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Photo courtesy: TOKOKAI



Japanese Lighthouses Watch over Ships and Seafarers

Kamishima Lighthouse

Kamishima is located 14 km north-east of Toba Port, between Cape Irago on the Atsumi Peninsula and the Shima Peninsula, and isolated in the swift currents of the Irago Channel. The beautiful island silhouette covered in green, as depicted in the novel *The Sound of Waves* by Japanese author Yukio Mishima, remains the same even today.

The island preserves numerous ancient cultural assets, and its rich history is evident in its many festivals, including the Gata Matsuri Festival held on New Year's Day, which is designated as an Intangible Folk Cultural Property by Mie Prefecture.

Locations on the east side of the island are immortalized in an old-time boatmen's song that goes: "Awa-no Naruto, Ondo-no Seto and Irago-doai are horrible!" The song refers to the roaring

Naruto Strait, famous for its whirlpools, Ondo-no Seto (the strait separating Honshu and Kurashiki Island in Kure City, Hiroshima Prefecture), and Irago-doai (the terrifying section of the Irago Channel between Tahara City, Aichi Prefecture, and Toba City, Mie Prefecture). The Irago Channel, one of Japan's three major sea gates, has been considered a treacherous stretch of water for centuries.

Following a naval vessel accident in the channel in July 1908, calls arose for the installation of navigation aids based on military requirements and the need to promote trade at Nagoya and Yokkaichi ports. Construction of the lighthouse began in 1909, and it was lit on May 1, 1910.

Originally made of steel, the lighthouse was rebuilt in reinforced concrete in 1967.

Location: 259-15 Higashiyama, Kamishima-cho,
Toba-shi, Mie Prefecture
Start of operation: May 1, 1910
Structure: Concrete
Height: 11m
Illumination: Fl(3) W 30s
(white light flashing 3X every 30 seconds)
Range: 23.0 nautical miles (about 43 km)



Fostering Bonds across the Sea

NYK Hosts Global Maritime Exchange Program for Students in Japan and the Philippines

From August 17 to 31, Nippon Yusen Kaisha (NYK) conducted an international maritime student exchange program, sending 29 students from leading Japanese maritime schools to interact with their peers at the NYK-TDG Maritime Academy (NTMA) operated by NYK in the Philippines.

The program aims to cultivate international mindsets and build cross-cultural networks among future seafarers from Japan and the Philippines. Students stay in each other's countries for approximately one week, engaging in classroom lectures, practical training, and sightseeing to experience language and cultural differences firsthand. Launched in 2015, this marks the seventh iteration of the program.

The Japanese participants came from Kobe University, Tokyo University of Marine Science and Technology, Nagasaki University, Toyama National College of Technology, Hiroshima National College of Maritime Technology, Yuge National College of Maritime Technology, and Oshima National College of Maritime Technology. Working closely with NTMA students, they conducted exercises using Japanese coastal charts to determine positions, practiced welding, and trained on an engine simulator.

They also toured the adjacent NYK-Fil Maritime E-Training Inc. (NETI) training facility and enjoyed a sightseeing tour of Tagaytay City. Additionally, NTMA students presented short stories in Japanese, while their Japanese counterparts did so in English, during a *kobanashi* show designed to humorously introduce each other's cultures and deepen mutual exchange.

Participating Japanese students shared comments such as: "The Filipino students actively participated and responded cheerfully to teachers and peers, creating a positive atmosphere throughout the program. This experience made me realize the importance of taking the initiative to speak up." Another said, "Imagining working on a ship alongside these Filipino friends has strengthened my resolve to become a navigator on an oceangoing vessel." One NTMA student observed, "Participating in this program was a journey of learning, cultural discovery, and personal growth that has shaped how I view the world." Said another, "This program allowed me to learn more about Japanese culture and tradition, communicate better with people from other countries, and ultimately make new friends." Their comments indicate that the program was a meaningful experience for them.



