**Key benefits**

- Keep fresh and authentic appeal
- Prevent fungi decay and browning
- Retard senescence
- Clean, friendly labeling

**FRESH-KEEPER FOR FRESH (CUT) FRUITS**

Today’s consumers want fresh-cut fruits with longer-lasting freshness. However, these products have a shorter shelf life than their whole counterparts because of enzymatic browning, texture decay, rapid microbial growth, weight losses and undesirable volatile production. How to hold on the freshness in natural way is becoming a great challenge that manufacturers face.

Befresh™ FV is a natural, label-friendly fresh keeper formulated by fungi chitosan and natural ferments. It shows dual effectiveness in retarding enzymatic browning and / or avoiding tissue softening caused by fungi decay in fresh-cut fruits (salads).
Case: Strawberry with Befresh™ FV

Strawberry

Strawberry is a highly perishable fruit with a short postharvest life which is mainly due to fungal decay. The shelf-life of cold-stored (0–4°C) fresh strawberries is around 5 days.

Befresh™ FV applied to strawberries, stored at room temperature, led to an improvement of fruit firmness, reduced visual fungal decay and delayed changes in external colour, as well as maintained strawberry flavour and aroma during cold storage.

Fungal decay control

Figure 1 shows the development of fungal decay of inoculated strawberries at 20°C. Befresh™ FV reduced the percentage of infected strawberries as compared to control after 3 days, and also exhibited a high anti-Botrytis effect as shown figure 2.

Superoxide dismutase (SOD)

SOD is the protective enzymes of fruit ripening senescence that can remove reactive oxygen free radicals, thereby reducing free radical damage to the membrane to retard cell senescence.

Figure 3 reflects that Befresh™ FV significantly enhances the SOD activities of strawberries as compared to control.

Polyphenol oxidase (PPO)

PPO is considered to be the main cause of enzymatic browning of fruit and vegetable enzymes, under aerobic conditions, PPO catalytic oxidation of phenolic substances quinone. Quinones produce a colored substance by a polymerization reaction resulting in tissue browning.

Figure 4 reflects that Befresh™ FV significantly inhibits the PPO activities and retards the browning of strawberries as compared to control.