Supplementary material

Table S1: List of used biological markers for AL-Index.

Biological System	Biomarker	Unit	Computation and transformation	Application	High-risk quartile?
Cardiovascular and pulmonary system	Systolic blood pressure (SBP)	mmHg		Indices of cardiovascular activity and major risk factor for vascular disease	Upper
	Diastolic blood pressure (DBP)	mmHg			Upper
	ratio of FEV to FVC	(FEV) in one second / FVC	Tiffeneau-Pinelli index	Indicator of lung function	Lower
Anthropometric system	Waist to hip ratio	waist measurement (cm) hip measurement (cm)	Waist (cm)/ hip (cm)	Body fat distribution and a predictor of metabolic consequences independent of overall adiposity	Upper
Metabolic System	Blood sugar level (fasting glucose, FG)	mmol/l		Main source of energy / indicates Diabetes	Upper
	Total cholesterol to HDL ratio		Total cholesterol (mmol/l)/ HDL cholesterol (mmol/l)	"Fat in the blood" associated with heart disease	Upper
	triglycerides (TG)	mmol/l		Important source of energy, high levels indicate cardiovascular risk	Upper
	low density lipoproteins (LDL)	mmol/l	Friedewald equation: LDL = TC - HDL - (TG / 2.2)	"Bad cholesterol," transports cholesterol to tissues, low levels associated with better cardiovascular health	Upper
	Creatinine clearance Rate	Creatinine(µmol/l)	Cockcroft-Gault formula [140-age (years)] x weight (kg) x f/ serum creatinine (mmol/l) where f=1.23 for males and 1.04 for females	Chemical waste product that indicates how effectively the kidneys are "cleaning" the blood.	Lower
Immune and inflammatory system	White blood cells (WBC) count	Counts (cel 10^9/l)		Indicates immune system activity / Elevated WBC also associated with increased risk of coronary heart disease, ischemic stroke, and mortality form cardiovascular disease	Upper

Table S2. Pairwise correlations of all allostatic load biomarkers for men (lower left triangle) and women (upper right triangle).

	SBP	DBP	FEV1/ FVC	WHR	FC	TC/ HDL	TG	LDL	CCR	WBC
SBP	1.000	0.116	0.119	-0.013	0.195	0.044	0.061	-0.021	0.133	0.158
DBP	0.097	1.000	0.163	0.049	0.278	0.210	0.152	0.034	0.275	0.180
FEV1/ FVC	0.108	0.096	1.000	0.591	0.457	0.094	0.120	0.124	0.233	0.171
WHR	-0.022	-0.082	0.510	1.000	0.222	0.125	0.095	0.028	0.129	-0.031
FC	0.148	0.204	0.458	0.024	1.000	0.192	0.175	0.015	0.358	0.179
TC/ HDL	0.074	0.192	0.054	0.045	0.119	1.000	0.702	-0.017	0.187	0.031
TG	0.064	0.120	0.124	0.096	0.141	0.685	1.000	0.031	0.162	0.161
LDL	-0.059	0.007	0.102	0.043	0.007	-0.033	0.016	1.000	0.021	0.097
CCR	0.183	0.289	0.198	-0.018	0.276	0.245	0.204	-0.015	1.000	0.241
WBC	0.079	0.157	0.153	0.003	0.166	0.026	0.119	0.081	0.261	1.000

Note. SBP: Systolic blood pressure, DBP: Diastolic blood pressure, FEV1/ FVC: Ratio of FEV to FVC, WHR: Waist to hip ratio, FC: Fasting glucose, TC/ HDL: Total cholesterol to HDL ratio, TG: Triglycerides, LDL: low density lipoproteins, CCR: Creatinine clearance Rate, WBC: White blood cells counts.