Chart exercise



Welding practice



Class



Engine simulator training

NTMA President Jan Soledad Asuncion stated, "This program demonstrates the strength of cooperation between Japan and the Philippines. It significantly contributes to developing the next generation of maritime leaders by enhancing the communication skills essential for transformational leadership and facilitating the sharing of experiences and knowledge among participants. I am deeply grateful that NTMA cadets can participate in such a program."

NTMA students are scheduled to visit Yuge Merchant Marine College and NYK Group-affiliated facilities from October 26 to November 1.

MOL Wins Basic Design Approval for New LNG Carrier Equipped with 4 Wind Challenger Hard Sail Wind-assisted Propulsion Systems



CG rendering of the new ship design featuring four Wind Challenger units

On September 8, Mitsui O.S.K. Lines, Ltd. (MOL) obtained approval in principle (AiP) from the Lloyd's Register (LR) classification society for two different designs of a membrane-type LNG carrier equipped with four units of the Wind Challenger, a hard sail wind-assisted propulsion system. In addition, safety evaluations were conducted in collaboration with the respective flag states. As a result, this new vessel design, jointly developed with HD Hyundai Heavy Industries Co., Ltd. (HHI), has earned AiP from the Marshall Islands, while the other, developed in cooperation with Samsung Heavy Industries Co., Ltd. (SHI) received AiP from Liberia.

The new design calls for a 174,000m³ LNG carrier equipped with four Wind Challenger units. The vessel's bridge has been positioned toward the bow to enable both an increase in the number of Wind Challenger units and the optimization of their placement, thereby maximizing fuel efficiency gains. Based on preliminary calculations, fuel saving is expected to reach approximately 30% per voyage with an average annual saving of 15%-20%.

MOL conducted comprehensive risk assessments in collaboration with the ship-

yards, the classification society, and flag states. These assessments covered the sail arrangement, visibility impact, emergency operation procedures, and other safety measures, all of which resulted in the successful acquisition of the AiP.

MOL exhibited the new vessel design at the Gastech Exhibition & Conference 2025 in Milan from September 9-12. The company's booth at the event showcased exhibits related to the new vessel design and hosted a commemorative ceremony for the AiP award in collaboration with the shipyards, the classification society, and the flag states to widely publicize the results of its joint development.

The MOL Group has set "Achieving net zero greenhouse gas (GHG) emissions by 2050" in its medium-to-long-term target of the "MOL Group Environmental Vision 2.2." The Wind Challenger is one of the key low- and zero-emission technologies supporting this vision. MOL plans to install Wind Challengers on 25 vessels by 2030 and on 80 vessels by 2035. To date, two vessels have been delivered, and installation has been confirmed for an additional nine vessels.

'K' Line Phase 1 Completed in Development of 'Seawing' Automated Kite System Harnessing Wind Power

Phase one in the development of the "Seawing" automated kite system—harnessing natural wind power to propel vessels—was successfully completed in June. Seawing was developed by OceanicWing S.A.S, a subsidiary of Kawasaki Kisen Kaisha, Ltd. ("K" Line) in France.

In phase one of the project, OceanicWing verified the tensile strength and performance of the system using a 300 m² kite at a land-based test site. OceanicWing has confirmed positive results of these tests. To move forward with Seawing's development and practical application OceanicWing commenced phase two of its development in July 2025. In this phase, the company plans to increase the size of the kite and verify the system's tensile strength, reliability, operability, and safety, again from a test site on land, looking ahead to the shipboard use of the system. Additionally, OceanicWing will conduct offshore demonstration experiments on a large bulk carrier owned and operated by "K" Line. The goal is to complete the tests within approximately two years and move toward the practical application of Seawing. It is expected that Seawing will reduce fuel con-

sumption by more than 10%.

Seawing harnesses natural wind power and can be installed on any type of vessel, including ships currently in service. Developers anticipate synergy between Seawing and efforts to transition away from the conventionally used heavy fuel oil to other fuels such as liquefied natural gas (LNG) and expect Seawing to increase performance in terms of reducing CO₂ emissions. There are several wind-assisted propulsion systems (WAPS) are under development, and Seawing is unique among them due to its ability to generate a comparatively large amount of thrust, which is achieved using high-altitude wind.

