

Supplementary information

Detection and imaging of fatty plaques on blood vessels using functionalized carbon dots

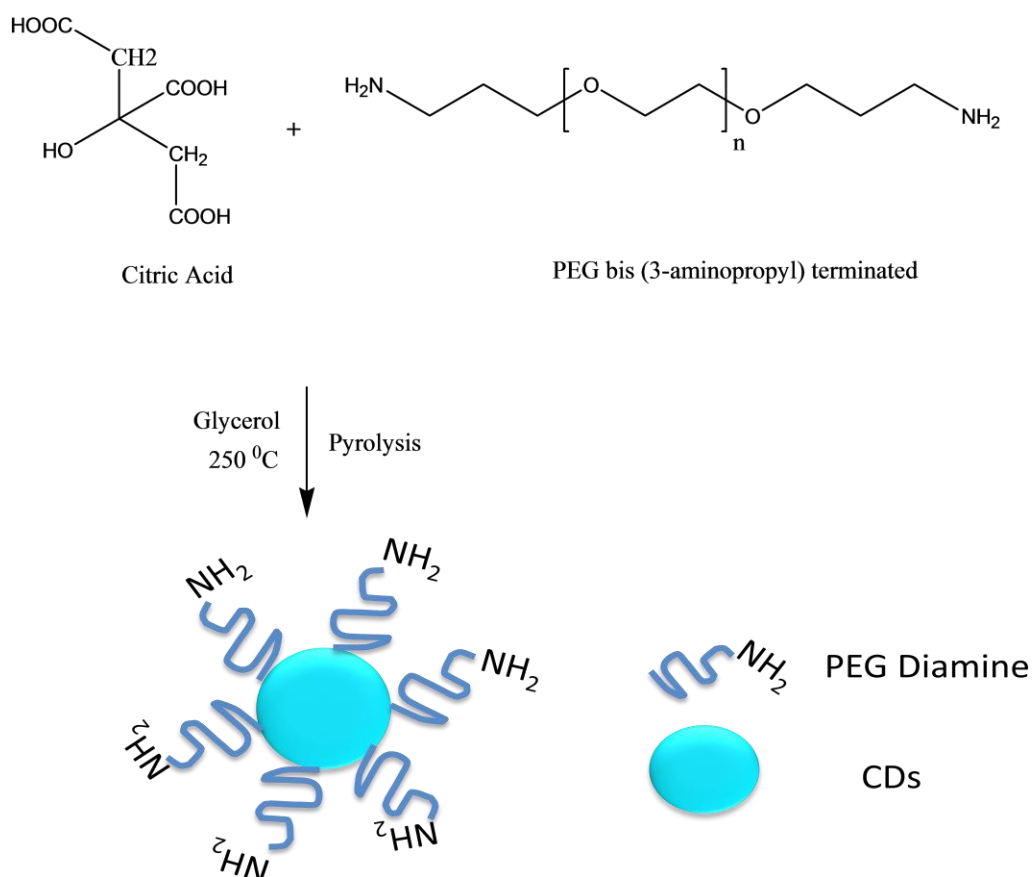
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FIGURES