Table S3. Association between career characteristics and AL-Index for men and women:
Negative binomial regression coefficients (ß), confidence intervals, and p-values (additional adjustments for BMI and activity limitations)

		Women (n=43,890)				Men (n=41,561)			
		ß	CI (95%)	p-value	[AME]	ß	CI (95%)	p-value	[AME]
Temporary jobs (per 10 years in paid work)	No temporary job (ref.)	–				–			
	1 or less temporary job	-0.003	(-0.024,0.017)	0.737	[-0.008]	0.014	(-0.007,0.036)	0.196	[0.035]
	More than 1 temporary jobs	0.034	(0.003,0.065)	0.031	[0.082]	0.044	(-0.007,0.094)	0.090	[0.107]
Job changes (per 10 years in paid work)	No change (ref.)	–				–			
	2 or less changes	0.001	(-0.012,0.015)	0.841	[0.003]	0.001	(-0.013,0.015)	0.867	[0.003]
	More than 2 changes	0.001	(-0.020,0.021)	0.945	[0.002]	0.006	(-0.018,0.029)	0.636	[0.014]
Number of unemployment periods	No unemployment period (ref.)	–				–			
	1 unemployment period	0.009	(-0.011,0.029)	0.354	[0.023]	0.011	(-0.013,0.035)	0.367	[0.026]
	2+ unemployment periods	0.039	(0.001,0.077)	0.042	[0.095]	0.056	(0.009,0.102)	0.018	[0.137]
Years out of work	No years out of work (ref.)	–				–			
	1-5 years out of work	0.006	(-0.010,0.022)	0.445	[0.014]	0.000	(-0.016,0.016)	0.999	[0.000]
	6+ years out of work	0.038	(0.023,0.054)	<0.001	[0.092]	0.057	(0.033,0.080)	<0.001	[0.139]
Mode occupational position	Large employers, higher managers and professionals (ref.)	–				–			
	Lower managers and professionals	0.051	(0.024,0.078)	<0.001	[0.118]	0.028	(0.006,0.050)	0.014	[0.065]
	Intermediate employee	0.060	(0.031,0.089)	<0.001	[0.139]	0.050	(0.025,0.075)	<0.001	[0.118]
	Small employers and self-employed	0.070	(0.016,0.125)	0.012	[0.164]	0.064	(0.021,0.106)	0.003	[0.151]
	Lower grade white collar workers	0.113	(0.079,0.147)	<0.001	[0.269]	0.075	(0.031,0.119)	0.001	[0.178]
	Skilled workers	0.065	(0.009,0.120)	0.022	[0.151]	0.082	(0.054,0.109)	<0.001	[0.195]
	Semi- or unskilled workers	0.101	(0.060,0.143)	<0.001	[0.240]	0.103	(0.071,0.134)	<0.001	[0.248]
	Main position unknown	0.069	(0.039,0.098)	<0.001	[0.160]	0.050	(0.028,0.073)	<0.001	[0.118]
Lack of promotion	Promotion (ref.)	–				–			
	No promotion	0.004	(-0.014,0.022)	0.679	[0.009]	-0.010	(-0.026,0.006)	0.226	[-0.024]
	Failed promotion	-0.004	(-0.050,0.042)	0.851	[-0.010]	0.043	(0.006,0.079)	0.022	[0.105]

Note. Models are based on multilevel models (individuals nested in health examination centre) and calculated separately for each career characteristic, adjusted for age, age square, partnership situation, education, BMI (continuous) and activity limitations (binary indicator). Respondents who retired or had a health-related career interruption prior age 45 are excluded from the analyses.

Table S4: Association between career characteristics and allostatic load biomarkers for women: unstandardized regression coefficients (b) and confidence intervals