"K" Line President & CEO Takenori Igarashi said, "Phase one of the Seawing development process being implemented by OceanicWing has been successfully completed. We will continue to develop the system so that it can be used on ships. We plan to develop this innovative energy-saving device harnessing natural wind power into a great solution for achieving the decarbonization of the shipping industry."

Until June 2025	From July 2025	Approximately 2027
Phase 1	Phase 2	
Verification of Seawing's performance using a 300 m ² kite at a land test site	Verification of the tensile strength and reliability of the system using a larger kite at the land test site Offshore demonstration experiments on a large bulk carrier	Practical application

Seawing development schedule

Take Good Care of Your Health!

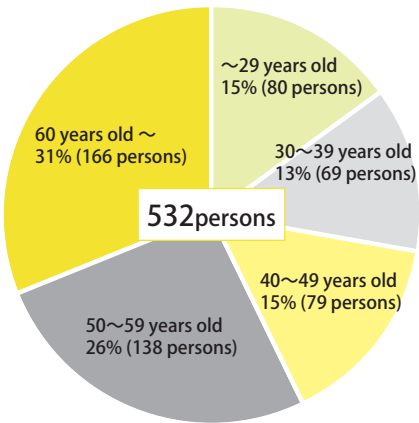
Trends in Illness among Seafarers

Are you taking good care of your health? According to the Association for Promoting Safety and Sanitation for Seafarers, 57% of seafarers aged 50 and above suffer from illness, with digestive system diseases such as ulcers accounting for 15% of cases. This article introduces the current trends in seafarers' illnesses. (Source: The Association for Promoting Safety and Sanitation for Seafarers)

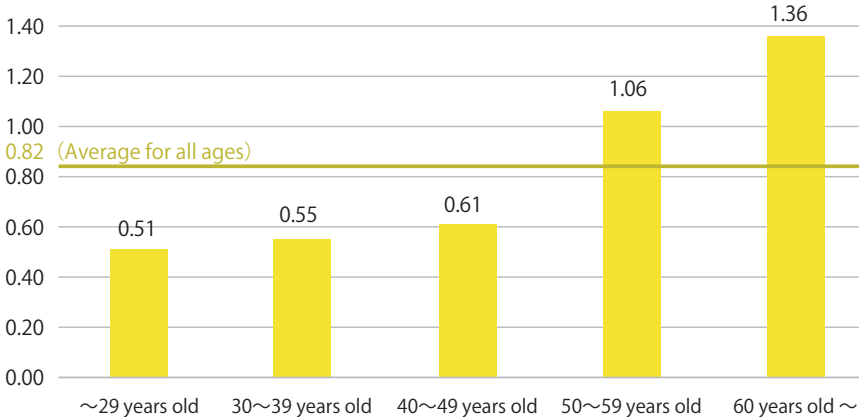
Trends in Disease Among Seafarers

The incidence of illness among seafarers has declined over the long term, though the pace of decrease has slowed in the past decade. Between fiscal years 2018 and 2020, seafarers aged 50 and above accounted for 57% of reported illness cases. The incidence rate was notably higher in this age group, at 1.06% for those in their 50s and 1.36% for those aged 60 and over.

