

INTRODUCTION .....	XIX
STUDY GOAL AND OBJECTIVE .....	XIX
REASON FOR DOING THE STUDY.....	XX
CONTRIBUTION OF THE STUDY.....	XXI
SCOPE AND FORMAT .....	XXI
METHODOLOGIES.....	XXII
INFORMATION SOURCES.....	XXII
RELATED BCC PUBLICATIONS .....	XXII
BCC ON-LINE SERVICES.....	XXIII
SUMMARY.....	XXIV
SUMMARY TABLE THE GLOBAL MARKET FOR VITAMINS BY TYPE OF VITAMIN, THROUGH 2005 (\$ MILLIONS).....	XXV
SUMMARY FIGURE A THE GLOBAL MARKET FOR VITAMINS, BY VITAMIN CATEGORY, 1995-2005.....	XXVI
SUMMARY FIGURE B STRUCTURE OF VITAMIN USE BY INDUSTRY, 2005 (%).....	XXVI
OVERVIEW .....	1
HISTORIC DEVELOPMENT AND INDUSTRY DEFINITION.....	1
THE VITAMIN MARKET AS PART OF THE FOOD AND FEED INGREDIENT MARKET.....	2
TABLE 1 GLOBAL MARKET VALUE OF VITAMINS BY APPLICATION SEGMENT, 1995 AND 1999 (\$ MILLIONS).....	3
TRENDS IN THE GLOBAL FEED INGREDIENT AND PET FOOD MARKETS .....	3
TABLE 2 TYPICAL EXAMPLES OF PRICE REDUCTIONS FOR IMPORTANT FEED INGREDIENTS IN THE EU, THROUGH 1999 (\$/KG).....	4
TABLE 3 STRUCTURE OF THE GLOBAL FEED ADDITIVE MARKET, 1995 AND 1999 (\$ MILLIONS).....	4
FIGURE 1 STRUCTURE AND DEVELOPMENT OF THE GLOBAL FEED ADDITIVE MARKET, 1995 AND 1999.....	5
TRENDS IN THE GLOBAL FOOD INGREDIENT MARKETS.....	6
TABLE 4 EXAMPLES OF THE INGREDIENTS OF HIGHLY POPULAR DESIGNER DRINKS.....	7
TABLE 5 STRUCTURE OF THE GLOBAL FOOD INGREDIENT MARKET, THROUGH 1999 (\$ MILLIONS).....	8
FIGURE 2 STRUCTURE AND DEVELOPMENT OF THE GLOBAL FOOD INGREDIENT MARKET, THROUGH 1999.....	9
VITAMINS USED FOR PHARMACEUTICAL PURPOSES .....	9
VITAMINS USED IN THE COSMETIC AREA.....	10
THE RELEVANCE OF BIOTECHNOLOGY FOR THE PRODUCTION OF VITAMINS.....	10
THE RELEVANCE OF...(CONTINUED).....	11
THE RELEVANCE OF...(CONTINUED).....	12
MARKETS BY TYPE OF VITAMIN.....	13
OVERVIEW.....	13

TABLE 6 OVERVIEW OF THE MARKETS FOR VITAMINS IN 1995 (\$ MILLIONS) .....	14
TABLE 7 OVERVIEW OF THE MARKETS FOR VITAMINS IN 1999 (\$ MILLIONS) .....	15
TABLE 8 OVERVIEW OF THE MARKETS FOR VITAMINS IN 2005 (\$ MILLIONS) .....	15
VITAMIN A .....	16
PHYSICAL, CHEMICAL CHARACTERISTICS, AND PRODUCT IDENTITY .....	16
TABLE 9 CHARACTERISTICS OF VITAMIN A .....	16
PRINCIPLE SOURCES IN NATURE AND PHYSIOLOGICAL FUNCTION .....	16
APPLICATION AND USE .....	17
FORMULATIONS .....	17
TABLE 10 TYPICAL DATA SHEET OF COMMERCIAL VITAMIN A FORMULATIONS .....	18
TABLE 10 (CONTINUED) .....	19
PRODUCTION AND PRICING .....	19
TABLE 11 DEVELOPMENT OF GLOBAL PRODUCTION OF VITAMIN A, THROUGH 1999 (TONS) .....	19
TABLE 12 PRICE DEVELOPMENT FOR VITAMIN A, THROUGH 1999 (\$/KG) .....	20
TABLE 13 PRICES OF DIFFERENT VITAMIN A FORMULATIONS, 1999 .....	20
STRUCTURE OF CURRENT AND FUTURE DEMAND .....	20