	SBP (n=45,234)			DBP (n=45,234)			FEV1/FVC (n=33,422)			WHR (n=46,100)			FG (n=44,889)			TC/HDL (n=44,318)			TG (n=44,823)			LDL (n=44,280)			CCR (n=44,844)			WBC (n=45,581)		
	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value
No temporary job (ref.)	–			–			–			–			–			–			–			–			–			–		
1 or less temporary job (per 10 years in paid work)	0.012	(-0.015,0.040)	0.385	0.025	(-0.001,0.052)	0.064	-0.017	(-0.047,0.013)	0.281	0.015	(-0.006,0.036)	0.157	0.007	(-0.019,0.032)	0.600	0.011	(-0.011,0.033)	0.319	0.010	(-0.014,0.035)	0.418	-0.016	(-0.042,0.010)	0.231	0.009	(-0.012,0.029)	0.410	0.010	(-0.018,0.037)	0.493
more than 1 temporary job (per 10 years in paid work)	0.059	(0.016,0.102)	0.007	0.043	(0.002,0.085)	0.041	-0.026	(-0.074,0.021)	0.194	0.065	(0.032,0.098)	0.000	0.029	(-0.010,0.069)	0.149	0.051	(0.017,0.085)	0.004	0.080	(0.043,0.118)	<0.001	-0.026	(-0.066,0.014)	0.206	0.066	(0.034,0.098)	0.000	-0.012	(-0.055,0.031)	0.580
No job change (ref.)	–			–			–			–			–			–			–			–			–			–		
2 or less job changes (per 10 years in paid work)	0.004	(-0.016,0.024)	0.681	0.008	(-0.011,0.027)	0.415	-0.006	(-0.028,0.016)	0.575	0.003	(-0.012,0.018)	0.707	<0.001	(-0.018,0.019)	0.985	0.009	(-0.007,0.025)	0.262	0.001	(-0.016,0.019)	0.891	0.004	(-0.015,0.023)	0.682	0.011	(-0.004,0.026)	0.142	0.003	(-0.017,0.022)	0.792
more than 2 job changes (per 10 years in paid work)	-0.005	(-0.034,0.024)	0.731	0.021	(-0.006,0.049)	0.129	-0.021	(-0.053,0.010)	0.180	0.039	(0.017,0.061)	0.000	0.022	(-0.005,0.048)	0.107	0.033	(0.010,0.056)	0.004	0.035	(0.010,0.060)	0.007	0.011	(-0.015,0.038)	0.408	0.038	(0.016,0.059)	0.001	0.003	(-0.025,0.031)	0.830
No unemployment period (ref.)	–			–			–			–			–			–			–			–			–			–		
1 unemployment period	-0.015	(-0.044,0.013)	0.291	-0.005	(-0.032,0.022)	0.722	-0.037	(-0.069,-0.006)	0.019	0.031	(0.010,0.053)	0.005	0.034	(0.008,0.061)	0.010	0.035	(0.012,0.058)	0.002	0.046	(0.021,0.071)	<0.001	0.005	(-0.022,0.032)	0.718	0.036	(0.015,0.058)	0.001	0.039	(0.011,0.067)	0.006
2+ unemployment periods	0.020	(-0.034,0.074)	0.461	0.052	(0.001,0.104)	0.047	-0.076	(-0.134,-0.018)	0.010	0.076	(0.035,0.116)	<0.001	0.053	(0.004,0.103)	0.036	0.074	(0.031,0.117)	0.001	0.116	(0.068,0.163)	<0.001	0.010	(-0.040,0.060)	0.699	0.045	(0.005,0.085)	0.028	0.066	(0.013,0.119)	0.015
No years out of work (ref.)	–			–			–			–			–			–			–			–			–			–		
1-5 years out of work	-0.010	(-0.032,0.012)	0.375	-0.001	(-0.023,0.020)	0.898	-0.023	(-0.047,0.002)	0.069	0.022	(0.005,0.039)	0.010	0.007	(-0.013,0.028)	0.474	0.015	(-0.003,0.032)	0.104	0.023	(0.004,0.043)	0.018	-0.010	(-0.031,0.010)	0.332	0.024	(0.008,0.041)	0.004	0.014	(-0.008,0.035)	0.219
6+ years out of work	0.017	(-0.006,0.039)	0.140	0.023	(0.002,0.045)	0.032	-0.052	(-0.077,-0.028)	<0.001	0.072	(0.055,0.089)	<0.001	0.046	(0.026,0.067)	<0.001	0.051	(0.033,0.069)	<0.001	0.080	(0.061,0.100)	<0.001	-0.003	(-0.024,0.018)	0.801	0.062	(0.046,0.079)	<0.001	0.019	(-0.003,0.041)	0.089
