



TREHA™ as a functional seasoning

Discover what Trehalose can do

– Flourishing possibility of culinary applications

TREHA™ is a trademark for Trehalose, which is enzymatically produced from starch. Trehalose is naturally found in commonly consumed food items such as mushrooms and seaweed, providing 38% of sweetness of sugar. Not only maintaining stability and freshness, TREHA™ can improve the flavor, color and texture of cooked food items.

For vegetables!!

Maintains fresh texture and prevents discoloration

Snap peas: 30 minutes after preparation



With TREHA™



Without TREHA™

For cooked rice!!

Makes fluffy cooked rice and prevents discoloration during heated storage

24 hours after heated storage



With TREHA™

Without TREHA™

For meats!!

Prevents dryness and maintains tenderness

Kara-age: 2 hours after preparation



With TREHA™



Without TREHA™

For eggs!!

Creates smooth, fluffy texture without causing inconsistent air pockets.

Dashimaki tamago (rolled pan fried egg)



With TREHA™



Without TREHA™



A Nagase Group Company

TREHA is a trademark for trehalose and a registered trademark of Hayashibara in Japan, the U.S. and other countries. It is the customers' responsibility to determine that the ingredient meets all legal requirements in the countries where it is used, and that it does not infringe on any third party patents.

<http://www.intl.hayashibara.co.jp/>

TREHA™ Culinary applications



1 tablespoon of TREHA™ = 10 g



1 teaspoon of TREHA™ = 3 g

Cooked Rice and Noodles

COOKED RICE AND SUSHI RICE : Add 2% TREHA™ to uncooked rice.

EXAMPLE : Add 1 tablespoon of TREHA™ to 450g of rice before cooking. For sushi rice, 600g of kombu dashi (broth) may be used instead of water. When using TREHA™, increase water by 5%.

BENEFITS : Maintains the freshness and texture of cooked rice even after cold or frozen storage.

PASTA, UDON NOODLES: Add 0.5% TREHA™ to boiling water.

EXAMPLE : Add ½ tablespoon of TREHA™ to 1,000cc of boiling water.

BENEFITS : Prevents a soggy texture of the cooked noodles.

FRESH PASTA : Add 1% TREHA™ to flour.

EXAMPLE : Add 2 teaspoons of TREHA™ to 600g of flour.

BENEFITS : Enhances the chewy texture. Maintains the fresh color and texture even after frozen storage.

Vegetables and Salads

VEGETABLE STICKS (daikon radish, carrot, cucumber, etc):

Cut the vegetables and soak in a 3% solution for 30 minutes.

EXAMPLE : Add 3 tablespoons of TREHA™ to 970g of water to make a 3% solution.

BENEFITS : Reduces “warping” and “wilting” caused by drying for an extended period of time.

LEAFY VEGETABLES AND HERBS: For loose-leaf lettuce and herbs, immerse the stem part in a 3% TREHA™ solution for 30 minutes. For head lettuce, cut the stock crosswise, make a crisscross cut on the surface and immerse the stock in a 3% TREHA™ solution for 30 minutes.

EXAMPLE : Add 3 tablespoons of TREHA™ to 970g of water to make a 3% solution.

BENEFITS : Maintains the crispy texture and color.

AVOCADOS AND APPLES: Cut to the desired size and soak in a 10-15% TREHA™ solution for 30 minutes.

EXAMPLE : Add 10 tablespoons of TREHA™ to 900g of water to make a 10% solution.

BENEFITS : Maintains the natural fresh color for an extended period of time.

BOILED VEGETABLES (snap peas, asparagus, okra, etc) Add 2-3% TREHA™ to boiling water.

EXAMPLE : Add 1 tablespoon of TREHA™ and 5g of salt to 500g of water.

BENEFITS : Maintains the natural color and texture for an extended period of time.

Egg Dishes

DASHIMAKI TAMAGO (rolled pan fried eggs): Add 3% TREHA™ to eggs.

EXAMPLE : Use 2 teaspoons of TREHA™ with 4 beaten eggs, 50cc of dashi (broth), 2 teaspoons of soy sauce, 1 teaspoon of mirin (sweet cooking rice wine) and ½ teaspoon of salt.

BENEFITS : Creates a moist and fine texture for a nice presentation. Enhances the broth flavor. Maintains a soft and workable texture making the omelet easy to roll.