TABLE 14 STRUCTURE OF CURRENT AND FUTURE DEMAND OF VITAMIN A, THROUGH 2005 (\$ MILLIONS) .....	21
VITAMIN D .....	21
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT IDENTITY .....	21
TABLE 15 CHARACTERISTICS AND FORMULATION OF VITAMIN D .....	22
PRINCIPLE SOURCES IN NATURE .....	22
TABLE 16 VITAMIN D <sub>3</sub> ACTIVITY OF PLANT LEAFS OR LEAF EXTRACTS .....	22
APPLICATION AND USE .....	23
FORMULATIONS .....	24
TABLE 17 TYPICAL DATA SHEETS OF COMMERCIAL VITAMIN D <sub>3</sub> FORMULATIONS .....	24
TABLE 17 (CONTINUED) .....	25
PRODUCTION AND PRICING .....	25
TABLE 18 DEVELOPMENT OF GLOBAL PRODUCTION OF VITAMIN D, THROUGH 1999 (TONS) .....	25
TABLE 19 AVERAGE PRICE DEVELOPMENT OF VITAMIN D <sub>3</sub> , THROUGH 1999 (\$/KG) .....	26
STRUCTURE OF CURRENT AND FUTURE DEMAND .....	26
TABLE 20 STRUCTURE OF CURRENT AND FUTURE DEMAND OF VITAMIN D, THROUGH 2005 (\$ MILLIONS) .....	27
VITAMIN E .....	27
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT IDENTITY .....	27
TABLE 21 CHARACTERISTICS AND FORMULATION OF VITAMIN E .....	27
PRINCIPLE SOURCES IN NATURE .....	28
TABLE 22 SOURCES FOR NATURAL TOCOPHEROL AND THEIR CONTENT OF $\alpha$ -, $\beta$ -, $\gamma$ -, AND $\delta$ -TOCOPHEROLS (MG/KG $\alpha$ -TOCOPHEROL EQUIVALENTS) .....	28

TABLE 23 COMPARISON OF TOCOPHEROL FORMULATIONS FOR FEED AND FOOD .....	29
TABLE 24 TYPICAL DATA SHEETS OF COMMERCIAL VITAMIN E FORMULATIONS.....	30
TABLE 24 (CONTINUED).....	31
PRODUCTION AND PRICING.....	31
TABLE 25 CONSUMPTION OF TOCOPHEROLS, THROUGH 1999 (TONS) .....	32
TABLE 26 PRICE DEVELOPMENT FOR TOCOPHEROLS USED IN FEED, THROUGH 1999 (100% TOCOPHEROL EQUIVALENTS, \$/KG) .....	33
TABLE 27 PRICE DEVELOPMENTS OF TOCOPHEROL USED IN FEED IN EUROPE, 1998.....	33
TABLE 28 PRICE DEVELOPMENT OF TOCOPHEROLS USED IN FOOD, PHARMA, AND COSMETICS, THROUGH 1999 (\$/KG).....	34
TABLE 29 PRICES OF TYPICAL TOCOPHEROL FORMULATIONS, 1998-1999 .....	34
STRUCTURE OF CURRENT AND FUTURE DEMAND.....	35
TABLE 30 STRUCTURE OF CURRENT AND FUTURE DEMAND OF VITAMIN E, THROUGH 2005 (\$ MILLIONS).....	36
FIGURE 3 STRUCTURE OF DEMAND FOR TOCOPHEROLS, 2005 .....	36
VITAMIN K.....	37
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT IDENTIFY .....	37
TABLE 31 CHARACTERISTICS AND FORMULATION OF VITAMIN K.....	37
PRINCIPLE SOURCES IN NATURE.....	37
APPLICATION AND USE.....	38
PRODUCTION AND PRICING.....	38
TABLE 32 STRUCTURE AND DEVELOPMENT OF VITAMIN K CONSUMPTION, THROUGH 1999.....	39
TABLE 33 PRICE DEVELOPMENTS OF VITAMIN K, THROUGH 1999 (\$/KG PURE PRODUCT).....	39
STRUCTURE OF CURRENT AND FUTURE DEMAND.....	40
TABLE 34 STRUCTURE OF CURRENT AND FUTURE DEMAND OF VITAMIN K, THROUGH 2005 (\$ MILLIONS).....	40
