xiii

TABLE OF CONTENTS

	Page	
ACKNOWLEDGEMENTS	iii	
ABSTRACT (ENGLISH)	vi	
ABSTRACT (THAI)	X	
TABLE OF CONTENTS	xiii	
LIST OF TABLES	xxv	
LIST OF FIGURES	xxviii	
ABBREVIATIONS	xxxix	
CHAPTER 1 GENERAL INTRODUCTION		
CHAPTER 2 LITERATURE REVIEW	4	
1. Skin morphology	4	
2. Traditional carrier systems	5	
2.1. Liposome	6	
2.2. Emulsion	6	
2.3. Polymeric nanoparticles	7	
3. Innovative carrier systems	8	
3.1. Lipid nanoparticles		
4. Technologies of production	18	
4.1. Microemulsion based technique	18	
4.2. High pressure homogenizer	19	

	4.3.	Ultra-so	onication	20
	4.4.	The sol	vent emulsification evaporation method	20
	4.5.	The sol	vent displacement method	21
	4.6.	The em	ulsification diffusion method	21
	4.7.	The pha	ase inversion based method	22
5.	Antic	oxidant		22
	5.1.	Lycope	ne	23
6.	Lipid	ls		31
	6.1.	Solid lig	pids	31
		6.1.1.	Orange wax	31
		6.1.2.	Cholesterol	33
		6.1.3.	Mangifera indica seeds butter	35
		6.1.4.	Beeswax	36
	6.2.	Liquid 1	ipids	37
		6.2.1.	Rice bran oil	37
		6.2.2.	Pomegranate seeds oil	39
	6.3.	Emulsit	fiers	41
		6.3.1.	Eumulgin TM SG	41
		6.3.2.	Tegocare TM 450	42
		6.3.3.	Inutec TM SP1	42
		6.3.4.	Plantacare TM 1200	44
		6.3.5.	Sucrose ester emulsifiers	45
		6.3.6.	Polysorbate 80	46

6.3.7. Dermofeel TM SL	47
CHAPTER 3 MATERIALS AND METHODS	48
1. Materials	48
1.1. Solid lipids	48
1.2. Liquid lipids	48
1.3. Active compound	48
1.4. Surfactants	48
1.5. Solvents	49
1.6. Antioxidant tests	49
1.7. Zeta potential measurement	50
1.8. Silanized solution	50
1.9. Solubility test	50
1.10. Cream base	51
2. Method	52
Part I Preformulation study of lycopene and carriers	52
1. Preliminary physicochemical properties of lycopene	52
1.1. Lycopene identification	52
1.1.1. UV-visible (UV/Vis) analysis	52
1.1.2. HPLC analysis	52
1.2. Solubility	52
1.3. Thermal analysis	53
1.4. Crystalline characterization	53 SI
1.5. Morphology	⁵³ e

	1.5.1.Light microscopy and polarized light microscopy	54
1.6.	. Biological action (antioxidant activities)	54
	1.6.1. ABTS assay	54
	1.6.2. DPPH assay	54
1.7.	. Stability of lycopene	55
	1.7.1. Crystalline characterization	55
2. Pre	eliminary physicochemical properties of carriers (solid	55
lipi	ids and liquid lipids)	
2.1	. Physicochemical properties of solid lipids	55
	2.1.1. Morphology	55
	2.1.2. Thermal analysis	55
	2.1.3. Crystalline characterization	56
2.2	2. Physicochemical properties of liquid lipids	56
	2.2.1. Thermal analysis	56
	2.2.2. Biological action (antioxidant activities)	56
<u>Part II</u> Op	otimization of formulations	56
1. Ef	ffect of surfactant	56
1.	1. Preparation of lipid nanoparticles	56
۱.: ۱.:	2. Effect of surfactant on contact angle	58
	1.2.1. Goniometric measurement	58
1.1	3. Effect of surfactant on the particle size	58
	1.3.1. Particle size analysis	59 SIT
ll rig ¹	4. Effect of surfactant on the physical stability of the	⁵⁹ e d

