



# SCHOCKORAMA (LSW)

Yearly age  
coefficients

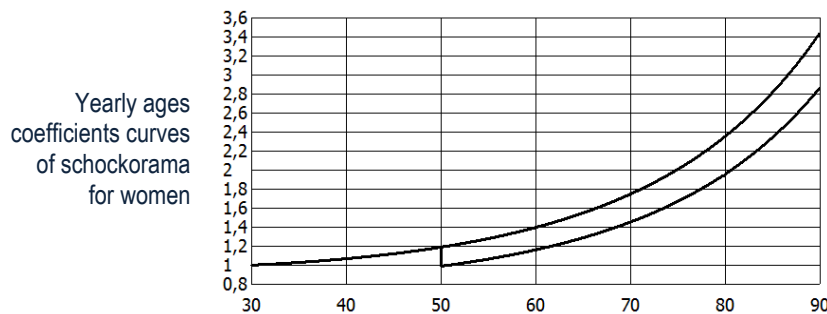
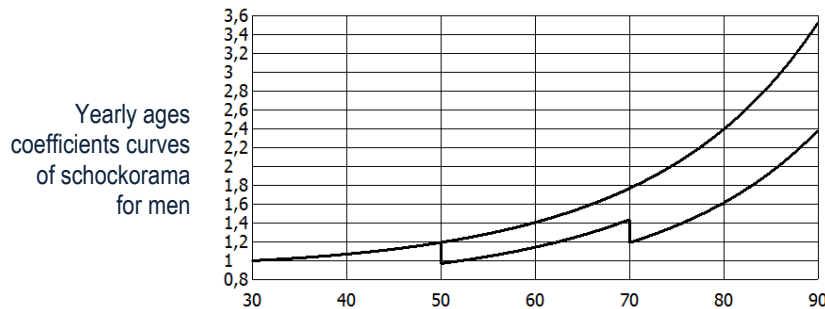
Schockorama **regulations** can be found at:

<http://www.joomla.lsw-spezialsport.de/Anlagen/LSW-Wettkampfordnung.pdf>

Lithuania is a small country, so often in different age groups participate one, two athletes only (in some age groups there are no sportsmen). Thus, yearly age coefficients are not only desirable, they are necessary in Lithuania. We hope that other countries will use the Lithuanian yearly age coefficients too.

**Yearly age coefficients** are determined using the exponential function:  $k = A \cdot e^{a+b \cdot m^n}$ . In equation,  $k$  is yearly age coefficient,  $A$  is the coefficient, which evaluates the increase of result (decrease of yearly age coefficient) when the mass of shots is changing,  $m$  is the age of the athlete (in years) at the time of sport event (it is calculated by deducting athlete's birthday from the first day of the competition),  $a$  and  $b$  are coefficients that depend on the statistically obtained averages of the results in age groups,  $n$  is the exponent.

Men		Women	
$k = A \cdot e^{(-0.04809)+0.000001792m^3}$		$k = A \cdot e^{(-0.0470)+0.000001756m^3}$	
when $m \leq 49$ ,	then $A=1.0000$ ,	when $m \leq 49$ ,	then $A=1.0000$ ,
when $50 \leq m \leq 69$ ,	then $A=0.8128$ ,	when $m \geq 50$ ,	then $A=0.8318$ .
when $m \geq 70$ ,	then $A=0.6746$ .		



Note. Yearly age coefficients are presented in the table. Their meanings are rounded to four significant digits. These rounded meanings should be used on computer programs; otherwise the results calculated using the formula given and results presented in the table will differ slightly.



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Men	Age	Women
1,000	30	1.000
1,005	31	1.005
1,011	32	1.011
1,016	33	1.016
1,023	34	1.022
1,029	35	1.029
1,036	36	1.036
1,044	37	1.043
1,052	38	1.051
1,060	39	1.059
1,069	40	1.068
1,078	41	1.077
1,088	42	1.087
1,099	43	1.097
1,110	44	1.108
1,122	45	1.120
1,135	46	1.132
1,148	47	1.145
1,162	48	1.159
1,177	49	1.173
0,969	50	0.988
0,983	51	1.002
0,997	52	1.016
1,012	53	1.031
1,027	54	1.046
1,044	55	1.063
1,061	56	1.080
1,080	57	1.099
1,099	58	1.118
1,119	59	1.138
1,141	60	1.160
1,163	61	1.182
1,187	62	1.206
1,213	63	1.231
1,239	64	1.258
1,267	65	1.285
1,297	66	1.315
1,328	67	1.346
1,361	68	1.378
1,396	69	1.413
1,189	70	1.449
1,221	71	1.488
1,255	72	1.528
1,291	73	1.571
1,329	74	1.617
1,369	75	1.665
1,412	76	1.715
1,457	77	1.769
1,505	78	1.826
1,555	79	1.886
1,609	80	1.950
1,666	81	2.018
1,727	82	2.090
1,791	83	2.166
1,860	84	2.247
1,932	85	2.333
2,010	86	2.425
2,092	87	2.522
2,180	88	2.626
2,274	89	2.737