VITAMIN C .....	41
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT IDENTITY .....	41
TABLE 35 CHARACTERISTICS AND FORMULATION OF VITAMIN C.....	41
PRINCIPAL SOURCES IN NATURE.....	41
APPLICATION AND USE.....	41
TABLE 36 TYPICAL DATA SHEETS OF COMMERCIAL VITAMIN C FORMULATIONS.....	42
TABLE 36 (CONTINUED).....	43
PRODUCTION AND PRICING.....	43
TABLE 37 STRUCTURE AND DEVELOPMENT OF VITAMIN C CONSUMPTION, THROUGH 1999 (1,000 TONS).....	44
TABLE 38 STRUCTURE AND DEVELOPMENT OF ASCORBIC ACID PRICES, THROUGH 1999 (\$/KG).....	44
TABLE 39 OVERVIEW OF PRICES FOR DIFFERENT VITAMIN C FORMULATIONS, 1995 AND 1999 (\$/KG).....	45
STRUCTURE OF CURRENT AND FUTURE DEMAND.....	45

TABLE 40 STRUCTURE OF CURRENT AND FUTURE DEMAND FOR VITAMIN C, THROUGH 2005 (\$ MILLIONS) .....	46
VITAMIN B1 .....	46
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT IDENTITY .....	46
TABLE 41 CHARACTERISTICS AND FORMULATION OF VITAMIN B1 .....	46
PRINCIPLE SOURCES IN NATURE .....	47
APPLICATION AND USE .....	47
TABLE 42 TYPICAL DATA SHEET OF COMMERCIAL THIAMIN .....	48
PRODUCTION AND PRICING .....	48
TABLE 43 STRUCTURE AND DEVELOPMENT OF VITAMIN B1 CONSUMPTION, THROUGH 1999 (TONS) .....	48
TABLE 44 PRICE DEVELOPMENT OF VITAMIN B1 MONONITRATE, THROUGH 1999 (\$/KG) .....	49
STRUCTURE OF CURRENT AND FUTURE DEMAND .....	49
TABLE 45 STRUCTURE OF CURRENT AND FUTURE DEMAND OF VITAMIN B1, THROUGH 2005 (\$ MILLIONS) .....	50
VITAMIN B2 .....	50
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT IDENTITY .....	50
TABLE 46 CHARACTERISTICS AND FORMULATION OF VITAMIN B2 .....	50
PRINCIPAL SOURCES IN NATURE .....	51
APPLICATION AND USE .....	51
TABLE 47 TYPICAL DATA SHEETS FOR COMMERCIAL RIBOFLAVIN FORMULATIONS .....	52
PRODUCTION AND PRICING .....	53
TABLE 48 STRUCTURE AND DEVELOPMENT OF VITAMIN B2 DEMAND, THROUGH 1999 (TONS) .....	53
TABLE 49 DEVELOPMENT OF VITAMIN B2 PRICES, THROUGH 1999 (\$/KG) .....	53
TABLE 50 DEVELOPMENT OF PRICES FOR DIFFERENT RIBOFLAVIN FORMULATIONS, THROUGH 1999 .....	54
STRUCTURE OF CURRENT AND FUTURE DEMAND .....	54
TABLE 51 STRUCTURE OF CURRENT AND FUTURE DEMAND OF VITAMIN B2, THROUGH 2005 (\$ MILLIONS) .....	55
VITAMIN B6 .....	55
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT IDENTITY .....	55
TABLE 52 CHARACTERISTICS AND FORMULATION OF VITAMIN B6 .....	55
PRINCIPLE SOURCES IN NATURE .....	55
APPLICATION AND USE .....	56
TABLE 53 TYPICAL DATA SHEET OF COMMERCIAL PYRIDOXINE .....	56
PRODUCTION AND PRICING .....	57
TABLE 54 STRUCTURE AND DEVELOPMENT OF VITAMIN B6 CONSUMPTION, THROUGH 1999 (TONS) .....	57
TABLE 55 PRICE DEVELOPMENT OF VITAMIN B6, THROUGH 1999 (\$/KG) .....	57
