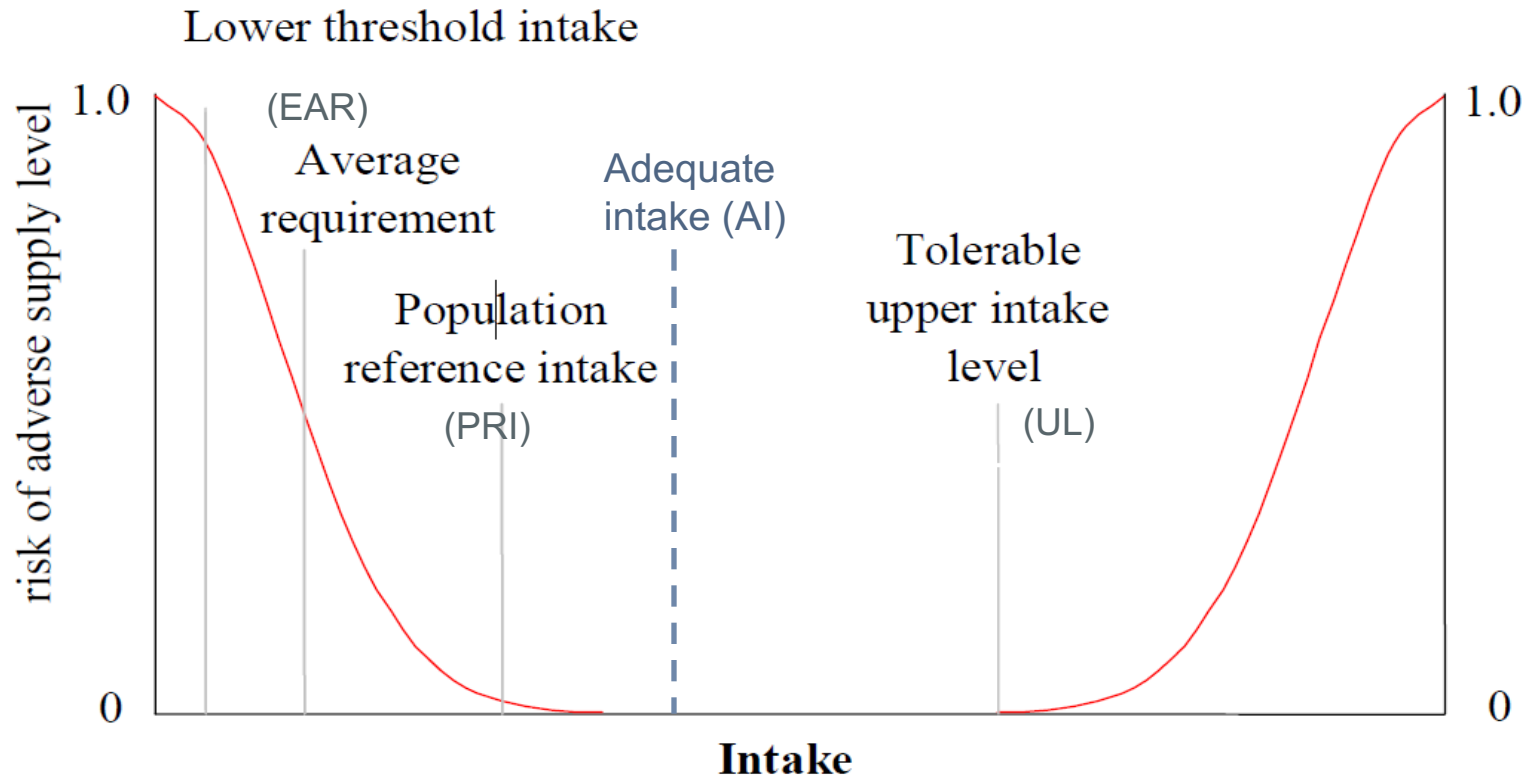


How well does the Belgian population comply with the DRV's for vitamins and minerals?

Karin De Ridder, PhD, MD

Head of team “Nutrition & Health”
Scientific Institute of Public Health

Dietary reference values (DRV's)



From: Health and Welfare, Canada, 1983; as adapted by Netherlands Health Council, 2000

VITAMINS



Vitamin B1

Vitamin B2

Vitamin B6

Folic acid (B9)

Vitamin B12

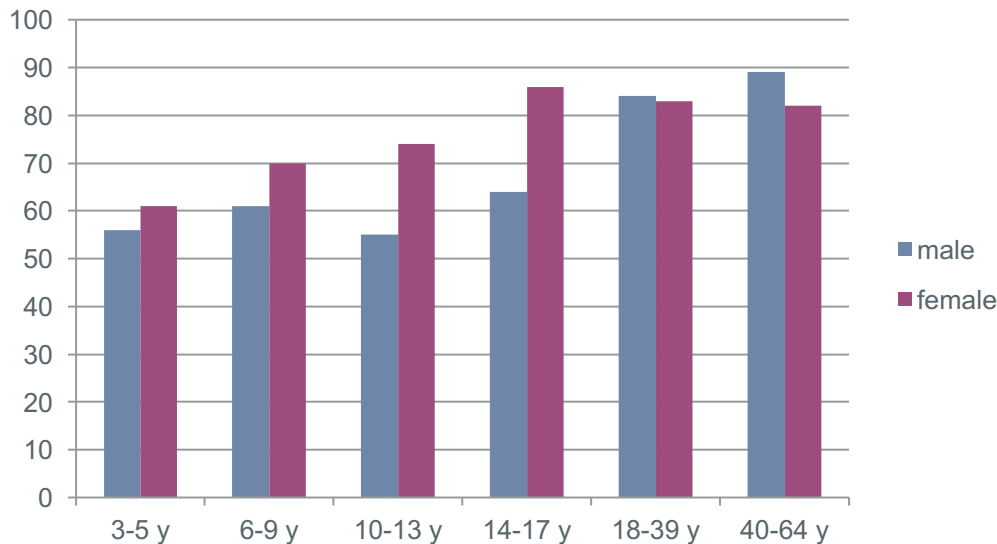
Vitamin C

Vitamin D

Vitamin B1 - Thiamine

	Mean intake	Recommendation PRI (~age/gender)	% population < PRI
food	0.97 mg/d	0.7-1.5 mg/day	81%
Food+sup	1.14 mg/d	0.7-1.5 mg/day	♂: 76% ♀:73%

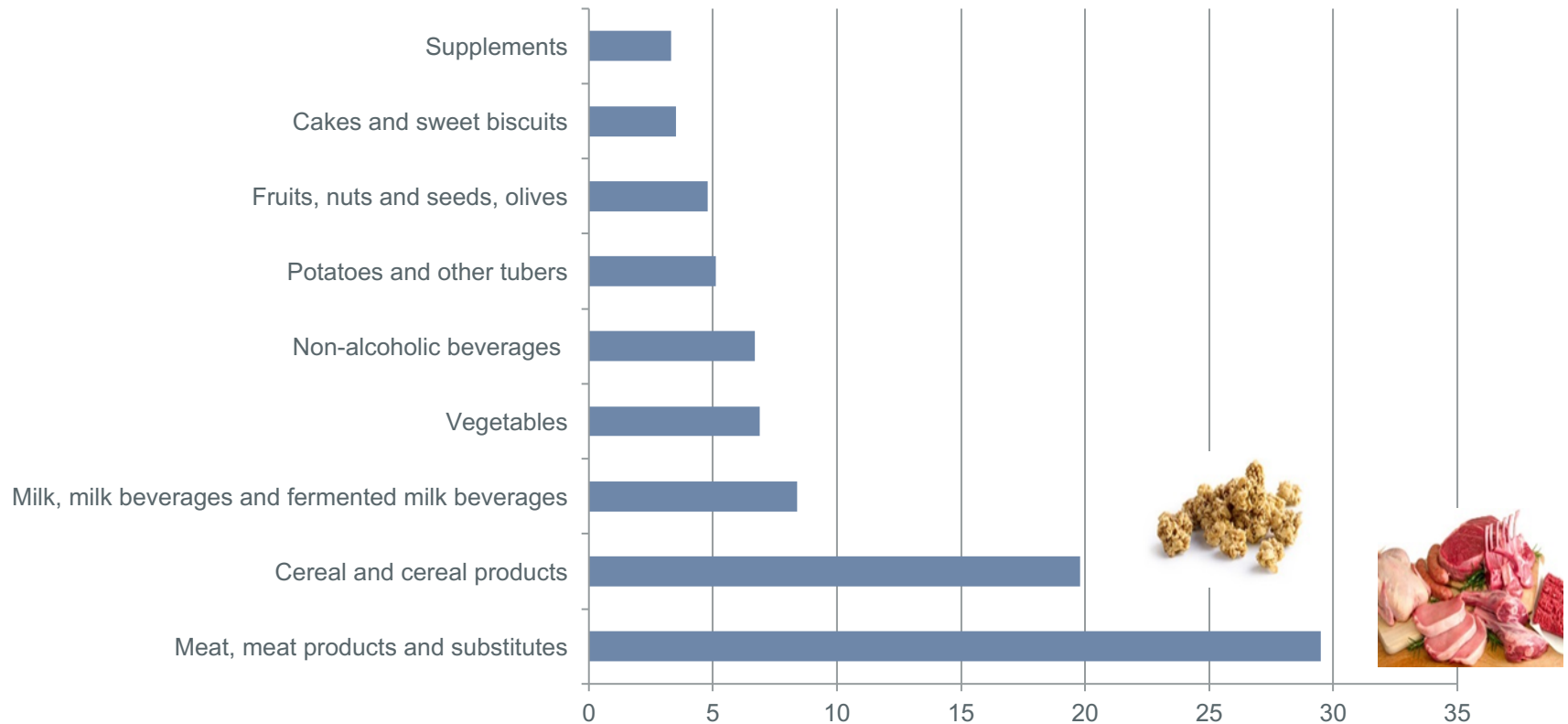
% of population with intake < PRI (food only)



(15-64 y)