	NLC	
	1.4.1. Particle size analysis	59
	1.4.2. Zeta potentiometry	59
	1.5. Chemical stability of the lycopene	60
	1.5.1. UV/Vis spectrophotometry	60
2.	Effect of different solid lipids	60
	2.1. Preparation of lipid nanoparticles	60
	2.2. Particle size analysis	60
	2.2.1. Photon correlation spectrophotometry	60
	2.2.2. Low angle static light scattering	60
	2.3. Zeta potentiometry	61
3.	Effect of the amount of cycle and pressure	61
	3.1. Particle size analysis	61
4.	Effect of different liquid lipids	61
	4.1. Particle size analysis	62
5.	Comparison of NLC system versus NE system	62
	5.1. The effect of lipid nanoparticle formulations on the	62
	particle size	
	5.1.1. Particle size analysis	63
	5.2. Entrapment efficiency	63
	5.3. Biological action (antioxidant activities)	63
	5.4. Stability test	63
	5.4.1. Particle size analysis	63

xvii

5.4.2. Zeta potentiometry	63
6. Effect of surfactant on NLC stability	64
6.1. Steric effect	64
6.1.1. Particle size analysis	64
6.2. Electrostatic effect	64
6.2.1. Particle size analysis	64
Part III Preparation and physicochemical study of lycopene-loaded	64
NLC	
1. Development of skin friendly lycopene-loaded NLC	64
1.1. Morphology and re-crystallize of lipid matrix	64
1.2. Effect of lipid combination	65
1.2.1. Thermal analysis	65
1.3. Preparation and characterization of the investigated	65
formulations	
1.3.1. Preparation of lipid nanoparticle	65
1.3.1.1. Preparation of lipid nanoparticle	65
1.3.2. Particle size analysis	65
1.3.3. Electric conductivity measurements	65
1.4. Effect of lipid on the state of the internal phase	65
1.4.1. Thermal analysis	65
1.5. Effect of rice bran oil and cholesterol on the state of	f 65
the internal phase and	
1.5.1. Thermal analysis	65

xviii

	1.6. Effect of rice bran oil and cholesterol on particle size	66
	of the internal phase	
	1.6.1. Particle size analysis	66
	1.7. Effect of rice bran oil and cholesterol on zeta potential	66
	of the internal phase	
	1.7.1. Zeta potentiometry	66
	1.8. Stability	66
	1.8.1. Particle size analysis	66
	1.8.2. Zeta potentiometry	66
	1.8.3. Stability profile of lycopene	66
	1.9. Occlusion property	66
2.	The investigation on crystallization behavior of lycopene-	67
	loaded NLC	
	2.1. Thermal analysis	67
	2.2. Crystalline characterization	67
	2.2.1. WAXS	67
	2.2.2. Electron diffraction mode of TEM analysis	67
	2.3. The bright field cryo-TEM analysis	67
Part IV	Effect of lycopene concentration on lycopene-loaded	68
	NLC	
	Effect on the particle size and ZP	68
	1.1. Preparation of lipid nanoparticle	68
	1.1.1. Particle size analysis	69

1.1.2. Zeta potentiometry	69
2. Entrapment efficiency	69
3. The <i>in vitro</i> release study	69
3.1. Membrane free release	69
3.2. Release from membrane	70
4. Occlusive property	70
5. Biological action (antioxidant activities)	70
6. Stability test	70
6.1. Particle size analysis	70
6.2. Zeta potentiometry	70
6.3. Stability profile of lycopene	70
Part V Preparation and evaluation of topical dosage forms	71
1. Preparation of topical dosage form	71
2. Occlusion property	71
3. Stability test	71
3.1. Stability profile of lycopene	71
4. Antioxidant activities	71
5. Statistical analysis	71
CHAPTER 4 RESULTS AND DISCUSSION	72
Part I Preformulation study of lycopene and carriers	72
1. Preliminary physicochemical properties of lycopene	72
1.1. Lycopene identification	72
1.1.1. UV-visible (UV/Vis) analysis	- 72

1.1.2. HPLC analysis	73
1.2. Solubility	75
1.3. Thermal analysis	78
1.4. Crystalline characterization	79
1.5. Morphology	80
1.6. Biological action (antioxidant activities)	81
1.6.1. ABTS assay	81
1.6.2. DPPH assay	83
1.7. Stability of lycopene	84
2. Preliminary physicochemical properties of carriers (soilid	86
lipids and liquid lipids)	
2.1. Physicochemical properties of solid lipids	86
2.1.1. Orange wax	86
2.1.2. Mango butter	90
2.1.3. Beeswax	93
2.2. Physicochemical properties of liquid lipids	96
2.2.1. Thermal analysis	96
2.2.2. Antioxidant activities	97
2.2.2.1. ABTS assay	97
2.2.2.2. DPPH assay	99
Part II Optimization of formulations	101
1. Effect of surfactant	101
1.1. Effect of surfactant on contact angle	101