Scheme S1: Synthetic route for the formation of CDs

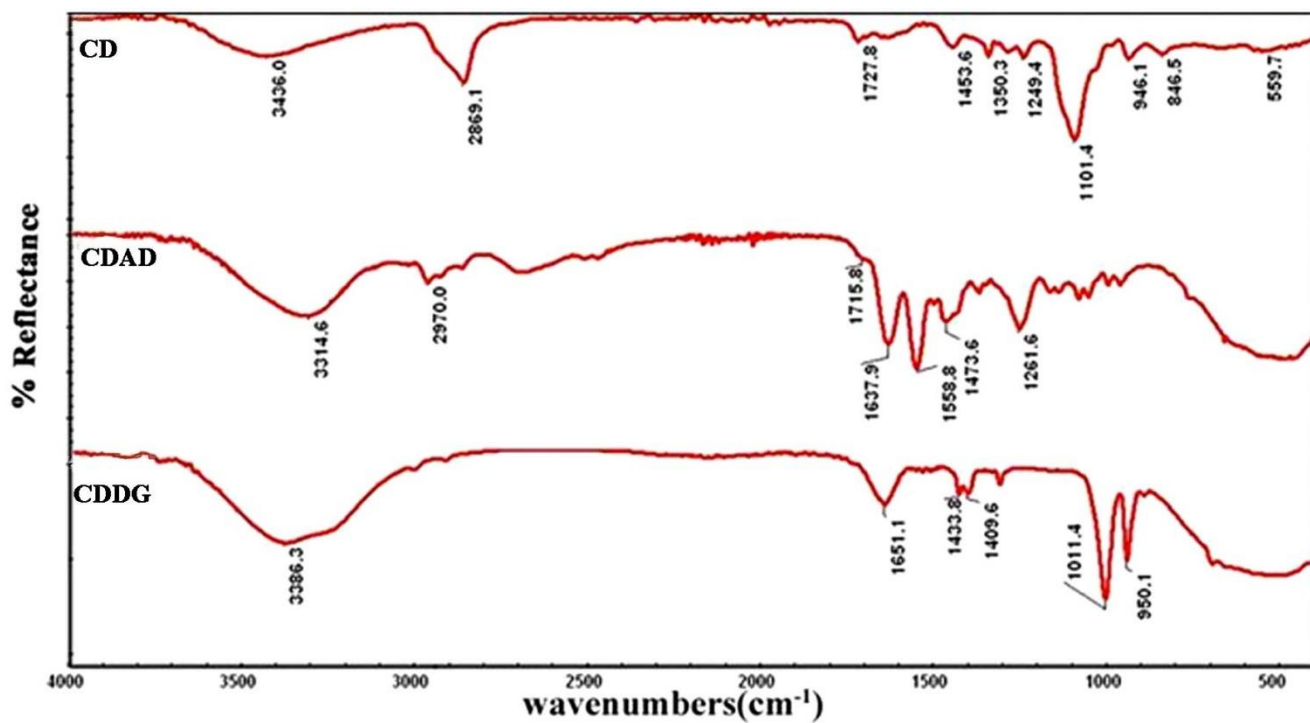
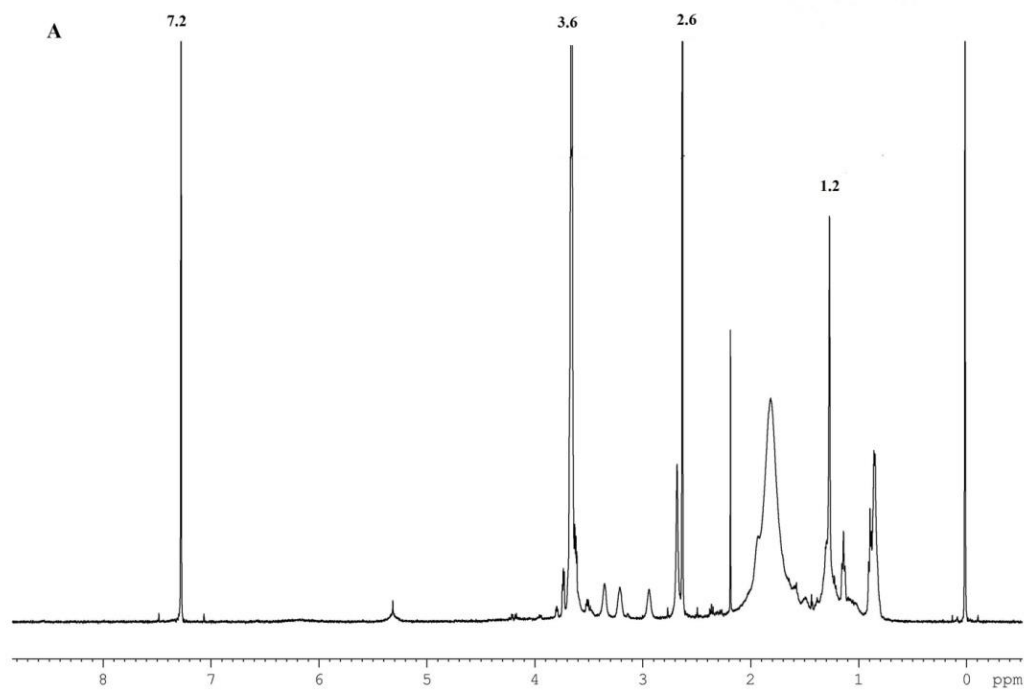


