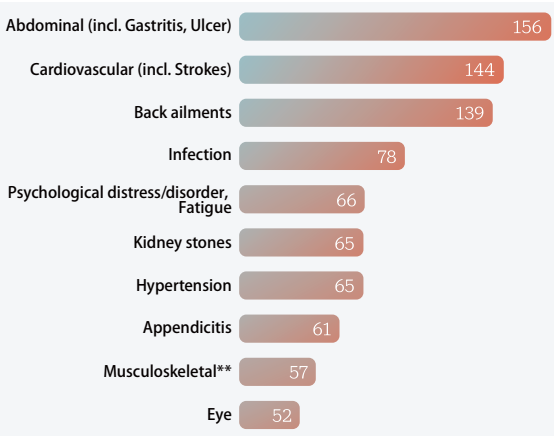
Life at sea is unlike any other job. The ocean is beautiful, but it can be unpredictable and demanding. Seafarers are the backbone of global trade, keeping the world moving, often while operating far from home, family, and the comforts of land. With this responsibility comes significant risk-injuries, illnesses, and emergencies can happen at any time, and when help is far away. This article is for you — the seafarer. It is based on the latest findings from the Gard Crew Claims Report 2025, which highlights some of the key challenges faced by seafarers worldwide. We will share real stories, practical advice, and introduce you to the Mariners Medico Guide (MMG) — a free app that is already making a difference for crews around the world.

1. The reality onboard : What the numbers tell us

Injuries and illnesses: Common, but often preventable

In 2024, Gard received and handled nearly 6,000 crew-related claims. That is not just a number — it is thousands of real people, just like you, who faced health challenges at sea. About 37% of these claims were for injuries, and 59% were for illnesses.

- What kinds of injuries are most common?
  - Finger injuries (often from crush incidents or machinery)
  - Back injuries (from lifting, slips or falls)
  - Cuts, slips, trips and falls (sometimes from rushing or not using the right gear)
- And what about illnesses?
  - Stomach problems (like gastritis or ulcers)
  - Heart issues and high blood pressure



Top 10 illnesses and most common body part injured (2024)

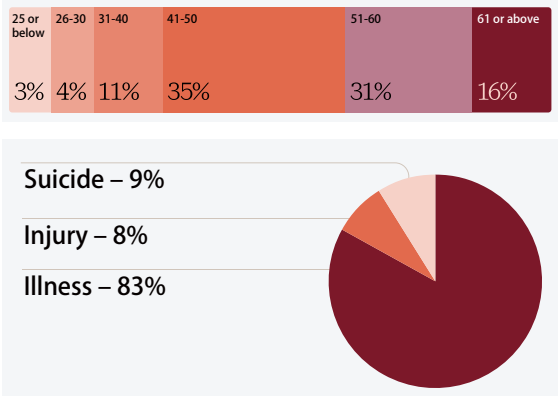
- Infections
- Back pain and other musculoskeletal problems
- Mental health issues, including stress and fatigue

Many of these problems are made worse by the realities of shipboard life: long hours, heavy workloads, and, sometimes, not enough rest.

• Fatalities: The hard truth

No one likes to talk about it, but it is important: over 90 crew deaths were reported to Gard last year. Most were due to illness — especially heart attacks and other cardiovascular problems. Fatal accidents and suicides also remain a serious concern.

- 83% of crew deaths were caused by illness
- Suicide, although rare, is now more common than fatal accidents
- Most suicides involved officers under the age of 41, often early on in their contracts.



Age group distribution of illness-related deaths and causes of fatalities (2024)

These numbers are sobering, but they also show where we can make a difference — by looking out for each other and taking action early.

• Fatigue and stress: The hidden dangers

It is not just physical risks. Fatigue and stress are silent threats that can lead to mistakes, injuries, and even long-term health problems. The Gard Crew Wellbeing Survey found that irregular hours and lack of rest are major reasons for poor health and low morale. Crew members who get enough sleep and feel comfortable seeking support are happier and healthier.

2. Real stories from the seas

Let us bring these numbers to life with some real-world examples:

- A deckhand rushed to finish a job before dinner, skipped his gloves, and ended up with a serious finger injury. He later said, "I thought it would only take a minute. Now I know it's never worth the risk."
- A young officer started feeling chest pain but didn't want to bother anyone. By the time he spoke up, he needed emergency evacuation. Early action could have made a big difference.
- A crewmate noticed a colleague seemed withdrawn and quiet. Instead of ignoring it, he asked, "Are you

okay?" That simple question led to a conversation and, eventually, the support the colleague needed.

These stories are a reminder: safety is not just about rules — it is about people.

3. What can you do? Practical tips for staying safe and healthy

1) Follow safety procedures — every time

Most serious injuries happen when safety steps are skipped, even just once. Always use the right gear and follow instructions, no matter how routine the job seems. If you see someone taking a shortcut, speak up — it could save a life.