STRUCTURE OF CURRENT AND FUTURE DEMAND .....	58
TABLE 56 STRUCTURE OF CURRENT AND FUTURE DEMAND OF VITAMIN B6, THROUGH 2005 (\$ MILLIONS) .....	58
VITAMIN B12 .....	58

PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT	
IDENTITY .....	58
TABLE 57 CHARACTERISTICS AND FORMULATION OF VITAMIN B12 .....	59
PRINCIPAL SOURCES IN NATURE .....	59
APPLICATION AND USE .....	59
TABLE 58 TYPICAL DATA SHEET OF COMMERCIAL VITAMIN B12 .....	60
PRODUCTION AND PRICING .....	60
TABLE 59 STRUCTURE AND DEVELOPMENT OF VITAMIN B12 CONSUMPTION, THROUGH 1999 (TONS) .....	61
TABLE 60 PRICE DEVELOPMENTS FOR B12, THROUGH 1999 (\$/KG) .....	61
TABLE 61 CURRENT 1999 PRICES FOR VITAMIN B12 FORMULATIONS (\$/KG) .....	62
STRUCTURE OF CURRENT AND FUTURE DEMAND .....	62
TABLE 62 PRICE DEVELOPMENTS OF CRYSTALLINE B12 IN THE EU, JANUARY-JUNE 1999 (\$/KG) .....	62
TABLE 63 STRUCTURE OF CURRENT AND FUTURE DEMAND FOR VITAMIN B12, THROUGH 2005 (\$ MILLIONS) .....	63
NIACIN .....	63
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT	
IDENTITY .....	63
TABLE 64 CHARACTERISTICS AND FORMULATION OF NIANCIN .....	63
PRINCIPAL SOURCES IN NATURE .....	64
APPLICATION AND USE .....	64
TABLE 65 TYPICAL DATA SHEET OF COMMERCIAL NICOTINIC ACID .....	65
PRODUCTION AND PRICING .....	65
TABLE 66 STRUCTURE AND DEVELOPMENT OF NICOTINATE CONSUMPTION, THROUGH 1999 (TONS) .....	65
TABLE 67 PRICE DEVELOPMENT OF NICOTINATES, THROUGH 1999 (\$/KG) .....	66
STRUCTURE OF CURRENT AND FUTURE DEMAND .....	66
TABLE 68 STRUCTURE OF CURRENT AND FUTURE DEMAND OF NIACIN, THROUGH 2005 (\$ MILLIONS) .....	67
PANTOTHENIC ACID .....	67
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT	
IDENTITY .....	67
TABLE 69 CHARACTERISTICS AND FORMULATION OF PANTOTHENIC ACID .....	68
PRINCIPAL SOURCES IN NATURE .....	68
APPLICATION AND USE .....	69
TABLE 70 TYPICAL DATA SHEETS OF COMMERCIAL PANTOTHENIC ACID FORMULATIONS .....	70
PRODUCTION AND PRICING .....	71
TABLE 71 STRUCTURE AND DEVELOPMENT OF THE MARKET OF PANTOTHENATES, THROUGH 1999 (TONS) .....	71
TABLE 72 PRICE DEVELOPMENT OF PANTETHONATES, THROUGH 1999 (\$/KG) .....	72
STRUCTURE OF CURRENT AND FUTURE DEMAND .....	72
TABLE 73 STRUCTURE OF CURRENT AND FUTURE DEMAND FOR PANTOTHENATES, THROUGH 2005 (\$ MILLIONS) .....	73
FOLIC ACID .....	73
PHYSICAL CHEMICAL CHARACTERISTICS AND PRODUCT	
IDENTITY .....	73
TABLE 74 CHARACTERISTICS AND FORMULATION OF FOLIC ACID .....	73

PRINCIPAL SOURCES IN NATURE.....	74
APPLICATION AND USE.....	74
TABLE 75 TYPICAL DATA SHEET OF COMMERCIAL FOLIC ACID.....	75
PRODUCTION AND PRICING.....	75
TABLE 76 STRUCTURE AND DEVELOPMENT OF FOLIC ACID CONSUMPTION, THROUGH 1999 (TONS).....	75
