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Nutrient intakes in European elderly populations: Comparison with recommendations

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Elderly people are often at risk of inadequate nutritional intake⁽¹⁾. Contributing factors include sensory impairment, poor dentition, reduced appetite and limited food access⁽²⁾. As nutrition impacts on chronic disease risk, as well as being a factor in length of hospital stay, reported wellbeing, and recovery from acute illness, it is important to understand where the deficits in older people's nutrition lie.

PubMed and Internet searches were done using key terms "European" + "Dietary Survey" + "Fatty acid/Nutrient/Micronutrient". For data to be included, a full report translated into English was required plus fatty acid data presented as percentage daily energy. The results from two Europe-wide and five country-specific surveys showed that saturated fat intakes as a proportion of energy were

The results from two Europe-wide and five country-specific surveys showed that saturated fat intakes as a proportion of energy were above 10% (range 12-14.5%) while n3 polyunsaturated fatty acid (PUFA) intakes were within the acceptable macronutrient distribution range of 2.5-9% daily energy. Long chain n3 PUFA intakes missed targets in the German and Finnish surveys. Other surveys did not report these data. Mean vitamin and mineral intakes as a proportion of recommendations were reported in six surveys – see below:

Ref	Age	Gender	Vit D	Folate	Ca	Mg	K	Fe	Zn
3	50-64 y	M	_	148	130	_	_	135	_
UK	•	F	_	123	110	_	_	110	_
4	≽65 y	M	38	148	135	90	88	125	97
UK		F	29	120	113	82	74	109	109
5	50-64 v	M	_	144	127	85	85	133	100
UK low income	≽65 y	F	_	129	119	76	75	117	87
	M	34	112	107	74	69	99	99	
	F	26	110	104	70	65	103	98	
6	≽70 y	M/F	16	_	79	67	_	102	_
France									
7	74–79 v	M	_	_	_	_	_	[7.2]*	_
Europe	,	F	_	_	_	_	_	[23.3]	_

y, year; * data show percentage below recommendation

The limited data on elderly populations suggest that average intakes of micronutrients are mostly satisfactory except for vitamin D, magnesium, potassium and zinc. Iron can be low or borderline in older groups. Fatty acid proportions are typically not in line with recommendations. Further work should identify sub-groups with inadequate nutrient intakes. It is worth noting that current UK policy states that housebound people and those aged ≥ 65 y should take a daily vitamin D supplement of 10 mcg. However, only 42 % of older people take any form of dietary supplement, indicating a need for better communication around vitamin $D^{(3)}$.

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