

## The combination of a Mediterranean diet and physical activity is associated with a lower risk of starting psychiatric medication

- *Following a diet based on Mediterranean diet recommendations and engaging in moderate physical activity is associated with a 41% to 59% lower risk of starting antidepressant, anxiolytic, antipsychotic, and antiseizure medications.*
- *The study is published in the journal Age and Ageing and is based on data from the PREDIMED study, a clinical trial on the effects of the Mediterranean diet in the prevention of cardiovascular disease.*
- *The analysis includes data from between 6,000 and 7,000 participants in the study, all older adults at risk for chronic illness.*

**Barcelona, June 13, 2025.** – Adhering to the principles of the Mediterranean **diet and engaging in physical activity is linked to a lower likelihood of initiating treatment with the three main types of psychiatric medications** — antidepressants, anxiolytics, and antipsychotics — as well as with antiseizure drugs, which are associated with neurological conditions. This is demonstrated in a new study led by the Hospital del Mar Research Institute and the Faculty of Health Sciences at Blanquerna-Ramon Llull University. This is the first study to describe the link between a healthy diet and the risk of starting use of these medications. The findings are published in the journal Age and Ageing.

The study is based on data from the PREDIMED study, which evaluates the impact of the Mediterranean diet in the primary prevention of cardiovascular disease. Specifically, **data from between 6,000 and 7,000 participants** were analyzed. These are older adults, with an average age of 67 years, who are at risk for chronic disease (14% were smokers, 45% were overweight, and 47% were obese). Participants were followed for nearly five years. During the study, 7.9% of participants began taking antidepressants, 8.8% started anxiolytics, 1.1% started antipsychotics and 2.8% started antiseizure drugs.

According to Dr. Álvaro Hernáez, researcher at the Hospital del Mar Research Institute and at CIBER's Cardiovascular Disease area (CIBERCV), and professor at the Faculty of Health Sciences at Blanquerna-Ramon Llull University, the results indicate that **"following a Mediterranean diet is associated with a lower likelihood of starting the three main types of psychiatric medication — antidepressants, anxiolytics, and antipsychotics — as well as a lower likelihood of starting antiseizure medications, which are associated with neurological conditions. As for physical activity, the associations are weaker and mainly focused on antidepressants, anxiolytics, and antiseizure drugs"**.

### Reduction between 41% and 59%

The study shows that each **one-point increase in adherence to the Mediterranean diet**, measured on a 0–14 scale, is linked to a 28% reduction in the initiation of antidepressants, 25% in anxiolytics, 23% in antipsychotics and 23% in antiseizure medications.

Regarding physical activity, an increase equivalent to walking briskly for 40 minutes per week, or attending 30-minute sessions of Pilates, dance, or aerobics once a week — especially among people with initially low activity levels — is associated with a 20% lower risk of starting antidepressants and a 15% lower risk of starting anxiolytics. It is also linked to a 4% lower risk of starting antiseizure drugs in the general population.

***"These associations are strongest when a person goes from low to moderate or high adherence to the Mediterranean diet, or from being inactive to becoming physically active"*** explains Dr. Hernáez. At the same time, the combination of both variables at high levels yields the best results, with **a reduced risk of starting all medications studied, ranging from 41% to 59%: 59% for antidepressants, 46% for anxiolytics, 55% for antipsychotics, and 41% for antiseizure medications.**

According to the authors, these results may be explained by several neuroprotective mechanisms, including reduced oxidative stress and neuroinflammation, improved neurotransmitter function, and other factors such as positive epigenetic modifications of DNA.

The study highlights the importance of exploring complementary approaches to pharmacological treatments in mental health, emphasizing the potential benefits of following a healthy diet and engaging in physical activity to improve the mental well-being of people over 65 years of age. In Europe, this group has a high prevalence of psychoactive medication use, along with its potential side effects. As noted by Dr. Víctor Pérez, Head of the Psychiatry Department at Hospital del Mar — who was not involved in the study — ***"this is a particularly interesting field of research for continuing to explore the relationship between mental disorders and protective factors such as diet and physical activity"***.

The researchers now aim to conduct a randomized clinical trial to evaluate the effectiveness of the Mediterranean diet and physical activity as interventions to help prevent conditions such as depression, anxiety, psychotic disorders, or seizure-related disorders.

The study also includes contributions from researchers in the CIBER areas of Obesity and Nutrition (CIBEROBN) and Epidemiology and Public Health (CIBERESP).

### **Reference Article**

Hernandez MH, Fornara E, Lassale C, Castañer-Niño O, Estruch R, Ros E, Martínez-González MÁ, Corella D, Babio N, Lapetra J, Gómez-Gracia E, Arós F, Fiol M, Serra-Majem L, Riera-Mestre A, Gea A, Ortega-Azorín C, Díaz-López A, Fitó M, Hernáez Á. Adherence to a Mediterranean diet and leisure-time physical activity are associated with reduced initiation of antidepressant, anxiolytic, antipsychotic and antiseizure drug use in older adults: a cohort study. *Age Ageing*. 2025 Mar 28;54(4):afaf088. doi: [10.1093/ageing/afaf088](https://doi.org/10.1093/ageing/afaf088). PMID: 40221936; PMCID: PMC11994031.

### **More Information**

Communications Office — Hospital del Mar Research Institute / Hospital del Mar: Marta Calsina 93 3160680 [mcalsina@researchmar.net](mailto:mcalsina@researchmar.net), David Collantes 600 402 785 [dcollantes@hmar.cat](mailto:dcollantes@hmar.cat)

