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List of Abbreviations and Symbols

AHA/ACC/TOS	American Heart Association/American College of Cardiology/The Obesity
	Society
API	Ayurvedic Pharmacopoeia of India
ARF	Alkaloid rich fractions
ATP	Adenosine triphosphate
β-AR	β- Adrenergic Receptor
BAT	Brown Adipose Tissue
BBB	Blood Brain Barrier
BMI	Body Mass Index
CART	Cocaine and amphetamine regulated transcript
CHD	Coronary Heart Disease
СКК	Cholecystokinin
СМ	Cold Maceration
CNS	Central Nervous System
CV	Coefficient of Variance
DAG	Diacyl glycerol
DC	Disease control
DCM	Dichloromethane
DM	Diabetes mellitus
DMSO	Dimethyl sulfoxide
DPX	Dibutylphthalate Polystyrene Xylene
EXT	Extract
FDA	Food & Drug Administration
FFA	Free Fatty acid
FOAD	Fetal Origins of Adult Diseases
GABA	Gamma aminobutyric acid
GI	Gastro-Intestinal
GLP-1	Glucagon like peptide type 1 receptor
HDL	High-density lipoproteins

H & E	Hematoxylin & Eosin
HFD	High Fat Diet
HP	Hot Percolation
HPLC	High Performance Liquid Chromatography
HPTLC	High Performance Thin Layer Chromatography
HRMS	High Resolution Mass Spectrometry
IC ₅₀	Half maximal inhibitory concentration
IL	Interleukin
IR	Insulin resistance
KBr	Potassium bromide
КОН	Potassium hydroxide
LCMS	Liquid Chromatography Mass Spectrometry
LD ₅₀	Half maximal Lethal Dose
LDL	Low-density lipoproteins
LOD	Limit of Detection
LOQ	Limit of Quantification
m.p.	Melting point
mmol	Millimole
MAG	Monoacyl glycerol
MC	Extraction by maceration
MCH	Melanin-concentrating hormone
MD	Molecular Dynamics
MM2	Molecular Mechanics 2
MSH	Melanocortin stimulating hormone
MUP	Methoxy undecylphosphonic acid
NMR	Nuclear Magnetic Resonance
NPs	Natural Products
NPY	Neuropeptide Y
NC	Normal control
ND	Normal Diet
nm	Nanometer

NPT	Normal Pressure and Temperature
ns	not significant
NVT	Normal Volume and Temperature
OC	Orlistat control
OXM	Oxyntomodulin
PDB	Protein Data Bank
Pgp	P-glycoprotein
PL	Pancreatic lipase
POMC	Proopiomelanocortin
PPAR	Peroxisome proliferator-activated receptor
PVN	Paraventricular nucleus
P-YY	Peptide-YY
PUFA	Polyunsaturated fatty acid
RMSD	Root Mean Square Deviation
ROS	Reactive oxygen species
rpm	Rotations per minute
RSD	Relative Standard Deviation
RT	Room Temperature
SD	Standard Deviation
SEM	Standard error of mean
SGF	Simulated Gastric fluid
SO	Extraction by ultrasonication
SX	Extraction by soxhlation
TAG	Triacyl glycerol
TC	Total cholesterol
TCA	Tricarboxylic acid
TCM	Traditional Chinese Medicine
TG	Total triglycerides
TLC	Thin Layer Chromatography
UCP-1	Uncoupling protein 1

UK	United Kingdom
US	United States
VLDL	Very low-density lipoproteins
WAT	White adipose tissue
WD	Western Diet
WHO	World Health Organization
WHR	Waist-Hip Ratio
α	Alpha
Å	Angstrom
$\mathbf{K}_{\mathrm{m}}^{\mathrm{app}}$	Apparent K _m
β	Beta
dl	Deciliter
°C	Degree Celsius
γ	Gamma
h	Hour
K _i	Inhibitory constant
kg	Kilogram
kcal/mol	Kilocalorie per mole
λ	Lamda
mg	Milligram
μg	Microgram
μΜ	Micromolar
μl	Microliter
ml	Milliliter
min	Minutes
K _m	Michealis-Menton constant
V_{max}	Maximum velocity
ng	Nanogram
%	Percentage
<i>v/v</i>	Volume/volume
w/w	Weight/weight

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List of Equation and Formulae