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## Associations between resilience, frequency of food group consumption and anthropometric measures

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The aim of the present study was to explore potential associations between resilience and the frequency of consumption of various food groups in middle-aged Europeans. Previous research has implied that a decline in psychological well-being can impact on eating behaviour and body fat distribution in both human subjects and animals<sup>(1)</sup>. The frequency with which particular food groups are consumed may serve as a proxy marker of physical and psychological health status. Data were collected by survey from a representative sample (age range 43–93 years; *n* 1722) in Great Britain (*n* 1182) and Portugal (*n* 540) as part of the LIPGENE project. BMI (kg/m<sup>2</sup>) and waist circumference (WC; cm) were measured. An FFQ was employed to establish the frequency of intake of ten different food groups. Resilience was measured by means of the validated resilience scale (RSS11)<sup>(2)</sup>. Pearson partial correlation analysis was conducted to explore potential relationships between the dependent (BMI and WC) and independent (FFQ and RSS11) variables. Age, gender and education were controlled for in these analyses. Data analysis was conducted using SPSS version 15.0 for windows (SPSS Inc., Chicago, IL, USA). *P* < 0.05 was considered significant. Higher resilience scores were associated with greater frequency of consumption of the following food groups: dairy (*r* 0.08, *P* < 0.0001; Fig. 1); confectionery and biscuits (*r* 0.14, *P* < 0.0001; Fig. 2); spreads (*r* 0.23, *P* < 0.0001; Fig. 3); fruit and vegetables (*r* 0.20, *P* < 0.0001; Fig. 4). Moreover, WC was negatively associated with resilience (*r* -0.19, *P* < 0.001). No associations were found between BMI and resilience. Enhanced psychological well-being may promote healthy dietary habits and prevent obesity.

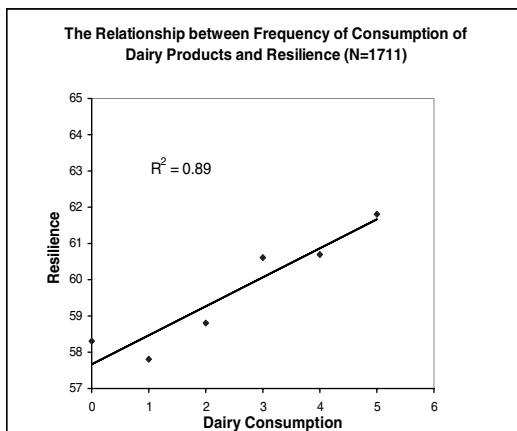


Fig. 1.

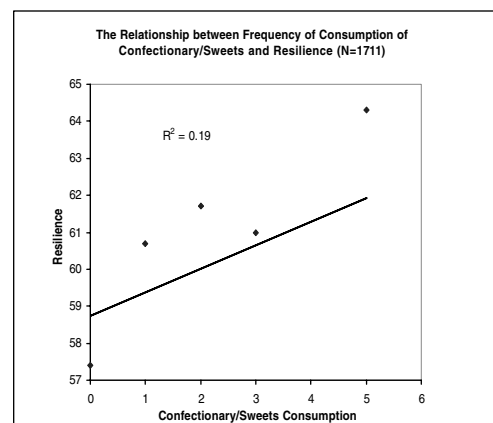


Fig. 2.

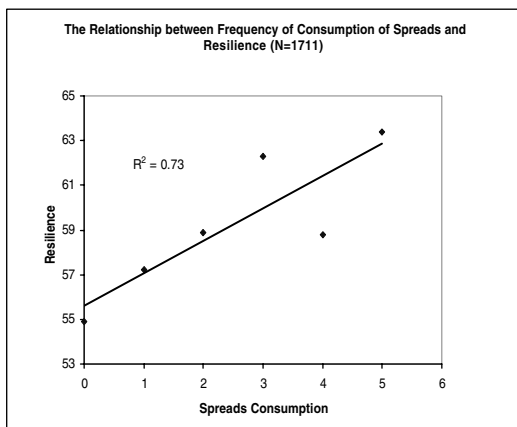


Fig. 3.

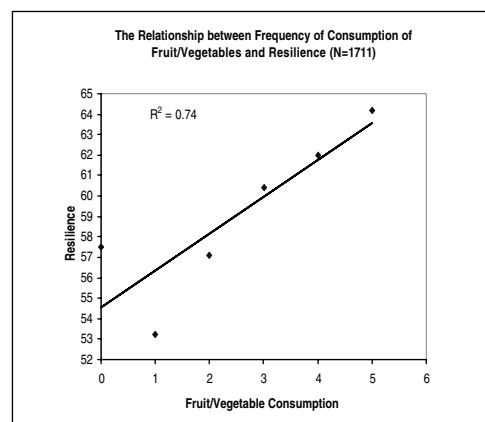


Fig. 4.

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1. Teskey GC, Kavaliers M & Hirst M (1984) *Life Sci* 35, 303–315.
2. Wagnild GM & Young HM (1993) *J Nurs Meas* 1, 165–178.