2) Look after your health

- Eat well and stay hydrated. It is easy to let nutrition slide at sea, but your body needs fuel to stay strong.
- Exercise when you can. Even a short walk on deck or some stretches in your cabin can help.
- Don't ignore symptoms. If something feels wrong, say something. Early action can prevent big problems later.
- Take pre-employment medical exams seriously. They are there to protect you, not just to tick a box.

3) Watch out for each other

Seafaring is a team effort. If you notice a crewmate struggling — physically or mentally — reach out. Sometimes just asking "Are you okay?" can make a difference. Don't be afraid to check in, even if you are not sure what to say.

4) Don't be afraid to ask for help

There is no shame in seeking support for stress, anxiety, or depression. Talking to someone you trust, or using resources like the MMG app, can be life-saving. Remember, you are not alone.

4. Mental health: Breaking the silence

Mental health is just as important as physical health. The Gard report found that suicide is now a leading cause of death among seafarers, especially younger officers. Most cases happen early in a contract at sea, often when someone feels isolated or unable to ask for help.

- What can you do?
  - Talk about mental health openly. The more we talk, the less stigma there is.
  - Know the warning signs: withdrawal, changes in mood, talking about hopelessness, or giving away possessions.
  - Encourage your ship to hold regular discussions about wellbeing. Even a short check-in can help.

- Use resources like the MMG app for guidance on what to do if you or a crewmate is struggling.

5. Spotlight: The Mariners Medico Guide (MMG) App — your lifeline at sea

• What is MMG?

The Mariners Medico Guide (MMG) is a free, easy-to-use app developed by Gard, Haukeland University Hospital, and the Norwegian Maritime Authority. It is designed for seafarers, by maritime doctors, to help you handle medical emergencies and everyday health issues — anytime, anywhere.

• Why should you download MMG?

- Immediate help in emergencies: The app gives you step-by-step instructions for first aid, symptom checks, and when to call for expert help. Whether it is a burn, chest pain, allergic reaction, or mental health crisis, MMG guides you through what to do — fast.
- Works offline: Once downloaded, MMG works without internet. You can use it anywhere on the ship, even far from shore.
- Easy to use: Clear menus, search functions, and visuals make it simple — even in stressful situations.
- Trusted by seafarers worldwide: Over 57,000 downloads since 2022. Captains and crew say it is a "one-stop solution" for onboard medical care.

• What makes MMG different?

- Symptom-based guidance; Enter symptoms, and the App helps you diagnose and treat the problem—or tells you when to get expert help.
- Visual aids: Photos and diagrams show you what to look for and how to act.
- Up-to-date and reliable: Content is written and updated by maritime doctors and approved by the Norwegian Maritime Authority.
- Supports better communication: When you call telemedicine services like Radio Medico, you and the doctor are "on the same page" — making it easier to get the right advice, fast.

Real stories: MMG in action

Capt. Gaurav Kapoor, General Manager at Pacific Carriers Limited, shares:

- The MMG App helped our crew manage a burn injury and a skin allergy. The Masters could explain symptoms clearly to medical officers, and proper first aid was given. The App's user experience is excellent — it's easy to navigate and gives the right response in emergencies.

6. Building a stronger safety culture — together

The Gard Crew Claims Report is clear: most injuries and illnesses at sea are preventable. By following procedures, looking after your health, and supporting each other, you can make a real difference — not just for yourself, but for your whole crew.

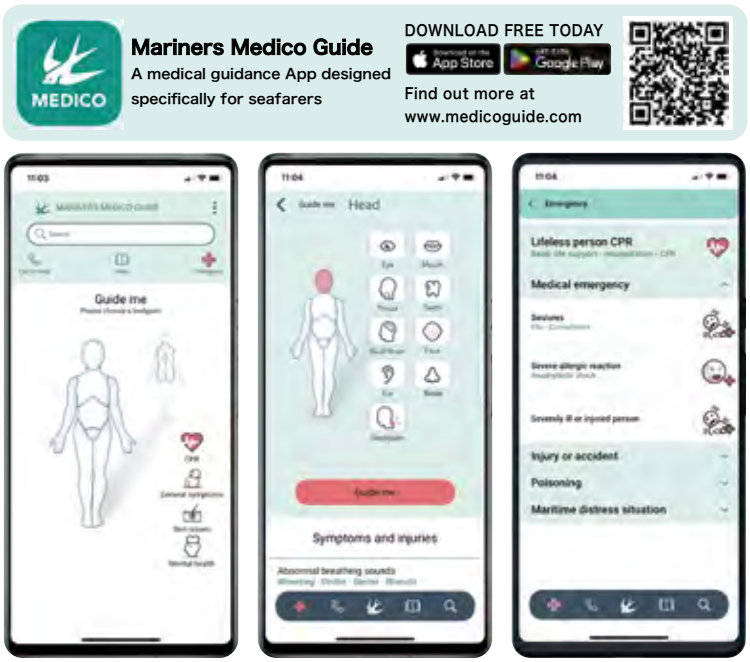
• Remember:

- Safety is everyone's responsibility.
- Speak up if you see something unsafe.
- Share what you learn with your crewmates.
- Use the tools available to you — like the MMG App — to stay prepared.

