#### SAFEPOD: NEW TECHNOLOGY FOR INTELLIGENT CONTROL OF FRESH PRODUCE STORAGE

**3** Year project funded jointly by UK Government and commercial companies





Produce Quality Centre







### Intelligent Controlled Atmosphere





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#### MUCH more than Dynamic CA





### Intelligent Controlled Atmosphere

#### MUCH more than Dynamic CA.....4 main functions.



# **F1.** Dynamic Controlled Atmosphere.



## F1.

#### Dynamic Controlled Atmosphere. To determine the Lowest Oxygen Level for safe storage



## **F1**.

### Dynamic Controlled Atmosphere. To determine the Lowest Oxygen Level for safe storage.

Using a representative sample of 60kg of fruit

.....Without exposing the complete room to potentially damaging very low oxygen conditions

.....Without the energy consumption needed to pull the complete room down to very low oxygen values.



# F2. Absolute Respiration rate.



## **F2**.

### Absolute Respiration rate.

Can be used to compare maturity between different stores to rank rooms for storage potential and assist with marketing planning.



# F3. Respiration rate changes.



## **F3**.

### Respiration rate changes.

Changes in respiration rate during the storage season can indicate the onset of some storage disorders











### Lower Oxygen storage.

The SafePod can be set up to control the contents at a lower Oxygen level than the rest of the store to explore alternative regimes without risking a complete room.







