

# Supplementary Materials: Development and Optimization of Cinnamon Oil Nanoemulgel for Enhancement of Solubility and Evaluation of Antibacterial, Antifungal and Analgesic Effects against Oral Microbiota

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**Table S1.** ANOVA data for globule size of CO-NE formulations in various runs.

Source	p-value	Significance
<b>Model</b>	< 0.0001	significant
A-Cinnamon Oil percent	0.0006	--
B-S <sub>mix</sub> percent	< 0.0001	significant
C-HLB	< 0.0001	significant
AB	0.1566	--
AC	0.3663	--
BC	< 0.0001	significant
<b>Residual</b>	--	--
Lack of Fit	0.0173	significant

**Table S2.** ANOVA data for the stability index of the CO-NE formulations in various runs.

Source	p-value	--
<b>Model</b>	< 0.0001	significant
A-Cinnamon Oil percent	0.3510	--
B-S <sub>mix</sub> percent	< 0.0001	significant
C-HLB	< 0.0001	significant
<b>Residual</b>	--	--
Lack of Fit	0.0517	not significant

**Table S3.** ANOVA data for the stability index of the CO-NE formulations in various runs.

<b>Source</b>	<b>p-value</b>	--
<b>Model</b>	< 0.0001	significant
A-Cinnamon Oil percent	< 0.0001	significant
B-S <sub>mix</sub> percent	0.0513	--
C-HLB	0.0002	--
AB	0.4013	--
AC	0.1090	--
BC	0.2107	--
A <sup>2</sup>	0.0005	--
B <sup>2</sup>	0.0063	--
C <sup>2</sup>	0.8512	--
<b>Residual</b>	--	--
Lack of Fit	--	--

**Table S4.** Coeffecient Table indicated p-values for each of selected fator on each re.

	<b>Intercept</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>AB</b>	<b>AC</b>	<b>BC</b>	<b>A<sup>2</sup></b>	<b>B<sup>2</sup></b>	<b>C<sup>2</sup></b>
<b>Globule Size</b>	129.363	-3.78168	-12.8252	-32.6735	1.62239	1.0667	7.90462			
<b>p-values</b>		0.0006	< 0.0001	< 0.0001	0.1566	0.3663	< 0.0001			
<b>Stability Index</b>	80.3597	0.455694	3.48621	10.3469						
<b>p-values</b>		0.3510	< 0.0001	< 0.0001						
<b>Zone of Inhibition</b>	14.4553	6.16188	0.487956	1.19226	0.260898	0.554172	-0.383875	1.81754	-1.22267	-0.0738419
<b>p-values</b>		< 0.0001	0.0513	0.0002	0.4013	0.1090	0.2107	0.0005	0.0063	0.8512