

# Association between adiposity levels and cognitive impairment in the Chilean older adult population

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Although both obesity and ageing are risk factors for cognitive impairment, there is no evidence in

Chile on how obesity levels are associated with cognitive function. Therefore, the aim of the present study was to investigate the association between adiposity levels and cognitive impairment in older Chilean adults. This cross-sectional study includes 1384 participants, over 60 years of age, from the Chilean National Health Survey 2009-2010. Cognitive impairment was evaluated using the Mini-Mental State Examination. BMI and waist circumference (WC) were used as measures of adiposity. Compared with people with a normal BMI, the odds of cognitive impairment were higher in participants who were underweight (OR 4.44; 95 % CI 2.43, 6.45;  $P < 0.0001$ ), overweight (OR 1.86; 95 % CI 1.06, 2.66;  $P = 0.031$ ) and obese (OR 2.26; 95 % CI 1.31, 3.21;  $P = 0.003$ ). The associations were robust after adjustment for confounding variables. Similar results were observed for WC. Low and high levels of adiposity are associated with an increased likelihood of cognitive impairment in older adults in Chile. Copyright © The Author(s) 2019 This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Adiposity

Ageing

Cognitive impairment

Elderly

Obesity

adolescent

adult

aged

aging

body mass

Chile

cognitive defect

complication

cross-sectional study

dementia assessment

female

health survey

human

lifestyle

male

middle aged

obesity

prevalence

risk factor

socioeconomics

very elderly

waist circumference

young adult

Adiposity

Adolescent

Adult

Aged

Aged, 80 and over

Aging

Body Mass Index

Chile

Cognitive Dysfunction

Cross-Sectional Studies

Female

Health Surveys

Humans

Life Style

Male

Mental Status and Dementia Tests

Middle Aged

Obesity

Overweight

Prevalence

Risk Factors

Socioeconomic Factors

Waist Circumference

Young Adult