FOOD SHELF LIFE TESTING

KEY DIFFERENCES BETWEEN REAL-TIME SHELF-LIFE TESTING AND ACCELERATED SHELF-LIFE TESTING:

REAL-TIME SHELF-LIFE TESTING		ACCELERATED SHELF-LIFE TESTING
Products are stored under recommended storage conditions (temperature, humidity, light) for their entire claimed shelf life.	**METHOD**	Products are subjected to harsher storage conditions (higher temperatures, humidity levels) than what they would experience normally.
Directly observes how a product degrades and loses quality over time under realistic storage conditions.	**GOAL**	Simulate and accelerate the degradation process to predict shelf life in a shorter timeframe.
Provides the most accurate prediction of shelf life for consumers and retailers.	**BENEFITS**	Provides faster results compared to real-time testing. This allows for quicker product development cycles and go-to-market strategies.
Can be very time-consuming, taking months or even years to complete depending on the product's shelf life.	**DRAWBACK**	Predictions may not be as accurate as real-time testing because the stressed conditions don't perfectly replicate real-world storage.
Can be more expensive due to the extended storage duration and resource requirements.	**COST**	Generally less expensive than real-time testing due to the shorter duration.

CHOOSING THE RIGHT METHOD:

The choice between real-time and accelerated shelf-life testing depends on several factors:

- **Product type:** Highly perishable products might favor real-time testing, while shelf-stable products may benefit from ASLT.
- **Budget and Time Constraints:** If speed is a priority and budget is limited, ASLT might be the better option.
- **Regulatory Requirements:** Some regulations might require real-time testing for specific product categories.