Total vitamin B1

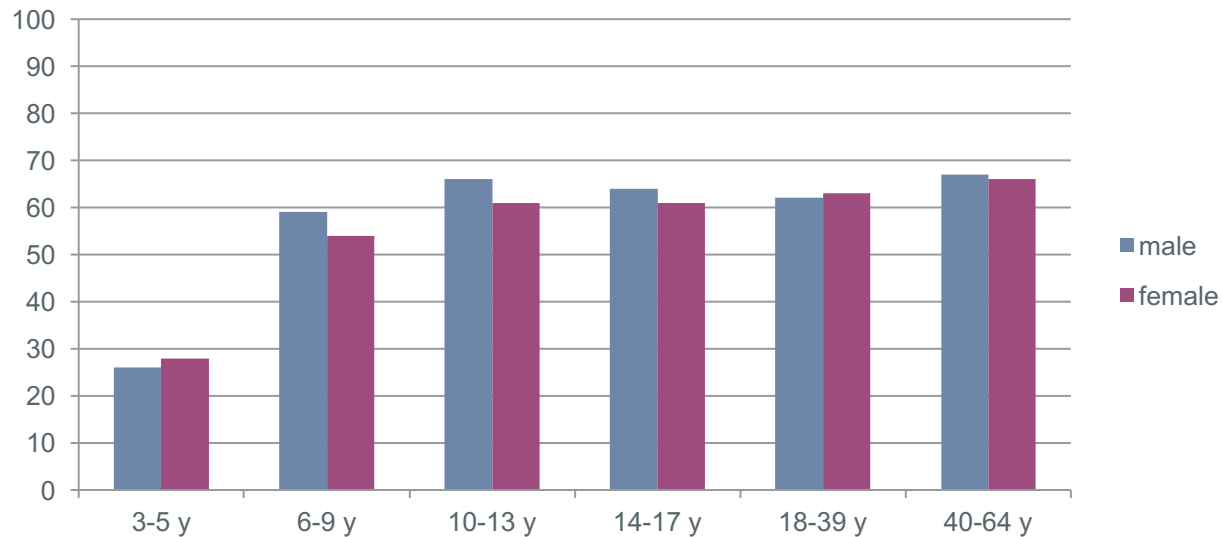
Mean contribution to total vitamin B1 intake (%)



Vitamin B2 - Riboflavin

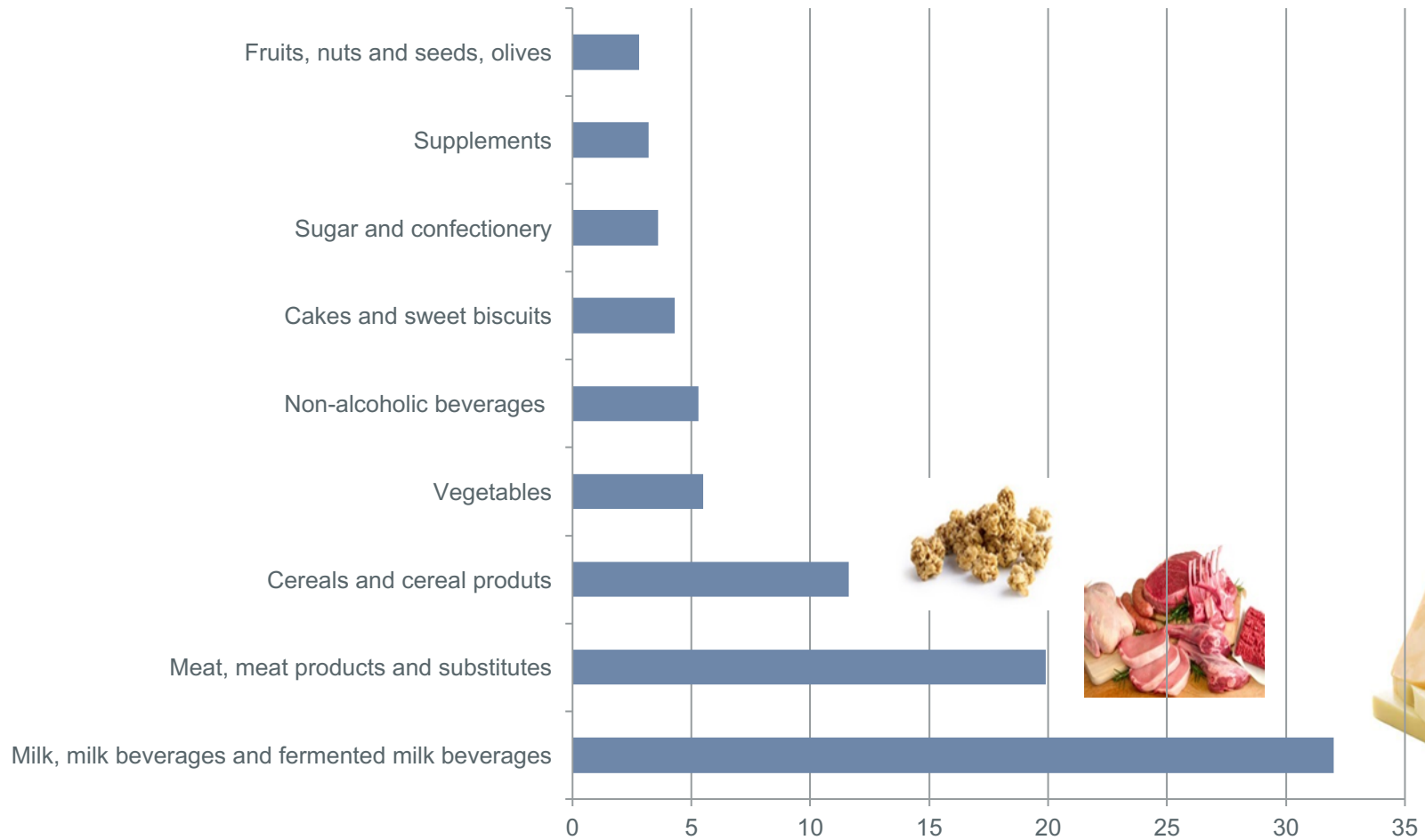
	Mean intake	Recommendation PRI (~age/gender)	% population < PRI	
food	1.25 mg/d	0.8-1.5 mg/day	♂: 63%	♀:62%
Food+sup	1.38 mg/d	0.8-1.5 mg/day	♂: 61%	♀:56%

**% of population with intake <PRI
(food only)**



Total vitamin B2

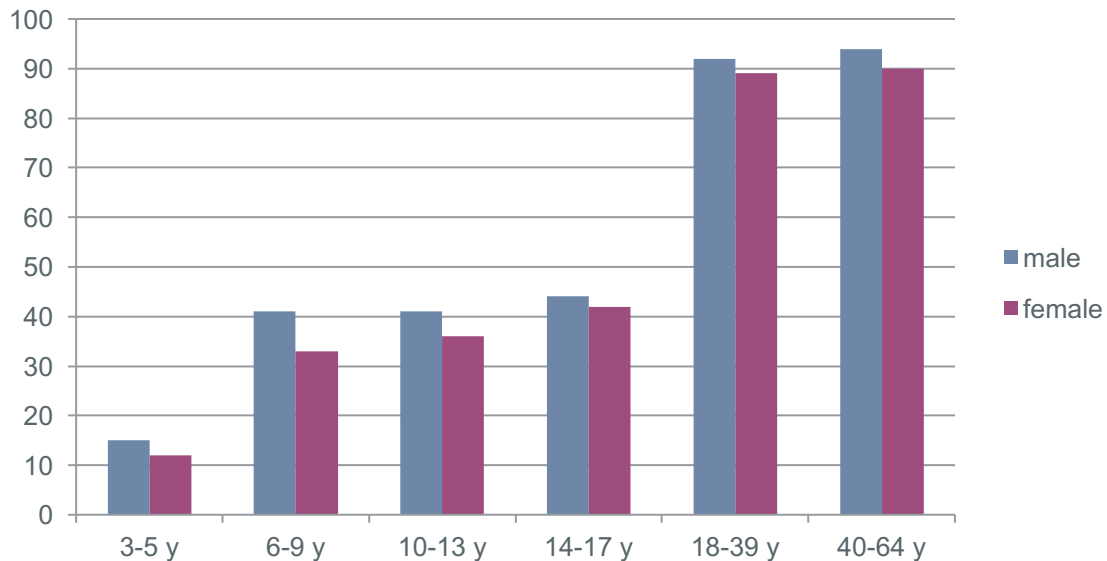
Mean contribution to total vitamin B2 intake (%)



Vitamin B6 - Pyridoxin

	Mean intake	Recommendation PRI (~age/gender)	% population < PRI	
food	1.52 mg/d	0.6-3 mg/day	♂: 80%	♀:77%
Food+sup	1.71 mg/d	0.6-3 mg/day	♂: 76%	♀:68%