TABLE 77 PRICE DEVELOPMENTS OF FOLIC ACID, THROUGH 1999 (\$/KG).....	76
STRUCTURE OF CURRENT AND FUTURE DEMAND.....	76
TABLE 78 STRUCTURE OF CURRENT AND FUTURE DEMAND FOR FOLIC ACID, THROUGH 2005 (\$ MILLIONS).....	77
BIOTIN.....	77
APPLICATION AND USE.....	77
TABLE 79 TYPICAL DATA SHEET FOR COMMERCIAL BIOTIN.....	78
PRODUCTION AND PRICING.....	78
TABLE 80 STRUCTURE AND DEVELOPMENT OF BIOTIN CONSUMPTION, THROUGH 1999 (TONS).....	79
TABLE 81 DEVELOPMENT OF BIOTIN PRICES, THROUGH 1999 (\$/G).....	79
STRUCTURE OF CURRENT AND FUTURE DEMANDS.....	80
TABLE 82 STRUCTURE OF CURRENT AND FUTURE DEMAND OF BIOTIN, THROUGH 2005 (\$ MILLIONS).....	80
VITAMIN-RELATED COMPOUNDS.....	80
CHOLIN CHLORIDE.....	81
Physical Chemical Characteristics and Product Identity.....	81
TABLE 83 CHARACTERISTICS AND FORMULATION OF CHOLIN CHLORIDE.....	81
Principal Sources in Nature.....	81
Production and Pricing.....	82
TABLE 84 DEVELOPMENT OF THE CHOLIN CHLORIDE DEMAND, THROUGH 1999 (1,000 TONS).....	82
TABLE 85 DEVELOPMENT OF CHOLIN CHLORIDE PRICES, THROUGH 1999 (\$/KG).....	82
Structure of Current and Future Demand.....	83
TABLE 86 CURRENT AND FUTURE DEMAND FOR CHOLIN CHLORIDE, THROUGH 2005 (\$ MILLIONS).....	83
CARNITINE.....	83
Physical Chemical Characteristics and Product Identity.....	83
TABLE 87 CHARACTERISTICS AND FORMATION OF CHARNITINE.....	83
Principal Sources in Nature.....	84
Application and Use.....	84
TABLE 88 TYPICAL DATA SHEETS FOR COMMERCIAL CARNITINE FORMULATIONS.....	85
Production and Pricing.....	85
TABLE 89 STRUCTURE AND DEVELOPMENT OF CARNITINE CONSUMPTION, THROUGH 1999 (TONS).....	86
TABLE 90 DEVELOPMENT OF L-CARNITINE PRICES, THROUGH 1999 (\$/KG).....	86
Structure of Current and Future Demand.....	86
TABLE 91 STRUCTURE OF CURRENT AND FUTURE DEMAND FOR L- CARNITINE, THROUGH 2005 (\$ MILLIONS).....	87
MARKETS BY APPLICATION.....	88

STRUCTURE AND DEVELOPMENT OF THE USE OF VITAMINS IN THE GLOBAL ANIMAL FEED MARKETS .....	88
DEVELOPMENTS IN THE ANIMAL FEED MARKETS.....	88
TABLE 92 DEVELOPMENT OF WORLD COMPOUND FEED PRODUCTION, THROUGH 1999 (MILLION TONS).....	89
CURRENT AND FUTURE DEVELOPMENT OF VITAMIN USE IN THE COMPOUND FEED SECTOR .....	89
Current and Future Development...(Continued) .....	90
TABLE 93 CURRENT AND FUTURE DEMAND FOR VITAMINS IN THE GLOBAL COMPOUND FEED INDUSTRY BY TYPE OF VITAMIN, THROUGH 2005 (\$ MILLIONS).....	91
TABLE 94 CURRENT AND FUTURE DEMAND FOR VITAMINS IN THE GLOBAL COMPOUND FEED INDUSTRY BY GEOGRAPHIC AREA, THROUGH 2005 (\$ MILLIONS) .....	91
FIGURE 4 RELATIVE SALES VALUES OF INDIVIDUAL VITAMINS IN THE FEED SECTOR, 2005 .....	92