Your health, your crew, your future !

Seafaring is a team effort. By looking after yourself and your crewmates, following safety rules, and using smart tools like the MMG App, you can make every voyage safer and healthier — for everyone onboard.

Don't wait for an emergency to get prepared. Download the MMG App before you need it. Stay safe, stay strong — and keep sailing !



Sample screens from the Mariners Medico Guide (MMG), offering clear, structured medical guidance for onboard use.

Filipino Fighters Battling Around the World and in Japan

On July 19, 2025, 46-year-old Manny Pacquiao challenged for the WBC welterweight title and fought to a draw even after the world of boxing expected him to retire following his bout in August 2021. His shocking return to the ring was an aftermath of the defeat in the Philippine presidential election. He delivered a spirited performance, once again proving that he is truly one of a kind. As the only boxer to win world titles in eight weight divisions, the fighting spirit of Manny "Pacman" Pacquiao will never fade. Here, I spotlight the next generation of fighters who share the same Filipino blood following in the footsteps of their idol.

Non-Fiction Writer/ Soichi Hayashi Sr.

Charlie Suarez: A Shot at the World Title

On May 10, 2025, WBO super featherweight champion Emanuel Navarrete faced Filipino challenger Chary Suarez at Pechanga Arena in Temecula, California. Navarrete won by technical decision to retain his title, but the bout ended in controversy.

Nine seconds into Round 6, Suarez landed a straight left that opened a deep cut above Navarrete's left eye. From that point on, the champion fought with blood streaming down his face. He was repeatedly seen wiping his eye with his glove. As the bleeding worsened, the ringside physician ruled that the fight could not continue after a second into Round 8.

If the cut were to be ruled the result of a punch, Suarez would win by TKO. If caused by an accidental clash of heads, on the other hand the outcome would be determined by the judges' scorecards.

Referee Edward Collantes ruled that the injury resulted from an accidental head clash. However, many media members believed the cut had been caused by the punch. Former referee and current California State Athletic Commission official Jack Reiss supported the referee's ruling. With Round 8 scored 10-10, the final tallies were 77-76, 77-76, and 78-75, awarding Navarrete a technical decision victory.

The replay shown repeatedly on the arena's big screens appeared to clearly indicate that the cut was caused by Suarez's left hand in the respective round. Suarez seemed to have been denied the title under contentious circumstances.

Three weeks after the bout, the California State Athletic Commission held a hearing on June 2, amid the immediate outcry, and changed the result to a no contest. Nevertheless, many felt the challenger deserved the victory.

Suarez, who represented the Philippines at the Rio De Janeiro Olympics after a distinguished amateur career, turned professional at age 30. He now holds a record of 18-0 with 10 knockouts and

one no contest. While he hopes for a rematch with Navarrete, reports of the champion's ongoing struggles to make weight suggest that a bout for the vacant title may be more realistic. Suarez is an orthodox fighter with solid fundamentals and a high work rate. There is still hope to finally get that weight off his chest.

Southpaw Olympic Medalist Pursuing a World Title

Eumir Felix Marcial, 30, won a bronze medal in the middleweight division at the Tokyo 2020 Olympics. After securing his place on the Philippine national team, he signed with MP Promotions, founded by Manny Pacquiao, mapping out his transition to the professional ranks. Like Pacquiao, he set his sights on the U.S. boxing scene.

When the Tokyo Olympics were postponed due to the pandemic, Marcial said, "I chose MP Promotions because I felt they would fully support my dream of fighting for the Philippines in the future."

Marcial made his professional debut in December 2020, before competing in the Olympics. Under current rules, professional boxers are eligible to participate in the Games. He has continued to campaign in the United States and has compiled a 7-0 record with four knockouts. He is currently ranked No. 19 by the WBC at middleweight.

"I will give everything. I have to become a world champion."

Training under Pacman, Marcial is learning the craft of professional boxing from a living legend. True to his elite amateur pedigree, he is a fundamentally sound southpaw.

WBO Asia-Pacific Super Bantamweight Champion

26 years old southpaw Gabriel Santisima is also gaining momentum. On February 7, 2026, he captured the WBO Asia-Pacific super bantamweight title with a decisive victory over Japan's Subaru Murata.

Murata entered the bout undefeated at 10-0, with all victories coming by knockout. However, Santisima neutralized him with sharp jabs and by throwing straight left hands. Murata was making his third title defense and may have regarded the 11th-ranked challenger as manageable. Instead, Santisima outperformed him in footwork, angles, and accuracy.

Late in Round 6, Santisima landed a left hook to the jaw that sent the champion to the canvas. Murata was saved by the bell, but he had taken significant astonishment. In Round 7, Murata touched the canvas with his glove after absorbing punches, yet the referee ruled it a slip.

Santisima celebrates as the new champion ©Hiroaki Finito Yamaguchi

Like Suarez in Southern California, Santisima was fighting on hostile territory in Tokyo. However, Santisima controlled the pace and kept pressing the champion, continuing to outwork him. In the end, he became the new champion by unanimous decision, 97-92, 96-93, and 96-93.