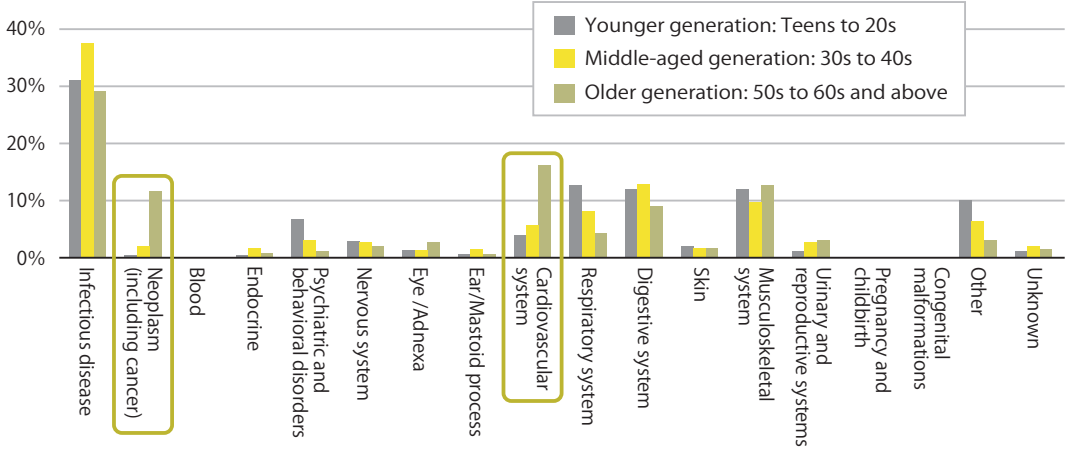
Incidence of Illness by Age Group (Average for Fiscal Years 2018–2020)



Age-Specific Incidence Rates (Average for Fiscal Years 2018–2020)



Breakdown of Diseases by Generation (Average for Fiscal Years 2018–2020)



From fiscal years 2018 to 2020, the breakdown of illness types among seafarers was as follows: digestive system disorders such as ulcers accounted for 15%; musculoskeletal disorders such as arthritis, 15%; circulatory system disorders such as ischemic heart disease and cerebral infarction, 14%; infectious diseases caused by viruses and other agents, 14%; and neoplasms such as cancer, 9%. Among middle-aged and older seafarers, the incidence rates of neoplasms and cardiovascular diseases were higher than in other age groups, highlighting the need for lifestyle disease prevention measures.

Among deaths caused by disease, lifestyle-related illnesses accounted for 79% (11 individuals). Of these, cardiovascular diseases—such as ischemic heart disease—were responsible for 10 deaths, while one person died of stomach cancer. The smoking rate among seafarers is 10 percentage points higher than among those ashore, and approximately 70% of seafarers consume alcohol, combining both “drink daily” and “drink occasionally” categories.

【Key Points for Preventing Lifestyle Diseases】

Moderate drinking: Limit daily pure alcohol intake to 20g or less (equivalent to about one medium bottle of beer)

Reduce salt intake: Keep daily salt intake below 6g (World Health Organization recommendation: below 5g)

Quit smoking: Smoking is the single largest preventable cause of death

Eat in moderation: Maintain nutritional balance and a healthy weight

Exercise: Engage in at least 30 minutes

of aerobic exercise 3 or more days per week

Sleep:

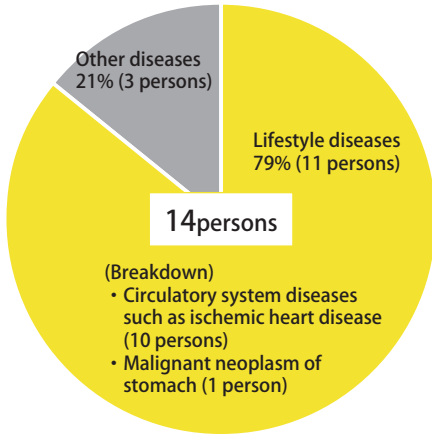
- Insufficient sleep is one cause of lifestyle-related diseases
- If you suspect sleep apnea, consult a specialist

