

## Supplementary material

### Co-encapsulated astaxanthin and kaempferol nanoparticles: Fabrication, characterization, and their potential synergistic effects on treating non-alcoholic fatty liver disease

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#### Supplementary Figure

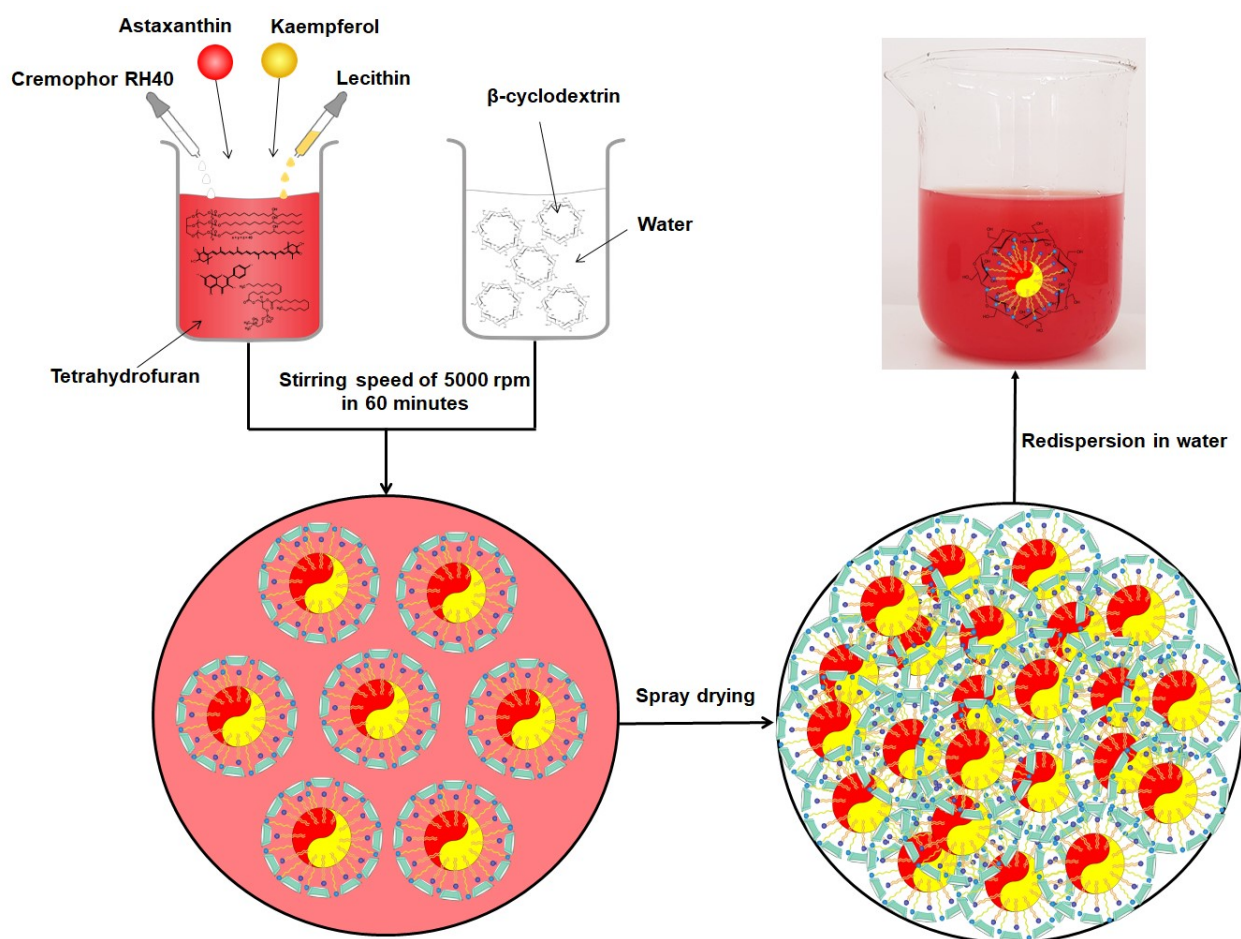


Fig. S1 Schematic illustration of astaxanthin/kaempferol nanoparticles formation

**Supplementary Table****Table S1.** Primers used for qPCR.

Gene	Primer (5'-3')	Sequence
miNOS	Forward	AGAAGGAAATGGCTGCAGAA
	Reverse	GCTCGGCTTCCAGTATTGAG
mTNF- $\alpha$	Forward	CCCAGATAGATGGGCTCAT
	Reverse	CAGGGACCTCTCTAATCA
mIL-6	Forward	TGAACTCCTTCTCCACAAGCG
	Reverse	GCTCTTCTGGGAAGTAGACAG
mGAPDH	Forward	CAACGAATTTGGCTACAGCAAC
	Reverse	ACTGTGAGGAGGGGAGATTCAG
h $\beta$ -actin	Forward	TGGCACCCAGCACAATGAA
	Reverse	CTAAGTCATAGCCGCCTAGAAGCA
hLXR $\alpha$	Forward	CGGGCTTCCACTACAATGTT
	Reverse	CTTCTCGATCATGCCAGTT
hCYP7A1	Forward	AACACCATTCCAGCGACTTTCT
	Reverse	GATTGCCTTCCAAGCTGACTTT
hFAS	Forward	AGCTGCCAGAGTCGGAGAACTTG
	Reverse	CAAGAACTGCACGGAGGTGTTGG
hSCD-1	Forward	TGGGTGGCTGCTTGTG
	Reverse	GCGTGGGCATGAAG
hCTP-1	Forward	TGAGACCAAACAAAGTGATGATGCAG
	Reverse	AGACGGTGGAAACAGAGGCTGAAG
hSREBP-1c	Forward	CGGAGCCATGGATTGCACTTT

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	Reverse	GATGCTCAGTGGCACTGACTCTTC
hInsig-2a	Forward	CGTTCTTGGTTACCATGTA
	Reverse	TGATGAGATTTTTCTGCGATAACTTT
hPPAR $\alpha$	Forward	ACGGAAAGCCCACTCTGCCCTCTC
	Reverse	CTTGTCCTCCGCAGATTCTACATTCG

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(m), indicates mouse genes (h) indicates human genes;