	1.2. Effect of surfactant on the particle size	103
	1.3. Effect of surfactant on the physical stability of the	105
	NLC	
	1.4. Chemical stability of the lycopene	108
2	. Effect of different solid lipids	110
3	. Effect of the amount of cycle and pressure	112
4	. Effect of different liquid lipids	115
5	. Comparison of NLC system versus NE system	119
	5.1. The effect of lipid nanoparticle formulations on the	119
	particle size	
	5.2. Entrapment efficiency	120
	5.3. Antioxidant activities	121
	5.3.1. ABTS assay	121
	5.3.2. DPPH assay	122
	5.4. Stability test	124
6	. Effect of surfactant on NLC stability	125
	6.1. Steric effect	125
	6.2. Electrostatic effect	127
<u>Part III</u>	Preparation and physicochemical study of lycopene-	130
	loaded NLC	
	. Development of skin friendly lycopene-loaded NLC	132
	1.1. Morphology and re-crystalline of lipid matrix	132
	1.2. Effect of lipid combination	136

xxii

	•	•
XX1	1	1

	1.3. Preparation and characterization of the investigated	139
	formulations	
	1.4. Effect of lipid on the state of the internal phase	143
	1.5. Effect of rice bran oil and cholesterol on the state of	144
	the internal phase	
	1.6. Effect of rice bran oil and cholesterol on particle	145
	size of the internal phase	
	1.7. Effect of rice bran oil and cholesterol on zeta	148
	potential of the internal phase	
	1.8. Stability	148
	1.9. Occlusive property	153
2.	The investigation on crystallization behavior of lycopene-	155
	loaded NLC	
	2.1. Thermal analysis	157
	2.2. Crystalline characterization	160
	2.3. Electron diffraction mode of TEM analysis	161
	2.4. The bright field cryo-TEM analysis	164
Part IV	Effect of lycopene concentration on lycopene-loaded NLC	166
~ ~ 1.	Effect on the particle size and ZP	166
Jans 12.	Entrapment efficiency	168
3.	The <i>in vitro</i> release study	169
	3.1. Membrane free release	169
	3.2. Release from membrane	170

4.	Occlusive property	172
5.	Biological action (antioxidant activities)	173
	5.1. ABTS assay	173
	5.2. DPPH assay	174
6.	Stability test	175
Part V	Preparation and evaluation of topical dosage forms	179
A 1 .	Occlusive property	182
2.	Stability test	184
3.	Antioxidant activities	186
	3.1. ABTS assay	186
	3.2. DPPH assay	186
CHAPTER 5 CO	ONCLUSION	188
REFERENCES		192
APPENDICES		223
APPENDIX A		224
APPENDIX B		230
APPENDIX C		232
CURRICULUM	VITAE	233
LIST OF PUBLI		234

xxiv

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LIST OF TABLES

Table		Page
2-1	Overview of NLC-based cosmetic products introduced to the market	13
	since October 2005 onward.	
2-2	Lycopene levels in human tissues.	24
2-3	Comparison of antioxidant activities of carotenoids: singlet oxygen	29
	quenching.	
2-4	Primary chemical composition of orange wax by percent.	32
2-5	Skin lipid composition compared to orange wax chemistry.	32
2-6	The fatty acid composition and their percentage of rice bran oil.	39
2-7	Summary of composition and HLB of sucrose ester emulsifiers.	45
3-1	The properties of selected surfactants.	57
3-2	The percentage of compositions used in the NLC and NE	62
	formulations.	
4-1-1	The resulted suitable HPLC condition.	75
4-1-2	Solubility of lycopene in melted solid lipids at room temperature after	76
	heating at 80°C.	
4-1-3	Solubility of lycopene in organic solvents at room temperature and in	76
	liquid lipids and surfactants at room temperature after heating at	
	80°C.	

