

CINNAMON AND TOMATO POLYPHENOLS

STRATEGIES TO GROW YOUR BUSINESS

Prepared by:

CPL Business Consultants
Innovation Centre, Milton Park, Abingdon,
Oxfordshire, OX14 4RY
Tel: +44 1865 257 057, info@cplconsult.com,
www.cplconsult.com

Dr Esther Hunter
Dr Robert Harwood
Mattias Bergström
Joe Hart

TABLE OF CONTENTS

TABLES.....	I
OBJECTIVE	1
METHOD	1
PRINCIPAL FINDINGS & CONCLUSIONS.....	2
GENERAL	2
CINNAMON.....	5
<i>Background</i>	5
<i>Market</i>	5
<i>Players</i>	6
<i>Scientific Research & Health Benefits</i>	6
<i>Patents</i>	6
<i>Advantages & Disadvantages of Cinnamon</i>	6
TOMATOES.....	7
<i>Overview</i>	7
GENERAL OVERVIEW ON POLYPHENOLS	8
INTRODUCTION & OVERVIEW	8
THE POLYPHENOL MARKET	34
KEY ANONYMOUS INDUSTRY CONTACT.....	37
CINNAMON EXTRACTS	43
INTRODUCTION & OVERVIEW	43
ADVANTAGES AND DISADVANTAGES OF CINNAMON EXTRACTS	44
REPORTED HEALTH BENEFITS AND SCIENTIFIC SUBSTANTIATION	44
PATENTS	57
ESTIMATED MARKET SIZE, GROWTH RATE & PRICES.....	59
KEY MARKET SEGMENTS.....	60
5 OPPORTUNITIES.....	60
22 PROFILES OF KEY PLAYERS AND INNOVATORS	65
REGULATORY.....	98
6 CONTACT REPORTS	101
APPENDIX – ADDITIONAL INFORMATION	109
<i>News</i>	109
TOMATO EXTRACT	110
INTRODUCTION & OVERVIEW	110
REPORTED HEALTH BENEFITS AND SCIENTIFIC SUBSTANTIATION	110
PATENTS.....	113
3 PROFILES OF KEY PLAYERS AND INNOVATORS.....	115
4 CONTACT REPORTS	116

TABLES

TABLE 1	CAROTENOID SOURCES.....	8
TABLE 2	POLYPHENOL SOURCES.....	9
TABLE 3	COMMON DIETARY FLAVONOIDS.....	11
TABLE 4	FOODS RICH IN FLAVONES, FLAVONOLS, <i>ETC.</i>	14
TABLE 5	CINNAMON EXTRACT PRICES OBTAINED BY CPL	60
TABLE 6	PUBLIC CONSULTATION ON PERFUMERY MATERIALS IN THE FRAMEWORK OF COUNCIL DIRECTIVE 76/768/EEC RELATIVE TO COSMETIC PRODUCTS. NEW ENTRIES ANNEX III, PART 1.....	98
TABLE 7	NOMENCLATURES FOR CINNAMON EXTRACTS.....	99

FIGURES

FIGURE 1 BASIC CHEMICAL STRUCTURE OF A FLAVONOID.....	10
FIGURE 2 CHEMICAL STRUCTURES OF SOME ANTHOCYANIDINS (ANTHOCYANIN AGLYCONES).....	12
FIGURE 3 CHEMICAL STRUCTURES OF SOME FLAVANONES	12
FIGURE 4 CHEMICAL STRUCTURES OF SOME FLAVONES.....	13
FIGURE 5 CHEMICAL STRUCTURES OF SOME ISOFLAVONES.....	13
FIGURE 15 STRUCTURE OF POLYPHENOL TYPE-A POLYMER.....	43