KINSHI TAMAGO (shredded egg crêpes): Add 3% TREHA™ to eggs.

EXAMPLE : Add 2 teaspoons of TREHA™ to 4 eggs.

BENEFITS : Creates a consistent and finer texture for a nice presentation. Maintains moistness for an extended period of time.

Sauces

TOMATO SAUCE : Add 1.5% TREHA™ to the sauce.

EXAMPLE : Use 2 tablespoons of TREHA™ with 300g of onions, 20g of celery, 2 cloves of garlic, 800g of canned whole tomatoes, a basil leaf and 100g of extra virgin olive.

BENEFITS : Enhances the natural tomato flavor and color.

Nimono (Simmered Dish)

SATOIMO NO NIKOROGASHI (taro potato simmered in soy sauce and broth): Add 1.5% TREHA™ to the dashi (broth).

EXAMPLE : Use 1 tablespoon of TREHA™ with 3 1/2 cups of dashi (broth), 4 tablespoons of soy sauce and 3 tablespoons of sugar and 1 tablespoon of mirin.

BENEFITS : Maintains the shape of the potatoes even after simmering. Reduces hardening after cold storage. Enhances the broth flavor.

NIKUJAGA (meat and potatoes stewed in sweetened soy sauce): Add 5% TREHA™ to the dashi (broth).

EXAMPLE : Use 1 ½ tablespoons of TREHA™ with 1/2 cup of sake, 1/2 of water, 3 tablespoons of sugar and 3 tablespoons of soy sauce.

BENEFITS : Maintains the shape of the potatoes even after simmering. Reduces hardening after cold storage.

Seafood dishes

TERIYAKI FISH : Add 17% TREHA™ to seasoned soy sauce.

EXAMPLE : Use 2 tablespoons of TREHA™ with 1 tablespoon of mirin, 2 tablespoons of sugar, 1 tablespoon of sake, 4 tablespoons of soy sauce and 2 fish fillets.

BENEFITS : Sauce coats the surface evenly, providing a gloss.

BOILED SHRIMP/PRAWN/LOBSTER: Add 2.5% TREHA™ to boiling water.

EXAMPLE : Add 2 ½ tablespoons of TREHA™ to 1,000cc of water.

BENEFITS : Enhances brightness of the shells. Minimizes black spots around the neck.

PRE-TREATMENT OF SEAFOOD (fish fillet, shellfish meat, etc):

Sprinkle TREHA™ on the fish and shellfish meat before cooking.

BENEFITS : Reduces the fishy smell.

Meat dishes

HAMBÄGU (Hamburg Steak): Add 1.5% of TREHA™ to the meat mixture.

EXAMPLE : Use 1 tablespoon of TREHA™ with 150g of ground pork, 150g of ground beef, 20g of panko breading, 3 tablespoons of milk, 150g of onion, 1 egg, ½ teaspoon of salt, approximately 30g of water (optional) and pepper and nutmeg to taste.

BENEFITS : Enhances the flavor while reducing off-notes. Reduces water release of the cooked meat when reheated in the microwave.

PRE-TREATMENT OF MEAT (beef, chicken, etc): Sprinkle TREHA™ on the meat before cooking.

BENEFITS : Reduces off-notes. Reduces the hardness of cooked meat when reheated.

Deep fried dishes

KAKIAGE (seafood and vegetable strip tempura): Add 8% TREHA™ to the batter.

EXAMPLE : Use 2 tablespoons of TREHA™ with 100g of flour, 4/5 cup of water including 1 beaten egg.

BENEFITS : Creates non-greasy, crispy surfaced kakiage. Reduces the soggy texture after freeze-thaw.

KARA-AGE (deep fried dish with seasoned batter): Add 2% TREHA™ to chicken.

EXAMPLE : Use 1 tablespoon of TREHA™ with 500g of chicken thighs, 20g of ginger, 1 clove of garlic, 2 tablespoons of soy sauce, 2 teaspoons of roasted sesame oil, ½ beaten egg and 3 tablespoons of potato starch.

BENEFITS : Reduces off-notes and makes tender juicy kara-age.

Sauces

BÉCHAMEL SAUCE*(white sauce) : Add 3.5% TREHA™ to the sauce.

EXAMPLE : Use 2 tablespoons of TREHA™ with 20g of butter, 20g of flour, 2 1/2 cups of milk.

BENEFITS : Creates a smooth texture and enhances the milk flavor.