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## Dietary Flavonoids of Spanish Youth: Intakes, Sources, and Association with the Mediterranean Diet

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**Background:** Plant-based diets have been linked to high diet quality and reduced risk of cardiovascular diseases. The health impact of plant-based diets might be partially explained by the concomitant intake of flavonoids. Estimation of flavonoids intake in adults has been important for the development of dietary recommendations and interventions for the prevention of weight gain and its consequences. However, estimation of flavonoids intake in children and adolescents is limited.

**Methods:** Average daily intake and sources of flavonoids were estimated for a representative national sample of 3,534 children and young people in Spain, aged 2–24 years. The data was collected between 1998 and 2000 by 24-h recalls. The Phenol-Explorer database and the USDA database on flavonoids content were used. Adherence to the Mediterranean diet was measured by the KIDMED index.

**Results:** The mean and median intakes of total flavonoids were 70.7 and 48.1 mg/day, respectively. The most abundant flavonoid class was flavan-3-ols (35.7%), with fruit being the top food source of flavonoids intake (42.8%). Total flavonoids intake was positively associated with the KIDMED index ( $p < 0.001$ ).

**Conclusion:** The results of this study provide primary information about flavonoids intake and main food sources in Spanish children, adolescents and young adults. Participants with high daily mean intake of flavonoids have higher adherence to the Mediterranean diet.