＜Comparison Between Seafarers and Shore-based Personnel＞

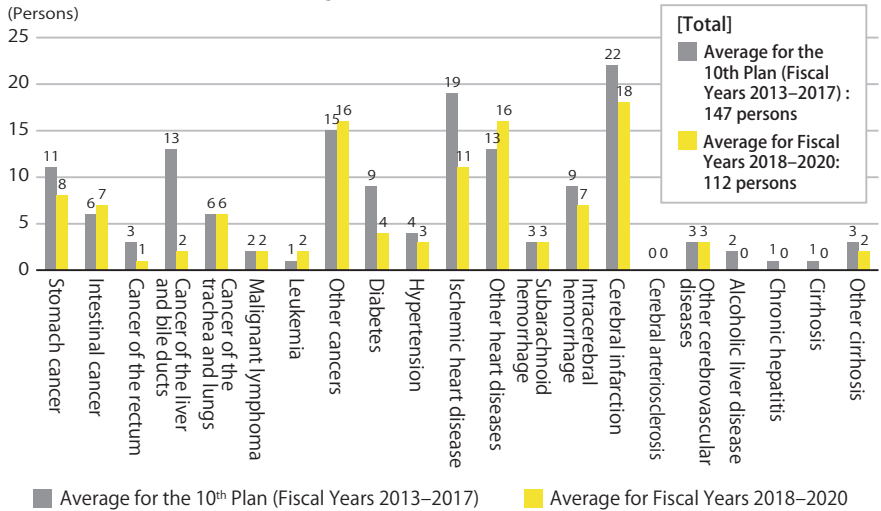
Smoking rate: Seafarers: 40% range; Shore-based: 30% range

Metabolic syndrome: Seafarers: 30% range; Shore-based: 20% range

Percentage of Deaths Due to Lifestyle Diseases (Average for Fiscal Years 2018–2020)



Number of New Cases of Lifestyle Diseases (Average for Fiscal Years 2018–2020)



* The term “lifestyle diseases” refers to a group of conditions whose onset and progression are influenced by habits such as diet, exercise, rest, smoking, and alcohol consumption. These include illnesses such as cancer (malignant neoplasms), diabetes, cardiovascular diseases (e.g., hypertension, ischemic heart disease, subarachnoid hemorrhage), and digestive system disorders (e.g., alcoholic hepatitis, chronic hepatitis).

No Bottom! Classic Stories of the Sea

By Akinori Sugiura

In the old days, when mariners navigated toward mountains and capes along a coastline and encountered heavy rain or fog, knowing the water depth was their only clue. In ancient Egypt, they measured the depth of rivers with long rods, but ancient Greek navigators already knew how to use the hand lead line. The exact period when the lead octagonal pyramid was first used is unclear, but it was employed during the Age of Exploration for surveying uncharted waters. They

were also able to learn about seabed sediment by hollowing out the bottom of the lead cone and filling it with animal fat. Several types of fabric and leather pieces were used for markers attached to sounding lines so that depth could be determined by touch or feel. When the sounding lead failed to reach the seabed at all, the leadsman would shout, “No bottom!” That call meant it was safe for the ship to keep moving, and also that it was still too early to drop anchor.

Captain Jima's Fun Pilot Diary

26 A Brief Guide to My Favorite Drinks 201015-1345-TK-I-NA-C1-ANCHOR

One day, I boarded a 30,000-ton tanker off the Irago Channel and was assigned to drop anchor at the designated anchorage in Nagoya. The entire crew was Indian. As we passed through the narrow channel and headed toward the Suzuka Mountains on the Mie Prefecture side, the captain asked, “Pilot, want some *chai*?” When I said, “I love *chai*,” a steward brought it over immediately.

Chai is a sweet, rich milk tea commonly enjoyed in India, often infused with ginger and other spices. Usually, when I order coffee or tea, it's prepared in the pantry behind the bridge and brought over. But this *chai* alone is made in the ship's galley and properly served by a steward. To them, this drink must be something special.

I tried to recall if there were any other drinks I have had on board ships that left an impression—and came up with my top five.

Number one is still *chai*. It's slightly sweet with a hint of ginger. While some ships may add a tiny bit of other spices besides ginger, it's a flavor a tea lover like me can easily enjoy.

Next up is the “espresso” served aboard some ships using a relatively new and specialized machine. As a devotee of tea, I rarely drank coffee, but when I boarded the Italian cruise ship *Costa neoRomantica* in May

2019, my coffee-loving wife ordered an authentic espresso at the onboard café. I ended up trying one too, and it was surprisingly delicious—so I started drinking it. Since boarding that cruise ship, I've purchased a manual espresso machine and now enjoy it at home.