At 122 pounds, other Japanese boxers ring a bell. There are the undisputed super bantamweight champion Naoya Inoue, and Junto Nakatani standing as a leading contender across the major sanctioning bodies. A future clash between Santisima and either of Japan's elite champions would be compelling.

A Tireless Fighter with Japanese and Filipino Roots

Finally, I turn to Japan's 10th-ranked super lightweight, Ryan Joshua Yamamoto, 30. In September 2024, he challenged for the Japanese national title but fell short by decision.

Born on October 19, 1993, in Nakano, Tokyo, to a Japanese father and a Filipino mother, Yamamoto is the second youngest of six siblings. At around age five, he moved to the Philippines with his two older sisters. He grew up in Manila, splitting time between his mother's home and his aunt's house.

"Life was extremely hard. I dropped out of school and returned to Japan at 13. I didn't attend junior high school. Instead, I worked in interior construction with my father. Around 16, I decided I wanted to study seriously, so I enrolled in night school to learn Japanese."

Yamamoto turned professional at 24 and holds a record of 9 wins, including 2 by knockout, and 8 losses. Prize money alone was not enough to support himself, so he worked various jobs, including interior construction, restaurant service, conveyor-belt sushi service, and at a grilled offal restaurant, while continuing his boxing career. Recently, he changed jobs to work in computer repair, allowing him to focus more fully on training.

"Until now, I wasn't fully committed. Every loss came from a lack of preparation. Looking back, I've changed my mindset. I'm developing a more aggressive, close-range style. I once thought my life was difficult, but it's nothing compared to Manny Pacquiao's. No matter how poor he was, he kept moving forward without excuses. That inspires me. I want to show the pride of the Philippines here in Japan, a country I love."

Each and every Filipino warrior continues to sweat in the gym today, striving toward his own dream.

Yamamoto (right) with Hitoshi Watanabe, the president of Watanabe Promotion (left) ©Soichi Hayashi

MMMA Celebrates Its Third Graduation Ceremony

Mitsui O.S.K. Lines, Ltd.

Mitsui O.S.K. Lines, Ltd. (MOL) held the third graduation ceremony of MOL Magsaysay Maritime Academy Inc. (MMMA) on February 3 at the academy's campus in Dasmariñas City. The academy is jointly operated with Magsaysay Maritime Corporation.

Of the 101 cadets in the third batch, 33 attended the ceremony, excluding those currently undergoing onboard training. In addition, 110 graduates from the first and second batches, who had been unable to attend previous ceremonies due to sailing schedules, were also present.

Junichiro Ikeda, Chairman of the Board of MOL, said, "I hope you will fully demonstrate the knowledge, leadership, and ambition for growth that you cultivated during your time at the academy, and protect people's daily lives from the blue oceans, which is our vision."

MOL Group and Magsaysay Maritime Corporation will each employ half of the graduates. The graduates will begin their careers as third officers and third engineers in the fleets of the two companies.

(Announcement date: February 4)

IMO Secretary-General Visits NYK Facilities in the Philippines

Nippon Yusen Kabushiki Kaisha

Nippon Yusen Kabushiki Kaisha (NYK) announced that International Maritime Organization Secretary-General Arsenio Antonio Dominguez Velasco visited its training facility and maritime academy in the Philippines.

On February 18, Secretary-General Dominguez visited the sites as part of official engagements with maritime stakeholders in the Philippines. At NYK-Fil Maritime E-Training Inc. (NETI), he toured the simulators and reviewed initiatives in advanced maritime education and training technologies.

At NYK-TDG Maritime Academy (NTMA), he took part in a forum with cadets. After delivering an address of encouragement, he exchanged views on maritime safety, environmental sustainability, and women's participation and career development in the maritime sector.

(Announcement date: February 25)

LNG Carrier to Be Jointly Owned by Three Companies in India

Kawasaki Kisen Kaisha, Ltd.

Kawasaki Kisen Kaisha, Ltd.("K" Line) has signed a memorandum of understanding with GAIL (India) Limited and JM Baxi Group, its business partner in India, to jointly own one LNG carrier.

The vessel is currently under construction at Samsung Heavy Industries. After delivery, it is scheduled to serve GAIL under a long-term time charter contract. The agreement forms part of "K" Line's medium-term management plan to secure projects in Asia, a growth market for its LNG carrier business. The company concluded a long-term charter contract with GAIL in December 2024. It has also maintained a long-standing partnership with JM Baxi through agency and logistics operations in India.

Through the joint ownership of the LNG carrier, the company aims to further strengthen its relationships with the two partners and promote business development, primarily in Asia.

(Announcement date: January 28)

Self-Care by Pressing Acupressure Points

Do you know the term "acupressure point"? Some people may already know the names or locations of certain points. Others may associate them with effects such as "pressing here relieves stiff shoulders" or "helps with constipation." Acupressure points bring changes to the body when you select the right spot according to your condition and apply moderate pressure. If the timing and stimulation are right, you may even feel almost magical effects. This article introduces acupressure points with the goal of making you think, "This might actually work!" I hope that as you continue pressing these points, you notice, "Hmm, I feel a little better."

