



# New Indirect Evidence of Centralized Aerobic-anaerobic Energy Balance Compensation

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## Letter to the Editor

The goal of this letter is to demonstrate how the recent report on the significant reduction of Alzheimer's disease (AD) risk for sildenafil users [1] can be linked through the theory of Centralized aerobic-anaerobic energy balance compensation (CAAEBEC) with our data obtained during recovery from arterial hypertension (AHT) [2]. In this report, the endophenotype disease module-based methodology was applied to Alzheimer's disease (AD). This allows us to reveal that sildenafil could be considered a potential disease risk modifier. It is known, that the risk of AD is associated with both risk of AHT [3] and diabetes myelitis (DM) [4]. The report itself demonstrates mostly pure statistical consideration, but in association with demonstrated effect on blood flow through vascular tone [5] and neuroprotective and neurorestorative role [6].

On another side, the theory of CAAEBEC suggests that the AHT appears as a compensation reaction to the blood flow through cervical vertebral arteries obstruction to access the rhomboid fossa. A detailed explanation of how this obstruction plays a role in AHT had been already done [7]. BTW, the connection between AHT and DM through CAAEBEC has also been demonstrated [8].

It looks like we can link the sildenafil effect on AD, DM, and AHT with the improvement of arterial blood flow. This could be considered indirect evidence of CAAEBEC.

## Declarations

## Funding

No funding was received for this study.

## Competing interests

The authors have no competing interests to declare that are relevant to the content of this article.

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Zhukov KV, Gasparyan BA, Vetcher AA, et al. (2023) New Indirect Evidence of Centralized Aerobic-anaerobic Energy Balance Compensation. *Front Med Health Res* 5: 118.

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**Received date:** October 27, 2022; **Accepted date:** March 30, 2023; **Published date:** April 08, 2023

**Citation:** Zhukov KV, Gasparyan BA, Vetcher AA, Shishonin AY (2023) New Indirect Evidence of Centralized Aerobic-anaerobic Energy Balance Compensation. *Front Med Health Res* 5(1): 118.

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