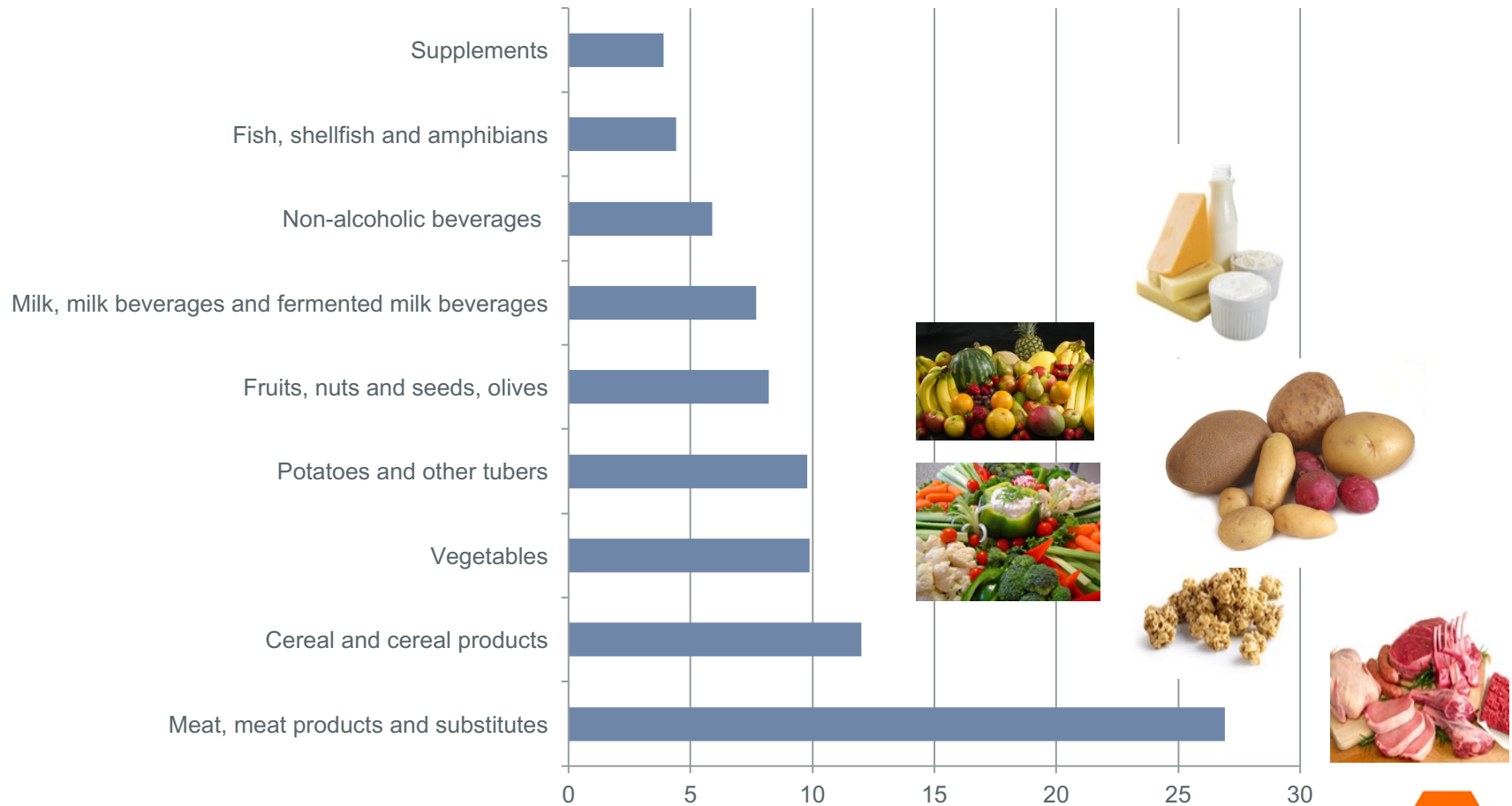
% of population with intake < PRI



Upper Limit (~age)	% > UL (Food+sup)
5-25 mg/day	♂:0 % ♀:0.4%

Total vitamin B6

Mean contribution to total vitamin B6 intake (%)



Vitamin B9 – Folic acid

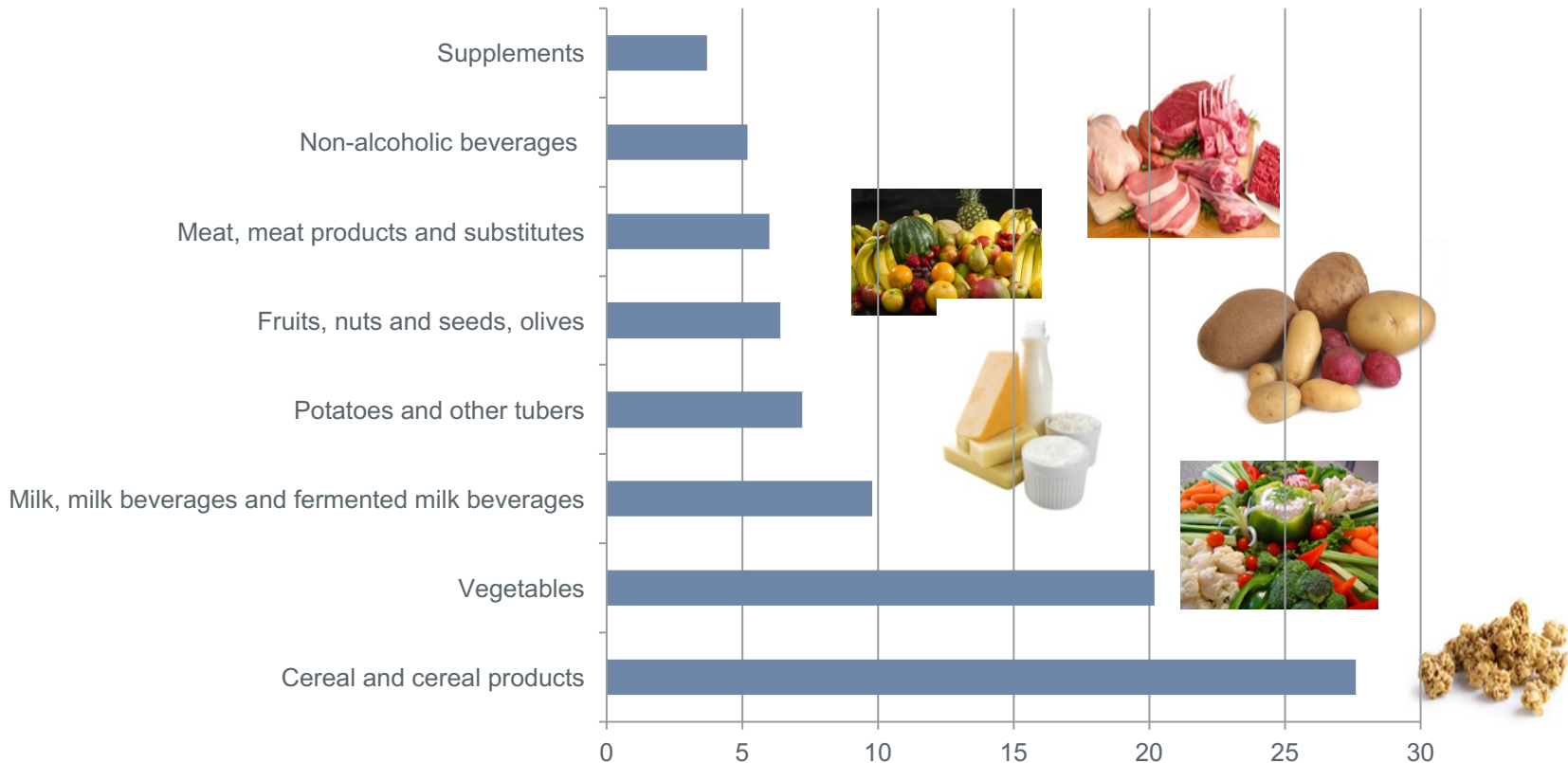
	Mean intake	Recommendation PRI (~age)	% of population < PRI
food	202 µg/d	100-300 µg/day	79%
Food+sup	236 µg/d	100-300 µg/day	70%

Mean Intake Folic Acid (µg/d)



Total Folic Acid

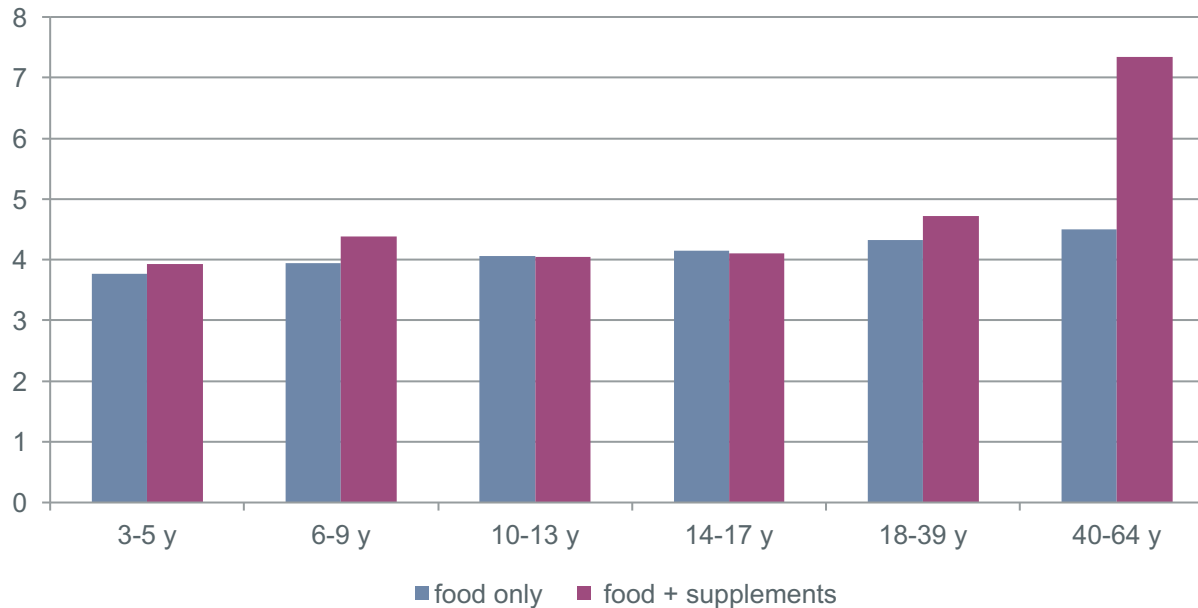
Mean contribution to total folic acid intake (%)



Vitamin B12 - cobalamine

	Mean intake	Recommendation AI (~age)	Prevalence of inadequate intake
food	4.33 µg/d	1.5-4 µg/day	♂: low ♀: low(3-9)/NA(10-64)
Food+sup	5.58 µg/d	1.5-4 µg/day	♂: low ♀: low(3-9)/NA(10-64)

Mean intake of vitamin B12



Total vitamin B12

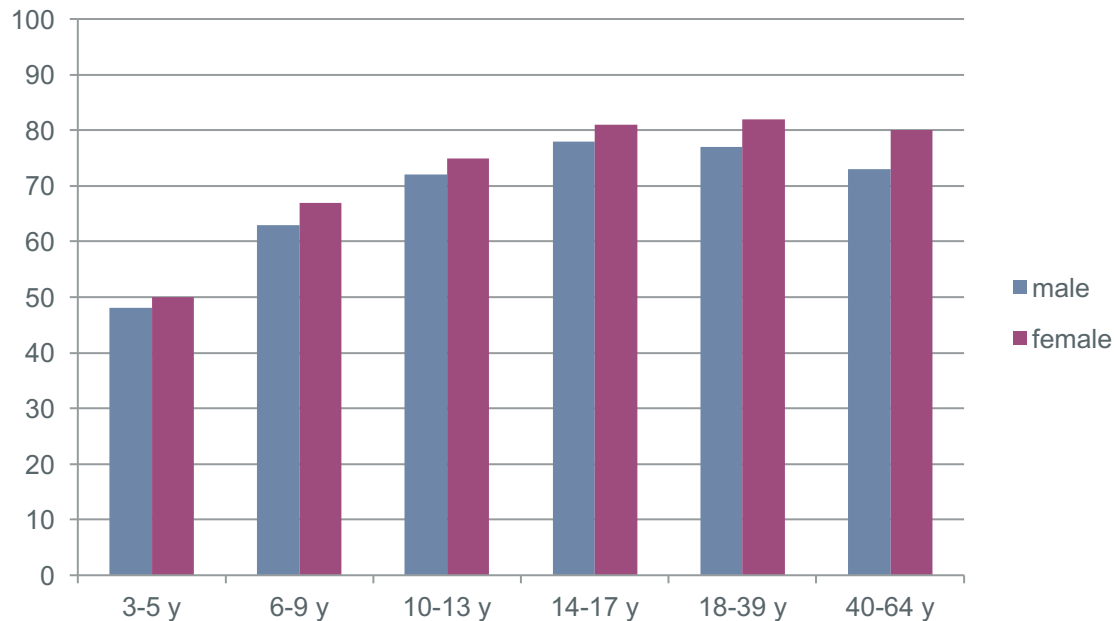
Mean contribution to total vitamin B12 intake (%)