Mayumi Yanamoto/Director, Mejiro Acupuncture Clinic

Acupressure Therapy Has Over 2,000 Years of History

Acupressure therapy is believed to have originated in China more than 2,000 years ago. It was introduced to Japan around 600 CE, and, over its long history, various effects have become known.

Acupressure points are not randomly scattered on the body; they are located along lines called meridians. Although meridians are not visible, it may help to imagine them like tubes running through the body, similar to blood vessels or nerves. Qi and blood, the body's vital energies, circulate along these lines. Acupressure points are the entry and exit points of this energy.

Currently, the World Health Organization recognizes 361 acupressure points. Meridians run vertically along the body and connect to the internal organs. There are 14 main meridians. When an organ experiences a problem, the points along the corresponding meridian often change as well. Stimulating these points is believed to help restore the body's balance.

In traditional Eastern medicine, the human body is composed of three elements: qi, blood, and fluids. These elements shape the body and support various functions, including metabolism, temperature regulation, immune function, and mental activity. In a healthy state, qi, blood, and fluids circulate throughout the body in proper balance. When circulation slows or these elements become deficient, various physical problems may arise. Acupressure therapy aims to restore balance to qi, blood, and fluids. Pressing the points transmits stimulation along the meridians, improving blood circulation. At the same time, fluid flow is believed to become smoother.

When these flows are restored, energy and nutrients needed to move the internal organs can reach them more effectively. As a result, organ function improves while the circulation of qi, blood, and fluids is further enhanced.

Three Tips for Finding Acupressure Points

Even if you want to try acupressure therapy, many people struggle to locate the correct points. There are three tips for finding them:

1. Use landmarks. Bones are often used as reference points because many acupressure points are located along the edges of bones. Start from a bone you can feel and follow it to locate the point. Other landmarks may include the eyes, nose, ears, or skin folds.

2. Measure the distance. Use your fingers to measure the distance from the landmark to the acupressure point. For example, one method is to count the number of finger-widths from the landmark to the point.

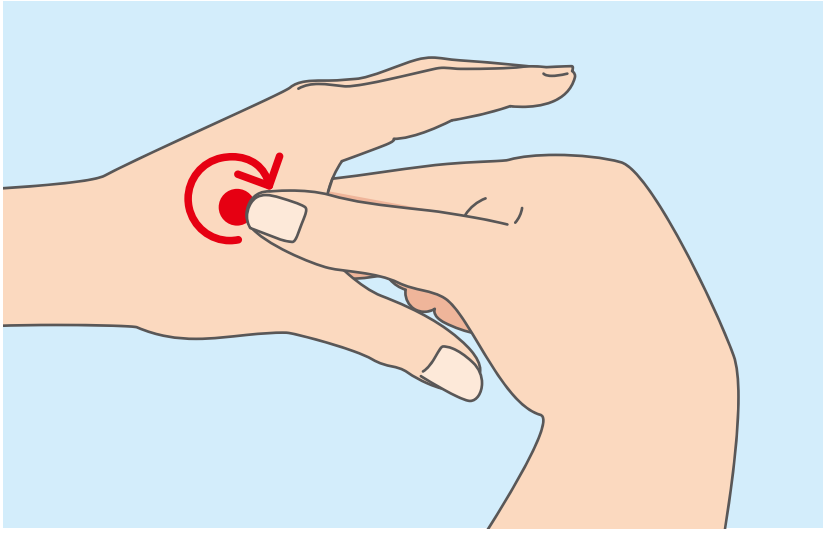
3. Rely on your senses. Observe and feel the area where the point is likely located. Acupressure points are reaction points, so their texture or appearance often differs from the surrounding tissue. A spot is likely an acupressure point if it feels tender or pleasantly stimulated when pressed.

The basic technique is to press or rotate the point with your fingers. Using the thumb provides precise stimulation. In contrast, using the index, middle, and ring fingers together produces a milder sensation. Pressing with three fingers is also helpful when the point is hard to locate, as it covers a wider area. The strength and number of presses should feel effective to you. Overdoing it or pressing too hard may have the opposite effect, so caution is needed.

Try These Five Acupressure Points

Here are five basic acupressure points to try:

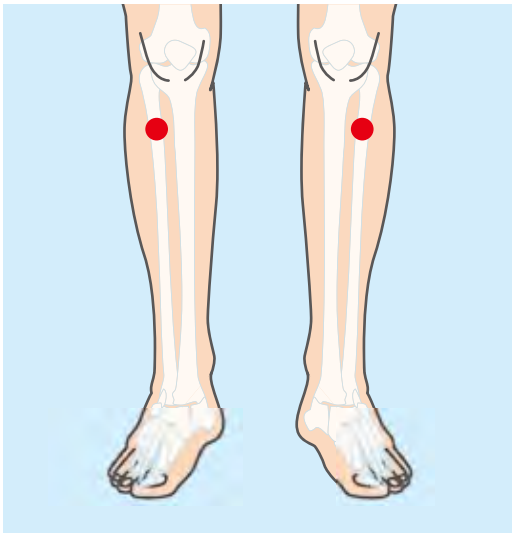
•Hegu (LI4): A versatile point for fatigue, overall sluggishness, and headaches.
Location: In the hollow where the bones of the thumb and index finger meet on the back of the hand.
Method: Place the pad of your thumb on the point. Press lightly until you feel slight discomfort, then rotate slowly 3–5 times. Repeat on both hands.