Third on the list is an herbal tea in a tea bag recommended by a Bulgarian captain. “We have chamomile herbal tea. Would you like to try some?” the captain asked. It's refreshing yet has a distinct black tea flavor. When I told the captain, “This is delicious,” he brought me a Twining's herbal tea in a tea bag.

The fourth was a deep-steamed tea made from real tea leaves, served aboard a ship captained by a Filipino who said, “We have delicious Japanese tea here.” It was served in a ceramic teapot and, though slightly astringent, was sweet and delicious. I asked, “Are these Japanese tea leaves?” and he showed me a foil package that said “Shizuoka Deep-Steamed Tea.” Many Filipino captains are knowledgeable about Japan, but it's rare to find someone this particular about tea.

Finally, about juice. While on Ise Bay, I was served lunch, which included fried chicken, spaghetti, and juice. Looking at the carton, it was labeled “Mangosteen Juice!” The mangosteen's round, deep purple outer skin contrasts sharply with its segmented flesh, which resembles pure white mandarin oranges—earning it the title “Queen of



Capt. Masujima



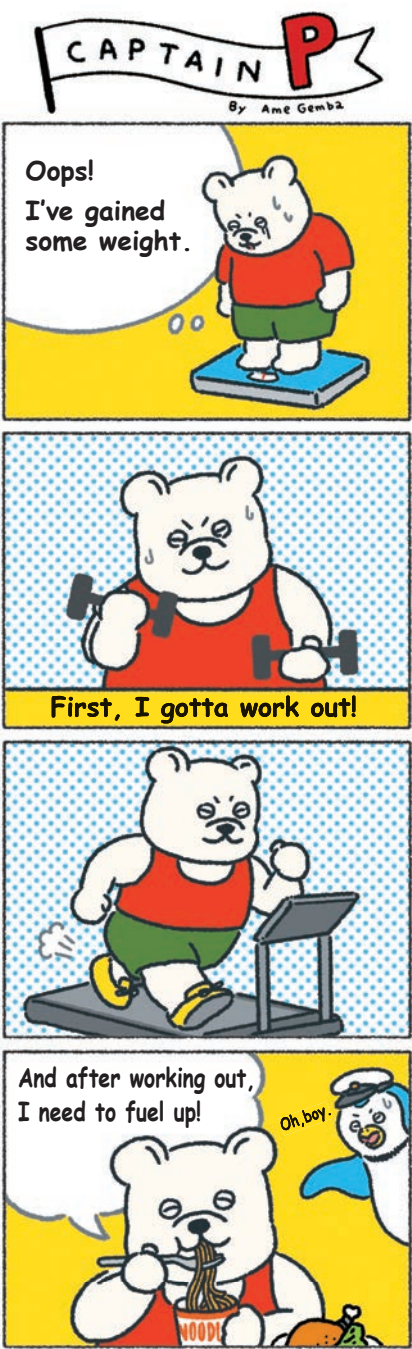
Passing through the Irago Channel, heading toward the Suzuka Mountains



Time for *chai*

Fruits.” Its texture is soft like a peach, yet its flavor is reminiscent of slightly tart milk. I recalled the time about 40 years ago when I first traveled on a company ship to Yangon, Myanmar. I bought mangosteens from roadside stands and was so impressed by their sweetness that I bought them daily from street vendors.

By my ninth year as a pilot, I had sailed on ships from around the world and encountered diverse cuisines from various countries. I consider this a true blessing of being a pilot. Some Ps avoid eating or drinking while traveling to prevent stomach issues,



but I see it as a fantastic opportunity to experience foods from around the world. I've not had food poisoning yet.

Brain Teaser Let's find out! Who's out of Your League?