- 4-1-4 Thermal events observed in DSC analysis of orange wax shown in 89 Figure 4-1-17.
- 4-1-5 Thermal events observed in DSC analysis of beeswax shown in 95Figure 4-1-26.
- 4-1-6 Summarization of TEAC values (μ M/mg) of different liquid lipids 98 and liquid lipids contain the equal specific amount of lycopene.
- 4-1-7 Summarization of IC_{50} values by ABTS assay of different liquid 98 lipids and liquid lipids contain the equal specific amount of lycopene.
- 4-1-8 Summarization of IC_{50} values by DPPH assay of different liquid 100 lipids and liquid lipids contain the equal specific amount of lycopene.
- 4-2-1 TEAC values of NLC and NE samples by ABTS radical method. 122
- 4-2-2 IC₅₀ values of NLC and NE samples by DPPH radical method. 123

126

- 4-2-3 Physical properties of PoloxamerTM surfactants.
- 4-2-4 Stability on particle size (PCS and LD (0.99) diameters) and PdI of 127 formulations using PoloxamerTM 188 and PoloxamerTM 407.
- 4-2-5 Stability on particle size (PCS and LD (0.99) diameters) and PdI of 129 formulations using DermofeelTM SL and EumulginTM SG.
- 4-3-1 Composition of ingredients used in the lipid nanoparticle bases. 140
- 4-3-2 Composition of ingredients used in lycopene loaded lipid 142 nanoparticle formulations.
- 4-3-3 Conductivity values of lycopene loaded lipid nanoparticle 143 formulations.

•	•
XXV1	1

4-3-4	The DSC parameters of orange wax, NE, SLN, and NLC	159
	formulations.	
4-4-1	PCS diameters, PdI and ZP values of NLC samples on freshly	168
	prepared (day 0) stored at room temperature.	
4-4-2	TEAC values of NLC samples by ABTS radical method.	174
4-4-3	IC ₅₀ values of NLC samples by DPPH radical method.	175
4-4-4	PCS diameters of NLC samples over a period of 120 days stored at	176
	4°C, 30°C and 40°C.	
4-4-5	PdI values of NLC samples over a period of 120 days stored at 4°C,	176
	30°C and 40°C.	
4-4-6	ZP values of NLC samples over a period of 120 days stored at 4°C,	177
	30°C and 40°C.	
4-5-1	The amount of ingredients (%w/w) in 7 semisolid cream formulations	180
	containing NLC dispersion.	
4-5-2	The texture of 7 semisolid cream formulations containing NLC.	181

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xxviii

LIST OF FIGURES

Figure

Page

25

Universi

2-1	The three layers of the skin (http://www.enchantedlearning.com/	4
	subjects/anatomy/skin/, available online 12/12/2012).	
2-2	The layers of the epidermis (modified after http://dermatology.	5
	about.com/od/anatomy/ss/epidermis.htm, available online 12/12/	

2012).

2-3 The controlled occlusion effect of lipid nanoparticles is a function of the particle size (left: at identical lipid concentration, one big particle gives many small particles) and a function of increasing particle number (right: increase of lipid concentration, at a given particle size).

2-4	Development of traditional carriers to lipid nanoparticles.	10
2-5	Situations on damaged skin.	11
2-6	Propose mechanisms of lipid nanoparticles (SLN and NLC) in	11

repairing the damaged skin.

2-7 All-trans lycopene.

- 2-8 Structures of most common lycopene isomers.
- 2-9 The chemical structure of cholesterol.

2-10	The structure of the rice kernel. The bran fraction, which includes	38
	the germ or embryo in most commercial milling operations,	
	represents only about 8% of paddy weight but contains about three-	
	fourths of the total oil (http://www.ricebranoil.info/index.html	
	(available online 15/10/2011).	
2-11	The chemical structure of punicic acid.	41
2-12	The chemical structure of hydrophobized inulin.	44
4-1-1	UV/Vis spectrum of lycopene standard solution.	73
4-1-2	Calibration curve of lycopene by UV/Vis analysis.	73
4-1-3	Calibration curve of lycopene by HPLC analysis.	74
4-1-4	The HPLC chromatogram of standard lycopene solution at 1 μ g/mL.	74
4-1-5	DSC heating (1) and cooling (2) curves of lycopene compound.	79
4-1-6	WAXS pattern of lycopene powder.	79
4-1-7	Physical appearance of lycopene powder.	80
4-1-8	LM picture (A) and PLM picture (B) of lycopene powder suspended	80
	in rice bran oil with magnification of 100x10 folds.	
4-1-9	Formation of ABTS ⁺⁺ (Moon and Shibamoto, 2009) with some	81
	modifications.	
4-1-10	%Inhibition of standard Trolox TM solution which varies the	82
	concentrations and reaction time.	
4-1-11	Standard calibration curve of Trolox TM solution at concentration of	83
	2-39 μ M at reaction time of 3 min.	

