

Methylglyoxal, the glyoxalase pathway and advanced glycation endproducts in type 2 diabetes and cardiovascular disease

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STELLINGEN

behorend bij het proefschrift

Methylglyoxal, the glyoxalase pathway and advanced glycation endproducts in type 2 diabetes and cardiovascular disease

Nordin Hanssen

Maastricht, 20 mei 2015

1. Hogere plasmawaarden van aan eiwit gebonden N^ε-(carboxymethyl)lysine en N^ε-(carboxyethyl)lysine hangen samen met een hoger risico op het ontwikkelen van hart- en vaatziekten in mensen met type 2 diabetes (Dit proefschrift)
2. Concentraties van aan eiwit gebonden N^ε-(carboxymethyl)lysine en 5-hydro-5-methylimidazolone zijn hoger in kwetsbare dan stabiele vormen van slagaderverkalking in de halsslagader (Dit proefschrift)
3. Glyoxalase-1-expressie is lager in gescheurde dan in stabiele segmenten van slagaderverkalking uit de halsslagader (Dit proefschrift)
4. Transgene overexpressie van glyoxalase 1 gaat ontwikkeling van slagaderverkalking niet tegen in ApoE-deficiënte muizen met en zonder diabetes (Dit proefschrift)
5. Remming van methylglyoxal productie is een potentiële behandelstrategie voor hart- en vaatziekten
6. Wetenschappelijk onderzoek verbetert de geneeskunde door het ontdekken van nieuwe behandelmethoden van ziekten, maar is vooral noodzakelijk om zinloze behandelingen uit te bannen
7. Door de evolutionaire oorsprong van de mens te bestuderen zijn de oorzaken van type 2 diabetes en hart- en vaatziekten beter te begrijpen
8. 80% van de door diabetes veroorzaakte sterfte vindt plaats in landen met een laag tot gemiddeld inkomensniveau. Diabetes is dus geen welvaartsziekte
9. "We are a way for the cosmos to know itself" Carl Sagan (1934-1996)