Figure S1. FTIR spectra of CD, CDAD and CDDG



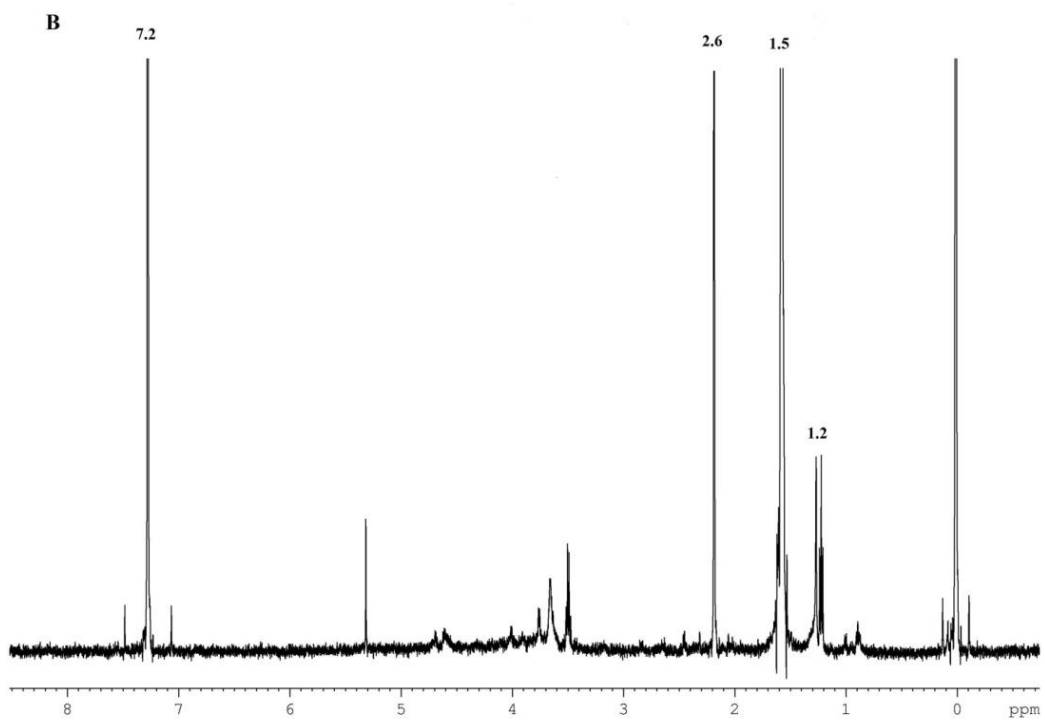
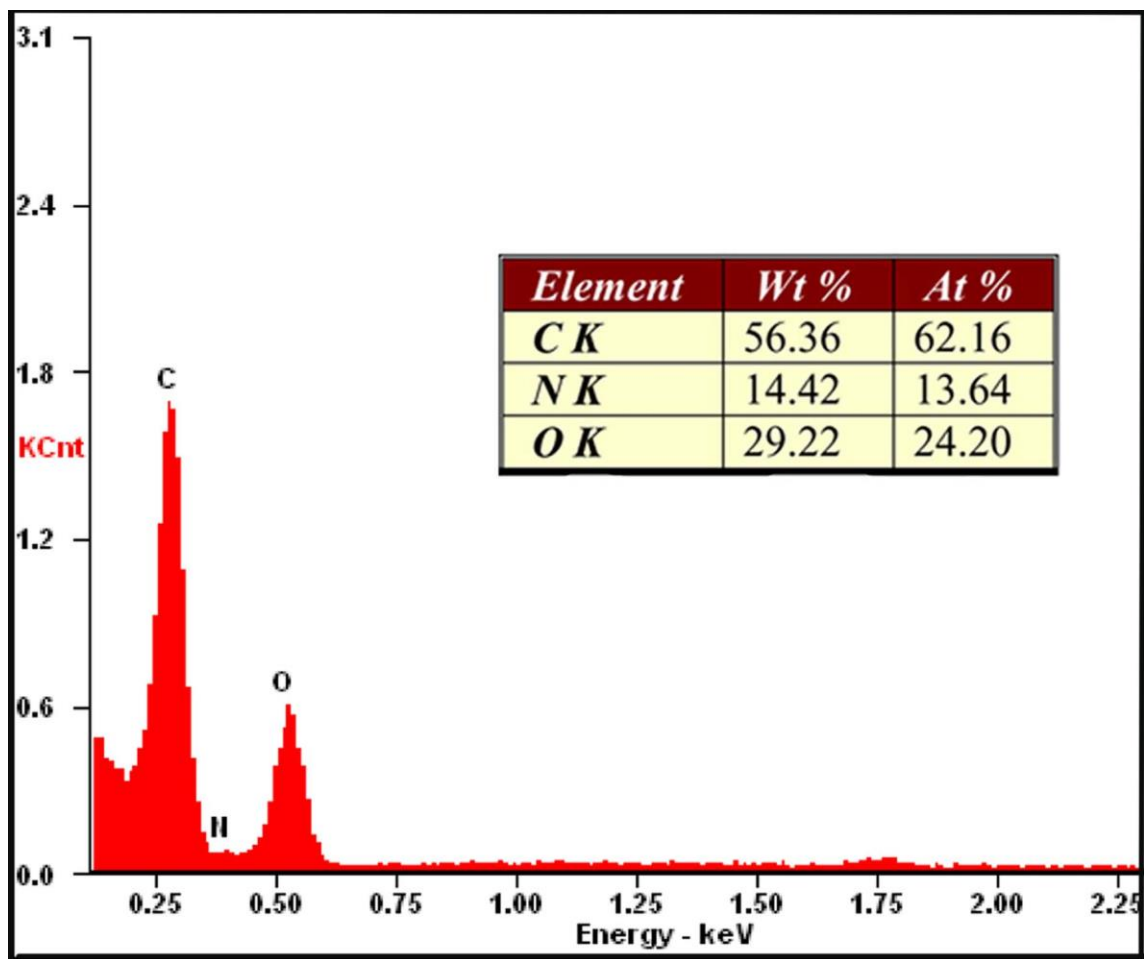