Vitamin C – L-ascorbic acid

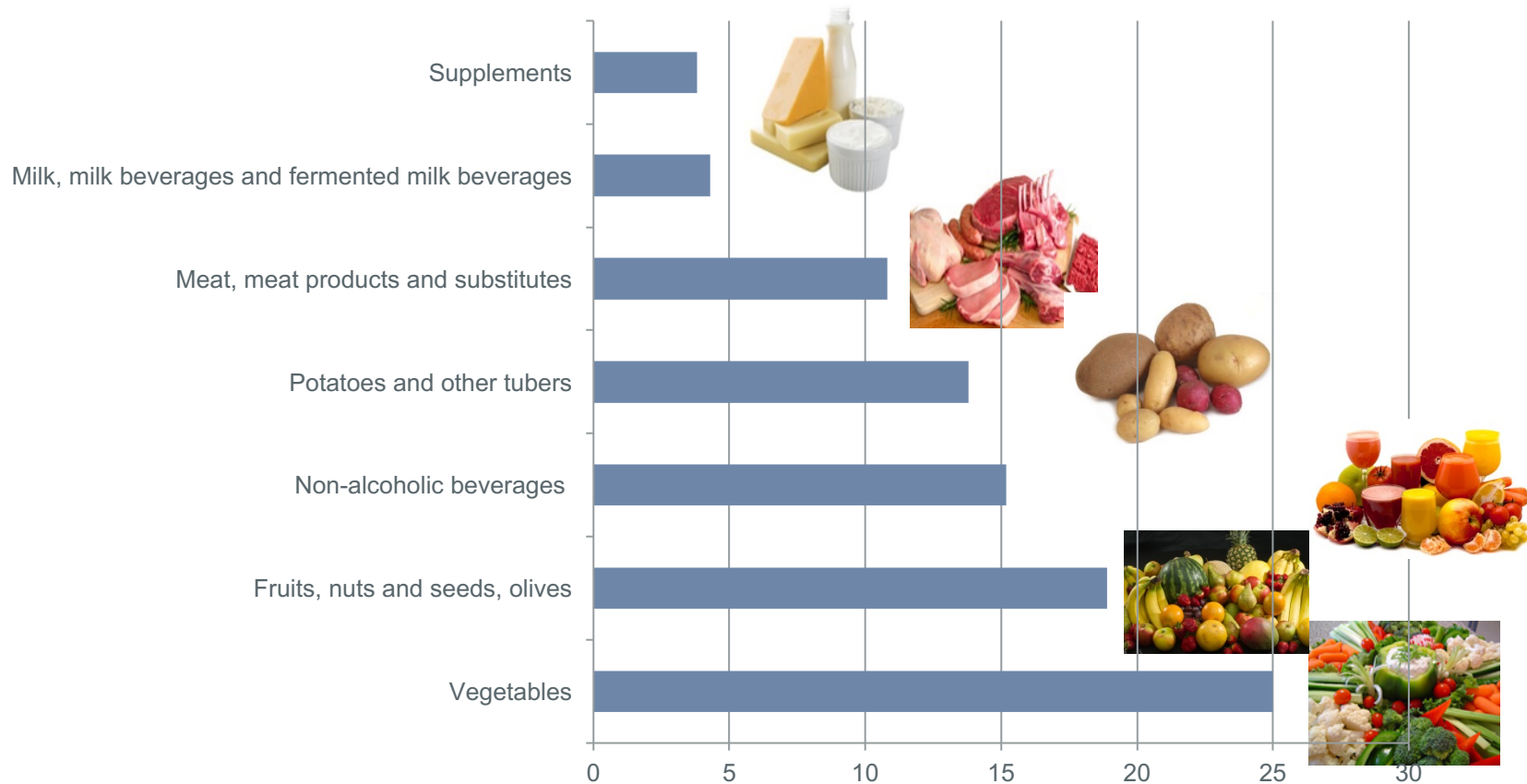
	Mean intake	Recommendation PRI (~age)	% of population < PRI
food	82 mg/d	60-110 mg/day	76%
Food+sup	89 mg/d	60-110 mg/day	71%

% of population with intake < PRI



Total Vitamin C

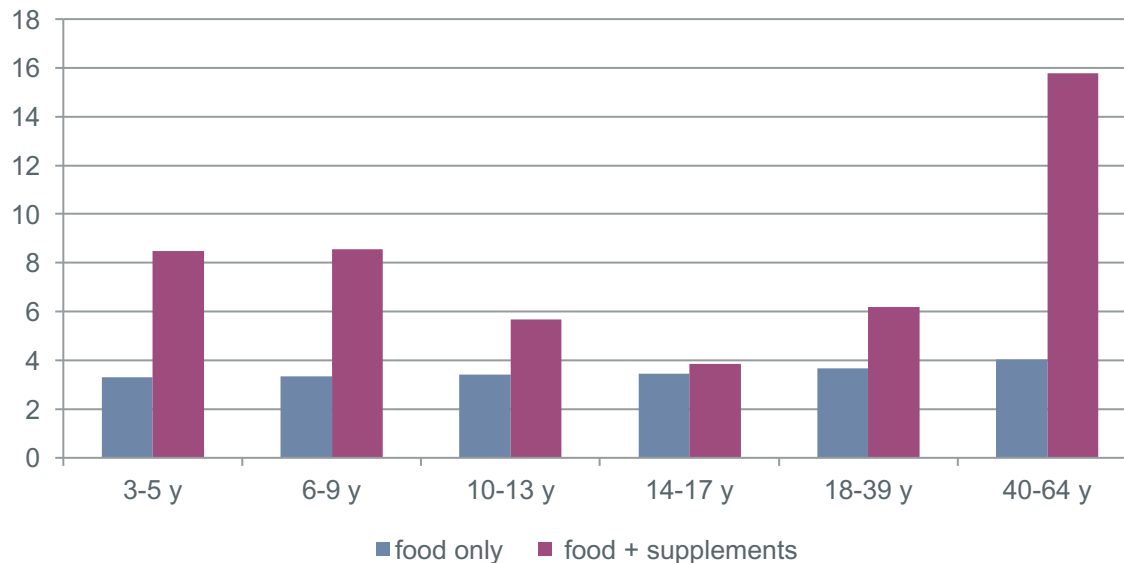
Mean contribution to total vitamin C intake (%)



Vitamin D

	Mean intake	Recommendation PRI (~age)	Prevalence of inadequate intake
food	3.76 µg/d	10-15 µg/day	NA
Food+sup	10 µg/d	10-15 µg/day	NA

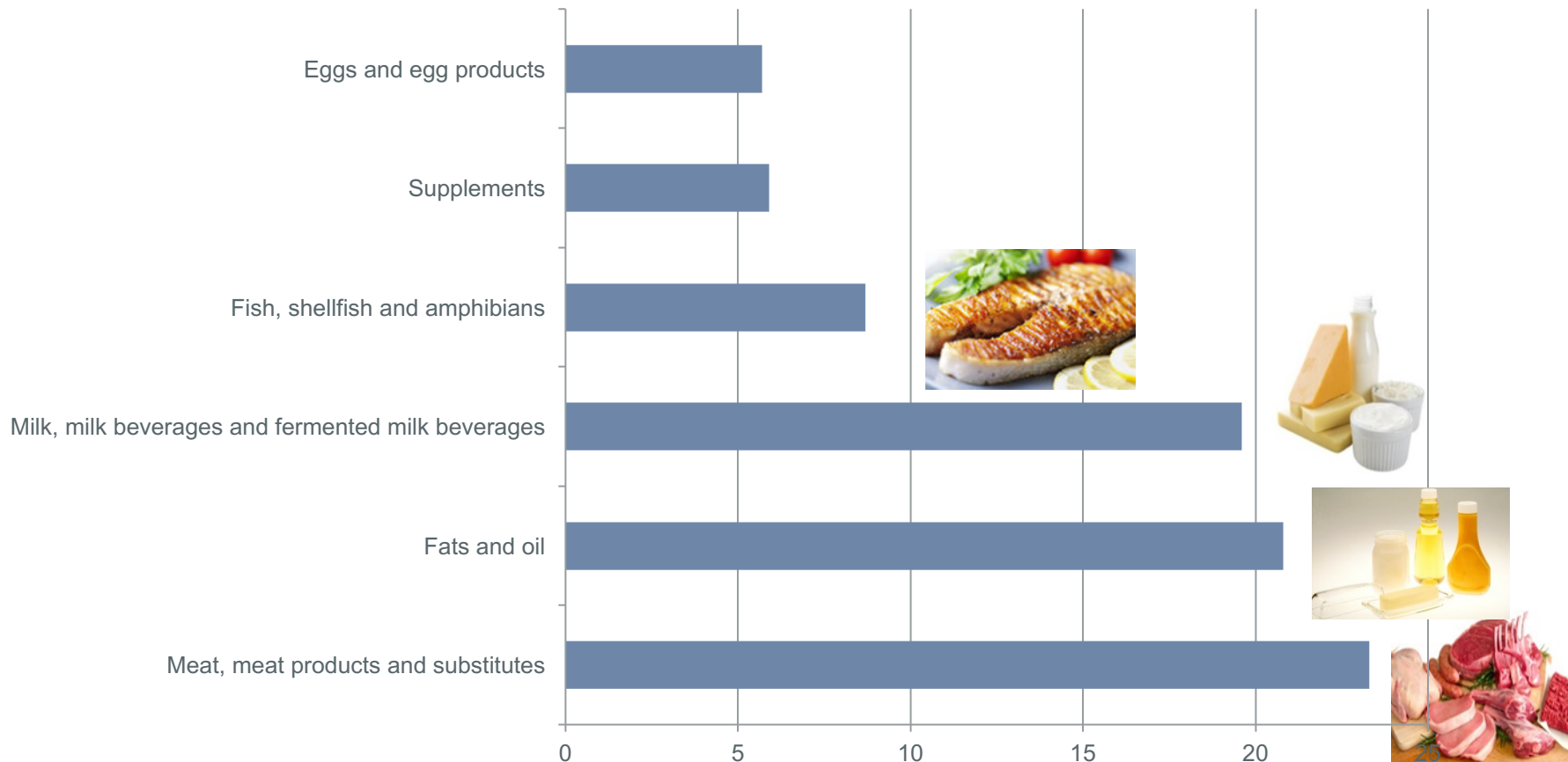
Mean intake Vitamine D (µg/d)



