

## Image analysis and product quality

food and drink innovation

# Dark area = 52% (L\*<80) L\*=68 a\*=17 b\*=38 b\*=34 L\*=83 a\*=7 b\*=38 Dark area = 52% (L\*<80)

#### Colour measurement

DigiEye allows accurate colour measurements for specification and documentation of appearance

#### Structure

Scanning electron microscopy provides image data at a range of magnifications, enabling the underlying structure of foods to be revealed

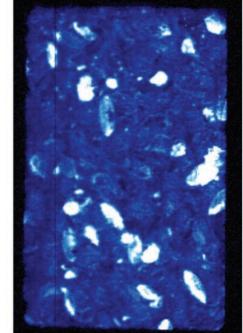
#### Component identification

Hyperspectral near infrared (NIR) imaging provides spectral compositional data, allowing spatial measurements of ingredient distributions across products



Rye cracker

### Distribution of CH<sub>2</sub> showing high fat content in seeds

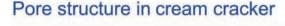


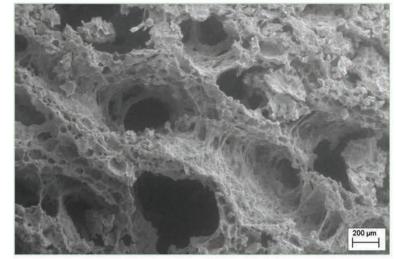
#### Pore structure

C-Cell provides objective measurements of food structure

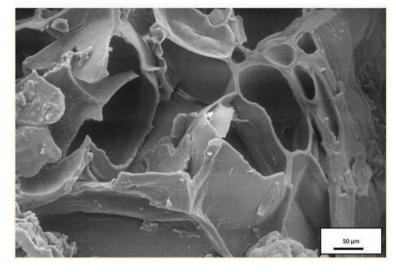


Simultaneous measurement of force and sound data provides a measure of product crispness

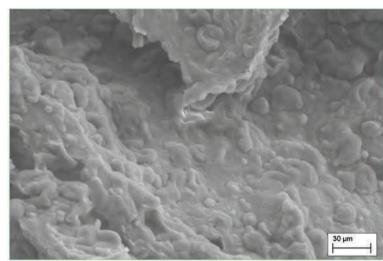




Rice cracker



Cream cracker showing starch granules



Rye cracker showing aleurone cells