STRUCTURE AND DEVELOPMENT OF USE OF VITAMINS IN THE GLOBAL FOOD MARKETS .....	92
TABLE 95 CURRENT AND FUTURE DEMAND FOR VITAMINS IN THE GLOBAL FOOD INDUSTRY BY TYPE OF VITAMIN, THROUGH 2005 (\$ MILLIONS).....	93
TABLE 96 CURRENT AND FUTURE DEMAND FOR VITAMINS IN THE GLOBAL FOOD INDUSTRY BY GEOGRAPHIC AREA, THROUGH 2005 (\$ MILLIONS).....	94
FIGURE 5 RELATIVE SALES VALUES OF INDIVIDUAL VITAMINS IN THE FOOD SECTOR, 2005 .....	94
STRUCTURE AND DEVELOPMENT OF THE USE OF VITAMINS IN THE GLOBAL PHARMA MARKETS .....	95
TABLE 97 CURRENT AND FUTURE DEMAND FOR VITAMINS USED FOR THERAPEUTIC PURPOSES, THROUGH 2005 (\$ MILLIONS).....	95
TABLE 98 CURRENT AND FUTURE DEMAND FOR VITAMINS SOLD AS OTC PRODUCTS BY TYPE OF VITAMIN, THROUGH 2005 (\$ MILLIONS).....	96
TABLE 99 CURRENT AND FUTURE DEMAND FOR VITAMINS SOLD AS OTC PRODUCTS BY GEOGRAPHIC AREA, THROUGH 2005 (\$ MILLIONS).....	97
FIGURE 6 RELATIVE SALES VALUES OF INDIVIDUAL VITAMINS IN THE OTC SECTOR, 2005 .....	97
TABLE 100 CURRENT AND FUTURE DEMAND OF VITAMINS FOR PHARMACEUTICAL PURPOSES, THROUGH 2005 (\$MILLIONS).....	98
STRUCTURE OF THE USE OF VITAMINS IN THE COSMETICS INDUSTRY .....	98
TABLE 101 STRUCTURE OF CURRENT AND FUTURE DEMAND OF VITAMINS USED IN THE COSMETIC INDUSTRY, THROUGH 2005 (\$ MILLIONS) .....	99
TABLE 102 CURRENT AND FUTURE DEMAND FOR VITAMINS IN THE COSMETICS INDUSTRY BY GEOGRAPHIC AREA, THROUGH 2005 (\$ MILLIONS).....	99
INDUSTRY STRUCTURE AND COMPANY PROFILES .....	100
INDUSTRY STRUCTURE.....	100
TABLE 103 OVERVIEW ON DEGREE OF SOPHISTICATION OF THE PRODUCTION OF VITAMINS BY THE DEGREE OF MARKET PENETRATION OF CHINESE AND INDIAN MANUFACTURERS .....	100
Strategic Principles Governing the Vitamin Business .....	100
Strategic Principles Governing...(Continued) .....	101

<i>TABLE 104 VITAMINS FOR WHICH INTENSIVE FORMULATION RESEARCH IS CARRIED OUT</i> .....	102
Different Companies – Different Market Strategies.....	102
The Market Leaders .....	102
<i>TABLE 105 TYPICAL PRODUCT STRATEGIES FOLLOWED BY VITAMIN PRODUCERS</i> .....	103
The Single Sector Specialist .....	103
Companies Producing Vitamins as Add-ons.....	104
Companies in China and India.....	104
<i>TABLE 106 OVERVIEW ON THE NUMBER OF CHINESE PRODUCERS BY TYPE OF VITAMIN</i> .....	105
MARKET SHARES BY TYPE OF VITAMIN .....	106
OVERVIEW .....	106
<i>TABLE 107 GLOBAL MARKET SHARES OF THE MOST IMPORTANT COMPANIES IN THE VITAMIN BUSINESS, 1995 AND 1999 (%)</i> .....	106
<i>FIGURE 7 GLOBAL MARKET SHARES OF THE MOST IMPORTANT PLAYERS IN THE VITAMIN BUSINESS, 1999</i> .....	107
<i>TABLE 108 GLOBAL MARKET SHARES OF THE MOST IMPORTANT COMPANIES IN THE VITAMIN FOR FEED BUSINESS, 1999 (%)</i> .....	107