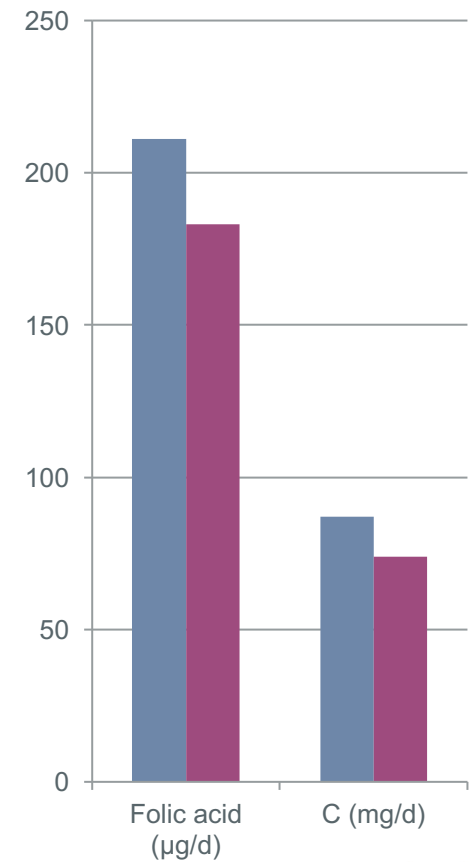
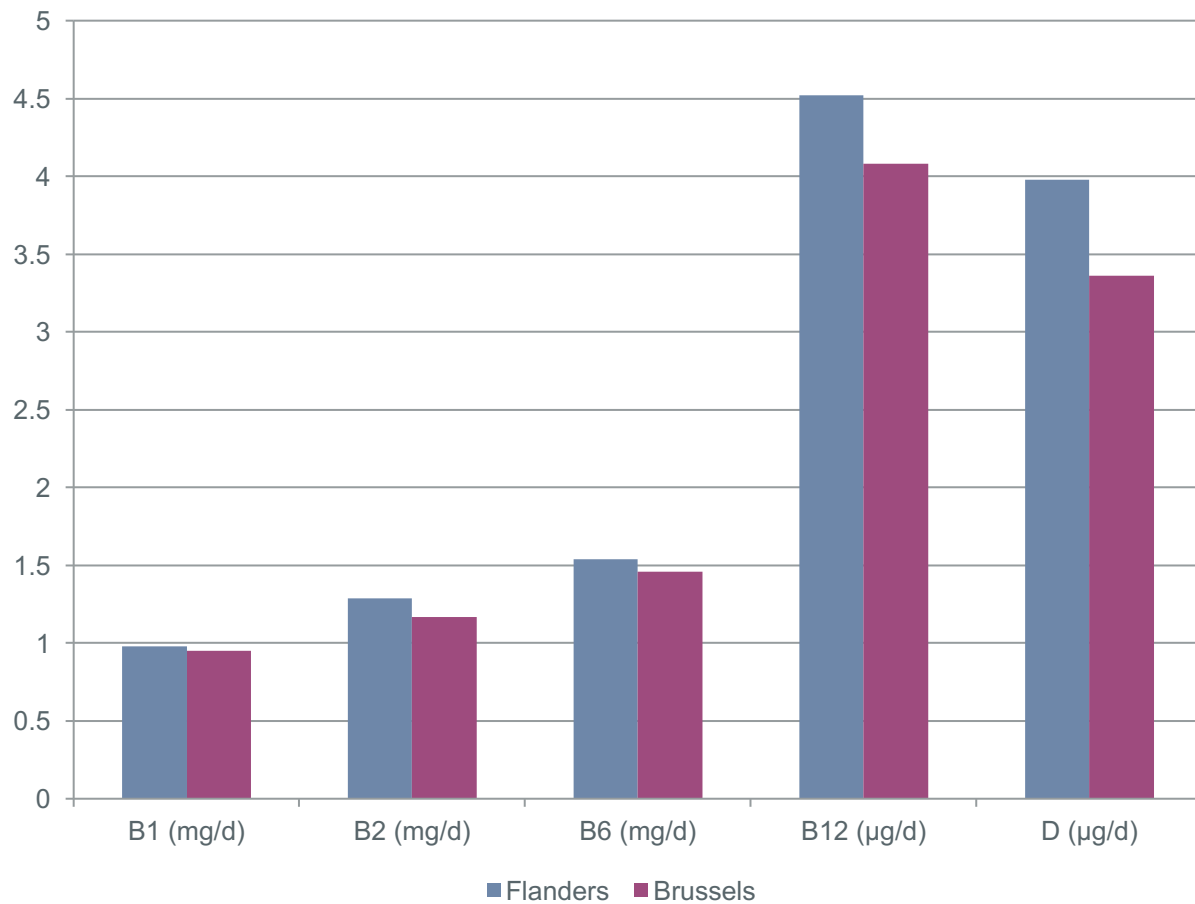
Upper Limit (~age)	% > UL (Food+sup)
25-50 µg/day	♂: 1% ♀: 2%

Total Vitamin D

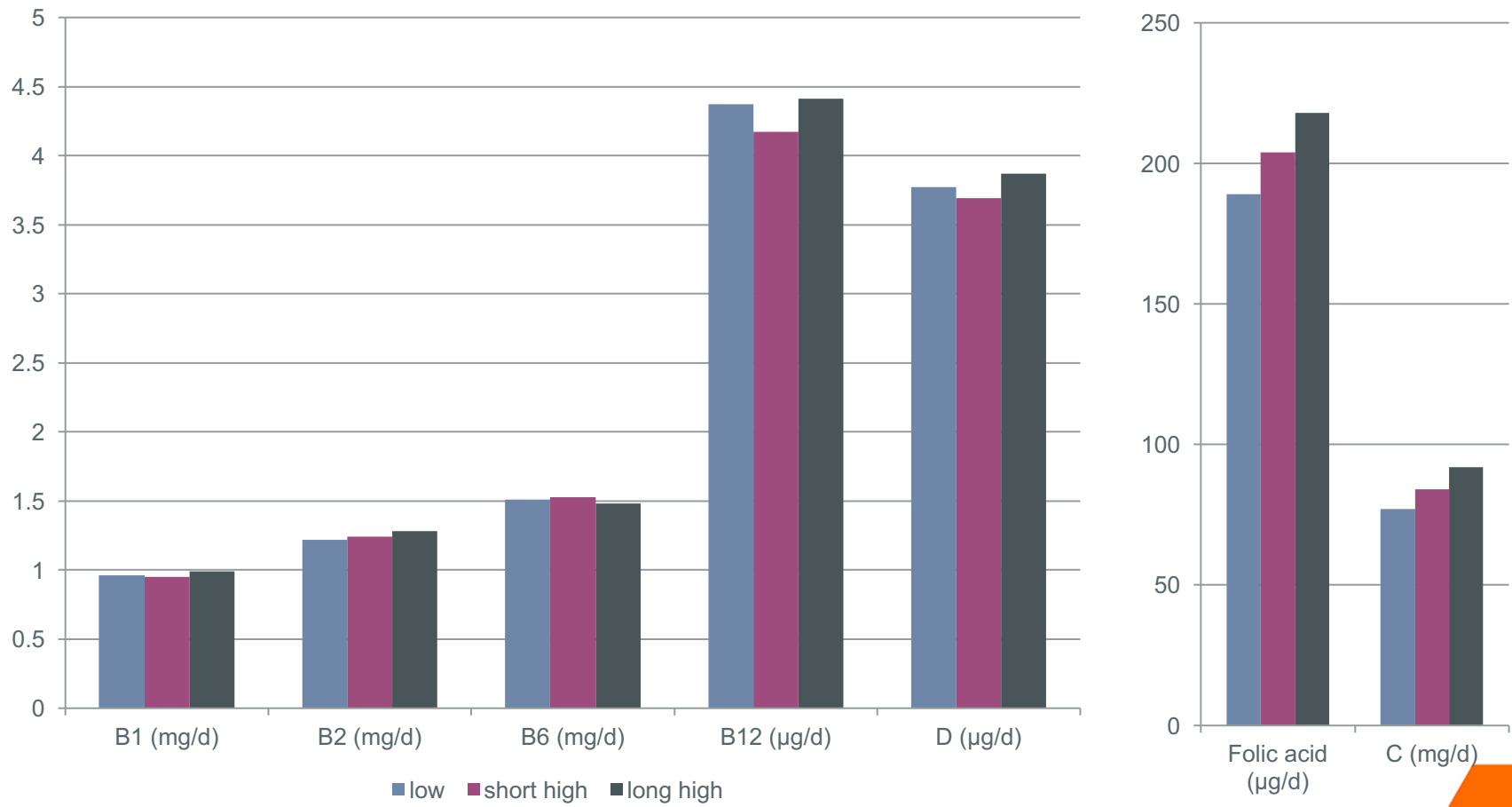
Mean contribution to total vitamin D intake (%)



