



How to Talk About
SEA VEGETABLES
in Foodservice



FOOD FOR
CLIMATE
LEAGUE

FOOD 
PLANET

Sea Vegetables are Gems of the Water



Swapping in sea vegetables in place of other leafy greens is a great way to incorporate them into your menu.

Sea vegetables offer incredible taste, versatility, nutritional value, and sustainability. While sea vegetables are a loved staple in cultures around the world, they remain underutilized on many menus. When dining out, eaters seek to explore flavors, textures, and dishes. Chefs, foodservice leaders, and restaurant staff like you are in a unique position to showcase the delicious versatility of sea vegetables and introduce the joy of sea veggies to eaters who are less familiar with the umami-packed greens. By incorporating more sea vegetables on your menus—and sharing their benefits with your staff and guests—you can delight and satisfy customers. That is because sea vegetables meet the latest demands for global flavors, as well as the growing interest in good-for-you, good-for-the-planet dining.

Everyday foods for everyone!

Sea vegetables are enjoyed as popular, everyday foods in Japan, Korea, China, and Polynesia, as well as in Native American and Asian American communities in the U.S. and in coastal regions in Scotland, Iceland, and France. They are associated with health and longevity as staple ingredients in the world-famous “Blue Zone” Okinawa and Mediterranean diets.

In this toolkit, you will find **research-backed ways to talk about sea vegetables** that drive eater interest and inspire you to **get creative on your menu.**

#nutrientdense

#umamipacked

#sustainable

#versatile

#colorful



Dulse



Kelp



Nori



Wakame



A small number of sea vegetables like nori boosts the nutritional value of a dish.

How to drive demand for sea vegetables

Consider sea vegetables an opportunity to wow eaters and contribute to a food future they—and you—can be proud of.

While taste is always king when it comes to trying new foods, many people are unfamiliar with sea vegetables and are a bit skeptical of the flavor. Lead your communications—on menu or for staff—with messages about **health and versatility**, paired with information on **sustainability**.



A special dish highlighting sea vegetables like kelp could be a great reason to dine out with friends.

Emphasize...



HEALTH

Sea vegetables are among the world's most nutrient-dense foods.



SUSTAINABILITY

Sea vegetables are more environmentally friendly than many land-grown greens.



VERSATILITY

Sea vegetables come in many different forms and may be promoted as an easy, flavorful addition to one's diet as a snack, seasoning, or land-grown leafy green alternative.

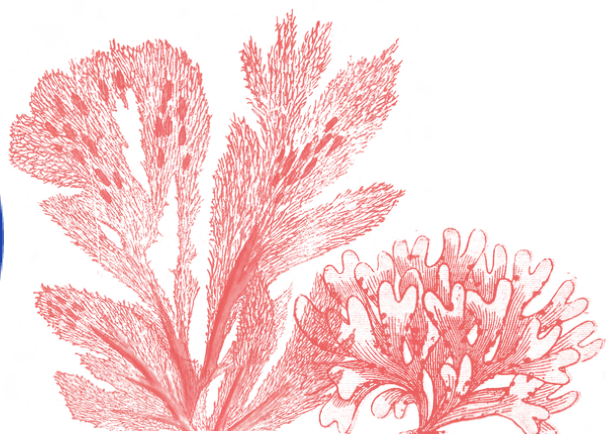
Why aren't we eating more sea vegetables?

33%
UNAWARE OF SEA
VEGETABLES

33% of U.S. eaters surveyed say they don't consume sea vegetables because they're simply unaware of them.¹

89%
GROWTH

Eaters' interest in sea vegetables is poised to grow by 89% in the next 1-2 years, moving sea vegetables into mainstream acceptance.²



In our narrative test for sea vegetables, two health-focused messages were most successful in driving eater interest, compared to ten other messages.⁶ But these are not the “heart-healthy” seafood health messages of generations past; now, “health” is more strongly tied to general wellbeing.

Sea veggies are nutritional powerhouses. They have...


