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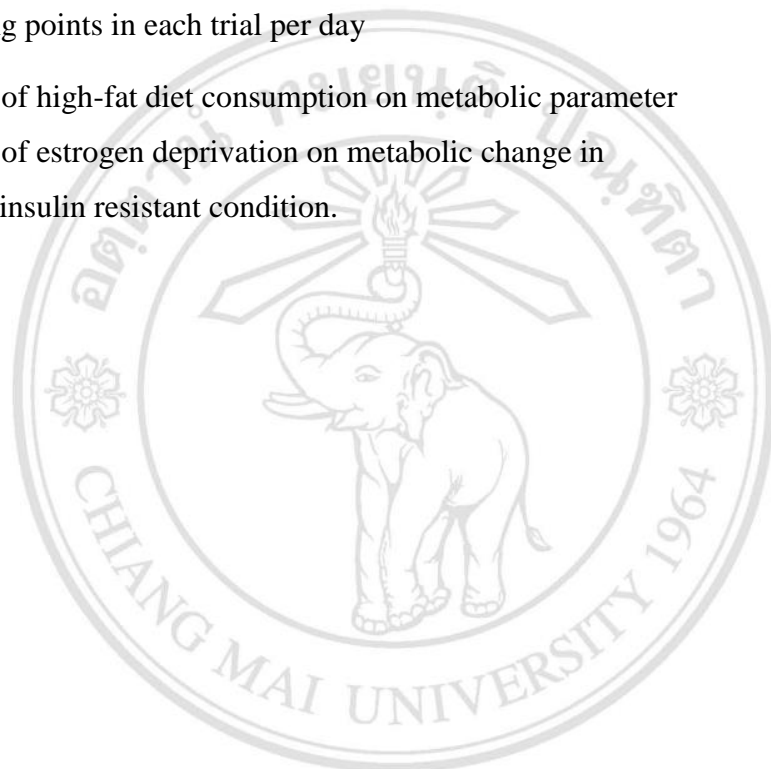
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LIST OF ABBREVIATIONS

aCSF	Artificial cerebrospinal fluid
Akt	A serine/threonine-specific protein kinase
Akt/PKB	A serine/threonine protein kinase/protein kinase B
ANOVA	Analysis of variance
AMPA	α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid
ATMS	Adipose tissue macrophages
ATP	Adenosine triphosphate
AUC	Area under the curve
BCA	Bicinchoninic acid
Bcl-2	B-cell lymphoma 2
BDNF	Brain-derived neurotrophic factor
BSA	Bovine serum albumin
CA1	Cornu Ammonis 1
CHE	Cholesterol esterase
CHOP	CCAAT-enhancer-binding protein homologous protein
CNS	Central nervous system
DAG	Diacylglycerol
DAP	Dihydroxyacetone-phosphate
DCFH-DA	Dichloro-hydrofluoresceindiacetate
ER	Estrogen receptor
ER- α	Estrogen receptor alpha
ER- β	Estrogen receptor beta
ERK	extracellular-signal-regulated kinases
FAS	Fatty acid synthase
fEPSPs	Field excitatory postsynaptic potentials
FFAs	Free fatty acid
GK	Glycerol kinase
Glut4	Glucose transporter type 4

GOD	Glucose oxidase
GPO	Glycerol-3-P-oxidase
Grb2	Growth factor receptor-bound protein 2
GSK3 β	Glycogen synthase kinase 3 beta
HDL	High-density lipoprotein
HF	High-fat diet
HFS	Sham-operated females rats fed with high-fat diet
Hfs	High frequency stimulation
HOMA	Homeostasis model assessment
HPLC	High performance liquid chromatography
H ₂ O ₂	Hydrogen peroxide
IKK- β	Nuclear factor-kB kinase- β
IL-6	Interleukin-6
IR	Insulin receptor
IRS-1	Insulin receptor substrate-1
JNK	JUN N-terminal kinase 1
LDL	Low-density lipoprotein
LPL	Lipoprotein lipase
LSD	Fisher's least significant difference
LTD	Long-term depression
LTP	Long-term potentiation
MAPK	mitogen-activated protein kinase
MDA	Malondialdehyde
mTORC1	Mammalian target of rapamycin complex 1
mTORC2	Mammalian target of rapamycin complex 2
MWM	Morris water maze
NaF	Sodium fluoride
ND	Normal diet
NDS	Sham-operated female rats fed with normal diet
NDO	Ovariectomized female rats fed with normal diet
NF-kB	Nuclear factor-kB

NMDA	N-methyl-D-aspartate
NOR	Novel object recognition
O	Bilateral ovariectomized
OFT	Open-field test
OGTT	Oral glucose tolerance test
OVX	Ovariectomy
PAI-1	Plasminogen activator inhibitor-1
PDK1	3-phosphoinositide-dependent protein kinase 1
PI3K	Phosphatidylinositol 3-kinase
PIP2	Phosphatidylinositol-4,5-bisphosphate
PIP3	Phosphatidylinositol (3,4,5)-trisphosphate
PKC	Protein kinase C
PKB	Protein kinase B
POD	Peroxidase
RBP4	Retinol-binding protein 4
ROS	Reactive oxygen species
rpm	Revolutions per minute
S	Sham-operated
SEM	Standard error
Shc	SH2-containing collagen-related proteins
SOS	Son of sevenless guanine nucleotide exchange factor
STZ	Streptozotocin
TBARS	Thiobarbituric acid reactive substances
TCA	Trichloroacetic acid
TG	Triglyceride
TNF- α	Tumor necrosis factor-alpha
T2DM	Type 2 diabetes mellitus

LIST OF SYMBOLS

%	Percentage
α	Alpha
μ	Micro
$^{\circ}\text{C}$	Degree Celsius
g	Gram
kg	Kilogram
M	Molar
mg/g	Milligram per gram
mg/dl	Milligrams per deciliter
min	Minute
mmol/l	Millimoles per liter
mM	Millimolar
ms	Millisecond
mV	Millivolts
ng/ml	Nanograms per milliliter
nm	Nanometer
pg/ml	Picograms per milliliter
$\mu\text{g/g}$	Microgram per gram
μm	Micrometer
μM	Micromolar
λ	Wavelength

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