Mean habitual Intake of vitamins by region



Mean habitual intake of vitamins by educational level



MINERALS & TRACE-ELEMENTS



Calcium

Sodium

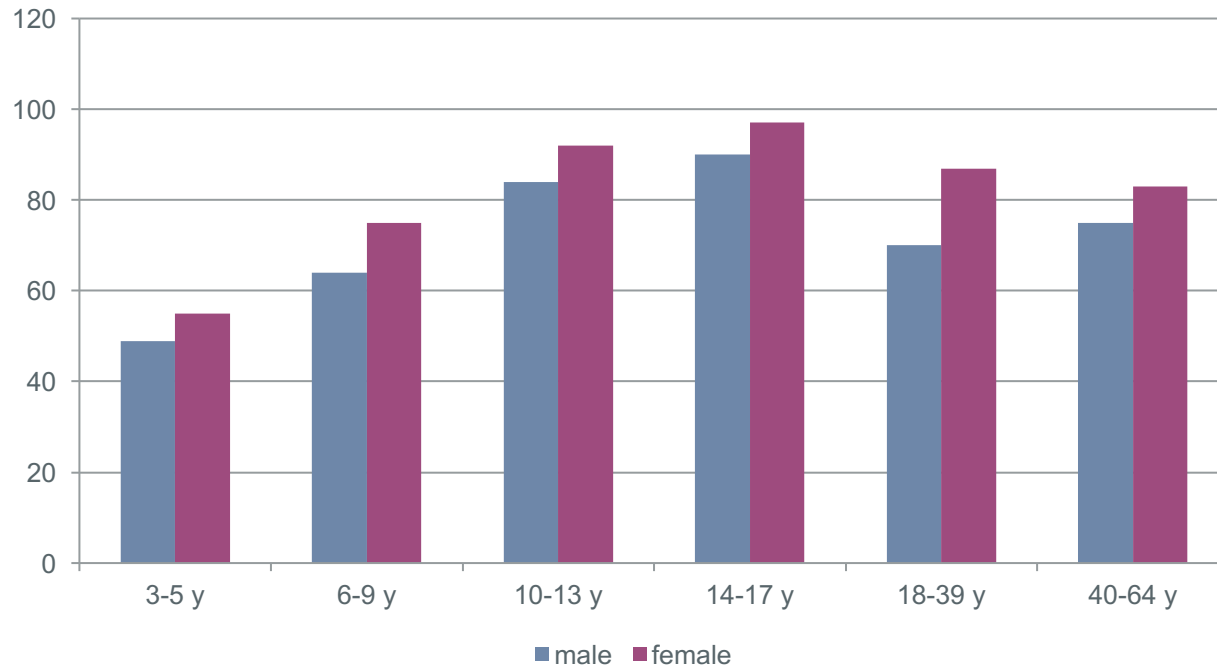
Iodine

Iron

Calcium

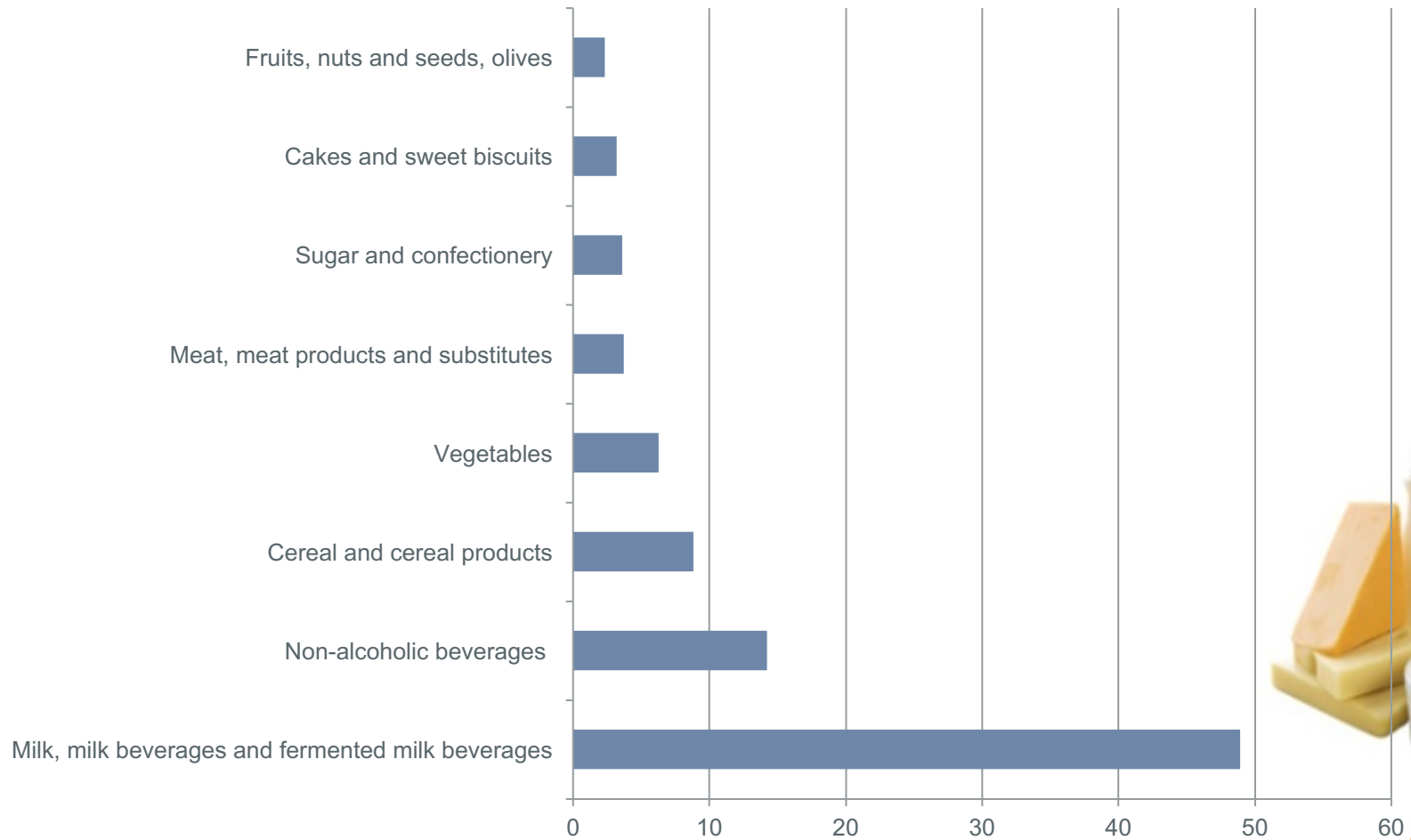
	Mean intake	Recommendation PRI (~age)	% of population < PRI
food	759 mg/d	450-1150 mg/day	78%

% of population with intake < PRI



Total calcium

Mean contribution to total calcium intake (%)



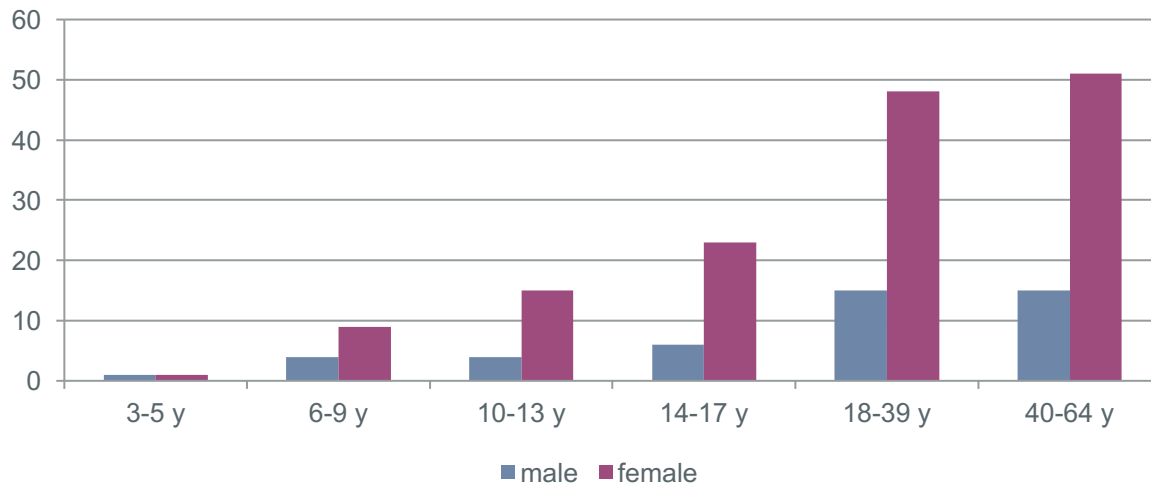
Sodium

	Mean intake	Recommendation PRI (~age)	% of population Within PRI range
food	2303 mg/d ²	225-500 to 600-2000 mg/day ¹	26%

¹ refers to range 0.57-1.25 (3 yrs old) and 1.5-5 gram (adult) salt per day

² =5.8 g salt/day

% of population within PRI range

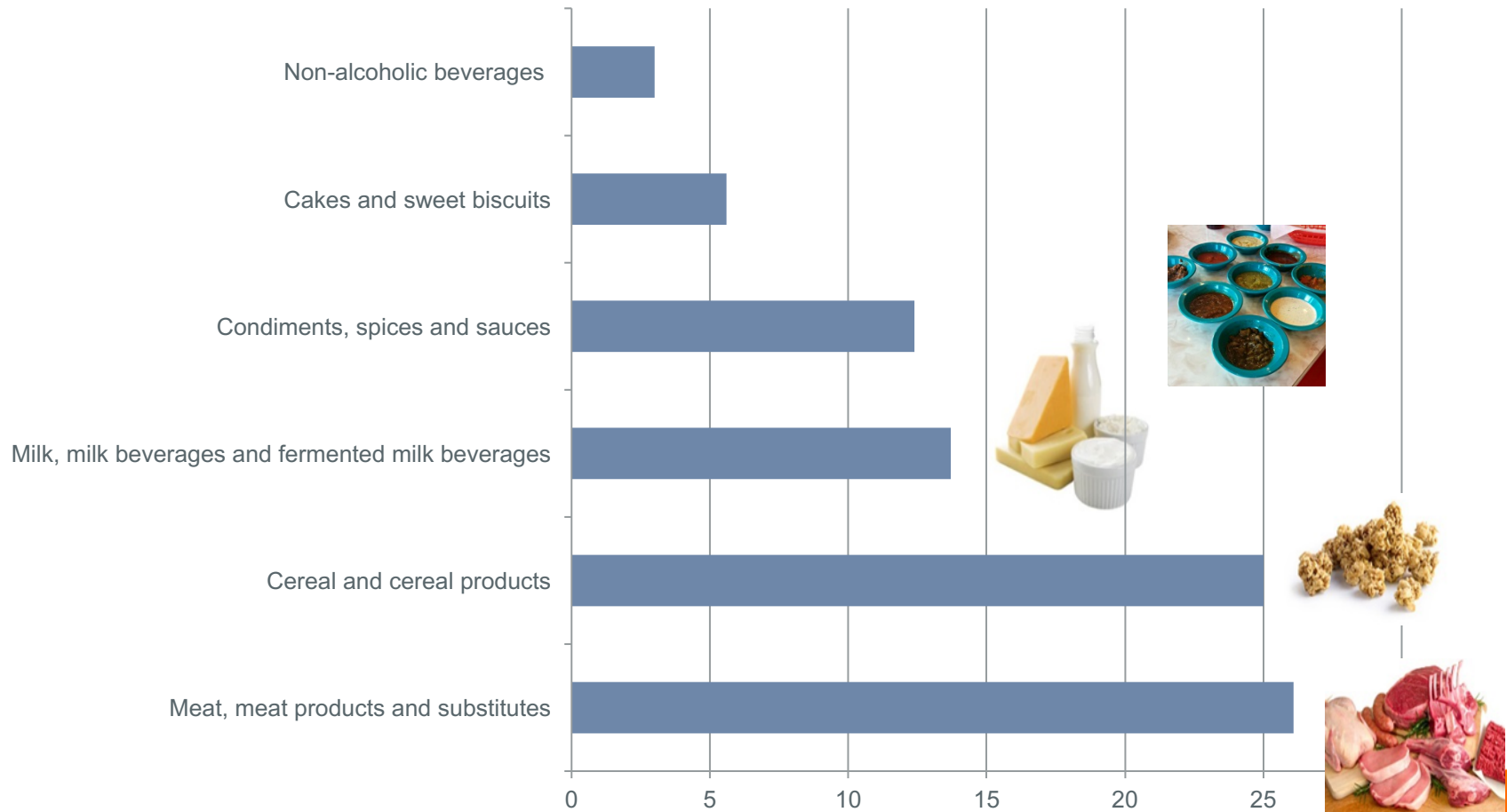


Upper Limit (~age)	% > UL
2300 mg/day ¹	♂: 63% ♀: 28%

¹ 6 g salt/day, American Heart Association.