10x
MINERALS

10x the mineral content of plants grown in soil.⁴

23
ESSENTIAL
NUTRIENTS

23 essential nutrients including Vitamin A, folate, omega-3 fatty acids (DHA/EPA), iron, and magnesium.⁵

Learn more about the nutritional profile of sea vegetables in Ch. 4 of the Food + Planet nutrition guide at eataquaticfoods.org/toolkits



Adding various sea vegetables to any salad is a delicious and highly nutritious option.

Of the Millennial and Gen Z eaters we surveyed...

31%
VALUE HEALTH
ABOVE OTHER
FACTORS

31% rank health higher in importance than familiarity, affordability, foodie relevance, or climate impact.⁶

50%
FOLLOW A DIET

50% are following at least one type of diet or dietary restriction.⁶

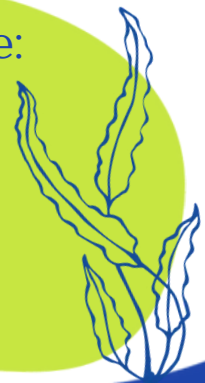
Keep in mind:



Consumers feel that eating sea vegetables offers multiple health benefits because they're packed with essential vitamins, minerals, and antioxidants, but are wary of their sodium and heavy metal content.²

Words to use:

Nutrient-rich
Nutrient-packed
Superfood
Power food
Antioxidant-rich
Immunity-boosting



Give people a land-based comparison.

Comparing these aquatic ingredients with terrestrial foods like other leafy greens is an easy way to help people understand the nutritional value and uses of these aquatic foods.



SUSTAINABILITY

Sea vegetables are more environmentally friendly than many land-based foods because they generally need no land or fertilizers and can sequester more carbon.⁷ They also provide marine ecosystem support by contributing to marine biodiversity, fish habitat improvement, and ocean restoration.⁸

Good to keep in mind:

58%

ALARMED ABOUT
CLIMATE CHANGE

58% of Millennial and Gen Z eaters we surveyed said they are concerned or alarmed about climate change.⁶

48%

EST. GROWTH

A growth of 48% in using sea vegetables as sustainable food source is estimated over the next two years.²

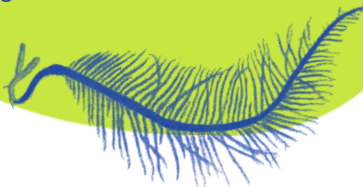
99%

CONFIDENCE
IN CLIMATE
MESSAGING

Our social media test among a Whole Foods audience with Atlantic Sea Farms confirmed with 99% confidence that a climate message will perform better than messages that do not include any emphasis on the sustainability of the product.⁶

Words to use:

Climate-smart	Sustainable
Ocean-friendly	Climate-friendly
Environmentally-friendly	Planet-friendly



Sea veggies are a planet-friendly food choice.



LAND OR
FERTILIZERS

Most sea vegetables require no land or fossil fuel-based fertilizers to grow.

20x

MORE EFFECTIVE

Sea vegetables are 20 times more effective at sequestering carbon than land-based plants.⁷

Learn more about the sustainability profile of sea vegetables in Ch. 2 of the Food + Planet nutrition guide at eataquaticfoods.org/toolkits



Incorporate sea vegetables into your homemade veggie burgers or source them from your favorite brand.

Sustainability should be added to messages on health.

While Millennial and Gen Z eaters are highly concerned about the climate crisis, only 3% of our study sample agreed that: "Above all, my food has to be sustainable and environmentally conscious."⁶ Instead, health, familiarity, foodie-relevance, and affordability were all ranked as higher priorities when making a food-related decision. Therefore, sustainability should be added to messages on health.



VERSATILITY

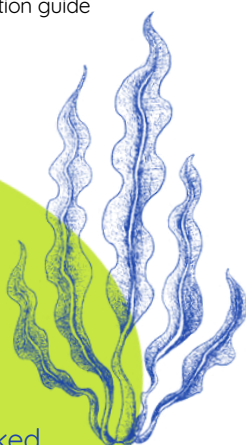
Sea vegetables come in many different forms. If you're missing out on the culinary benefits of sea veggies, you can easily incorporate them into existing menu items via seasonings or swap them in for land-grown leafy greens.