- 4-1-12 Mechanism of action by antioxidants on DPPH radical in DPPH 84 assay (Moon and Shibamoto, 2009) with some modifications.
- 4-1-13 Outer appearance of original lycopene powder (A) and degraded 85 lycopene powder (B) under exposed to light and oxygen after 7 days at room temperature.
- 4-1-14 WAXS pattern of degraded lycopene powder.
 4-1-15 Physical appearance of orange wax.
 4-1-16 LM picture (A) and PLM picture (B) of orange wax with 87

magnification of 100x10 folds.

- 4-1-17 DSC 1st heating (1), 1st cooling (2), 2nd heating (3) and 2nd cooling 88
 (4) curves of orange wax.
- 4-1-18WAXS pattern of orange wax.89
- 4-1-19 Physical appearance of mango butter.
- 4-1-20 LM picture (A) and PLM picture (B) of mango butter with 90 magnification of 100x10 folds.
- 4-1-21 LM picture (A) and PLM picture (B) of the mixture of mango butter 91 and lycopene with magnification of 100x10 folds.
- 4-1-22 DSC 1st heating (1), 1st cooling (2), 2nd heating (3) and 2nd cooling 92
 (4) curves for mango butter (I-VI are existing polymorph forms).
- 4-1-23 WAXS pattern of mango butter.
- 4-1-24 LM picture (A) and PLM picture (B) of the mixture of beeswax 93 with magnification of 100x10 folds.
- 93

90

- 4-1-25 LM picture (A) and PLM picture (B) of the mixture of beeswax and 94 lycopene with magnification of 100x10 folds.
- 4-1-26 DSC 1st heating (1), 1st cooling (2), 2nd heating (3) and 2nd cooling 95
 (4) curves of beeswax.

96

- 4-1-27 WAXS pattern of beeswax.
- 4-1-28 DSC thermograms of the mixtures of orange wax (90%) and 97 different liquid lipids (10%); lycosol (A), broccoli (B), lorbeer tree (C), sesame (D), safflower (E), rice bran (F), pomegranate seeds (G), cranberry (H).
- 4-2-1 Contact angle between surfactant solutions and lipid surface of 102 orange wax and lycopene mixture.
- 4-2-2 Chemical structures of sucrose laurate (A), sucrose palmitate (B), 103 sucrose stearate (C), and lauryl glucoside (D).
- 4-2-3 Particle size of lycopene loaded NLC stabilized by different 104 surfactants.
- 4-2-4 Effect of storage time on ZP of lycopene-loaded NLC stabilized by 106 C-1216 (A) and PlantacareTM 1200 (B).
- 4-2-5 Effect of storage time on particle size of lycopene loaded NLC 107 stabilized by C-1216 (A) and PlantacareTM 1200 (B).
- 4-2-6 Effect of storage time on PdI values of lycopene loaded NLC 107 stabilized by C-1216 (A) and PlantacareTM 1200 (B).

- 4-2-7 Stability profiles of lycopene concentration (●) and log concentration 109
 (○) in solution (A), C-1216 (B) and PlantacareTM 1200 (C) NLC dispersions.
- 4-2-8 Average PCS diameters and PdI values of formulations using three 110 different solid lipid types (orange wax, mango butter and beeswax) during the period of 14 days.
- 4-2-9 LD (0.50), LD (0.95) and LD (0.99) diameters of formulations using 111 three different solid lipid types (orange wax, mango butter and beeswax) during the period of 14 days.
 - 4-2-10 ZP values of formulations using three different solid lipid types 111 (orange wax, mango butter and beeswax) using four different surfactants during the period of 14 days.
 - 4-2-11 Average PCS diameters and PdI values of formulations after 1, 2, 3, 4 113 and 5 cycles at 500 bar and 800 bar.
 - 4-2-12 LD (0.50), LD (0.95) and LD (0.99) diameters of formulations after 113
 1, 2, 3, 4 and 5 cycles at 500 bar and 800 bar.
 - 4-2-13 Average PCS diameters and PdI values of formulations after 1, 2, 3, 4 114 and 5 cycles at 500 bar and 800 bar at during the period of 14 days.
 - 4-2-14 LD (0.50), LD (0.95) and LD (0.99) diameters of formulations after 1151, 2, 3, 4 and 5 cycles at 500 bar during the period of 14 days.
 - 4-2-15 LD (0.50), LD (0.95) and LD (0.99) diameters of formulations after 1151, 2, 3, 4 and 5 cycles at 800 bar during the period of 14 days.