Total sodium

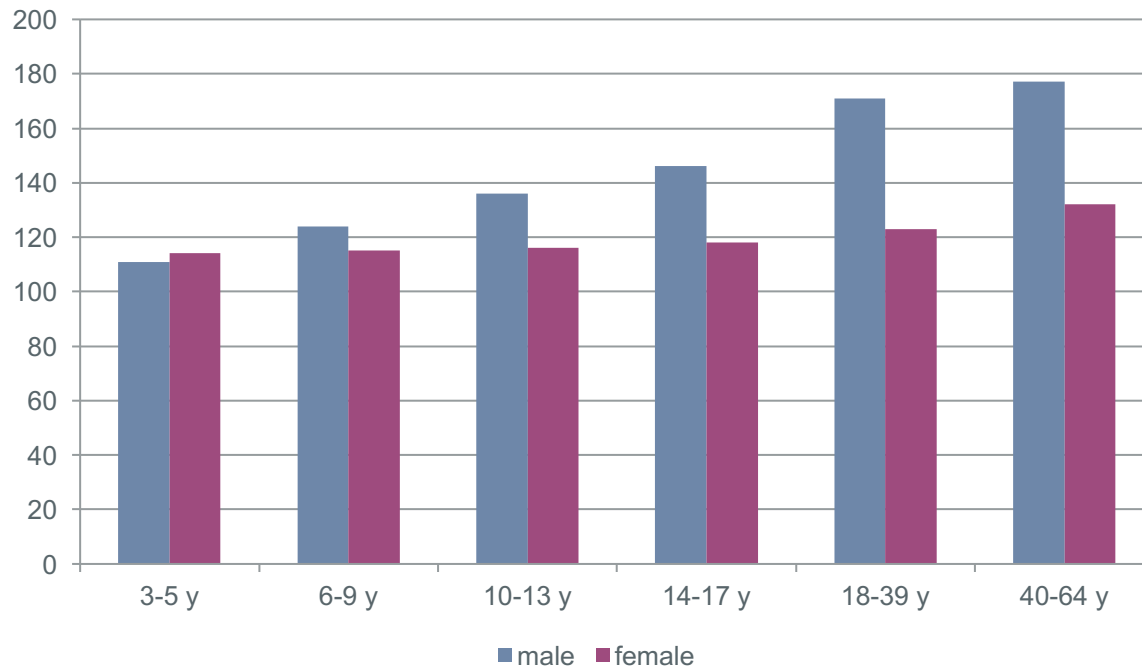
Mean contribution to total sodium intake (%)



Iodine

	Mean intake	Recommendation AI (~age)	Prevalence of inadequate intake
food	144 µg/d	90-150 µg/day	NA

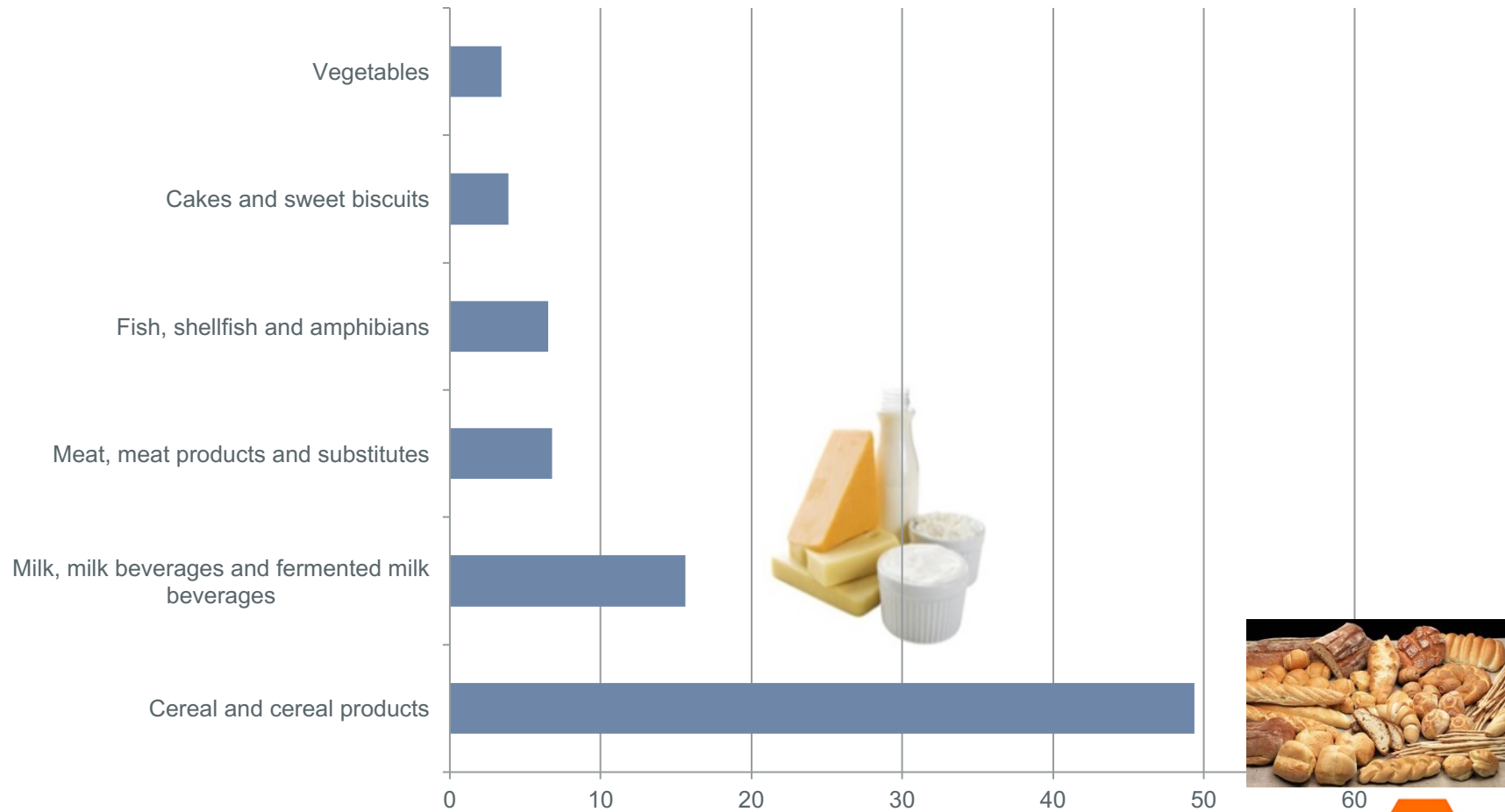
Mean habitual intake of Iodine (µg/d)



Upper Limit (~age)	% > UL
200-600 µg/day	0.10% (3-5 yrs: 1.5%)

Total iodine

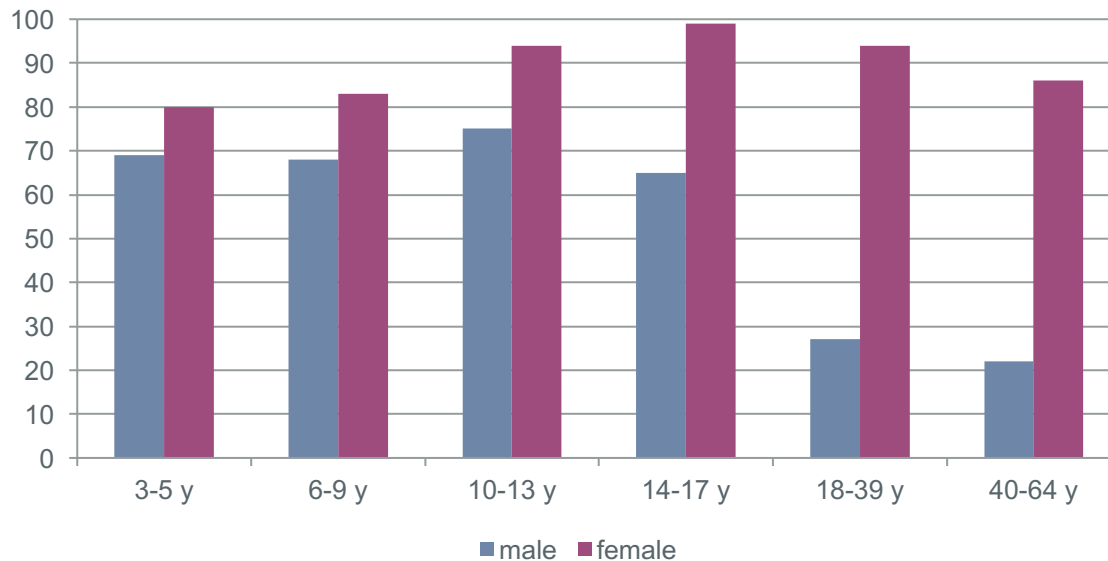
Mean contribution to total iodine intake (%)



Iron

	Mean intake	Recommendation PRI (~age;gender)	% of population < PRI	
food	9.48 mg/d	8-15 mg/day	♂: 36%	♀: 96%
Food+sup	9.94 mg/d	8-15 mg/day	♂: 36%	♀: 90%

