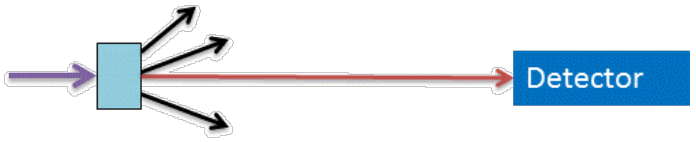
Evaluation of optical properties of low UVT fluids

1-cm path length cuvettes -

diluted solutions to determine **absorptivity** coefficient or molar absorptivity



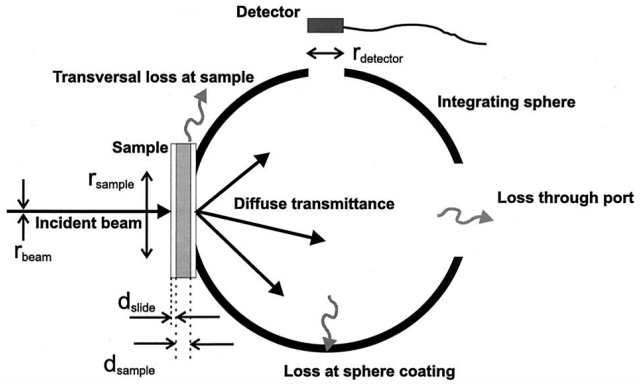
A vs c

$$A = \varepsilon c b$$

0.05 – 1-mm path length quartz cuvettes - **absorption** coefficient including absorbance and scattering

A vs b

$$A = (\varepsilon b) x c$$

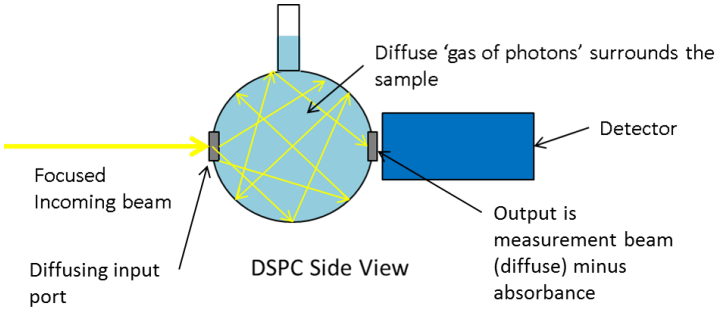


Integrated sphere (IS) - **diffuse transmittance** excluding back scattered light

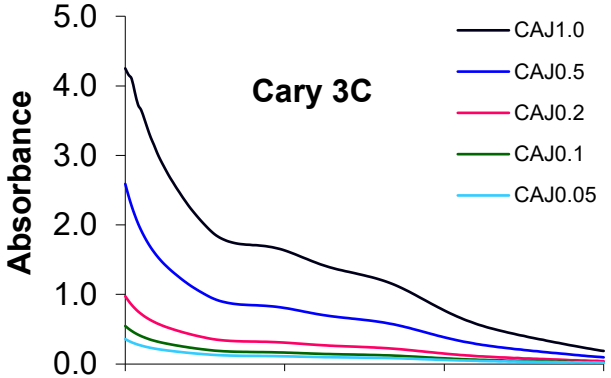
$$A = (\varepsilon c) x b$$

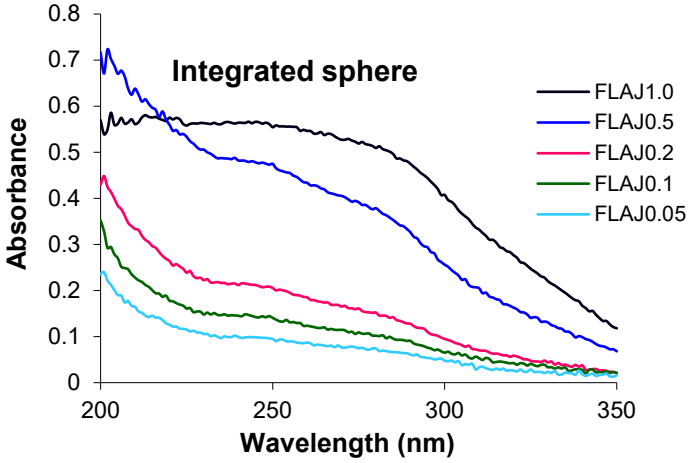
CLARiTY - integrated cavity

Absorbance corrected per cm excluding scattering

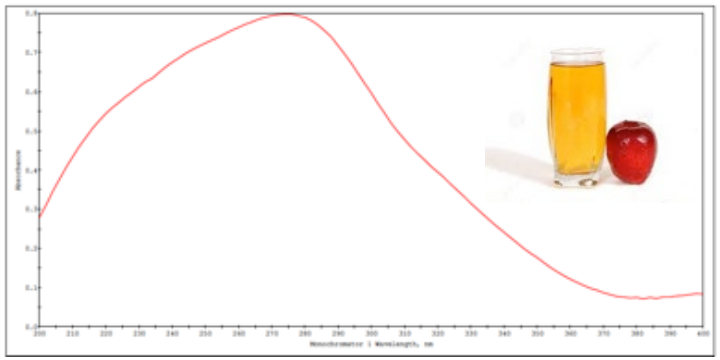


Clear Apple juice

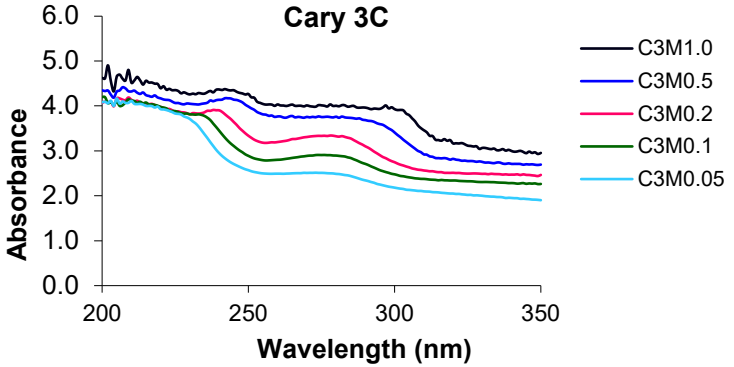


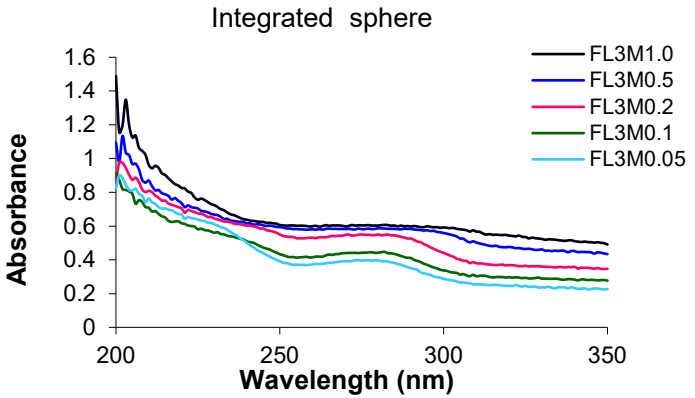


CLARiTY - integrated cavity



Whole milk 3.25 % fat





CLARiTY - integrated cavity