A recent population health study performed by Singapore’s Lee Kong Chian School of Medicine (LKCMedicine) discovered a relationship between visceral fat and cognitive ability.

Visceral fat is the kind of fat that wraps around the internal organs, and having too much of it is linked to poorer cognitive performance, namely memory, executive function, processing speed, and attention. The study, which examined the data of nearly 9,000 Singaporeans and permanent residents, also discovered a link between a greater BMI and poorer cognitive ability.

**Findings of the Study**

The Health for Life in Singapore (HELIOS) research, coordinated by NTU LKCMedicine in collaboration with the National Healthcare Group and Imperial College London, commenced in 2018. The study looked at the cognitive performance and body fat of 8,769 people between the ages of 30 and 84. The individuals were subjected to cognitive tests, whole-body scans, physiological and biochemical examinations, and a series of body fat and metabolic characteristics were calculated.

The HELIOS data indicated three factors that are consistently associated with poor cognitive performance: lower high-density lipoprotein (or “good” cholesterol), higher visceral fat mass index, and higher waist-to-hip ratio. This information prompted the researchers of the study to look into a biological link between body fat and cognition.

**Mendelian Randomization Analysis**

The researchers used Mendelian randomization, a statistical approach that uses short snippets of DNA that vary from person to person, to gain a better understanding of the relationship between body fat and cognitive function. Because these genetic variants are present at birth and are not influenced by lifestyle or environmental factors, any differences in health outcomes observed can be attributed to the presence or absence of specific genetic variants.

The researchers discovered that genetic variations that predict excess visceral fat, raised BMI, and increased BMI-adjusted waist-to-hip ratio are linked to poor cognitive function. Dr Theresia Mina, NTU LKCMedicine Dean’s Postdoctoral Fellow and study lead author, explained that some people may have more visceral fat due to genetic reasons, providing evidence that visceral fat is directly related to cognitive ageing and not due to environmental or lifestyle factors.

**Implications of the Study**

These findings have important public health implications, as dementia is predicted to affect millions of individuals worldwide in the future decades. Professor John Chambers, the study’s principal author, suggested that preventing and treating obesity in Asian populations could play a vital role in maintaining cognitive function and reducing the risk of dementia in the future.
Lifestyle Changes to Control Visceral Fat

Here are some tips you can do to prevent and manage visceral fat:

1. **Spice up your meals**
   
   Adding fragrant spices and herbs to your meals, such as turmeric, ginger, and cinnamon, not only makes them more delicious, but it can also help accelerate your metabolism and reduce inflammation in your body.

2. **Get moving**

   Regular exercise will help you burn excess visceral fat while also improving your overall health. Encourage your family to go for evening walks or to do some gentle yoga in the morning.

3. **Watch your sugar intake**

   Sweetened beverages and pastries can raise blood sugar levels and promote the accumulation of visceral fat. Family members should be encouraged to choose healthy snacks like fruit or almonds.

4. **Drink green tea**

   **Green tea** use can aid to increase metabolism and decrease inflammation. Encourage your family to consume green tea instead of sugary beverages.

5. **Get enough sleep**

   Not getting enough sleep might cause hormonal imbalances and an increase in visceral fat. Family members should be encouraged to prioritise getting 7-8 hours of sleep per night.

   You and your family can lessen your risk of developing visceral fat accumulation and enhance general health by adopting these suggestions into your everyday routine. Never forget that tiny adjustments can have a tremendous impact!

**Takeaway**

NTU LKCMedicine’s population health study reveals evidence of a link between visceral fat and cognitive performance. The researchers discovered that having too much visceral fat is linked to lower cognitive performance in areas such as memory, executive function, processing speed, and attention. This study emphasises the need of avoiding and treating obesity in Asian people in order to retain cognitive function and reduce the risk of dementia in the future.

- **Source**
  
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