



CURESUPPORT HOLDING B.V.
ZUTPHENSEWEG 55, 7418 AH
DEVENTER, THE NETHERLANDS.

BIOAVAILABILITY STUDY OF
CANNABIDIOL IN LIPOSOMAL
FORMULATION AGAINST
TRADITIONAL OIL SOLUTIONS

THIS BIOAVAILABILITY STUDY
IS PERFORMED BY UNIVERSITY
OF NOTTINGHAM.



* There were more products used
in this study.



BIOAVAILABILITY
STUDY OF

CANNABIDIOL IN
LIPOSOMAL FORMULATION
AGAINST TRADITIONAL
OIL SOLUTIONS

THIS BIOAVAILABILITY STUDY
IS PERFORMED BY UNIVERSITY
OF NOTTINGHAM.

CURESUPPORT
IT'S ALL ABOUT ABSORPTION

BIOAVAILABILITY STUDY OF CANNABIDIOL IN LIPOSOMAL FORMULATION AGAINST TRADITIONAL OIL SOLUTIONS

OBJECTIVE OF THE STUDY

To gather basic information on CBD pharmacokinetic profile in different pharmaceutical preparation for oral administration.

NUMBER OF SUBJECTS

Number of subjects planned: 9
 Number of subjects completed the study and analyzed: 9

TESTED PRODUCT

LIPOSOMAL

Product name: Lipodiol Liposomal CBD
 Dosage: 250mg cannabidiol / 30ml

TRADITIONAL OIL SOLUTION

Product name: Product obtained from the market (2.5% cannabidiol in oil)
 Dosage: 250mg / 10ml