Large employers, higher managers and professionals (ref.)	–			–			–			–			–			–			–			–			–			–		
Lower managers and professionals	0.057	(0.022,0.093)	0.002	0.053	(0.018,0.087)	0.003	-0.009	(-0.049,0.030)	0.645	0.039	(0.012,0.066)	0.005	0.008	(-0.024,0.041)	0.617	0.049	(0.021,0.078)	0.001	0.075	(0.043,0.106)	<0.001	0.043	(0.010,0.077)	0.011	0.032	(0.006,0.059)	0.016	0.020	(-0.016,0.055)	0.275
Intermediate employee	0.075	(0.036,0.114)	<0.001	0.063	(0.025,0.101)	0.001	0.002	(-0.041,0.046)	0.919	0.083	(0.053,0.113)	<0.001	0.040	(0.004,0.076)	0.031	0.080	(0.048,0.111)	<0.001	0.124	(0.089,0.159)	<0.001	0.050	(0.013,0.087)	0.008	0.067	(0.038,0.096)	<0.001	0.031	(-0.007,0.070)	0.113
Small employers and self-employed	0.033	(-0.047,0.114)	0.417	0.023	(-0.054,0.101)	0.553	0.031	(-0.059,0.122)	0.497	0.143	(0.082,0.204)	<0.001	0.091	(0.018,0.165)	0.015	0.138	(0.074,0.202)	<0.001	0.151	(0.080,0.221)	<0.001	0.105	(0.030,0.180)	0.006	0.057	(-0.003,0.117)	0.063	0.091	(0.012,0.171)	0.024
Lower grade white collar workers	0.171	(0.123,0.219)	<0.001	0.161	(0.114,0.207)	<0.001	-0.008	(-0.061,0.046)	0.773	0.189	(0.153,0.226)	<0.001	0.115	(0.071,0.159)	<0.001	0.132	(0.093,0.170)	<0.001	0.197	(0.154,0.239)	<0.001	0.075	(0.030,0.121)	0.001	0.190	(0.154,0.226)	<0.001	0.125	(0.078,0.172)	<0.001
Skilled workers	0.163	(0.083,0.244)	<0.001	0.118	(0.041,0.195)	0.003	0.039	(-0.048,0.126)	0.381	0.110	(0.049,0.171)	<0.001	0.128	(0.055,0.202)	0.001	0.023	(-0.041,0.087)	0.486	0.108	(0.037,0.179)	0.003	-0.007	(-0.082,0.069)	0.862	0.089	(0.029,0.148)	0.003	0.083	(0.004,0.161)	0.040
Semi- or unskilled workers	0.190	(0.130,0.251)	<0.001	0.147	(0.089,0.205)	<0.001	0.035	(-0.035,0.104)	0.327	0.246	(0.200,0.292)	<0.001	0.146	(0.091,0.202)	<0.001	0.177	(0.128,0.225)	<0.001	0.218	(0.164,0.271)	<0.001	0.044	(-0.013,0.101)	0.132	0.234	(0.169,0.259)	<0.001	0.112	(0.053,0.172)	<0.001
Main position unknown	0.075	(0.035,0.115)	<0.001	0.063	(0.024,0.101)	0.001	-0.024	(-0.068,0.021)	0.298	0.097	(0.066,0.127)	<0.001	0.056	(0.019,0.093)	0.003	0.091	(0.059,0.123)	<0.001	0.134	(0.099,0.169)	<0.001	0.054	(0.016,0.091)	0.005	0.078	(0.049,0.108)	<0.001	0.054	(0.015,0.094)	0.007
Promotion (ref.)	–			–			–			–			–			–			–			–			–			–		
No promotion	0.018	(-0.007,0.043)	0.154	0.006	(-0.018,0.030)	0.609	0.003	(-0.025,0.030)	0.848	0.006	(-0.013,0.025)	0.539	0.006	(-0.017,0.029)	0.628	-0.017	(-0.037,0.003)	0.104	-0.002	(-0.025,0.020)	0.831	-0.024	(-0.048,-<0.001)	0.046	-0.012	(-0.030,0.007)	0.215	-0.005	(-0.030,0.020)	0.682
Failed promotion	0.035	(-0.029,0.098)	0.283	0.046	(-0.015,0.108)	0.137	0.029	(-0.041,0.098)	0.418	0.008	(-0.040,0.056)	0.749	-0.018	(-0.076,0.040)	0.538	-0.024	(-0.074,0.027)	0.353	-0.018	(-0.073,0.038)	0.533	0.011	(-0.048,0.071)	0.706	0.016	(-0.031,0.064)	0.492	-0.016	(-0.079,0.046)	0.607