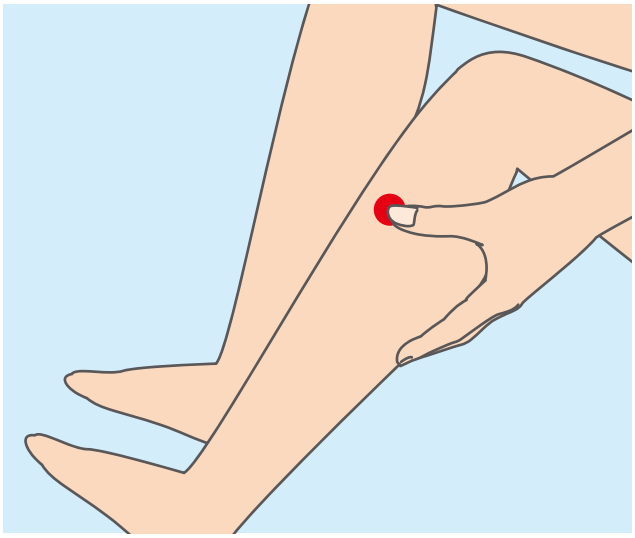


•Zusanli (ST36): Supports digestion and generates energy.

Location: It is located slightly to the outer side of the bone below the knee.Place your hand in an L-shape around the kneecap; the point is where your middle finger rests.

Method: Massage firmly with the thumb. Also massage the area from below the knee to the ankle in the same way.

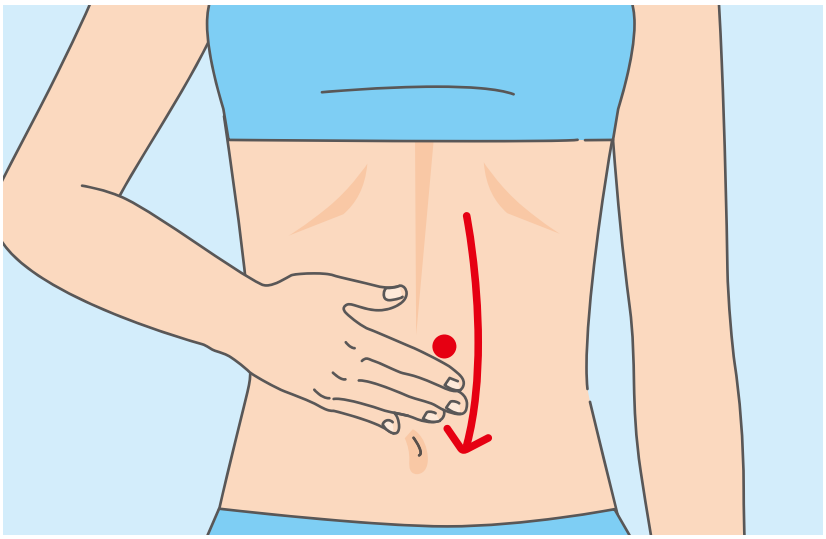




•Zhongwan (CV12): Promotes digestion and regulates the stomach and intestines.

Location: Five finger-widths above the navel.

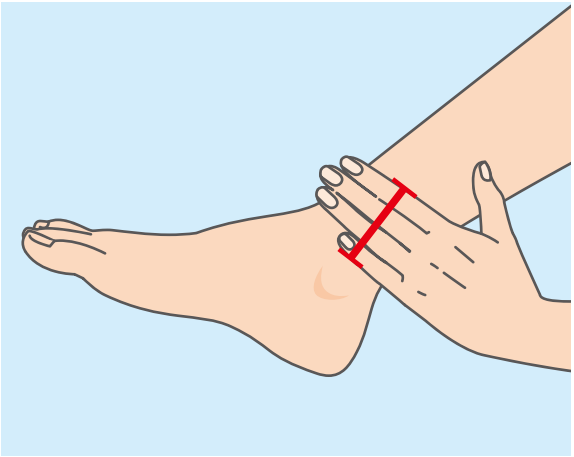
Method: Press lightly with the index, middle, and ring fingers. If you feel nausea, stroke from top to bottom.

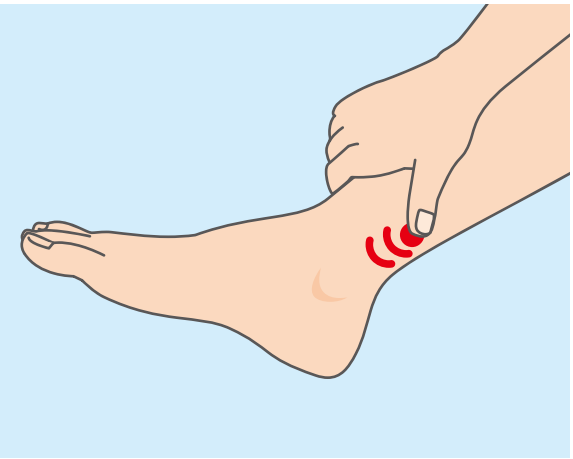


•Sanyinjiao (SP6): Helps with menstrual pain and irregular periods.

