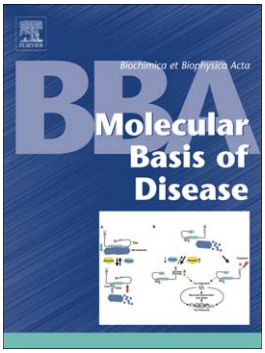

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Abbreviations: 3-TyrNO2, 3-Nitrotyrosine; AβN3(pE), Pyroglutamate-Aβ; iAβ, Intraneuronal Aβ; BBB, Blood-brain barrier; BHI, Bioenergetic Health Index; CRTC, CREB-regulated transcription coactivator; IDE, Insulin degrading enzyme; IR, Insulin resistance; MetS, Metabolic syndrome; OCR, Oxygen consumption rate; PGC-1α, PPARɣ coactivator 1α; SD, Standard diet; Sirt1, Sirtuin 1; SO, stratum oriens; SOD, Superoxide dismutase; SP, stratum pyramidale; SRC, Spare respiratory capacity;T2DM, Type 2 diabetes mellitus; WAT, White adipose tissue; WD, Western diet.