- 4-2-16 Average PCS diameters and PdI values of formulations using 116 different liquid lipids; rice bran oil, sesame oil, and pomegranate seeds oil, stabilized with surfactant combination between TegocareTM
 450 and TweenTM 80 at ratio 1:1, respectively.
- 4-2-17 Average PCS diameters and PdI values of formulations using 117 different liquid lipids; rice bran oil, sesame oil, and pomegranate seeds oil, stabilized with surfactant combination between TegocareTM 450 and PlantacareTM 1200 at ratio 1:1, respectively.
- 4-2-18 Average PCS diameters and PdI values of formulations using 118 different liquid lipids; rice bran oil, sesame oil, and pomegranate seeds oil, stabilized with surfactant combination between TegocareTM
 450 and InutecTM SP1 at ratio 1:1, respectively.
- 4-2-19 LD (0.50), LD (0.95) and LD (0.99) diameters of formulations using 119 different liquid lipids; rice bran oil, sesame oil, and pomegranate seeds oil, stabilized with surfactant combination between TegocareTM 450 and InutecTM SP1 at ratio 1:1, respectively.
- 4-2-20 Average PCS diameters and PdI values of NLC and NE formulations 120 with lycopene and without lycopene.
- 4-2-21 Correlation of antioxidant activities of samples from DPPH (IC₅₀) 123 and ABTS (TEAC) assay.
- 4-2-22 The linear relationship of logarithmic values of IC_{50} and TEAC. 123

- 4-2-23 The PCS diameters and PdI values of NLC free, NLC load, NE free, 124 and NE load dispersions stored at room temperature at a period of 30 days.
- 4-2-24 ZP values of NLC free, NLC load, NE free, and NE load dispersions 125 measured at day 0.
- 4-2-25 The chemical structure of PoloxamerTM surfactant. 126
- 4-2-26 Average PCS diameters and the LD (0.50), LD (0.95) and LD (0.99) 126 diameters of formulations using PoloxamerTM 188 and PoloxamerTM 407.
- 4-2-27 The chemical structures of sodium stearoyl lactylate (DermofeelTM 128 SL) (A) and sodium stearoyl glutamate (EumulginTM SG) (B).
- 4-2-28 Average PCS diameters and the LD (0.50), LD (0.95) and LD (0.99) 128 diameters of formulations using DermofeelTM SL and EumulginTM SG.
- 4-3-1 LM picture (A) and PLM picture (B) of mixture of orange wax 99.9 133%w/w and lycopene 0.1 %w/w with magnification of 100x10 folds.
- 4-3-2 LM picture (A) and PLM (B) of mixture of orange wax 90 %w/w and 134 rice bran oil 10 %w/w with magnification of 100x10 folds.
- 4-3-3 LM picture (A) and PLM picture (B) of mixture of orange wax 89.91 135 %w/w, rice bran oil 9.99 %w/w, and lycopene 0.1 %w/w with magnification of 100x10 folds.

- 4-3-4 LM picture (A) and PLM picture (B) of mixture of orange wax 72 135
 %w/w, cholesterol 18 %w/w, rice bran oil 10 %w/w with magnification of 100x10 folds.
- 4-3-5 LM picture (A) and PLM picture (B) of mixture of orange wax 71.93 136
 %w/w, cholesterol 17.98 %w/w, rice bran oil 9.99 %w/w, and
 lycopene 0.1 %w/w with magnification of 100x10 folds.
- 4-3-6 The physical appearance of the melted orange wax (A) and orange 137 wax rice bran oil mixtures containing oil of 10% (B), 20% (C), 30% (D), 40% (E) and 50% (F).
 - 4-3-7 DSC thermograms of the melted orange wax (A) and orange wax 138 rice oil mixtures containing 10% (B), 20% (C), 30% (D), 40% (E) and 50% oil (F).
 - 4-3-8 Physical appearance of the melted orange wax/cholesterol mixtures 139 of 4:1 (A), 3:1 (B), and 7:3 (C).
 - 4-3-9 DSC fusion curves for the mixtures of orange wax and cholesterol at 139 ratios of 4:1 (A) and 3:1 (B), orange wax (C) and cholesterol (D).
 - 4-3-10 Outer appearance of Formula 1 (A), Formula 2 (B) and Formula 3 141 (C).
 - 4-3-11 The PCS diameters and PdI values of Formula 1 (A), Formula 2 (B) 141 and Formula 3 (C).
 - 4-3-12 Outer appearance of Formula 1 (A), Formula 2 (B), and Formula 3 141(C) after 1 day's storage at room temperature.