Location: Four finger-widths above the inner ankle.

Method: Place the thumb on the point and press along the edge of the shin bone, as if holding it. Press a little deeper for better effect.

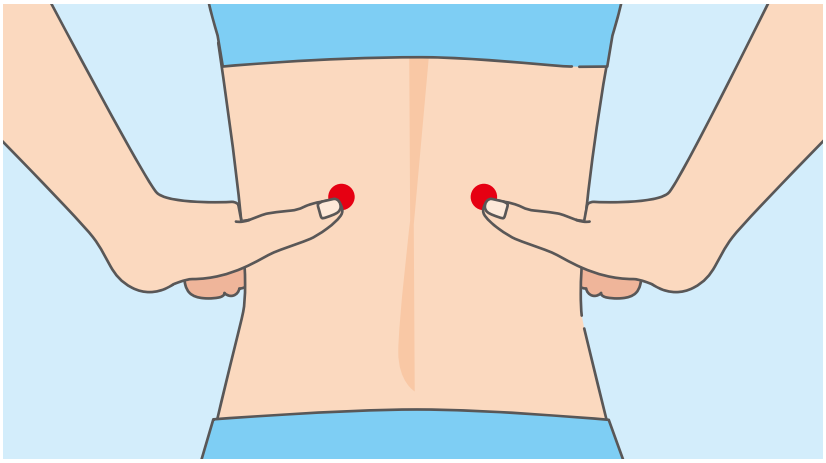




•Shenshu (BL23): Enhances kidney function.

Location: At the narrowest part of the waist; place your hands on the waist and the thumbs land on the point.

Method: Place the pad of your thumb on the point and press while rotating slowly. Pressing the point against a tennis ball can also be effective.



Mayumi Yanamoto

Director of Mejiro Acupuncture Clinic. She practices careful acupuncture treatment, closely observing each patient's condition and responses. Through her books and magazine contributions, she promotes acupressure therapy and shares accurate knowledge about its practice.

The Mariner's Digest has made readers' pages aiming at gathering direct voice of seafarers who are working on board ships and inserting them into the magazine. You may see people who you know and can ensure that they are living nice lives. MD welcomes your letter with some photos by email. (MD email address: md-edit@jseinc.org)

Theme: What do you want to try in 2026?

2026: Continuing to Grow Through Challenge

As we move into 2026, I know that my role as a ship's Master will continue to bring greater responsibility and more complex challenges. Beyond navigating the vessel safely, I must also protect the crew, the cargo, and the ship throughout every voyage.

One important challenge I want to take on is strengthening my decision-making in difficult situations at sea. I hope to develop greater calmness and mental resilience, so that I can respond quickly and wisely when unexpected circumstances arise.

At the same time, I would like to grow further in people management. Creating a safe, disciplined, and efficient working environment depends not only on procedures, but also on trust, communication, and teamwork. Building a united crew is never easy, yet it is essential for safe operations.

In addition, I hope to gain experience on larger-tonnage vessels and different ship types, expanding my professional skills and perspective. I believe 2026 will be both demanding and meaningful—a year of growth, where I can continue improving and proudly represent Vietnamese seafarers in the international maritime industry.

Nguyen Cong Kien
Captain
Taiyo Sangyo Trading & Marine Service Ltd.

Earning a Fitness Instructor Certification to Support Crew Health

This year, I'm challenging myself to balance my career as a First Assistant Engineer with my passion for health & fitness. I have three main goals: to get my Fitness Instructor certification by March, to stay on track with my bodybuilding goals, and to earn my next promotion. It's not easy to stay fit while working at sea, but I want to prove that you can grow professionally and physically at the same time.

The engine room is a high-pressure environment where long working hours and lack of sleep are normal. Onboard, we face a constant 'health battle'—limited food options, a lack of sleep, the struggle of fitting a workout into a busy schedule, a culture often centered around drinking, and the mental stress of isolation. I used exercise to overcome my own struggles with stress and depression, and I refuse to let the maritime lifestyle dictate my health.

By completing my Fitness Instructor certification in early 2026, I want to do more than just train myself; I want to lead. My goal is to guide my crewmates in injury prevention and better nutrition, despite our limitations. Ultimately, my seafaring career is the engine powering my future, providing the discipline and the capital to eventually open my own gym. This year is about proving that we don't have to 'just survive' at sea; we can evolve.

André Benjamin Gianni S. Martinez
First Assistant Engineer
Taiyo Sangyo Trading & Marine Service Ltd.

Advancing Step by Step Through Daily Commitment

I hope 2026 will be a year in which I can cherish each day, continue working hard, and remain true to myself—so that my crewmates can say I am even one step ahead of last year.

