Supplementary Information



**Figure S1** Non-contact mode Atomic Force Microscope image of plant stanol ester solid lipid nanoparticles, 4.5 × 4.5 µm scan size.

**Figure S2** Mean particle diameter of plant stanol ester loaded solid lipid nanoparticles stored at 4 °C (blue) and 22 °C (orange) as measured by particle tracking analysis.

**Figure S3** Calibration curve of phytostanol.

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|  | **Phase contrast** | **Fluorescence** |
| 1. **HepG2**
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| 1. **HepG2**
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|  **(c) HT-29** | E:\Cell studies\28.6.19 Fluorescence Microscopy\Final images\HT-29\HT-29 untreated\28.6.19_HT-29_LD1.jpg | E:\HT-29 uptake studies\13.3.19\13.3.19_untreated_no fluo.jpg |
|  **(d) HT-29** | E:\Cell studies\28.6.19 Fluorescence Microscopy\Final images\HT-29\HT-29 fluorescent\28.6.19_HT-29 Fluo image.jpg | E:\Cell studies\28.6.19 Fluorescence Microscopy\Final images\HT-29\HT-29 fluorescent\HT-29_4.jpg |

**Figure S4** Cellular uptake of SLNPs post 2 hours incubation as imaged by fluorescence microscopy.

(a) Untreated HepG2 (b) R123 SLNPs at 37 °C (c) Untreated HT-29 and (d) R123 SLNPs at 37 °C. The green fluorescence is due to Rhodamine123 encapsulated within the solid lipid nanoparticles. The scale bars in the images represent 200 μm.