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Insulin resistance in obese patients with type 2 diabetes mellitus : effects of a very low calorie diet

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**Insulin Resistance in Obese Patients
with Type 2 Diabetes Mellitus:
Effects of a Very Low Calorie Diet**

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**Insulin Resistance in Obese Patients
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ABBREVIATIONS

Acrp	Complement-related protein 30
ADD1/SREBP	Adipocyte determination and differentiation factor/sterol regulatory element-binding protein
AgRP	Agouti-related protein
AMPK	Adenosine monophosphate kinase
aP2	Fatty-acid binding protein
apM1	Adipose most abundant gene transcript-1
ASBG	Adjustable silicone gastric banding
AS160	Akt substrate of 160 kD
ASP	Acylation-stimulating protein
ATP	Adenosine triphosphate
AUC	Area under the plasma concentration-time curve
BAT	Brown adipose tissue
bHLH	Basic helix-loop-helix
BIA	Bioelectrical impedance analysis
BMI	Body mass index
BPD	Biliopancreatic diversion
BSA	Body surface area
cAMP	Cyclic adenosine monophosphate
CART	Cocaine-amphetamine-related transcript
C/EBP	CCAAT (is piece of DNA)/enhancer-binding protein
CHD	Coronary heart disease
CNS	Central nervous system
COS cells	Monkey cells immortalised with simian V40 virus
CRH	Corticotropin-releasing hormone
CT-scan	Computer tomography scan
Cys	Cysteine
DAG	Diacylglycerol
DM	Diabetes mellitus
DNA	Deoxyribonucleic acid
EGP	Endogenous glucose production
ER	Energy restriction
FAS	Fatty acid synthase
FAT/CD36	Fatty acid transporter/CD36
FFA	Free fatty acids
FFM	Fat free mass
FIZZ	Found in inflammatory zone

Abbreviations

FPG	Fasting plasma glucose
GAP	GTP-ase activating protein
Gdp 28	Gelatin-binding protein
GH	Growth hormone
GLUT-4	Glucose transporter-4
G6Pase	Glucose-6-phosphatase
GS	Glycogen synthase
GSK-3	Glycogen synthase kinase-3
GTP	Guanosine triphosphate
HbA _{1c}	Glycosylated haemoglobin
HDL	High density lipoprotein
HGO	Hepatic glucose output
HNF	Hepatic nuclear factor
IL-6	Interleukin-6
IMCL	Intramyocellular lipids
IRS	Insulin receptor substrate
JAK	Janus kinase
kD	Kilo Dalton
LBM	Lean body mass
LCFA	Long-chain fatty acids
LDL	Low density lipoprotein
M	Glucose metabolised
MCR _i	Metabolic clearance rate of insulin
MODY	Maturity-onset diabetes of the young
mRNA	messenger-RNA (ribonucleic acid)
MRI	Magnetic resonance imaging
MRS	Magnetic resonance spectroscopy
α-MSH	Alpha-melanocyte-stimulating hormone
MW	Molecular weight
N	Nitrogen
NEFA(s)	Non-esterified fatty acid(s)
NMR	Nuclear magnetic resonance
NOGD	Non-oxidative glucose disposal
NPY	Neuropeptide Y
Ob-Rb	Long isoform of the leptin receptor
PDK-1	Phosphoinositide-dependent kinase-1
PEPCK	Phospho-enolpyruvate carboxykinase
PI3K	Phosphatidylinositol 3-kinase
PIP2	Phosphatidyl-inositol-3,4-biphosphate

PIP3	Phosphatidyl-inositol-3,4,5-triphosphate
PKB	Protein kinase B
PKC	Protein kinase C
POMC	Pro-opiomelanocortin
PPAR- γ	Peroxisome proliferator-activated receptor gamma
PRAS 40	Proline-rich Akt substrate of 40 kDA
PTEN	Phosphatase and tensin homologue
PTP1B	Protein tyrosine phosphatase 1B
R_a	Rate of appearance of a flux
R_d	Rate of disappearance of a flux
RELM	Resistin-like molecule
RIA	Radioimmuno assay
RR	Relative risk
RQ	Respiratory quotient
RXR	Retinoid X receptor
SD	Standard deviation
SEM	Standard error of the mean
SHIP	SH2-domain-containing inositol 5-phosphatase
STAT	Signal transducers and activators of transcription
TC	Total cholesterol
TG	Triglycerides
TNF- α	Tumour necrosis factor alpha
TZD	Thiazolidinedione derivative
$\dot{U}co_2$	CO ₂ production
$\dot{U}o_2$	O ₂ consumption
VBG	Vertical banding gastroplasty
VLCD	Very low calorie diet
VLDL	Very low density lipoprotein
WAT	White adipose tissue
WHO	World health organization
WHR	Waist to hip ratio



"Wie schrijft die blijft"



Ter herinnering aan mijn moeder

*" Zij die menen zonder trainen kans te hebben op succes
Oh die dommerds, oh die stommerds leren straks een harde les"*

Voor mijn vader