In this vessel, I focused on memorizing the duty work and basic work.

But as I gained more experience, I began to see my own challenges and points to be improved. Next, I would like to make the most of my experience by checking carefully, reporting promptly, and maintaining proper watch. I hope to grow into a Third officer who can contribute to safe operation.

Konosuke Kishi
Third Officer
Taiyo Sangyo Trading & Marine Service Ltd.

Strengthening Leadership and Technical Knowledge in Advanced Marine Engineering

Today's ships are becoming more advanced, with modern main engines such as ME-C and ME-B types, as well as emission-control systems like scrubbers to meet stricter environmental standards. For this reason, I would like to deepen my knowledge of these technologies and continue learning the latest international regulations from IMO, including SOLAS, MARPOL, STCW, and MLC 2006.

At the same time, I hope to become a stronger leader for my engine team—guiding younger engineers, sharing experience, and building a safer working culture onboard.

Through continuous learning and dedication, I want to keep improving and contribute to safer and cleaner shipping in the years ahead.

Dam Van Due
Chief Engineer
Taiyo Sangyo Trading & Marine Service Ltd.

To become a Chief Officer and contribute to maritime education ashore

My primary goal for 2026 is to step into the role of Chief Officer. After years of dedicated service, I feel ready to take on greater responsibility in managing deck operations and ensuring the safety of the crew and cargo at a higher level.

My ambitions, however, extend beyond the bridge. Last year, I gained valuable perspective while working as an Assistant Career Control at our manning agency. This experience highlighted the importance of mentorship and the systematic development of seafarers. It inspired me to share the practical knowledge I have gained at sea with the next generation.

By becoming a maritime instructor during my vacation, I hope to help bridge the gap between theoretical study and the real-world challenges of modern navigation. Combining the leadership role of a Chief Officer with teaching allows me to contribute to the maritime industry from two equally vital angles.

Sherwin Bernadas
Second Officer
Taiyo Sangyo Trading & Marine Service Ltd.

Quit Dreaming

This doesn't mean giving up on my dreams. I've dreamed of many things in the past: getting back into soccer, starting surfing, learning to play a musical instrument, going on trips (both domestic and abroad), traveling to see my old friends, camping, climbing Mt. Fuji, going on a hot spring tour, eating delicious food until I'm completely full, exercising regularly, relearning my field of expertise, learning a new language, reading books, starting a new business, organizing my photos and spending a lot of time with my family.

This year, I want to make at least one of them come true. Otherwise, they are just daydreams if they don't turn into reality.

Yusuke Arai
Captain
Taiyo Sangyo Trading & Marine Service Ltd.

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‘What Polar Bear Weight Doesn’t Show’ —Can Safety Be Measured?

Koichi Sunagawa
Mitsui O.S.K. Lines, Ltd.
Editorial Committee Member

CNN reported that Arctic polar bears are actually gaining weight, even as sea ice rapidly disappears. Despite worsening foraging conditions, their physical condition appears to be “improving.” This paradox reminded me of a lesson from polar survival training in Svalbard, Norway: “Good numbers do not necessarily indicate fundamental safety.”

This is a comprehensive training program for seafarers, researchers, and helicopter pilots serving aboard polar research vessels. Its purpose is to teach survival techniques for remaining alive on the ice while awaiting rescue, should they be forced to abandon ship in polar regions.

Last year’s training involved a three-night, four-day, 65-hour ice exercise covering the entire sequence: abandoning ship (using life rafts and immersion suits) → landing on the ice → setting up camp → establishing communications → requesting rescue → helicopter evacuation. Judging by the outcome alone, everyone returned safely, so it could be called a “success.” However, the instructors were not concerned with the result itself, but with each individual’s decision-making process and how they preserved a safety margin. Beyond visible factors such as weather, ice conditions, physical stamina, and equipment status, the most critical consideration was what information underpinned the decision-making process.

The training repeatedly stressed two essential abilities in extreme environments: leadership and decision-making. Sound judgment is not accidental success; it is supported by reproducible ways of thinking. Even in something as specific as handling a survival kit, the core of safety capability lies in unquantifiable elements such as equipment knowledge, role division, and preparation of alternative procedures.

Viewed through this lens, the polar bear case shows that “being fat” is not necessarily evidence of good health. Short term adaptation can conceal long term vulnerability. The same is true in the maritime industry. When accidents decrease or KPIs steadily improve, declines in judgment and risk awareness become harder to perceive. It may be precisely during these periods of “smooth sailing” that we need to be most vigilant.

During the ice training, we encountered moments when favorable weather or well functioning equipment worked in our favor. We learned that the real danger lies in mistaking such luck for genuine capability. Safety resides not in numbers, but in the quality of our judgment. Just as we should not be misled by a polar bear’s weight, we must not be lulled by “good results”; instead, we must continue to strengthen the foundations of our decision-making.

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After three days of survival training on the ice, the trainees were airlifted by a rescue helicopter as part of the training program. Photo by the author

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