

## **On-line Supplemental Tables B: Micronutrient intake in Serbia**

### **Background and methods**

The Serbian micronutrient data are obtained from the YUSAD study (Yugoslav study of precursors of atherosclerosis in schoolchildren). The YUSAD study is the first and (until now) only national survey in Serbia with food consumption data of families obtained with comprehensive dietary assessment methods (dietary intake data were derived from a 7 day household food consumption survey). The study was approved by the Ministry of Science and Ministry of Health. In 1998, families having one or more children aged 10 years at that time were recruited in ten sample points. The same sample was followed up in 2003 where the particular children were 15 years of age. A representative sample of 1319 children aged 10 in 1998 and 966 children aged 15 in Serbia with their families were examined on health and nutritional status in ten study centres. Additionally, 7 day food records were used to assess the food consumption of the entire family, with which the energy and nutrient intake was, calculated <sup>(1)</sup>.

Family members were intensively instructed to record all foods consumed within 7 consecutive days (not during holidays). A 24 hour telephone information service was available during the time of recording. A detailed description of the foods, including preparation method, was obtained. Furthermore the household composition was assessed. The information on food consumption was translated to nutrient intakes using a regional food composition database which was complemented with the USA food composition database <sup>(2)</sup>. No specific information on supplement intake and fortified foods was obtained. The nutrient data were calculated as specific consumption units according to the respective nutrient requirements <sup>(3)</sup>. Data are presented from the 2003 survey for adolescents (15-17 years), adults (30-59 years) and older adults (60-74 years) separately <sup>(4)</sup>.

## References

1. Gurinović M, Kadvan A (2011) Methodology of the dietary survey in YUSAD study. In *Yugoslav study of atherosclerosis precursors in schoolchildren in Serbia: twenty years follow-up*. pp. 334-342 [S Nedeljkovic, editor]. Belgrad, Serbia: Medical Faculty University of Belgrade.
2. Kaić-Rak A, Antičić K (1990) *Tablice o sastavu namirnica i pica (Tables on composition of food and beverages)*. Zagreb, Croatia: Zavod za zaštitu zdravlja SR Hrvatske (Institute for health protection of Republic Croatia).
3. Naska A, Fouskakis D, Oikonomou E, *et al.* (2006) Dietary patterns and their socio-demographic determinants in 10 European countries: data from the DAFNE databank. *Eur J Clin Nutr* **60**, 181–190.
4. Gurinović M, Kadvan A, Vukotić M, *et al.* (2011) The quality of nutrition in schoolchildren and adult members of families. In *Yugoslav study of atherosclerosis precursors in schoolchildren in Serbia: twenty years follow-up*. pp. 343-368 [S Nedeljkovic, editor]. Belgrad, Serbia: Medical Faculty University of Belgrade.

**Tables B:** Micronutrients intake in Serbia according to age groups

**Table B1:** Micronutrient intake for males, 15-17 years (n=574, mean energy intake 9.72 MJ/d)

Micronutrient	Base Diet Only			
	Mean Intake	P5 intake	% < LRNI intake	% < EAR intake
Calcium (mg)	959	250	16	34
Copper (mg)	3,7	0,41	30	30
Folate (µg)	219	51	16	29
Iodine (µg)	168	27	18	30
Iron (mg)	15,8	4,9	12	19
Vitamin B12 (µg)	4,5	0,8	16	18
Vitamin C (mg)	107	27	9	13
Vitamin D (µg)	4,1	0,6	8	8
Zinc (mg)	10,7	2,5	26	34
Magnesium (mg)	315	90	24	36
Vitamin E (µgα-TE)	21,5	4	15	18

**Table B2:** Micronutrient intake for females, 15-17 years (n=558, mean energy intake 7.56 MJ/d)

Micronutrient	Base Diet Only			
	Mean Intake	P5 intake	% < LRNI intake	% < EAR intake
Calcium (mg)	737	188	23	39
Copper (mg)	3,39	0,34	33	33
Folate (µg)	170	38	23	42
Iodine (µg)	122	18	16	34
Iron (mg)	12,2	3,6	26	45
Vitamin B12 (µg)	3,5	0,6	19	21
Vitamin C (mg)	84	18	9	15
Vitamin D (µg)	3,2	0,5	9	9
Zinc (mg)	8,4	2,1	24	32
Magnesium (mg)	245	65	34	51
Vitamin E (µgα-TE)	17,2	3,2	14	17

**Table B3:** Micronutrient intake for males, 30-59 years (n=518, mean energy intake 10.12 MJ/d)

Micronutrient	Base Diet Only			
	Mean Intake	P5 intake	% < LRNI intake	% < EAR intake
Calcium (mg)	1000	255	12	18
Copper (mg)	4,31	0,45	33	34
Folate (µg)	231	53	16	27
Iodine (µg)	169	25	29	35
Iron (mg)	16,6	5,1	9	13
Vitamin B12 (µg)	4,8	0,8	16	17
Vitamin C (mg)	113	27	9	12
Vitamin D (µg)	4,2	0,7	9	67
Zinc (mg)	11,3	2,8	25	32
Magnesium (mg)	330	93	22	33
Vitamin E (µgα-TE)	22,6	4,4	14	16

**Table B4:** Micronutrient intake for females, 30-59 years (n=550, mean energy intake 7.79 MJ/d)

Micronutrient	Base Diet Only			
	Mean Intake	P5 intake	% < LRNI intake	% < EAR intake
Calcium (mg)	765	198	18	27
Copper (mg)	3,28	0,33	34	34
Folate (µg)	176	41	22	40
Iodine (µg)	131	19	33	41
Iron (mg)	12,7	3,9	24	43
Vitamin B12 (µg)	3,6	0,6	18	20
Vitamin C (mg)	87	22	10	15
Vitamin D (µg)	3,3	0,5	9	83
Zinc (mg)	8,7	2,1	24	32
Magnesium (mg)	253	72	23	35
Vitamin E (µgα-TE)	17,5	3,3	14	18

**Table B5:** Micronutrient intake for males, 60-74 years (n=89, mean energy intake 6.89 MJ/d)

Micronutrient	Base Diet Only			
	Mean Intake	P5 intake	% < LRNI intake	% < EAR intake
Calcium (mg)	692	144	27	36
Copper (mg)	3,51	0,25	40	40
Folate (µg)	142	30	32	53
Iodine (µg)	109	16	38	47
Iron (mg)	11,1	1,5	18	27
Vitamin B12 (µg)	2,8	0,5	24	27
Vitamin C (mg)	67	17	9	16
Vitamin D (µg)	2,6	0,4	11	92
Zinc (mg)	8,5	1,5	38	45
Magnesium (mg)	220	55	42	58
Vitamin E (µgα-TE)	15,9	3	21	25

**Table B6:** Micronutrient intake for males, 60-74 years (n=148, mean energy intake 6.5 MJ/d)

Micronutrient	Base Diet Only			
	Mean Intake	P5 intake	% < LRNI intake	% < EAR intake
Calcium (mg)	634	151	27	39
Copper (mg)	2,8	0,26	38	39
Folate (µg)	135	30	33	57
Iodine (µg)	109	15	38	47
Iron (mg)	10,5	2,8	19	28
Vitamin B12 (µg)	2,8	0,5	23	26
Vitamin C (mg)	69	16	11	18
Vitamin D (µg)	2,5	0,4	10	95
Zinc (mg)	7,4	1,6	33	40
Magnesium (mg)	208	56	34	48
Vitamin E (µgα-TE)	14,7	2,5	19	23