

## Infrared Spectroscopy – Research Application

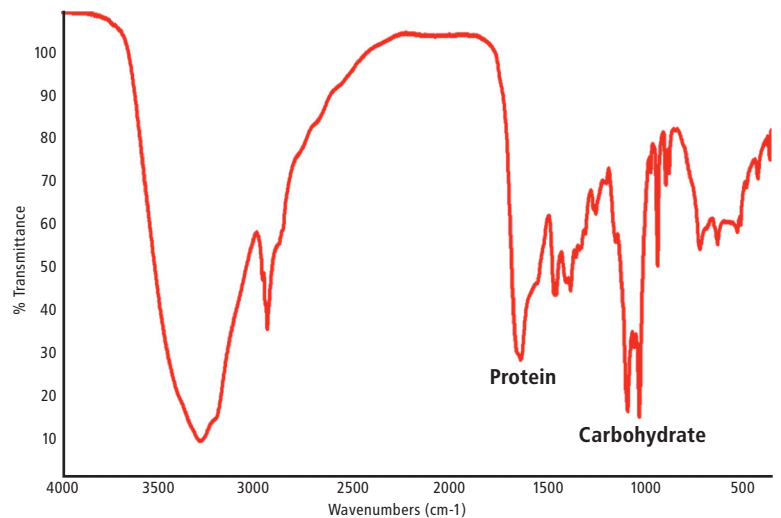
# Mushrooms – How fresh are they?

Infrared Spectroscopy can be used to produce a **Chemical Fingerprint** of a huge range of materials. It can even be used to monitor the freshness of the mushrooms in your fridge!

**Fresh Button Mushrooms**



**Infrared Spectrum**

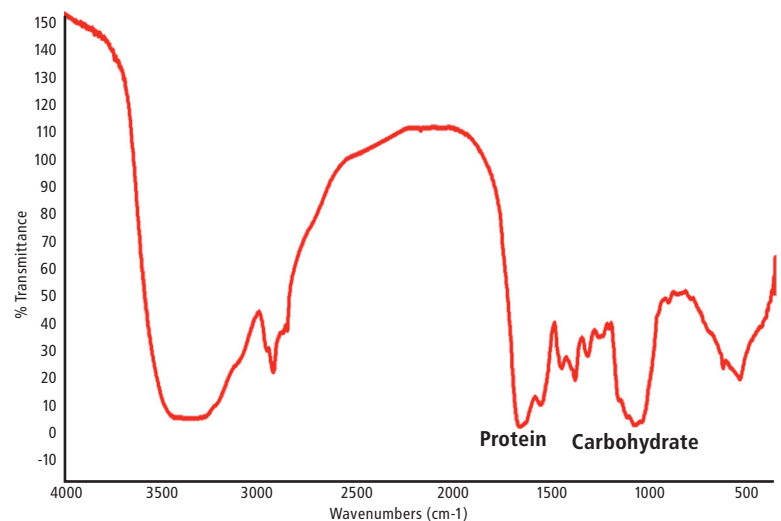


**2 WEEKS LATER**

**Aged Button Mushrooms**



**Infrared Spectrum**



### So what has changed?

The fresh and aged mushrooms not only look different but their **Protein** and **Carbohydrate** infrared patterns have changed. This indicates that **Chemical Changes** have taken place, which are part of the ageing process. **Infrared Spectroscopy** can even be used to detect early deterioration of your mushrooms before you can see any change in their appearance.