Play up the fun and practicality of sea vegetables—such as the colors, textures, or easy-to-use formats. Showcase meals that connect with your audience's backgrounds and interests, be it traditional uses—onigiri, Irish sea moss pudding, miso soup—or modern uses like kelp burgers, seaweed-infused hot sauce, or BLTs with dulse bacon.

Learn more about the versatility of sea vegetables in chapters 3 and 5 of the Food + Planet nutrition guide at eataquaticfoods.org/toolkits

Words to use:

Simple	Umami
Common	Delicious
Traditional	Crunchy
Pantry-staple	Everyday
Widely used	Flavor-packed
Must-have	Affordable



Who already eats sea vegetables?

Our survey of 900 Millennial and Gen Z eaters in the U.S. found that those who most frequently eat sea vegetables include: people of a higher socio-economic status, people who prioritize sustainability and work to reduce their meat consumption, urban residents, health-focused eaters, people of Asian descent, foodies, females, coastal residents, and those on a diet.⁶



Udon bowl with sea vegetables

Some eaters appreciate that sea vegetables are typically more flavorful than land-based, cooked greens.²



Korean rice balls, Jumeokbap, with sea vegetables

Eaters appreciate that sea vegetables can be used as meat alternatives, as some varieties boast a "meaty" texture and flavor.²



Furikake on avocado toast

Some eaters are surprised to learn that sea vegetables can be paired with other foods, eaten raw in salads, sautéed, cooked, or added to smoothies in a similar way as land vegetables.²

Communication Best Practices

Whether it's on packaging or in marketing materials, our research has found the following communication strategies will help drive eater demand and purchases of sea vegetables.

1 Lead with what's familiar.

Many eaters are eager to discover new dishes and flavors, yet most are also creatures of habit. You can create a space for exploration by leading with what's familiar—be it a format, origin, or another ingredient—in a menu title. When it comes to communications, put what's familiar first. For example, you might flip a “Kelp Carbonara” to a “Modern Carbonara Pasta” and add “kelp bacon” to the description.

2 Compare them to land-based vegetables.

Most U.S. eaters are more familiar with terrestrial greens than aquatic greens. Compare all types of sea vegetables to land-grown greens like kale, spinach, chard, lettuce and more, when it comes to nutrition and use. These comparisons can demystify the uses and benefits of sea vegetables.

3 Use popular descriptors.

Some eaters are concerned about fishy, bitter, or overly salty flavors, and slimy textures. Play up the many other textures and flavor notes offered by sea vegetables (e.g. “umami,” “crunchy”) and steer clear of flavor descriptions like “briny” or “tastes like the ocean.”



Presenting sea vegetables in formats familiar to your patrons helps ease eaters into the idea of trying something new.



Sea vegetables are great alternatives to soil-grown veggies.

Create a sense of familiarity.

More than ¼ of the Millennial and Gen Z eaters we surveyed said that “I always eat the same familiar foods that I know and trust.” For those who are unfamiliar with sea vegetables, you can create a sense of familiarity through the words you choose to describe a dish, along with the format and seasonings of a dish.⁶

4

Call sea vegetables by their names.

Calling different varieties by their names—eg. “kelp,” “nori,” or “dulse”—helps breed understanding and familiarity with the diversity of delicious options from the underwater world.

If you are not sure if your audience is familiar with the species, call them “sea vegetables” or define the species for your patrons. For example: “pickled kelp, a sea vegetable.” Using the term “sea vegetables” helps eaters who aren’t familiar with seaweeds think more broadly about the many ways we could be enjoying seaweeds, and provides an immediate, familiar frame of reference: land vegetables.⁶

If your audience is familiar with and loves seaweed already, stick with the term “seaweed”!



Dulse bread with green sea vegetables soup.