Figure S2. ^1H NMR Spectra o



f A) CDDG B) Digitonin

Figure S3. EDAX spectrum of CDs

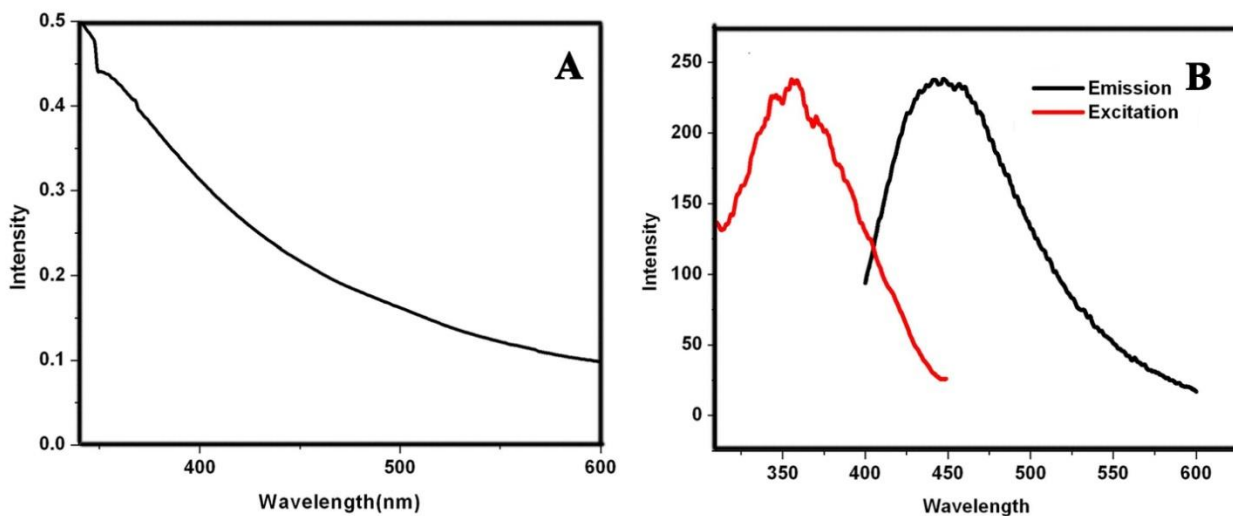


Figure S4. A) UV-Visible absorption spectrum of CDDG

B) Fluorescence excitation and emission spectra of CDDG

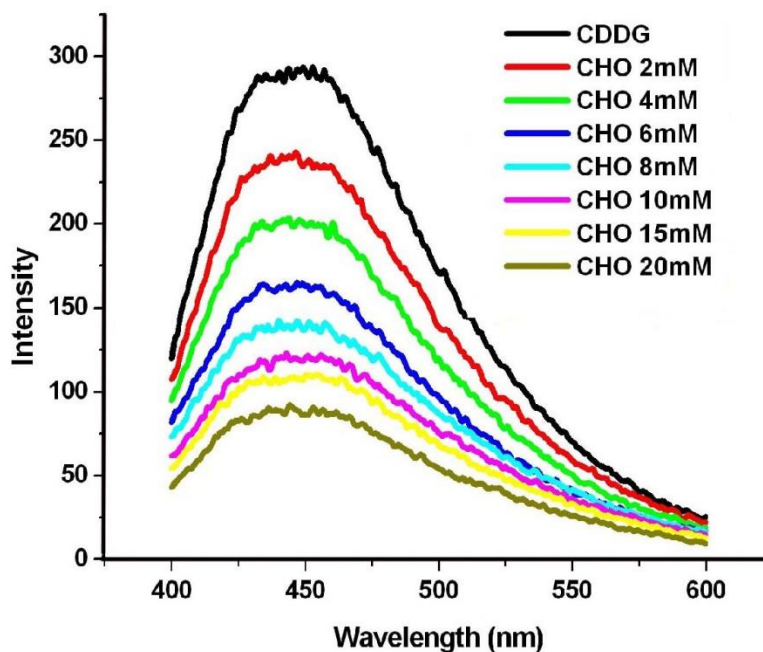


Figure S5. Fluorescence spectra of CDDG in presence of different concentrations of cholesterol

