

Compound: **aluminium** ug/kg b.w./day

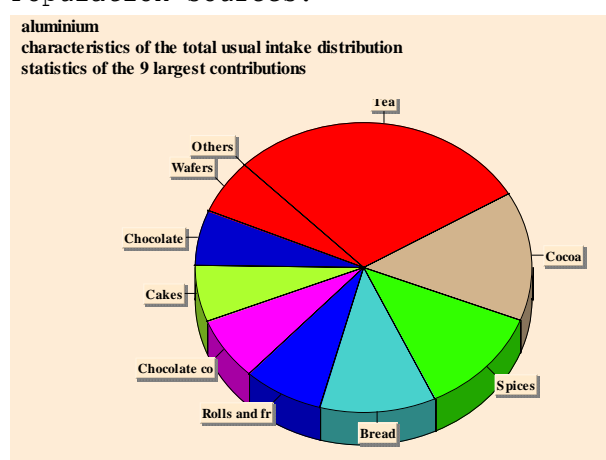
LONG TERM EXPOSURE (USUAL INTAKE)

Percentage	Entire population
50.00	37.70851
90.00	79.40942
95.00	99.57326
99.00	146.48296
99.90	203.90736
99.99	204.03968

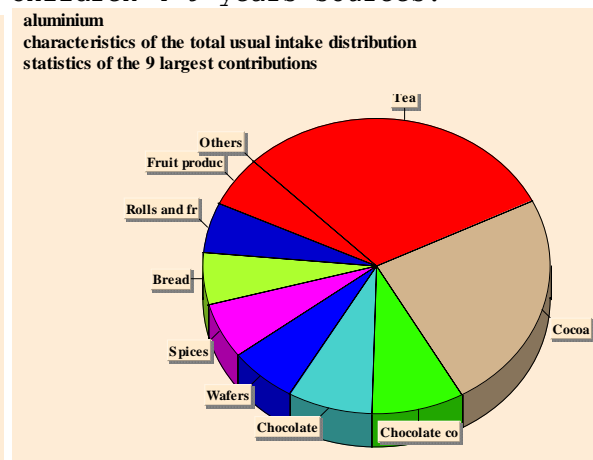
Uncertainty of percentiles (Confidence limits)

Percentage	Entire population			
	2.5%	25%	75%	97.5%
50.00	30.8857	35.2949	40.6288	44.7645
90.00	63.9503	73.0307	87.8401	95.6509
95.00	78.7029	91.2730	111.0696	122.2743
99.00	112.7245	133.3712	165.6676	182.7304
99.90	160.1599	188.2756	233.0742	257.6581
99.99	160.2908	188.3978	233.2468	257.8410

Population sources:



Children 4-9 years sources:



Compound: aluminium children 4-9y

LONG TERM EXPOSURE (USUAL INTAKE)

Percentage	Entire population
50.00	97.00259
90.00	147.80447
95.00	165.82379
99.00	202.42385
99.90	231.38391
99.99	250.07030

Uncertainty of percentiles (Confidence limits)

Percentage	Entire population			
	2.5%	25%	75%	97.5%
50.00	75.9481	88.5385	103.6603	119.0993
90.00	115.8012	133.7358	159.3368	182.2963
95.00	129.7733	150.7736	179.6253	204.0359
99.00	151.8097	186.4660	222.2444	251.2033
99.90	167.0614	213.4806	263.3580	308.4231
99.99	174.0016	230.3801	285.7414	342.6889

Conclusions:

in average, about 1% of CZ population is above new safe dose 143 ug/kg b.w./day (TWI EFSA from 15.7.2008 = 1 mg / kg b.w. / week). This 1% of population involves in higher rate children 4-9 y – 10 % of this group is over this level. Due to spectrum of dietary sources there is no simple dietary advice how to decrease this intake. High intake for children is coming from tea and cocoa and products – then Al content in tea/cocoa (natural/processing reasons) should be reconsidered.

Other Al sources: additives, drugs, food contact materials.

Main toxicological effect: neurotoxic and reproductive (testicular/sperms) (not Alzheimer disease)