Dr Georges MOUTON MD

Functional Medicine

QUOTE GM #25

23/04/2018

Titre

Créé le

LA PERFORMANCE COGNITIVE EST ASSOCIÉE À LA PRISE DE SUCRE

Am J Clin Nutr. 2017 Dec;106(6):1463-1470. doi: 10.3945/ajcn.117.162263. Epub 2017 Oct 25.

A high-glycemic diet is associated with cerebral amyloid burden in cognitively normal older adults.

Taylor MK[1,2], Sullivan DK[1,2], Swerdlow RH[2], Vidoni ED[2], Morris JK[2], Mahnken JD[3,2], Burns JM[4].

Author information

1 Departments of Dietetics and Nutrition and.
2 University of Kansas Alzheimer's Disease Center, Fairway, KS.
3 Biostatistics, University of Kansas Medical Center, Kansas City, KS; and.
4 University of Kansas Alzheimer's Disease Center, Fairway, KS jburns2@kumc.edu.

Abstract

Background: Little is known about the relation between dietary intake and cerebral amyloid accumulation in aging.**Objective:** We assessed the association of dietary glycemic measures with cerebral amyloid burden and cognitive performance in cognitively normal older adults.**Design:** We performed cross-sectional analyses relating dietary glycemic measures [adherence to a high-glycemic-load diet (HGLDiet) pattern, intakes of sugar and carbohydrates, and glycemic load] with cerebral amyloid burden (measured by florbetapir F-18 positron emission tomography) and cognitive performance in 128 cognitively normal older adults who provided eligibility screening data for the University of Kansas's Alzheimer's Prevention through Exercise (APEX) Study. The study began in November 2013 and is currently ongoing.**Results:** Amyloid was elevated in 26% (n = 33) of participants. HGLDiet pattern adherence (P = 0.01), sugar intake (P = 0.03), and carbohydrate intake (P = 0.05) were significantly higher in participants with elevated amyloid burden. The HGLDiet pattern was positively associated with amyloid burden both globally and in all regions of interest independently of age, sex, and education (all $P \leq 0.001$). Individual dietary glycemic measures (sugar intake, carbohydrate intake, and glycemic load) were also positively associated with global amyloid load and nearly all regions of interest independently of age, sex, and educational level ($P \leq 0.05$). Cognitive performance was associated only with daily sugar intake, with higher sugar consumption associated with poorer global cognitive performance (global composite measure and Mini-Mental State Examination) and performance on subtests of Digit Symbol, Trail Making Test B, and Block Design, controlling for age, sex, and education.**Conclusion:** A high-glycemic diet was associated with greater cerebral amyloid burden, which suggests diet as a potential modifiable behavior for cerebral amyloid accumulation and subsequent Alzheimer disease risk. This trial was registered at clinicaltrials.gov as NCT02000583.

KEYWORDS: Alzheimer disease; PET imaging; amyloid; carbohydrate; glycemic load; principal components analysis

PMID: 29070566 PMCID: PMC5698843 [Available on 2018-12-01] DOI: 10.3945/ajcn.117.162263

"Le modèle de régime à charge glycémique élevée était positivement associé à la surcharge amyloïde à la fois globalement et dans toutes les régions intéressantes, et ce indépendamment de l'âge, du sexe et de l'éducation (tous P ≤ 0,001).

*Les évaluations glycémiques alimentaires individuelles (consommation de **sucre**, prise de **glucides** tout comme la charge glycémique) étaient aussi associées positivement à la surcharge amyloïde globale dans presque toutes les régions intéressantes, et ce indépendamment de l'âge, du sexe et du niveau d'instruction (P ≤ 0,05).*

La performance cognitive était uniquement associée à la prise quotidienne de sucre…

***Conclusion** : un régime à charge glycémique élevée était associé à une surcharge amyloïde cérébrale plus importante, ce qui suggère que le régime alimentaire doit être vu comme un comportement potentiellement modifiable afin de contrôler l'accumulation amyloïde dans le cerveau et, en conséquence, le risque de maladie d'Alzheimer. "*

Aide à la traduction : www.medicatrix.be et Christel Heintz