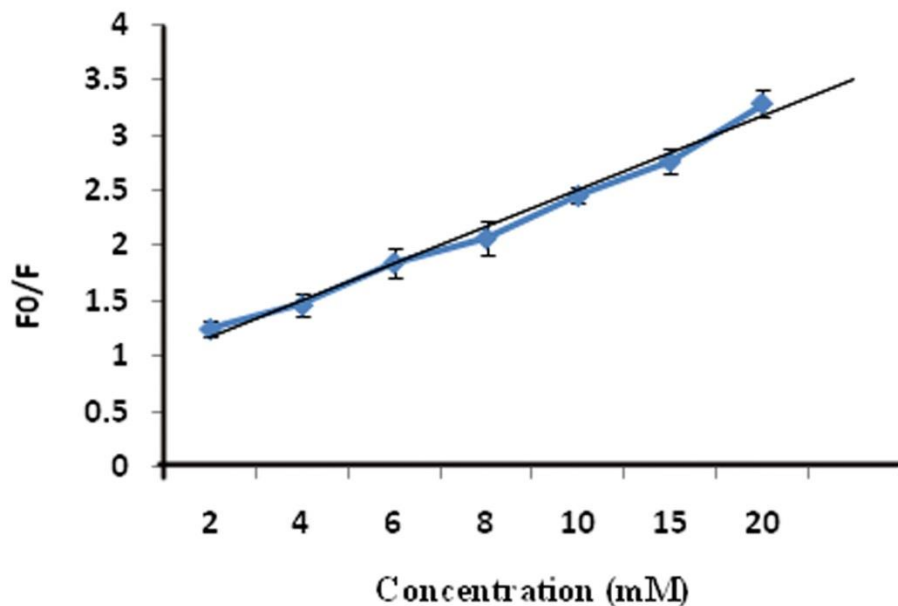


Figure S6. Linear relationship between the relative fluorescence intensities of CDDG and varied concentrations of cholesterol is depicted here. F₀ and F are the fluorescence intensities of CDDG in the absence and presence of cholesterol respectively

