

# TREHA® COST SAVINGS

## Saving Food = **Saving Money**

Every foodservice professional knows how quickly food ages, losing its appetite appeal. This results in perfectly edible food getting thrown out—along with your profit margin. What if there were a simple way to extend freshness and improve food quality, widening that freshness window and resulting in better food, reduced waste, happier customers and higher profits?

Well, good news—now there is. By using just TREHA® you can extend the marketable moments for a full range of foods. TREHA® not only extends freshness for bakery, beverages, dairy, dressings and sauces, fruits and vegetables, jams and jellies, grains, fish and meats, snack foods, sweets and soups, in many cases, it even increases their yield. Here are some handy examples of what you can expect to see when you cook with TREHA®.

### SUSHI RICE

The shelf life of rice cooked and mixed with TREHA® sushi vinegar (vs. sushi vinegar without TREHA®) is extended by approximately 24 hours. (Borderline of edible hardness determined by sensory evaluation.) In TREHA® sushi vinegar, 20-30% of sugars were replaced by TREHA®.

### BREAD – Sandwich Loaf

Adding 2% TREHA® against flour weight to dough will extend shelf life of a sandwich loaf by approximately 24 hours. (Softness of bread determined by plunger test with rheometer.)

### BREAD – Croissant

Adding 5% TREHA® to dough increases the volume of a baked croissant doubles viable freezing time of the dough from 2 to 4 weeks.

*Comparison after baking (3 weeks storage):*

Control.....  
(7% sugar)



.....TREHA®  
(7% sugar +  
5% TREHA®)

### GLAZED DONUTS

Using 80% of TREHA® in donut glaze on yeast donuts keeps the donuts fresh for up to two days. (Determined by stickiness starting point and end point.)

### FRESH NOODLES

The addition of 2% TREHA® against flour weight extends the moisture content (suppresses the drying) of fresh noodles by up to a week when stored, refrigerated (41° F) in plastic bags. (Determined by moisture of noodle surface measured after 1 and 2 weeks).

### CUT VEGETABLES

Soaking cut vegetables (e.g., carrots, cucumber, radish) for 30 minutes in a water bath with 3% TREHA® enables them to resist dehydration, extending shelf life by several hours. (Determined by ability to keep their original shape, color and texture.)

Without  
TREHA®

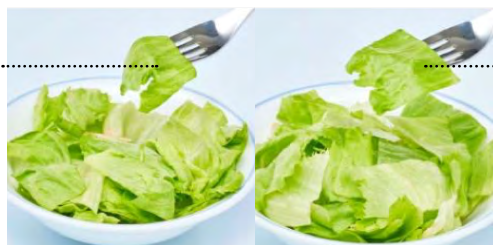


With  
TREHA®

### SALAD GREENS

Soaking salad greens in a 3% TREHA® water bath for 30 minutes extends just-cut crispness by hours. (Determined by ability to resist wilting.)

Without  
TREHA®



With  
TREHA®

## AVOCADOS

When avocados are cut and soaked in 10% TREHA® solution, then stored in a refrigerator, they keep their fresh color and resist browning for hours. (Determined by color measurement with a colorimeter.)



## APPLES & OTHER FRUITS

Soaking apples for 30 minutes in a water bath with 10% TREHA® enables them to keep their just-cut color for hours after cutting without containment. (Determined by color measurement with a colorimeter.)

5 Hours without containment



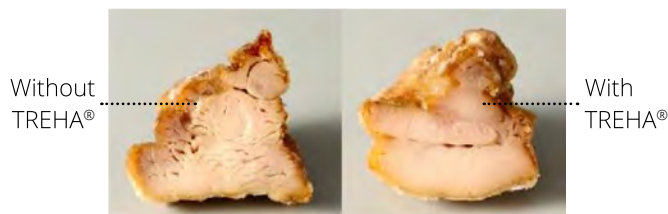
## TOMATO PUREE

Adding approximately 3% TREHA® to tomato puree (made with minced tomato) enables the puree to maintain a bright red color during storage for days longer than without TREHA®. (Determined by color measurement with a colorimeter.)



## MEAT – Fried Chicken

When chicken is marinated with 2% TREHA® with other seasonings it may be held in a hot case for several hours longer and retain its juiciness. (Determined by degree of drying.)



## RICE CRACKERS

Due to a high glass transition temperature within TREHA®, it assumes a candied state in low-moisture foods that is relatively resistant to humidity and has a crispier texture at the same moisture content. That means that including TREHA® in crackers can maintain crispiness approximately 16 hours longer.

## FISH

Minced fish such as tuna's bright color is maintained up to 24 hours when mixed with 1% TREHA®\* against fish. (Minced tuna stored in 10°C and determined by color measurement with a colorimeter.)

*\*TREHA® is added as treatment solution; 2% baking soda, 0.5% sodium ascorbate and 4% TREHA® dissolved in 93.5% water. For minced tuna, 5% of treatment solution is mixed against tuna to formulate 1% TREHA® in tuna.*

## CUSTARD CREAM

The shelf life of custard cream is extended a remarkable 14 days when TREHA® is used as a 40% replacement for table sugar. (Determined by syneresis.)

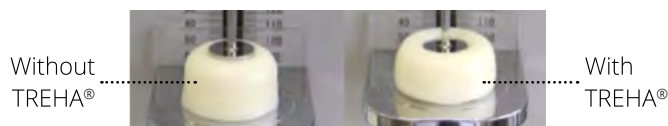
## EGG

TREHA® stabilizes air bubbles of meringue, so it's possible to increase the yield of cheesecake to 114% by replacing 50% of table sugar with TREHA® in the meringue mixed into cheesecake batter. (Determined by number of cheesecakes able to be made from the same amount of batter.) When batters of the same volume are baked, the one with TREHA® comes out fluffier with less volume reduction.



## MOCHI

When TREHA® is added to mochi at 10% of the rice flour weight, the mochi remains soft and shelf life is extended by 3 days over sucrose. (Determined by 600g weight hardness test one day after cold storage.)



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**TREHA®**

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