Production: FLOUR TORTILLAS

Objective: Measure tortilla stretchability, breaking point and firmness

Type of action: Burst test

Test setting:

Speed	Test mode	Trigger	Target	Hold
1.7 mm/s	Distance (c)	20 gf	30 mm	0 sec

Accessory:

Middle hole fixing rig, Cylinder probe with an area of 1cm^2, Platform

Sample Preparation:

After cooling for 30 minutes, tortillas are double bagged and held at room temp. until further testing. Tortillas are generally tested on days 1, 3 and 7 after griddling. Generally at least 10 test repetitions are conducted for each variable per day.

Data Analysis:

☒Max Force

☒Peak Distance

Results

The maximum peak force value as well as the distance is recorded and the average and standard deviation are calculated.

Notes:

- This method is from a collection of procedures for testing the texture of common bakery products with the Texture Analyzer. These procedures have been developed by and are used at the American Institute of Baking's Experimental Bakery Lab in Manhattan, Kansas.
- It is the philosophy of the researchers at the AIB to have extremely flexible protocols for texture testing. Bakery products come in every imaginable type and shape, so meaningful textural comparisons must account for the different product geometries. These test procedures typically manage differences in geometry by reducing the products' size to a common denominator.
- Generally, the objective of most of these tests is to measure the firmness and shelf life of a baked product. Since the bulk of these protocols address sample handling, they can and should be modified slightly if the test objective is different (eg springiness, cohesiveness, resilience, etc).
- These protocols are simply starting places for developing test methods which are suitable for your own products. A researcher should be comfortable modifying the sample handling protocols, test speeds and distances to accommodate any specific purposes.

The above curve was produced from plain dough biscuits, tested at 20C.