5

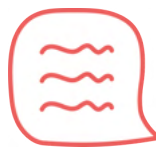
Highlight origins.

In your storytelling, highlight where and/or from whom you source your ingredients.

69%

VALUE SAFETY
IN FOOD

69% of eaters say being “safe to eat” is an important criterion when consuming sea vegetables.⁶



Offering transparent sourcing information is one of the best ways to create a sense of safety and help your customers feel in control. Eaters are looking for trustworthy, relatable, and specific information to evaluate the quality of sea vegetables.



Beautiful presentation and a strong backstory go a long way in inspiring eaters to try something new.

Hot Tips

Chefs are one of the most trusted sources for trying new ingredients. This is your chance to inspire, and create an experience that is worth repeating!



Request stories from your suppliers about the origin, the farmer, or the quality of the water that your sea vegetables are sourced from, and leverage that information on the menu or on the table. Guests are looking for cues to know that they can trust the products and that they are safe to consume.



Bite-size tasters help unfamiliar eaters discover the wonderful deliciousness of sea vegetables!



Let people know about the nutritional and planetary benefits; you can do so by adding some info to the menus, on tables, or on your website and in social media posts.



Share this toolkit and talk to your staff about sea vegetables. A collective understanding of the benefits of these foods and an ability to incorporate those in service through storytelling is key.



Avery and Catherine, "a two-woman team bringing seaweed into the everyday kitchen" at Daybreak Seaweed Co.
Photo by Lucianna McIntosh



Get your dishes with sea vegetables into people's hands. Free samples of new dishes have been shown to excite eaters and to increase the likelihood of a menu item's long-term success.



Swap your table salt for umami-rich sea vegetable flakes or seasonings. For some, it's an introduction to something new and exciting. For others, it creates a sense of familiarity. For everyone, it boosts nutrition.



Celebrate National Seafood Month (October) and Earth Day (April 22). Take part in the action by adding sea vegetables to your weekly menu rotation in entrees, salads, bowls, and side-dishes.

Quick Menu Naming Guide

When naming a dish on your menu that incorporates sea vegetables, be sure to include:

1 Positive flavor descriptors

Words that describe what it's like to smell, see, or taste the dish.

Examples: **CRUNCHY, JUICY, SPICY, CRISPY, REFRESHING**

2 Descriptors that explain how the dish was made

Examples: **HOUSEMADE, SAUTÉED, SIMMERED, STEAMED**

3 Positive nutritional descriptors

Examples: **NUTRIENT-DENSE, NUTRITIOUS, ANTIOXIDANT-RICH, IRON-RICH**

4 Positive sustainability descriptors

Words that describe what is sustainable about the dish. This can help build trust in the quality of the dish. Be as specific and evidenced-based as you can!

Examples: **SUSTAINABLY-SOURCED, RESPONSIBLY HARVESTED, LOCALLY/REGIONALLY-HARVESTED - OR NAME THE ORIGIN AND THE FARMER DIRECTLY**



Offering furikake (sea vegetable seasoning) is an easy way to spark interest and boost the nutritional value of any meal.

5 Familiar formats, flavors, origins, or ingredients

Words that can serve as a reference point for what an eater can expect when eating the dish. In the dish title, feature well-known ingredients and preparation methods that are loved among your audience to enhance dish appeal. Leave ingredients that are unfamiliar for the dish description.



Expert Perspectives

"I have a carrot dish in which we use seaweed in the escabeche. I use seaweed and mushroom broth when I'm cooking lentils. We have a seaweed dessert, a seaweed ganache."

Chef Victoria Blamey
The French Room



"I love seaweed. Most people are familiar with nori which wraps their sushi rolls or kids' snacks in school. But did you know you can use kombu, which you used to make dashi broth for your ramen or miso soup, then slice it thin into pasta noodles that you could serve with steamed clams? There are so many choices with seaweed nowadays. I think that there's an opportunity for chefs because seaweed is more readily available to us now than it ever has been. It also makes the customer journey all that more special and more compelling when you can share the story of delicious food and ingredients and how it's helping the planet."