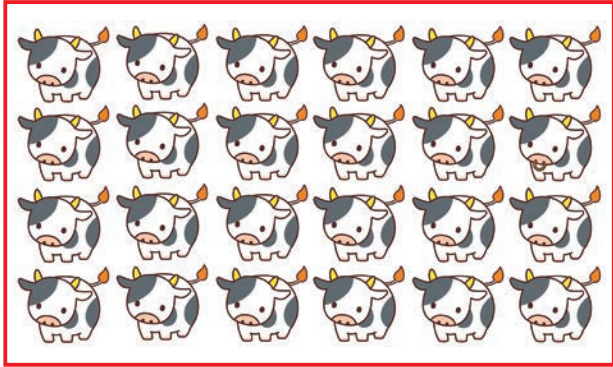


Illustration courtesy: illustAC

October has arrived! While daytime temperatures can still be hot, you can feel the signs of autumn in the mornings and evenings. This month's “Brain Teaser” comes from an illustration of cattle. These animals have long been associated with humans, utilized for their milk and meat. Furthermore, they have played a vital role in farming and transportation, making them indispensable to people's lives.

In Japan, cattle represent one of the zodiac signs, and people born in the Year of the Ox are said to be patient. Additionally, stroking the *Nade-ushi* statue at a shrine is believed to cure illnesses. Cattle are ruminants with a stomach divided into four compartments, digesting grass over an extended period. Though you wouldn't guess it from their leisurely appearance, cattle's digestive systems are extremely efficient at absorbing nutrients.

So... if you look closely, you will see that one of the cattle is different from the others. Which one is it? (The answer will be in next month's issue.)

Here is the answer to last month's (September) Brain Teaser.



Only one owl has a different pattern on its chest.

Use the Floor for Easy Stretch! Loosen up Your Hip Joints and Get More Flexibility to Prevent Lower Back Pain

- (1) Lie on your back.
- (2) Bend one knee and pull it toward your chest while keeping the other leg straight.
- (3) Wrap both arms around your knee and pull it closer to your chest.
- (4) Hold this position for several seconds (15–30 seconds).
- (5) Repeat movements (2) through (4) with the opposite leg. Repeat three times on each side.

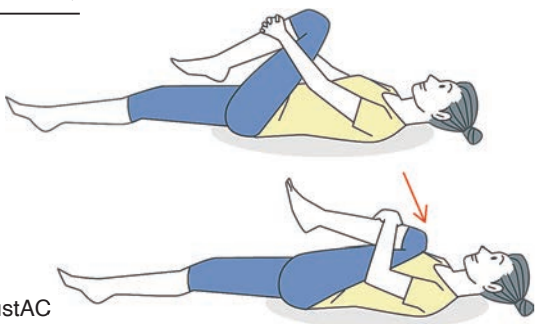


Illustration courtesy: illustAC

Today's Delicious Dish: Oyster and Cod au Gratin

■ Ingredients (1 serving)

- 4 oysters (shelled)
- 1/2 piece (about 50g) salted cod
- 1/2 cup water
- 1/2 teaspoon bouillon granules
- 1 tablespoon butter
- 1/2 green onion 1/2 potato
- 1 1/2 tablespoons flour
- 3/4 cup milk
- A pinch of salt and pepper
- 25 g cheese for melting

■ How to cook

1. Wash the oysters in salt water. Cut the cod into bite-sized pieces and slice the green onions and potatoes into 1cm pieces.
2. Add the consommé to boiling water, quickly parboil the cod in the boiling water, and remove from pan.
3. Melt butter in a frying pan and sauté ingredients in (1) above. Coat with flour, then gradually add milk and the cooking liquid from (2) while stirring to dissolve.

Season with salt and pepper. Once thickened, remove from heat.

4. Place half of the mixture from (1) into a heatproof dish. Arrange the mixture from (2) on top, then pour the remaining mixture from (4) over it. Top with cheese.
5. Bake (4) in a toaster oven until the cheese is golden brown.



Source: Ministry of Agriculture, Forestry and Fisheries website (Recipe, perfectly matched for rice)
<https://www.maff.go.jp/j/seisan/kakou/me-zamasi/recipe/index.html>