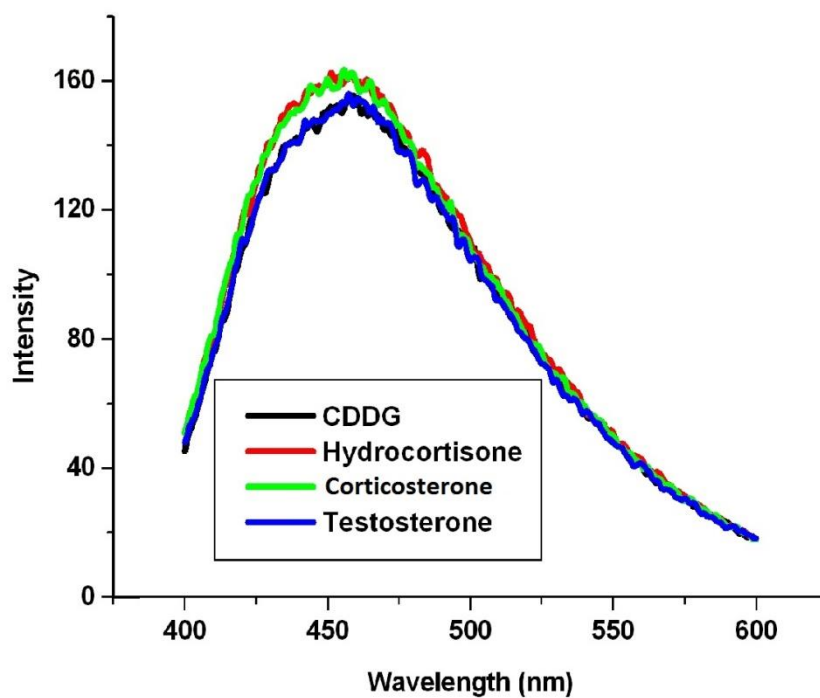


Figure S7. Fluorescence emission spectra of CDDG in presence of other steroids

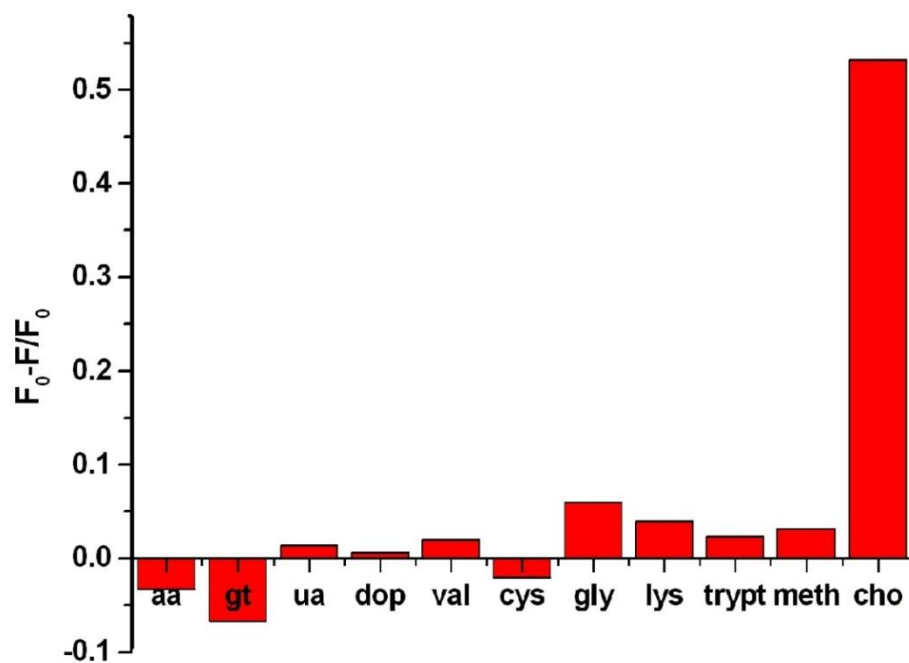


Figure S8. CDDG in presence of potential interfering biomolecules coexisting in serum. F_0 and F are the fluorescent intensities of CDDG before and after adding the corresponding molecules respectively.

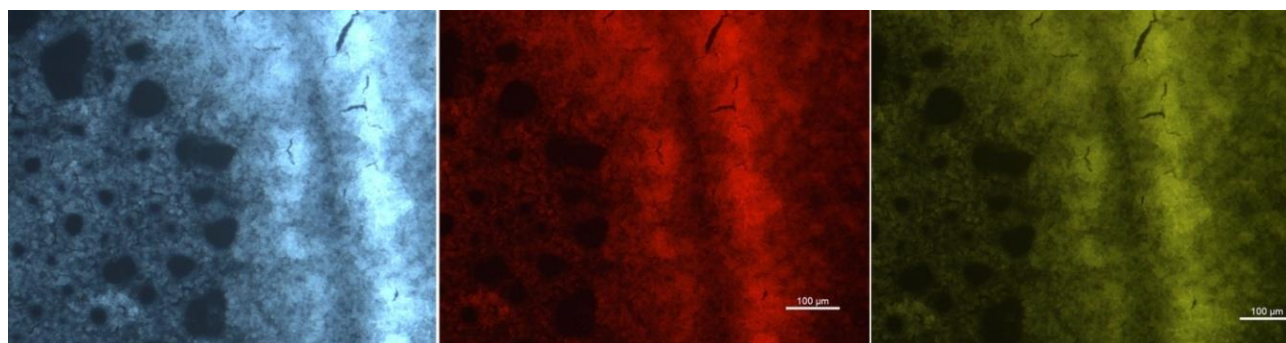


Figure S9. Fluorescence microscope images of cholesterol solution dried on a glass slide incubated with CDDG, at different excitations

