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LIST OF ABBREVIATIONS

2-AP	2-acetyl-1-pyrroline
AAPH	2,2'-azobis(2-amidinopropane) dihydrochloride
AC	Antioxidant capacity
ACh	Acetylcholine
AChE	Acetylcholinesterase
AD	Alzheimer's disease
ANOVA	One-way analysis of variance
AOAC	Association of official analytical chemists
APOE	Apolipoprotein E
APP	Amyloid precursor protein
ATCh	Acetylthiocholine
ATP	Adenosine triphosphate
AUC	Areas under curve
BACE1	β -secretase or β -site amyloid precursor protein cleaving enzyme
BCh	Butyrycholine
BChE	Butyrylcholinesterase
BTCh	Butyrylthiocholine chloride
CAT	Choline acetyltransferase
CH ₂ Cl ₂	Dichloromethane
ChEIs	Cholinesterase inhibitors
ChEs	Cholinesterases
CNS	Central nervous system
DI	Deionized water
DMSO	Dimethyl sulfoxide
DNA	Deoxyribonucleic acid

LIST OF ABBREVIATIONS (cont.)

DPPH	1,1-diphenyl-2-picrylhydrazyl
DTNB	5-5'-dithiobis(2-nitrobenzoic acid)
DW	Dry weight
EtOH	Ethanol
FDA	Food and drug administration
FeCl ₃ •6H ₂ O	Ferric chloride hexahydrate
FRAP	Ferric reducing antioxidant power
FRET	Fluorescence resonance energy transfer
GAE	Gallic acid equivalents
GC-MS	Gas chromatography-mass spectrometry
H1N1	Influenza virus
H5N1	Avian influenza A
HCl	Hydrochloric acid
HPLC	High performance liquid chromatography
HSRI	Health systems research institute
HSV-1	Herpes simplex virus type-1
IC ₅₀	Half maximal inhibitory concentration
K ₂ HPO ₄	Di-potassium hydrogen phosphate
KCl	Potassium chloride
KH ₂ PO ₄	Dihydrogen phosphate
KOH	Potassium hydroxide
KPB	Potassium phosphate buffer solution
LC-MS	Liquid chromatography-mass spectrometry
MCI	Mild cognitive impairment
MgCl ₂	Magnesium chloride
MTs	Microtubules
NA	Not assessable
Na ₂ CO ₃	Sodium bicarbonate

LIST OF ABBREVIATIONS (cont.)

nAChRs	Nicotinic acetylcholine receptors
NaOH	Sodium hydroxide
NCD	Non communicable disease
ND	Not detected
NFTs	Neurofibrillary tangles
NHESO	National health examination survey office
NMDA	N-methyl-D-aspartate
OGTT	Oral glucose tolerance test
ORAC	Oxygen radical antioxidant capacity
p3	Non-amyloidogenic 3kDa peptide
PKN	Protein kinase N
PS1	Penicillin 1
PTFE	Polytetrafluoroethylene
RINm5F	Insulinotropic rat cells
RNA	Ribonucleic acid
RNS	Reactive nitrogen species
RO	Reverse osmosis water
ROS	Reactive oxygen species
RSM	Response surface methodology
sAPP- α	Soluble peptide APP- α
sAPP- β	Soluble peptide APP- β
SAR	Structure-activity relationships
SARS	Severe acute respiratory syndrome
t-BNQ	tert-Butylhydroquinone
TE	Trolox equivalence
TF	Total flavonoid
TFA	Trifluoroacetic acid
TPC	Total phenolic content

LIST OF ABBREVIATIONS (cont.)

TPCs	Total phenolic compounds
TPTZ	2, 4, 6-tripyridyl-s-triazine
TRAP	Total radical trapping antioxidant parameter
Trolox	6-hydroxy-2,5,8-tetramethylchroman-2-carboxylic acid