

Freshness of different fresh products such as apples**USE**

Cylindrical probes are used to make penetration test. Those tests allow us to determine the freshness of the products by linking firmness to freshness.

**METHOD**

In this test, the apple is puncture by a 2mm cylindrical probe at multiples point of the fruit. The penetration is made at a rate of 1mm/s. The penetration depth is 30mm.

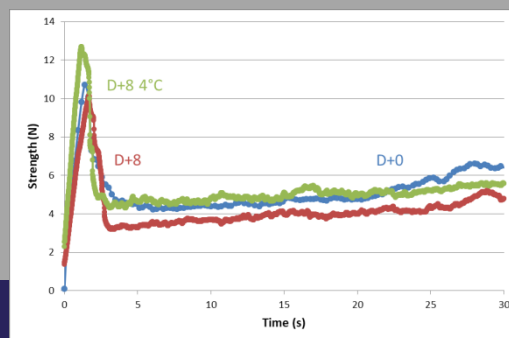
**EQUIPEMENT**

TX-700

+

Cylindrical
probe 2mm

+

Software
(optional)**RESULTS**

The association of a 2mm cylindrical probe with the TX-700 allows us to determine the firmness of a solid sample. Thanks to the device, it is possible to differentiate multiples types of deodorant based on their response curve.

Maximal strength (F_{max}) corresponds to the firmness of the product. The plate corresponds to the texture of the flesh. The red curve shows us that the apple left in the open is less firm than the fresh one (blue curve) and the refrigerated one (green curve).

With the TX-700, it is also possible to make quality controls on this kind of product. It is also possible to adapt the storage to the product's reactions.

