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Version: Supplemental Material

**Article:**
Niaz, T, Imran, M and Mackie, A (2021) Improving carvacrol bioaccessibility using core–shell carrier-systems under simulated gastrointestinal digestion. Food Chemistry, 353. 129505. ISSN: 0308-8146

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**Supplementary Figure Captions:**

**Figure S1:** Fluorescent intestines of FITC labeled C-NCs and CB-NCs (A-I and A-II).

**Figure S2:** Leucine standard curve; used to quantify the digestion of protein-layer by OPA assay from void and carvacrol loaded C-BSA core-shell NCs.

**Figure S3:** Transmission electron microscopy of C-NCs (at 50 nm scale).

Figure S1

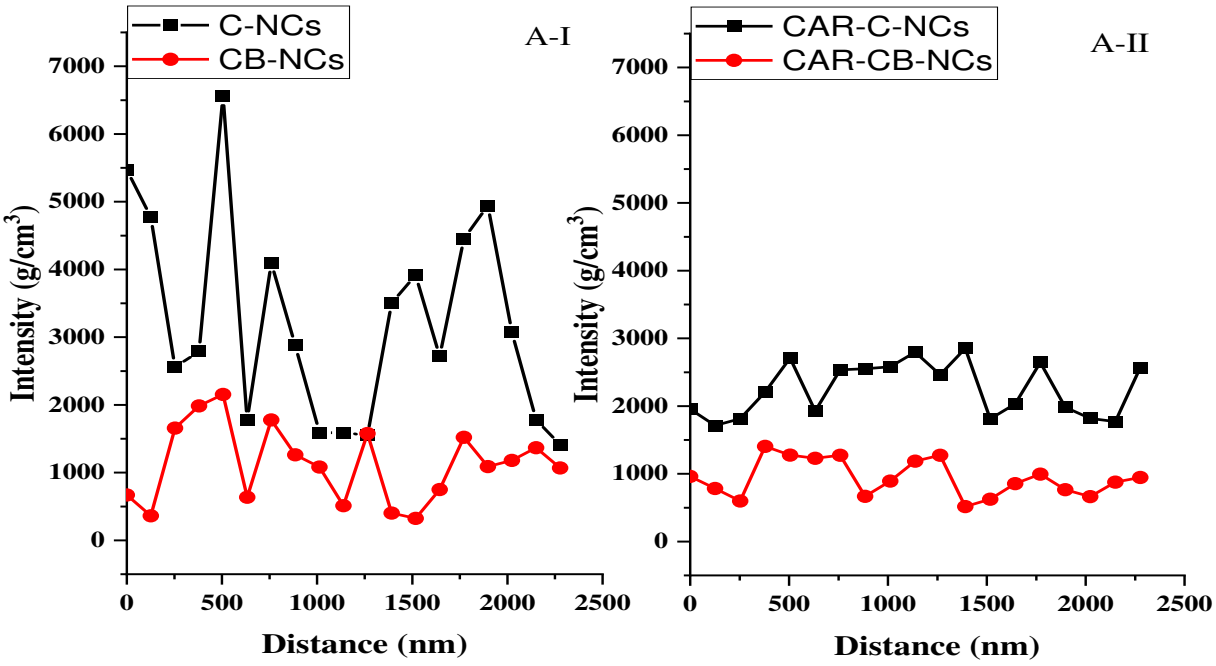
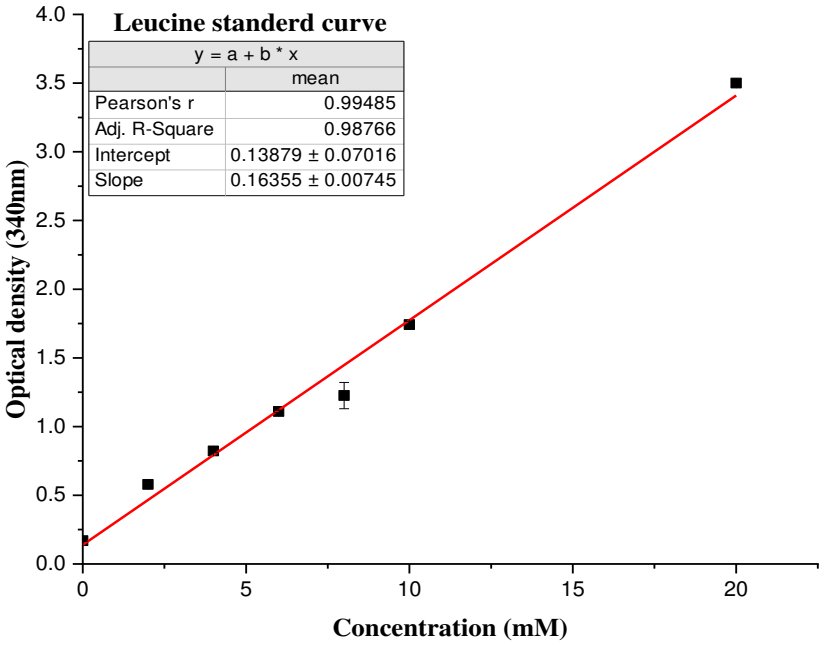