<i>TABLE 109 GLOBAL MARKET SHARES OF THE MOST IMPORTANT COMPANIES IN THE VITAMIN FOR PHARMA, FOOD, AND COSMETICS INDUSTRY, 1999 (%)</i> .....	108
<i>FIGURE 8 GLOBAL MARKET SHARES OF THE MOST IMPORTANT PLAYERS IN THE VITAMIN BUSINESS BY TYPE OF VITAMIN, 1999</i> .....	108
VITAMIN A .....	109
<i>TABLE 110 GLOBAL MARKET SHARES FOR VITAMIN A, 1995-1999 (%)</i> .....	109
VITAMIN D .....	109
<i>TABLE 111 GLOBAL MARKET SHARES FOR VITAMIN D, 1995 AND 1999 (%)</i> .....	110
VITAMIN E .....	110
<i>TABLE 112 GLOBAL MARKET SHARES FOR VITAMIN E (DL-FORM), 1995 AND 1999 (%)</i> .....	111
<i>TABLE 113 GLOBAL MARKET SHARES FOR VITAMIN E (D-FORM), 1995 AND 1999 (%)</i> .....	111
<i>TABLE 114 GLOBAL MARKET SHARES FOR VITAMIN E (DL- + D-FORM), 1995 AND 1999 (%)</i> .....	112
VITAMIN K .....	112
VITAMIN C .....	112
<i>TABLE 115 GLOBAL MARKET SHARES FOR VITAMIN C, 1995 AND 1999 (%)</i> .....	113
VITAMIN B1 .....	113
<i>TABLE 116 GLOBAL MARKET SHARES FOR VITAMIN B1, 1995 AND 1999 (%)</i> .....	113
VITAMIN B2 .....	114
<i>TABLE 117 GLOBAL MARKET SHARES FOR VITAMIN B2, 1995 AND 1999 (%)</i> .....	114
VITAMIN B6 .....	114
<i>TABLE 118 GLOBAL MARKET SHARES FOR VITAMIN B6, 1995 AND 1999 (%)</i> .....	115
VITAMIN B12 .....	115
<i>TABLE 119 GLOBAL MARKET SHARES FOR VITAMIN B12, 1995 AND 1999 (%)</i> .....	115
NICOTINATES .....	115
<i>TABLE 120 GLOBAL MARKET SHARES FOR NICOTINATES, 1995 AND 1999 (%)</i> .....	116
PANTOTHENATES.....	116

TABLE 121 GLOBAL MARKET SHARES FOR PANTOTHENATES, 1995 AND 1999 (%).....	116
FOLIC ACID.....	117
TABLE 122 GLOBAL MARKET SHARES FOR FOLIC ACID (%).....	117
BIOTIN.....	117
TABLE 123 GLOBAL MARKET SHARES OF BIOTIN, 1995 AND 1999 (%).....	118
CHOLIN CHLORIDE.....	118
TABLE 124 GLOBAL MARKET SHARES OF CHOLIN CHLORIDE, 1995 AND 1999 (%).....	118
L-CARNITINE.....	118
TABLE 125 GLOBAL MARKET SHARES FOR L-CARNITINE, 1995 AND 1999 (%).....	119
COMPANY PROFILES.....	120
F. HOFFMANN-LA ROCHE.....	120
TABLE 126 ROCHE'S GLOBAL MARKET SHARE OF THE VITAMIN BUSINESS, 1995 AND 1999 (%).....	121
BASF.....	122
TABLE 127 BASF GLOBAL MARKET SHARE OF THE VITAMIN BUSINESS, 1995 AND 1999 (%).....	123
RHONE POULENC (RP).....	123
TABLE 128 RP'S GLOBAL MARKET SHARE OF THE VITAMIN BUSINESS, 1995 AND 1999 (%).....	124
LONZA.....	124
DAIICHI PHARMACEUTICAL COMPANY.....	125
EISAI.....	125
MERCK.....	125
TABLE 129 MERCK'S GLOBAL MARKET SHARE OF THE VITAMIN BUSINESS, 1999 (%).....	126
NISSHIN OIL MILLS.....	126
TAKEDA CHEMICAL INDUSTRIES LTD.....	126
TABLE 130 TAKEDA'S GLOBAL MARKET SHARE OF THE VITAMIN BUSINESS, 1995 AND 1999 (%).....	127
TANABE.....	127
DEGUSSA.....	127
CHINESE PRODUCERS.....	128
CHINESE PRODUCERS (CONTINUED).....	129