

---

**LIST OF SYMBOLS AND ABBREVIATIONS**

$A_{\text{sample}}$	Absorbance of sample
$A_{\text{blank}}$	Absorbance of blank
ABTS	2,2'-azinobis(3-ethylbenzothiazoline-6-sulfonic acid
AChE	Acetylcholinesterase
AE	Aqueous extract
$\alpha$	Alpha
AMPK	AMP activated protein kinase
ANOVA	One-way analysis of variance
AR	Analytical reagent
ATGL	Adipose triglyceride lipase
$\beta$	Beta
BE	Butanol extract
BHA	Butylated hydroxyanisole
BHT	Butylated hydroxytoluene
b.w	Body weight
cm	centimeter
CAT	Catalase
COSY	Correlation spectroscopy
$^{13}\text{C}$	Carbon-13
C	Carbon
CRP	C- reactive proteins
$^{\circ}\text{C}$	Degree Celsius

$\delta$	Delta
CDCL <sub>3</sub>	Deuterium chloroform
cDNA	Complementary deoxyribonucleic acid
DAG	Diacylglycerol
DEPT	Distortionless Enhancement by Polarization Transfer
DM	Diabetes mellitus (type 2 diabetes)
DMRT	Duncan Multiple Range Test
EE	Ethanol extract
EAE	Ethyl acetate extract
FA	Fatty acids
Fe <sup>3+</sup>	Ferric
FeCl <sub>3</sub> .6H <sub>2</sub> O	Ferric trichloride hexahydrate
Fe <sup>2+</sup>	Ferrous
FeSO <sub>4</sub> .7H <sub>2</sub> O	Ferrous sulphate
GAEs	Gallic acid equivalents
GC-MS	Gas chromatography mass spectrum
GE	Polysaccharide extract
× g	G-force
g	gram
GLUT-4	Glucose transporter - 4
GPX	Gluthathione peroxidase
GR	Reduced gluthathione
$\gamma$	Gamma
hr	Hour

HCl	Hydrochlorid acid
HDL-c	High density lipoprotein cholesterol
HFD	High-fat diet
HFD60	High-fat diet with 60 mg/kg b.w of GE
HFD120	High-fat diet with 120 mg/kg b.w of GE
HFD240	High-fat diet with 240 mg/kg b.w of GE
HFDMET	High-fat diet with 2 mg/kg b.w of metformin
HPLC	High performance liquid chromatography
HMBC	Heteronuclear multiple bond coherence
$^1\text{H}$	Proton-1
HMQC	Heteronuclear multiple quantum coherence
H	Hydrogen
HOMA-IR	Homeostatic model assessment for insulin resistance
HSL	Hormone sensitive lipase
$\text{H}_2\text{O}_2$	Hydrogen peroxide
IBMX	3-Isobutyl-1-methylxanthine
$\text{IC}_{50}$	50% Inhibitory concentration
IL-6	Interleukin – 6
$\text{K}_2\text{O}_8\text{S}_2$	Potassium persulfate
kg	kilogram
L	litre
LDL-c	Low density lipoprotein cholesterol
LPL	Lipoprotein lipase
$\mu$	micro

$\mu\text{g}$	microgram
$\mu\text{g/ml}$	microgram per millilitre
$\mu\text{l}$	microlitre
$\mu\text{M}$	micromolar
$\mu\text{mol of FeSO}_4 \cdot 7\text{H}_2\text{O}$	micromole of ferric reducing antioxidant power
equivalents/g	equivalents per gram
$\mu\text{mol/ml}$	micromole per millilitre
MAG	Monoacylglycerol
MCP-1	Monocyte chemoattractant protein-1
mg	milligram
mg/l	milligram per litre
mg/ml	milligram per millilitre
ml	millilitre
ml/min	millilitre per minute
mm	millimeter
mM	millimolar
mmol/l	millimole per litre
min	minute
NADPH	Nicotinamide adenine dinucleotide phosphate
ND	Normal diet
ND240	Normal diet with 240 mg/kg b.w of GE
NF- $\kappa$ B	Nuclear factor – kappa B
nm	nanometer
NOESY	Nuclear overhauser effect spectroscopy

NMR	Nuclear magnetic resonance
ln	Natural log
%	Percent
±	Plus-minus
PBS	Phosphate buffer saline
<i>P. sajor-caju</i>	<i>Pleurotus sajor-caju</i>
PKA	Protein kinase A
PPAR- $\gamma$	Peroxisome proliferator activated-receptor - $\gamma$
R <sup>2</sup>	R-squared value
Na <sub>2</sub> CO <sub>3</sub>	Sodium carbonate
O <sub>2</sub>	Oxygen
8-OHdG	8-hydroxy-2-deoxyguanosine
OGTT	Oral glucose tolerance test
RBP-4	Retinol binding protein -4
ROS/RNS	Reactive oxygen/nitrogen species
SD	Standard deviation
SAA-2	Serum amyloid A - 2
SOD	Superoxidase dismutase
SREBP-1c	Sterol regulatory binding protein- 1c
TAG	Triacylglycerol
TBHQ	Tertiary butyl hydroquinone
t	time
<i>t</i>	tetra
TBARS	Thiobarbituric acid reactive species

TNF- $\alpha$	Tumor necrosis factor-alpha
TEPs	1,1,3,3-Tetraoxypropane
TPTZ	2,4,6-tripyridyl-s-triazine
TLC	Thin layered chromatography
TEAC	Trolox equivalent antioxidant capacity
Trolox	6-hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid
$\mu\text{mol}$ of Trolox	Micromole of trolox equivalents per gram
TG	Total triglycerides
TC	Total cholesterol
VLDL	Very low-density lipoproteins