C-NCs
CB-NCs
A-I
Intensity (g/cm$^3$)
Distance (nm)
CAR-C-NCs
CAR-CB-NCs
A-II
Intensity (g/cm$^3$)
Distance (nm)

**Figure S2**


Leucine standerd curve
y = a + b * x
mean
Pearson's r 0.99485
Adj. R-Square 0.98766
Intercept 0.13879 ± 0.07016
Slope 0.16355 ± 0.00745
Optical density (340nm)
Concentration (mM)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
0
5
10
15
20

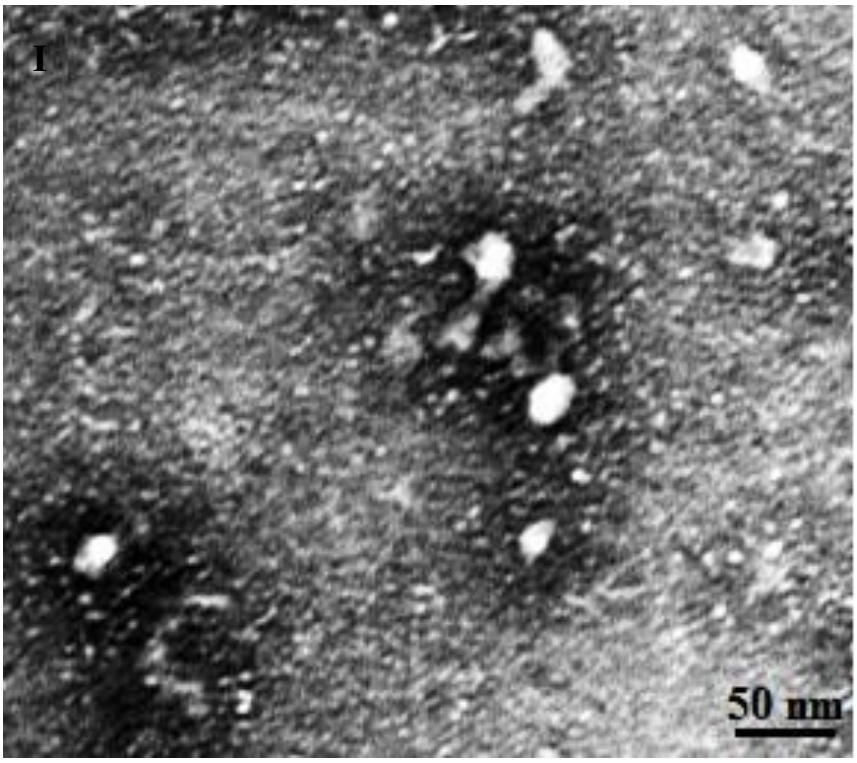



**Figure S3**