LIPOSOMAL

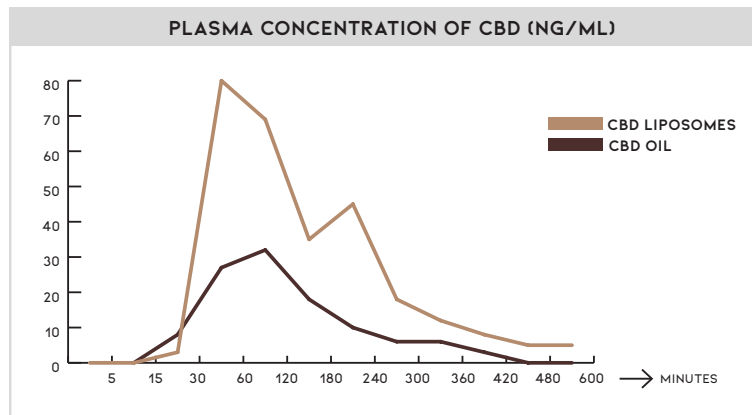
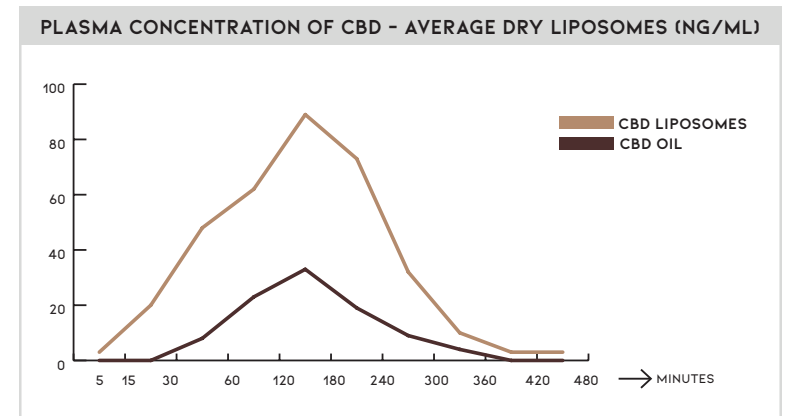
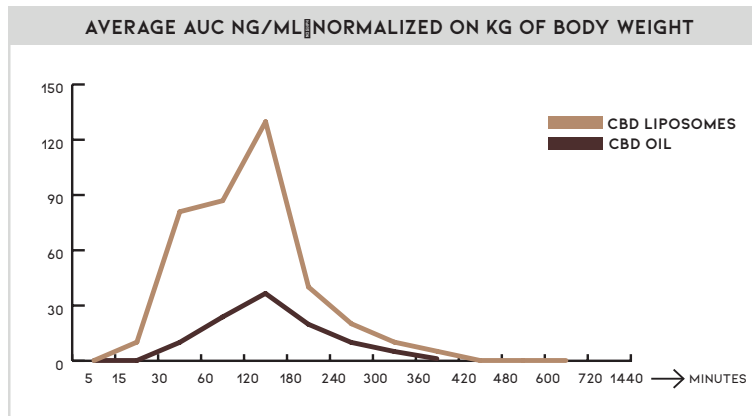
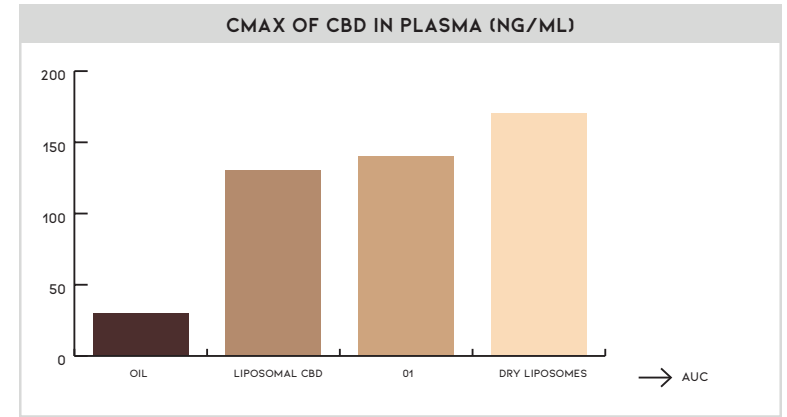
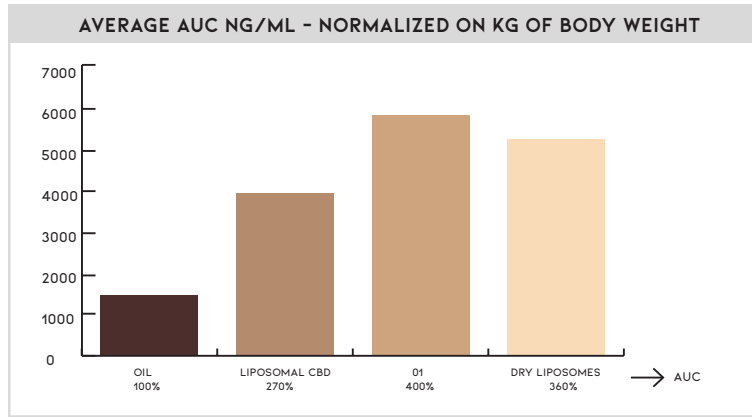
Product name: O1 Omnidol (CBD+ Curcumin (CureIT)+ Vitamin D3)
 Dosage: 250mg cannabidiol / 50ml

DRY LIPOSOMS

Product name: Capsule
 Dosage: 250mg cannabidiol + 0.1% full spectrum Cannabis Sativa terpene profile 5g powder.

DOSE AND MODE OF ADMINISTRATION

All participants received 250mg of Cannabidiol in different pharmaceutical preparations, on empty stomach. Food intake was allowed after 75 min in study I., 120min in Study II. and 180min in Study III. after the test sample ingestion.



CONCLUSION

Since Cannabidiol is a lipid soluble compound, it is expected that its absorption would be enhanced in combination with a fatty vehicle substance. It has been proven that plant seeds oils enhance the absorption of CBD compared to absorption of pure CBD in tablet form (without any fatty component). Our studies have proven that liposomes additionally enhance CBD's absorption compared to oil solutions up to 400% and make liposomal formulations favorable pharmaceutical preparation for oral CBD delivery. However, it is worth mentioning that food intake and type of food considerably impact the CBD bioavailability. Additional interesting finding is much better absorption of CBD in females compared to males.