Chef Chandon Clenard
Director of Culinary Operations,
Amazon at Compass Group USA

"It's not that great work isn't happening on the water—it's that we have a communication problem. People think seaweed are just the wrap for your sushi. They don't think of kelp and seaweed as an ingredient that chefs everywhere could be chopping, slicing, dicing or pureeing and putting into any dish that they wanted, to add umami and nutrients to."

Jennifer Bushman
Co-Founder Fed by Blue,
Chief Marketing Officer,
Kvarøy Arctic



Research methodology

This toolkit is a result of research conducted with Millennials and Gen Zers of diverse racial and cultural backgrounds.

71

academic papers reviewed

184

organizations engaged with bivalves and sea vegetables analyzed

28

trend reports reviewed

30

health professionals interviewed

17

healthy dietary patterns for compatibility assessed

1.5K

eaters surveyed and interviewed

AI

leverage for cutting-edge ethnographic insights

200K

people reached via social media

Citations

- 1 Maine Aquaculture Innovation Center. n.d. Non-Seaweed Consumer.
- 2 MotivBase. 2022. Eaters' Perceptions of Sea Plants.
- 3 Animal Feed Science and Technology. 2016. Seaweeds for livestock diets: A review.
- 4 American Scientist. 2017. The Science of Seaweeds.
- 5 Critical Reviews in Food Science and Nutrition. 2022. Minerals in edible seaweed: health benefits and food safety issues.
- 6 Food for Climate League. 2022. Aquatic Foods Research.
- 7 Harvard University: The Graduate School of Arts and Sciences. 2019. How Kelp Naturally Combats Global Climate Change.
- 8 Lloyd's Register Foundation. 2020. Seaweed Revolution. A manifesto for a sustainable future.

Additional Resources

For additional resources, including the sea vegetables version of this toolkit, please visit eataquaticfoods.org.

[Getting to Know Sea Vegetables](#)

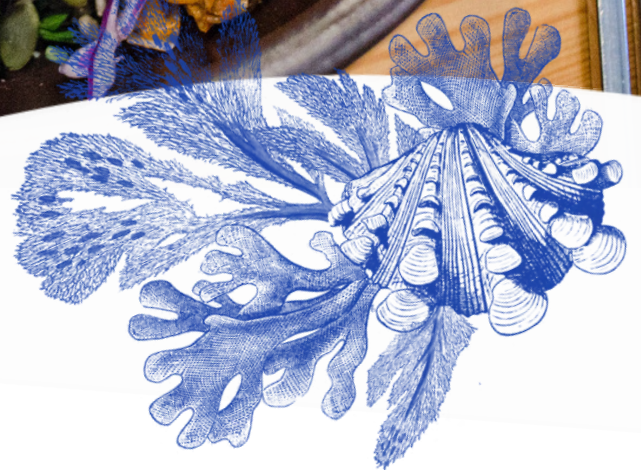
[Sea Vegetables Buying Guide: Choosing with Confidence](#)

[How to Make the most of Sea Vegetables](#)



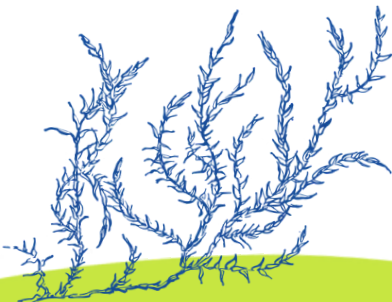


This toolkit was created by Food for Climate League, a women-led 501(c)3 research collaborative working to make climate-smart eating the norm, in partnership with Food+Planet, a visionary 501(c)3 collective aimed at empowering health professionals to be leaders in sustainable food systems. It was made possible by a grant from Builders Initiative, which invests in partners working towards sustainable solutions to societal and environmental challenges.



Interested in collaborating on products with sea vegetables?

If you are interested in partnering with us, please reach out to info@eataquaticfoods.org.



BUILDERS INITIATIVE



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