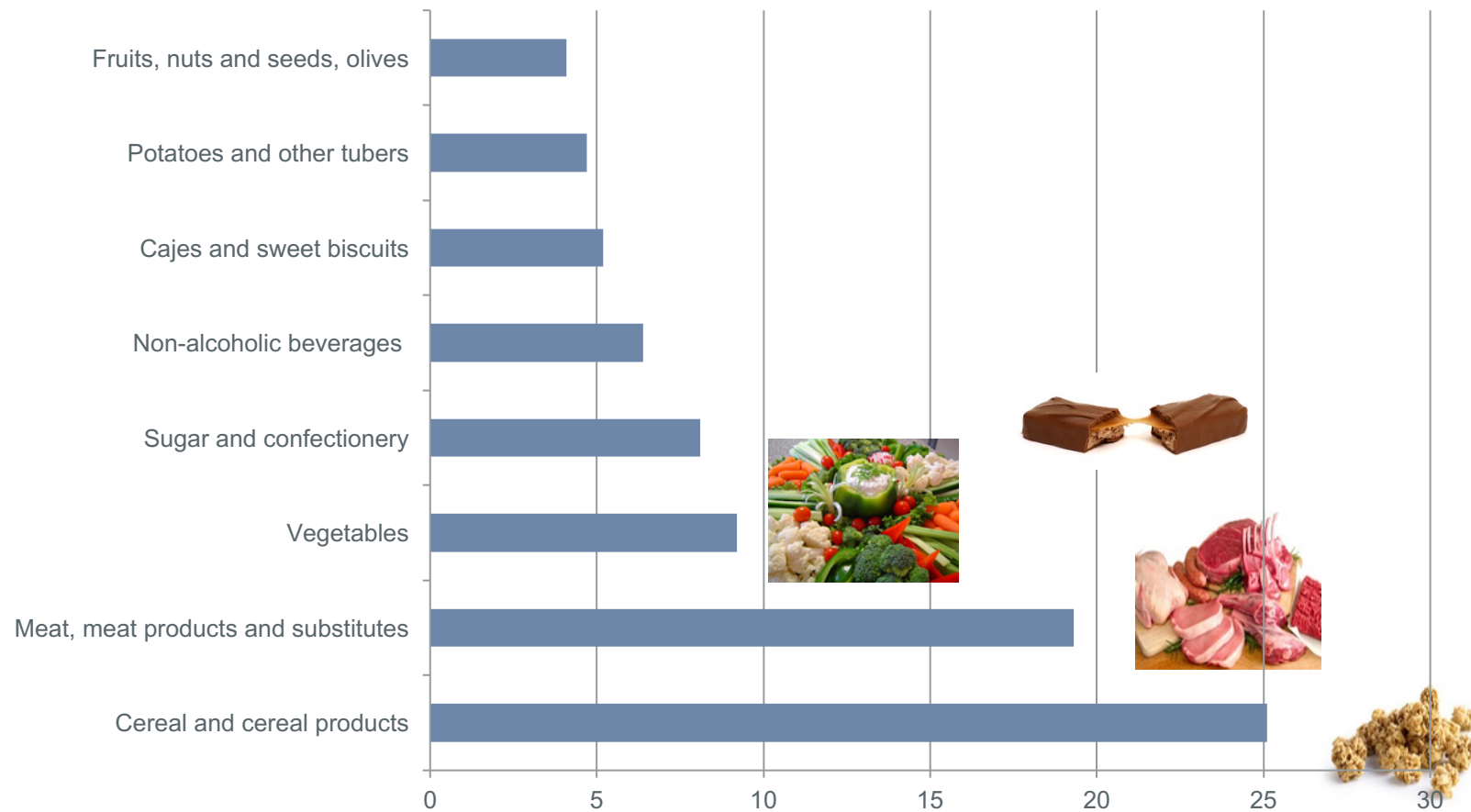
% of population with intake <PRI



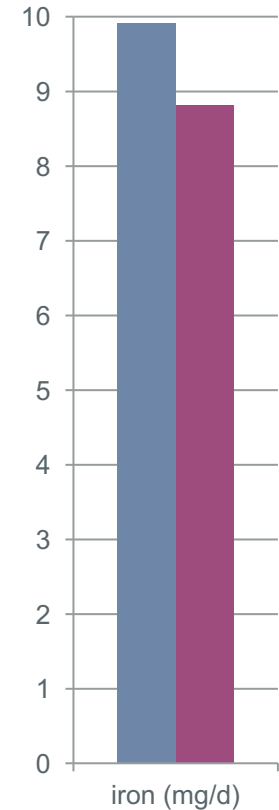
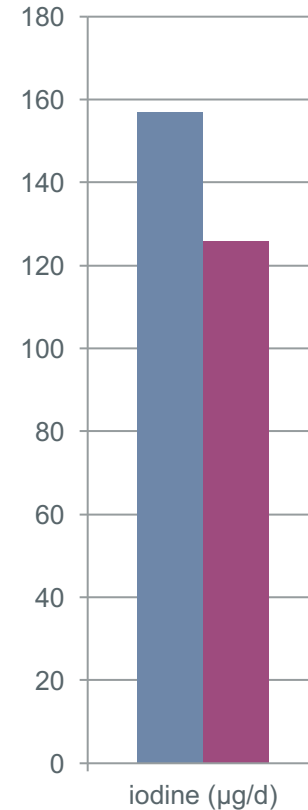
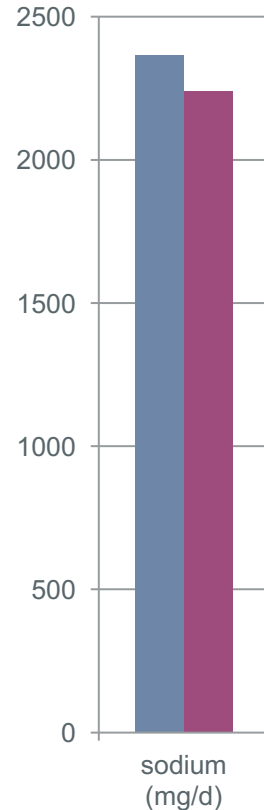
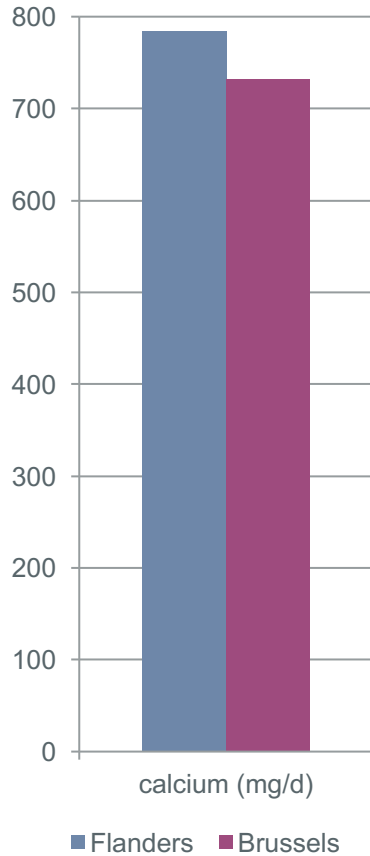
Upper Limit (~age)	% > UL (food+sup)
40-45 mg/d	♂: 0.2% ♀: 0.2%

Total iron

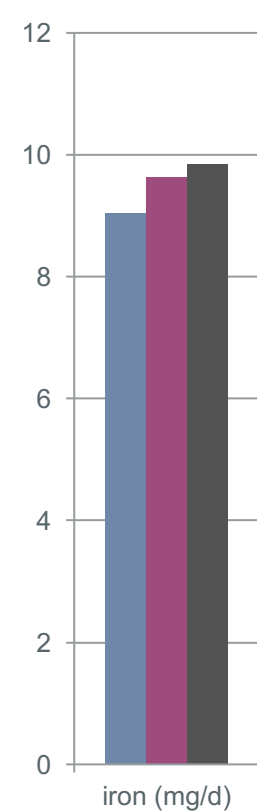
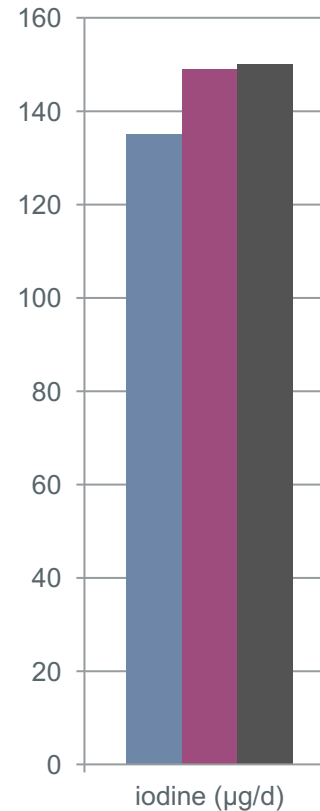
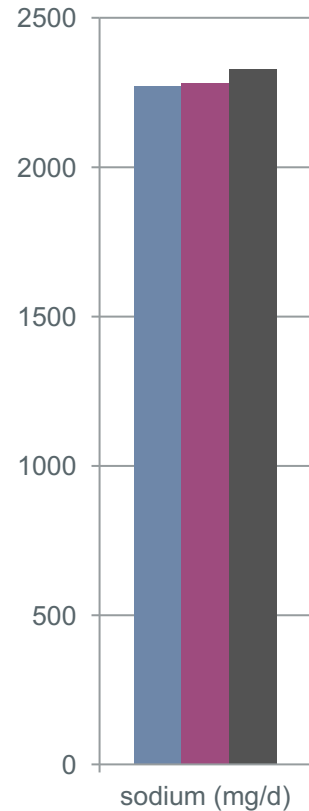
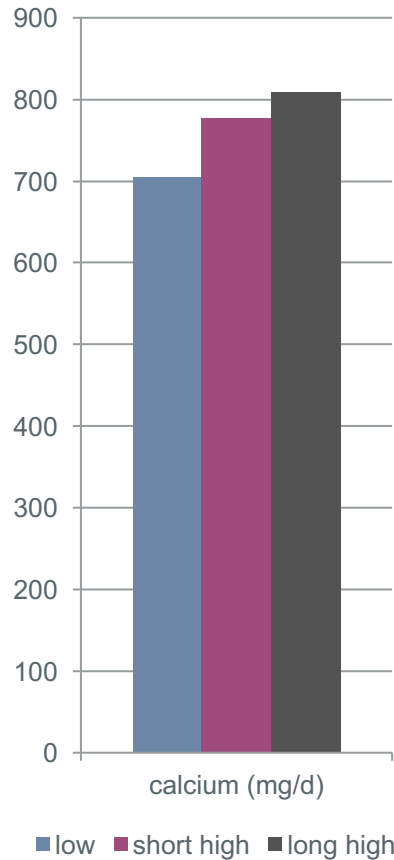
Mean contribution to total iron intake (%)



Mean habitual Intake of minerals by region



Mean habitual intake of minerals by educational level



Thanks for your attention!

More detailed or other results?

<https://fcs.wiv-isp.be>