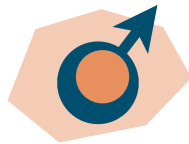


Calculating the risk factor

Framingham study results and point system

Ever since 1948 the National Heart Institute has closely been monitoring a population of approximately 5000 individuals from the town of Framingham in a bid to identify the causal factors of cardiovascular disease, of which little was known at the time. The study is now into its third generation and has enabled risks to be calculated as follows:



Age	Points
20-24	-9
25-39	-4
40-44	0
45-49	3
50-54	6
55-59	8
60-64	10
65-69	11

Smoking

	Age			
	20-39	40-49	50-59	60-69
Non-smoker	0	0	0	0
Smoker	8	5	3	1

Total cholesterol

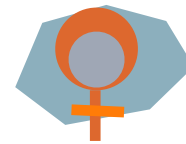
total chol. mg/100ml	Alter			
	20-39	40-49	50-59	60-69
<160	0	0	0	0
160-199	4	3	2	1
200-239	7	5	3	1
240-279	9	6	4	2
>280	11	8	5	3

HDL, mg/dL

HDL, mg/dL	Points
≥60	-1
50-59	0
40-49	1
<40	2

Blood pressure

Systolisch	ohne	mit. Behand.
<120	0	0
120-129	0	1
130-139	1	2
140-159	1	2
≥160	2	3



Age	Points
20-24	-7
25-39	-3
40-44	0
45-49	3
50-54	6
55-59	8
60-64	10
65-69	12

Smoking

	Age			
	20-39	40-49	50-59	60-69
Non-smoker	0	0	0	0
Smoker	9	7	4	2

Total cholesterol

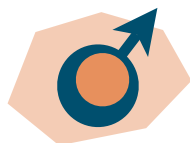
Total chol. mg/100ml	Alter			
	20-39	40-49	50-59	60-69
<160	0	0	0	0
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240-279	9	6	4	2
>280	11	8	5	3

HDL, mg/dL

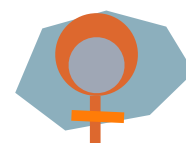
HDL, mg/dL	Points
≥60	-1
50-59	0
40-49	1
<40	2

Blood pressure

Systolisch	ohne	mit. Behand.
<120	0	0
120-129	1	3
130-139	2	4
140-159	3	5
≥160	4	6



Total Points	Risk in 10 years
<0	<1
0	1
1-4	1
5-6	2
7	3
8	4
9	5
10	6
11	8
12	10
13	12
14	16
15	20
16	25
≥17	≥30



Total Points	Risk in 10 years
<9	<1
9	1
10-12	1
13-14	2
15	3
16	4
17	5
18	6
19	8
20	11
21	14
22	17
23	22
24	27
≥25	≥30

What should your LDL cholesterol level be?

Now that you are aware of your risk factors and ten-year risk, you can work out the target LDL cholesterol level you should be aiming to achieve:

Risk category	Target LDL	Treatment recommended
1-high risk: existing coronary disease or presence of diabetes	<100 mg/dl	>100 mg/dl
2- moderately high risk: presence of at least two risk factors and risk of 10-20% in 10 years	<130 mg/dl	>130 mg/dl
3-moderate risk: presence of at least two risk factors and risk of <10% in 10 years	<130 mg/dl	>160 mg/dl
4-low risk: presence of 0-1 risk factor	<160 mg/dl	>190 mg/dl