

## Supplementary Information

### *Enzymatic preparation of phytosterol esters with fatty acids from high-oleic sunflower seed oil using response surface methodology*

Xiaoping Wang, Bing Xiao, Guolong Yang, Jingnan Chen, Wei Liu\*

College of Food Science and Technology, Henan University of Technology, Lianhua  
Street 100, Zhengzhou 450001, Henan Province, P. R. China

**Table S1. Experimental design and results of the conversion of phytosterols  
affected by the reaction temperature, molar ratio of substrates, and enzyme  
loading.**

<b>Trial</b>	<b>X<sub>1</sub> Temperature (°C)</b>	<b>X<sub>2</sub> substrate molar ratio</b>	<b>X<sub>3</sub> Enzyme loading (%)</b>	<b>Conversion (%)</b>
1	40 (0)	1:3 (1)	8 (1)	94.4
2	50 (1)	1:2 (0)	8 (1)	95.1
3	40 (0)	1:2 (0)	6 (0)	94.0
4	40 (0)	1:3 (1)	4 (-1)	91.5
5	50 (1)	1:1 (-1)	6 (0)	90.6
6	30 (-1)	1:1 (-1)	6 (0)	72.6

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7	40 (0)	1:2 (0)	6 (0)	94.9
8	40 (0)	1:2 (0)	6 (0)	94.8
9	30 (-1)	1:3 (1)	6 (0)	92.9
10	40 (0)	1:1 (-1)	4 (-1)	76.4
11	30 (-1)	1:2 (0)	8 (1)	92.7
12	40 (0)	1:1 (-1)	8 (1)	84.9
13	50 (1)	1:3 (1)	6 (0)	96.5
14	40 (0)	1:2 (0)	6 (0)	94.0
15	40 (0)	1:2 (0)	6 (0)	94.6
16	50 (1)	1:2 (0)	4 (-1)	95.6
17	30 (-1)	1:2 (0)	4 (-1)	80.9

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