Note. Models are based on linear multilevel models (individuals nested in health examination center) and calculated separately for each career characteristic, adjusted for age, age square, partnership situation and education (complete case analyses). Respondents who retired or had a health-related career interruption prior age 45 are excluded from the analyses. Each outcome was log-transformed in case of skewness (i.e. white blood cell counts, blood sugar levels, ratio of total to HDL cholesterol, triglycerides, and lung function) and standardized to enable comparisons before estimating models. Coefficients estimate the differences on the standardized scale to the reference category. The sample varies according to the outcome, because valid data for some medical examination data (i.e. lung function) is available for a lower proportion of participants than data from blood samples.

SBP: Systolic blood pressure, DBP: Diastolic blood pressure, FEV1/ FVC: Ratio of FEV to FVC, WHR: Waist to hip ratio, FG: Fasting glucose, TC/ HDL: Total cholesterol to HDL ratio, TG: Triglycerides, LDL: low density lipoproteins, CCR: Creatinine clearance Rate, WBC: White blood cells counts.

Table S5: Association between career characteristics and allostatic load biomarkers for men: unstandardized regression coefficients (b) and confidence intervals

	SBP (n=42,852)			DBP (n=42,852)			FEV1/FVC (n=31,993)			WHR (n=43,569)			FG (n=42,224)			TC/HDL (n=41,350)			TG (n=42,115)			LDL (n=41,283)			CCR (n=42,309)			WBC (n=42,999)		
	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value	b	CI (95%)	p-value
No temporary job (ref.)	–			–			–			–			–			–			–			–			–			–		
1 or less temporary job (per 10 years in paid work)	-0.037	(-0.066,-0.008)	0.013	-0.034	(-0.064,-0.004)	0.025	-0.058	(-0.094,-0.023)	0.001	-0.007	(-0.028,0.015)	0.545	-0.042	(-0.076,-0.008)	0.016	0.013	(-0.013,0.040)	0.336	0.002	(-0.030,0.033)	0.924	0.010	(-0.020,0.040)	0.521	-0.032	(-0.056,-0.008)	0.008	0.021	(-0.008,0.051)	0.160
more than 1 temporary job (per 10 years in paid work)	-0.049	(-0.116,0.018)	0.154	-0.026	(-0.094,0.042)	0.456	-0.079	(-0.165,0.006)	0.068	0.010	(-0.039,0.060)	0.689	-0.011	(-0.090,0.068)	0.785	0.071	(0.009,0.132)	0.024	0.082	(0.008,0.156)	0.030	-0.055	(-0.125,0.015)	0.122	0.001	(-0.054,0.055)	0.981	0.048	(-0.021,0.117)	0.171
No job change (ref.)	–			–			–			–			–			–			–			–			–			–		