- 4-3-13 DSC thermograms of Formula 4 (A), Formula 5 (B), Formula 6 (C) 144 and Formula 7 (D).
- 4-3-14 The particle size and size distribution of Formula 4 (A), Formula 5 147(B), Formula 6 (C) and Formula 7 (D).
- 4-3-15 The particle size and size distribution of the three batches of Formula 1474 (A), Formula 5 (B), Formula 6 (C) and Formula 7 (D).
- 4-3-16 Zeta potential of Formula 4 (A), Formula 5 (B), Formula 6 (C) and 148 Formula 7 (D).
- 4-3-17 Particle size and size distribution of Formula 4 (A), Formula 5 (B), 149Formula 6 (C) and Formula 7 (D) during stored at 25°C for 45 days.
- 4-3-18 Particle size and size distribution of Formula 6 stored at 4°C (A), 150
 25°C (B), and 40°C (C) and Formula 7 stored at 4°C (D), 25°C (E), and 40°C (F).
- 4-3-19 Zeta potential of Formula 6 stored at 4°C (A), 25°C (B), and 40°C 151
 (C) and Formula 7 stored at 4°C (D), 25°C (E), and 40°C (F).
- 4-3-20 Effect of temperature on lycopene stability of Formula 6 (A) and 153 Formula 7 (B).
- 4-3-21 The occlusive properties of formula 4, 5, 6, and 7 observed at 6, 24, 155 and 48 h.

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- 4-3-22 DSC thermograms of orange wax (A), lycopene (B), melted mixture 158 of orange wax and lycopene (C), melted mixture of orange wax and rice bran oil (D), melted mixture of orange wax, rice bran oil, and lycopene (E), lycopene loaded NE (F), lycopene loaded SLN (G), and lycopene loaded NLC (H).
- 4-3-23 WAXS patterns of orange wax (A), lycopene (B), melted mixture of 161 orange wax and lycopene (C), melted mixture of orange wax and rice bran oil (D), melted mixture of orange wax, rice bran oil, and lycopene (E), lycopene loaded NE (F), lycopene loaded SLN (G), and lycopene loaded NLC (H).

4-3-24	ED pattern of NE.	163
4-3-25	ED pattern of SLN.	163
4-3-26	ED pattern of NLC.	164
4-3-27	The bright field cryo-TEM images of lycopene loaded NLC.	165
4-4-1	The outer appearance of the four NLCs obtained.	167
4-4-2	Cumulative amount of lycopene (μg) released from NLC over a	170
	period of 24 h independent of using membrane.	
4-4-3	Cumulative amount of lycopene (μg) released from NLC over a	171
	period of 24 h using dialysis membrane.	
4-4-4	Occlusion factors of NLCs incorporated 0-0.05 %w/w of lycopene	173
	observed at 6, 24 and 48 h.	
4-4-5	Correlation of antioxidant activities of NLC samples from DPPH	175
	(IC ₅₀) and ABTS (TEAC) assay.	

- 4-4-6 Stability profiles of lycopene concentration in NLC dispersions 178 loaded with lycopene 0.005%w/w (A), 0.025% w/w (B) and 0.050% w/w (C).
- 4-5-1 The physical appearance of 7 semisolid cream formulations 179 containing NLC of which the composition of ingredients is detailed in Table 4-5-1.
- 4-5-2 Occlusion factors of base creams and NLC creams of formulation 1 183
 (A), formulation 2 (B), formulation 3 (C), formulation 4 (D), formulation 5 (E), formulation 6 (F) and formulation 7 (G) observed at 6, 24 and 48 h.
- 4-5-3 Stability profiles of lycopene concentration in NLC cream 185 formulation 1 (A), formulation 2 (B), formulation 3 (C), formulation 4 (D), formulation 5 (E), formulation 6 (F) and formulation 7 (G) stored at room temperature.
- 4-5-4 TEAC values of base creams and NLC creams of formulation 1-7. 186
- 4-5-5 IC₅₀ values of base creams and NLC creams of formulation 1-7. 187
- 4-5-6 Correlation of antioxidant activities of base creams and NLC creams 187 from DPPH (IC₅₀) and ABTS (TEAC) assay.