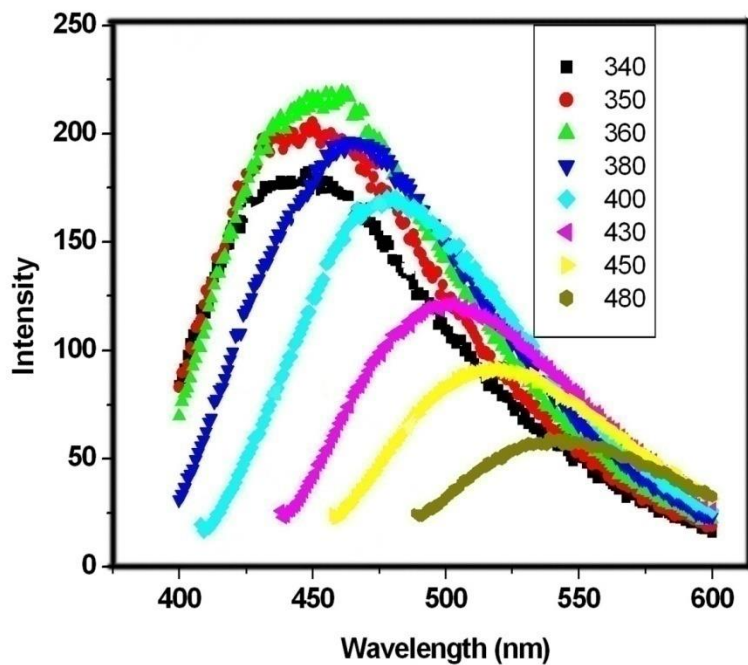


Figure S10. Excitation dependent emission of CDDG

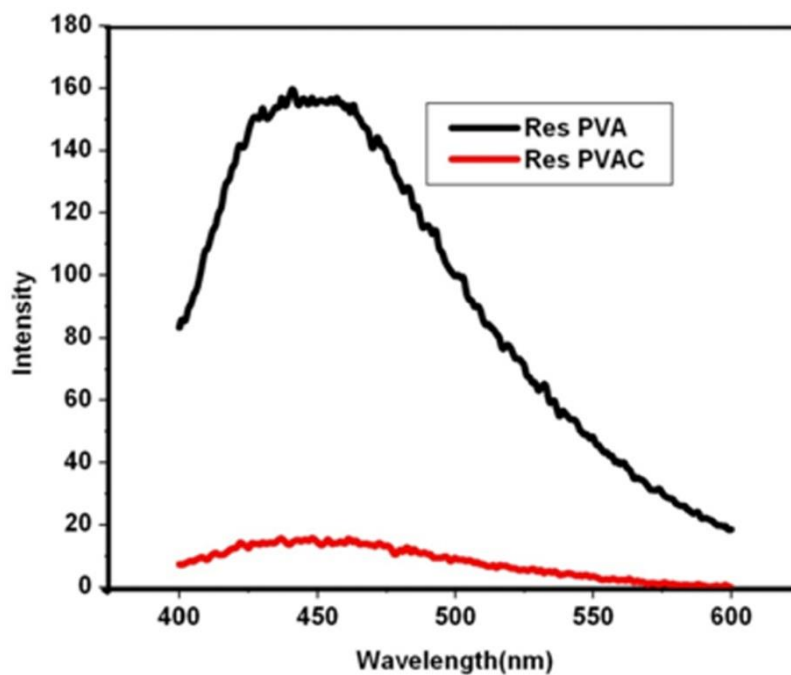


Figure S11. Fluorescence emission of CDDG solution after removing the incubated PVA film alone (Res PVA) and PVA film doped with cholesterol (Res PVAC)

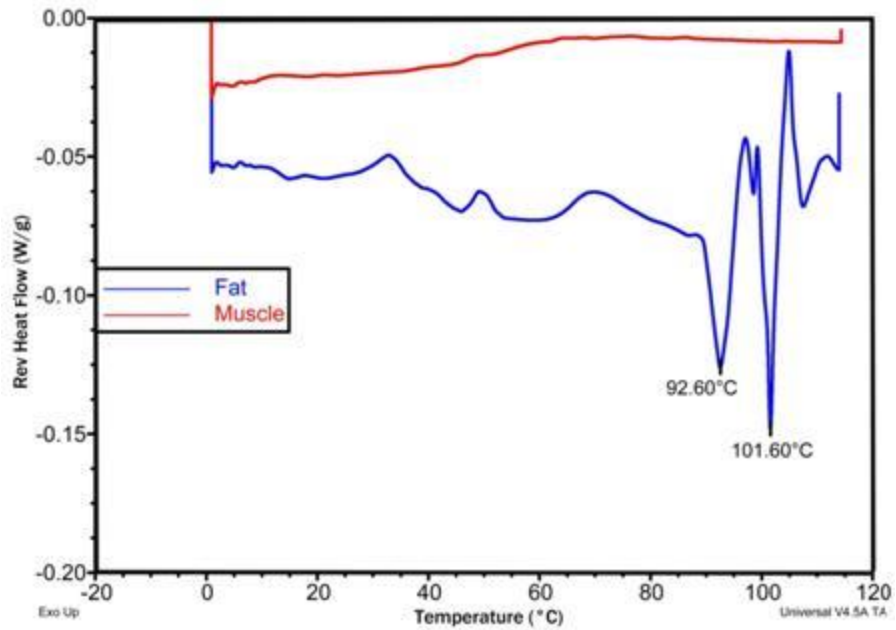


Figure S12. MDSC curve for the fat deposited tissue and deposit free tissue

Table S1. Zeta Potential values from DLS

S.No	Sample Code	Zeta Potential (mV)
1	CD	-20.90
2	CDAD	-6.78
3	CDDG	-4.99