2 or less job changes (per 10 years in paid work)	-0.020	(-0.039,0.000)	0.053	-0.014	(-0.034,0.006)	0.184	0.015	(-0.010,0.039)	0.244	0.024	(0.009,0.038)	0.002	0.009	(-0.014,0.032)	0.455	0.041	(0.023,0.059)	<0.001	0.045	(0.023,0.067)	<0.001	0.008	(-0.013,0.028)	0.472	0.018	(0.002,0.034)	0.030	-0.003	(-0.023,0.017)	0.772
more than 2 job changes (per 10 years in paid work)	-0.052	(-0.084,-0.020)	0.001	-0.038	(-0.071,-0.006)	0.021	-0.060	(-0.100,-0.020)	0.003	0.056	(0.033,0.080)	<0.001	0.003	(-0.034,0.041)	0.864	0.063	(0.034,0.092)	<0.001	0.094	(0.059,0.129)	<0.001	-0.050	(-0.083,-0.017)	0.003	0.031	(0.005,0.057)	0.019	0.047	(0.015,0.080)	0.005
No unemployment period (ref.)	–			–			–			–			–			–			–			–			–			–		
1 unemployment period	-0.008	(-0.040,0.024)	0.632	-0.022	(-0.055,0.011)	0.190	-0.044	(-0.084,-0.004)	0.030	0.045	(0.022,0.069)	<0.001	0.040	(0.002,0.077)	0.040	0.035	(0.006,0.065)	0.019	0.057	(0.022,0.092)	0.002	-0.038	(-0.071,-0.004)	0.027	0.039	(0.013,0.065)	0.004	0.051	(0.018,0.084)	0.003
2+ unemployment periods	-0.052	(-0.115,0.012)	0.110	-0.024	(-0.089,0.041)	0.464	-0.167	(-0.247,-0.087)	<0.001	0.069	(0.022,0.116)	0.004	-0.023	(-0.098,0.052)	0.546	0.070	(0.011,0.128)	0.019	0.135	(0.065,0.204)	<0.001	-0.068	(-0.134,-0.002)	0.044	0.064	(0.012,0.115)	0.016	0.154	(0.089,0.220)	<0.001
No years out of work (ref.)	–			–			–			–			–			–			–			–			–			–		
1-5 years out of work	-0.041	(-0.063,-0.020)	<0.001	-0.034	(-0.057,-0.012)	0.002	-0.027	(-0.055,-<0.001)	0.047	0.016	(-<0.001,0.032)	0.052	0.020	(-0.005,0.046)	0.119	0.026	(0.006,0.046)	0.009	0.033	(0.009,0.056)	0.007	-0.012	(-0.035,0.011)	0.294	0.017	(-<0.001,0.035)	0.054	0.036	(0.014,0.059)	0.001
6+ years out of work	0.002	(-0.030,0.034)	0.907	0.016	(-0.017,0.049)	0.351	-0.083	(-0.124,-0.042)	<0.001	0.064	(0.040,0.088)	<0.001	0.059	(0.021,0.097)	0.002	0.071	(0.041,0.101)	<0.001	0.085	(0.050,0.121)	<0.001	-0.065	(-0.099,-0.031)	<0.001	0.049	(0.023,0.075)	<0.001	0.098	(0.065,0.132)	<0.001
Large employers, higher managers and professionals (ref.)	–			–			–			–			–			–			–			–			–			–		
Lower managers and professionals	0.023	(-0.007,0.052)	0.128	0.008	(-0.022,0.038)	0.601	-0.003	(-0.039,0.034)	0.875	0.010	(-0.012,0.032)	0.360	-0.016	(-0.051,0.018)	0.356	-0.001	(-0.028,0.026)	0.947	-0.005	(-0.037,0.027)	0.779	0.010	(-0.020,0.041)	0.509	-0.008	(-0.032,0.016)	0.525	0.012	(-0.018,0.043)	0.428
