

## **Tidymodels for sensory and consumer scientists. A tidy approach to data modelling in R**

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This tutorial offers a step-by-step guide to help sensory and consumer scientists start their journey in modern data modelling using Tidymodels in R. Tidymodels is a collection of R packages designed to support the entire modelling workflow, from data preprocessing, model specification, training, validation, and interpretation, within the tidy data framework. Predictive and explanatory modelling is increasingly important in sensory and consumer science, supporting tasks such as consumer liking prediction, product classification, segmentation, and identification of drivers of liking. Tidymodels provides a coherent, transparent, and reproducible approach to these analyses while remaining accessible to non-specialists. During the workshop, participants will gain hands-on experience coding in R and will become familiar with tidy modelling principles and tools. The tutorial is not intended as a statistics or machinelearning course, and participants will not need deep technical knowledge of modelling algorithms. By the end of the tutorial, participants will be able to build, evaluate, and interpret basic models relevant to sensory and consumer research. Topics covered include data preprocessing using recipes, model specification with parsnip, workflow creation, resampling, performance assessment, and tidy model outputs for interpretation and communication. A suitable dataset and complete R script covering the full workflow will be provided.

### **Audience**

Sensory and consumer scientists interested in applying data modelling techniques.

### **Audience background**

Basic familiarity with R/RStudio. Familiar with data modelling principles and algorithms.

### **Laptop required**