



## The proven benefits of Dry Misting

Dry Misting is an innovative technology that spreads tiny drops of water in the air, creating a thin layer of mist. As the mist evaporates, the humidity rises and the temperature drops naturally. This is done without causing any wetness on the product. When applied on fresh products, Dry Misting results in retaining freshness, color and nutrients. Extending the shelf life of these products to up to twice as long and hereby reducing food waste.

Multiple studies have evaluated and demonstrated the benefits of Dry Misting. The results of the 3 most important studies: Fresh Demo, Wageningen University & Research and a case study in collaboration with a leading retail chain, can be found on this leaflet.

## Award-winning EU research: Fresh Demo

The Fresh-Demo research project, financed under the EU Horizon 2020 program, was a response to the EU priority topic of food waste reduction and the creation of the circular economy.

The consortium of 7 parties involved in this research received 2 million in EU funding to evaluate the effect of Dry Misting from harvest up to retail. Trials and studies were performed on various products, at different stages of the fresh food supply chain (cold storage, transport and retail display). The results are listed below:



### **Escarole:**

**46%** less weight loss  
Longer shelf life  
More intense taste



### **Strawberries:**

**72%** less weight loss  
**20%** longer shelf life  
Stalks remain green



### **Grapes:**

**40%** less weight loss  
**15-25%** longer shelf life  
Less brown spots

## Business case: ROI 1-2 years

One aspect of the Fresh Demo project contained a retail trial in which, for a period of 4 years, data was recorded from the fresh produce department of a supermarket. Measuring turnover, food waste, energy costs and labor savings before and after the installation of Dry Misting. Taking these elements into account, an average payback time of Dry Misting was measured at 1-2 years.

***\*Fresh Demo was awarded the Horizon 2020 impact award in September 2020, for its sustainable impact.***



## Wageningen University & Research: humidification in retail

Wageningen University & Research (WUR) conducts worldwide research into 3 core areas: nutrition and food production, environment and health. In 2018, WUR published a report on the effects of humidification on the quality and shelf life of fresh products in a supermarket.

This research contained a retail display simulation under controlled lab-conditions, one with, and one without Dry Misting. The results for specific products were as follows:



**Lettuce:**  
40% less weight loss  
Better firmness



**Carrots:**  
36% less weight loss  
Better firmness



**String beans:**  
27% less weight loss  
Better firmness

*"The main effect of this application is on limiting weight loss, which is again related to quality aspects such as better firmness and crispness, less wrinkling and less dehydration of fresh produce"*

\*Source: Wageningen University, Evaluation of Contronics "Fresh in - Fresh out" fresh displays, J.A. Verschoor & E.C. Oتما

## Case study retail

A leading retail chain studied the effect of Dry Misting in 10 of their supermarkets over a period of 3 months. This pilot showed positive effects on quality, labor costs, customer satisfaction and shelf life:



**Bell pepper:**  
47% less waste



**Bananas:**  
44% less waste



**Cucumber:**  
14% less waste

***\*This case study resulted in a national rollout of Dry Misting in over 800 supermarkets.***

*"We are very pleased with the results of Dry Misting. We intend to offer fruit and vegetables of the best quality. Dry Misting helps us to do just that while reducing wastage and enabling us to use less plastic packaging"*

\*Source: review on case study by leading European retail chain

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