# MOUTHFEEL AND OAT BEVERAGES

The term "mouthfeel" is used to describe sensations we experience when eating or drinking. It is more important to us humans than you might think.

CASE IN POINT: The English language has more than 80 words that apply to mouthfeel, and the Japanese have an astonishing 400+ words.

This goes to show just how essential it is to our perception and enjoyment of food and beverages.

## The study of mouthfeel

Mouthfeel is an intriguing, complex concept that can be studied in various ways:

## Food rheology

The study of how food flows and deforms under certain stresses and conditions.

### **Food tribology**

The study of the friction, wear and lubrication of food as it is processed in the mouth.

### **Psycho rheology**

The study of the sensual perception of consumer products, particularly food and cosmetics.

## How we perceive mouthfeel

The sensations of mouthfeel are experienced at different times in various parts of the mouth.

### First impressions

When a food or beverage first touches the mouth, we detect whether it's liquid or solid, wet or dry, hot or cold.

## Sipping and swirling

Sensory receptors in the teeth, tongue and palate tell us more about whether the beverage is smooth, slippery, melty, gummy or grainy.

## Texture and mouthfeel

These qualities go hand in hand. But while texture can be measured, mouthfeel cannot—it's a sensation, and often quite subjective.

## Texture

A physical property of food, such as creamy, syrupy or thick.



## Mouthfee

The way food or drink feels in your mouth, such as when sugars break down, fats melt or bubbles pop.

## Swallowing and aftertaste

This is where residues left in the mouth, such as fats or juices, are experienced. This is also the stage at which astringency — the drying-out sensation caused by certain wines, teas and fruits, as well as oat beverages — is detected.

## Mouthfeel and oat beverages

Food technologists use various methods and processes to achieve the ideal smoothness, stability and texture of oat beverages. These properties all contribute to mouthfeel, while taste contributes to the overall experience:



## Stability

The stabiliser gellan gum not only helps prevent separation of the product in the package, but also can increase the sensation of roundness in the mouth.



## Texture

Heat treatment to ensure food safety can lead to graininess in oat beverages.

The homogenisation process that follows removes this graininess.



## Smoothness

Adding 1% rapeseed oil to the ingredients helps create a smoother, richer, more appealing product.



## Taste

Enzymes are used to break down starches into sugars such as maltose or glucose, which can contribute to a sweeter product.