



**IEH**  
Laboratories &  
Consulting Group

# Rheology and texture analysis services

We offer rheology and texture analysis services on all types of food products (e.g., fruit juice, protein drink, coffee, honey, salad dressing, starch, ketchup, bakery, confectionery, dairy, gel, meat & fish, plant-based meat and dairy alternatives, pasta, cereals, and produce), cosmetics (e.g., face cream, shampoo), and packaging materials. Our rheology and texture analysis team of scientists and consultants serve to help clients explore the applications of novel food ingredients, find the best ingredient choices and plant-based alternatives to build up new generation foods, and provide innovative solutions to support the food industry.



## Get rheology and texture measurements for your products and ingredients

Rheology and texture are important in manufacturing, distribution, handiness, and final quality of food and cosmetic products. Rheology and texture testing provides valuable information to food and cosmetic producers and developers. Rheological and textural properties are helpful in determining changes in raw ingredients or packaging (for cost reduction/ supplier changes), competitor product analysis, new product development, correlations to sensory analysis, product changes during storage, and applications of newly-developed ingredients.

### Texture analysis

We provide Texture Profile Analysis and customized texture measurements.

- Hardness
- Cohesiveness
- Fracturability
- Springiness/Recovery
- Chewiness
- Gumminess
- Stringiness/Shortness
- Resilience
- Crispness/Crunchiness
- Rupture force
- Gel strength
- Adhesiveness/Stickiness
- Tensile/Breaking strength
- Peel/Seal strength
- Film burst strength

### Rheology analysis

We provide analysis on flow behavior of liquids, viscoelastic properties of semi-solids, and ingredient characterization.

- ✓ **Flow behavior analysis of liquid food and cosmetic products (e.g., beverage, soup, ketchup, dysphagia diet)**
  - Viscosity analysis
  - Yield stress measurements
- ✓ **Viscoelasticity analysis of semi-solid food and cosmetic products (e.g., plant-based meat and cheese alternative, pudding, gel)**
  - Amplitude sweep tests
  - Frequency sweep tests
  - Temperature sweep tests
  - Time sweep tests
- ✓ **Ingredient characterization**
  - Flow behavior analysis
  - Gel strength and gelling-melting point measurements
  - pH-, temperature-, and time-dependent rheological properties
  - Rheological behaviors when mixing with other food ingredients

For more information about our rheology and texture analysis services, please contact [rheology@iehinc.com](mailto:rheology@iehinc.com)