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xxxix

ABBREVIATIONS

ABBREVIATIONS			
ABTS	2,2'-Azinobis (3-ethylbenzothiazoline-6 sulfonic acid)		
ACN	Acetonitrile		
AUC	Area under the curve		
bp	Boiling point		
cal	Calorie(s)		
CAS	Chemical abstract service		
CEVS	Controlled environment vitrification system		
CHD	Coronary heart disease		
CI%	Percentage of crystallinity index		
СМС	Critical micelle concentration		
cm ²	square centimeter(s)		
cm ³	cubic centimeter(s)		
cryo-TEM	Cryogenic transmission electron microscopy		
CTFA	Cosmetic, toiletry, and fragrance association		
Da	Dalton		
DI water	Deionized water		
DMSO	Dimethyl sulfoxide		
DPPH	2,2-Diphenyl-1-picryhydrazyl		
DSC	Differential scanning calorimetry		
EDTIG	Electron diffraction		
EE	Entrapment efficiency		

e.g.	exemplit gratia, " for example"
EM	Electron microscopy
EO	Ethylene oxide
et al	et alii, "and others"
EtOH	Ethanol
FDA	Food and drug administration
g	Gram(s)
GRAS	Generally recognized as safe by the food and drug
	administration of the USA
НС	Hydrocarbon
HCl	Hydrochloric acid
HDL	High density lipoprotein
HLB	Hydrophilic-lipophilic balance
HPLC	High performance liquid chromatography
IC ₅₀	Inhibition concentration at 50%
i.e.	<i>id est</i> , "that is"
INCI	International Nomenclature of Cosmetic Ingredients
INN	International nonproprietary name
IRI	Imaginary refractive index
JŜIK	Joule(s)
kg	Kilogram(s)
ight	Liter(s) Chiang Mai University
LD	Laser diffractometry

LD ₅₀	A dose lethal to 50% of the specified animals or				
	microorganisms				
LDA	Laser doppler anemometry				
LDL	Low density lipoprotein				
LM	Light microscopy				
LOD	Lower of detection limit				
LOQ	Lower of quantitative				
М	Molar				
max	Maximum				
МеОН	Methanol				
mg	Milligram(s)				
min	Minute(s) or minimum				
mL	milliliter(s)				
mM	millimolar				
mol	mole(s)				
mp	Melting point				
MSDS	Material safety data sheet				
MW	Molecular weight				
NDGA	Nordihydroguaiaretic acid				
NE	Nanoemulsion				
NLC	Nanostructured lipid carrier				
NMF	Natural moisturizing factor				
^{nm} r o	nanometer(s)				
o/w	oil-in-water				

	PBS	Phosphate buffer saline
	PCS	Photon correlation spectroscopy
	PdI	Polydispersity index
	PEG	Polyethylene glycol
	PG	Propylene glycol
	рН	The negative logarithm of the hydrogen ion concentration
	PIDS	Polarization intensity differential scattering
	pK _a	The negative logarithm of the dissociation constant
	PLM	Polarized light microscopy
52	RI	Refractive index
	ROS	Reactive oxygen species
	rpm	Revolutions per minute
	S	Second(s)
	SAXS	Small angle X-ray scattering
	SC	Stratum corneum
	SEM	Scanning electron microscopy
	SLN	Solid lipid nanoparticle
	SPF	Sun protection factor
	TEAC	Trolox equivalent antioxidant capacity
ลิสสา	TEM	Transmission electron microscopy
	TEWL	Transepidermal water loss
Copyr	THF	Tetrahydrofuran
	UV	Ultraviolet
	UV/Vis	Ultraviolet/visible

xlii

xliii

VLDL	Very low density lipoprotein
WAXS	Wide-angle X-ray scattering
w/o	water-in-oil
w/v	weight in volume
w/w	weight in weight
XRD	X-ray diffractometry
z-ave	Average/mean particle size
ZP	Zeta potential
°C	Degree celsius
μΙ	Microliter(s)
μΜ	Micromolar
μg	Microgram(s)
μm	Micrometer(s)

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