Intermediate employee	0.076	(0.043,0.109)	<0.001	0.065	(0.031,0.099)	<0.001	0.017	(-0.024,0.058)	0.419	0.052	(0.028,0.077)	<0.001	0.049	(0.010,0.088)	0.013	0.023	(-0.007,0.053)	0.138	0.049	(0.013,0.085)	0.008	0.017	(-0.018,0.051)	0.336	0.022	(-0.005,0.049)	0.108	0.038	(0.004,0.072)	0.031
Small employers and self-employed	0.142	(0.081,0.203)	<0.001	0.128	(0.065,0.190)	<0.001	-0.046	(-0.123,0.031)	0.240	0.199	(0.154,0.244)	<0.001	0.171	(0.099,0.242)	<0.001	0.095	(0.039,0.150)	0.001	0.099	(0.032,0.166)	0.004	0.014	(-0.050,0.078)	0.664	0.211	(0.161,0.260)	<0.001	0.105	(0.042,0.168)	0.001
Lower grade white collar workers	0.091	(0.030,0.152)	0.004	0.069	(0.007,0.132)	0.029	-0.033	(-0.110,0.045)	0.408	0.125	(0.080,0.170)	<0.001	0.127	(0.055,0.198)	0.001	0.054	(-0.002,0.110)	0.057	0.124	(0.057,0.190)	<0.001	-0.033	(-0.096,0.031)	0.312	0.069	(0.019,0.118)	0.006	0.052	(-0.010,0.115)	0.101
Skilled workers	0.113	(0.075,0.150)	<0.001	0.096	(0.058,0.135)	<0.001	0.008	(-0.038,0.055)	0.724	0.112	(0.085,0.140)	<0.001	0.119	(0.075,0.163)	<0.001	0.056	(0.022,0.090)	0.001	0.045	(0.004,0.086)	0.031	0.047	(0.007,0.086)	0.020	0.059	(0.028,0.089)	<0.001	0.032	(-0.007,0.071)	0.110
Semi- or unskilled workers	0.142	(0.098,0.186)	<0.001	0.108	(0.063,0.154)	<0.001	-0.062	(-0.118,-0.007)	0.027	0.179	(0.146,0.211)	<0.001	0.166	(0.115,0.218)	<0.001	0.073	(0.032,0.113)	<0.001	0.089	(0.040,0.137)	<0.001	-0.004	(-0.050,0.042)	0.854	0.127	(0.091,0.163)	<0.001	0.132	(0.087,0.178)	<0.001
Main position unknown	0.069	(0.039,0.099)	<0.001	0.048	(0.018,0.078)	0.002	-0.021	(-0.058,0.016)	0.265	0.078	(0.056,0.100)	<0.001	0.035	(<0.001,0.070)	0.047	0.039	(0.012,0.066)	0.005	0.056	(0.023,0.088)	0.001	0.013	(-0.018,0.044)	0.413	0.023	(-0.001,0.047)	0.063	0.043	(0.013,0.074)	0.005
Promotion (ref.)	–			–			–			–			–			–			–			–			–			0.012	(-0.018,0.043)	0.428
No promotion	0.007	(-0.015,0.029)	0.552	-<0.001	(-0.023,0.022)	0.976	-0.022	(-0.049,0.005)	0.115	-0.034	(-0.051,-0.018)	<0.001	-0.011	(-0.037,0.015)	0.401	-0.043	(-0.063,-0.023)	<0.001	-0.056	(-0.080,-0.032)	<0.001	-0.011	(-0.034,0.012)	0.344	-0.019	(-0.037,-0.001)	0.036	-0.008	(-0.031,0.014)	0.464
Failed promotion	0.041	(-0.010,0.092)	0.117	0.038	(-0.014,0.090)	0.149	-0.136	(-0.198,-0.073)	<0.001	0.055	(0.017,0.093)	0.004	-0.005	(-0.064,0.055)	0.880	0.005	(-0.042,0.051)	0.844	-0.011	(-0.066,0.045)	0.703	0.020	(-0.032,0.073)	0.448	0.035	(-0.006,0.077)	0.093	0.048	(-0.004,0.100)	0.073

Note. Models are based on linear multilevel models (individuals nested in health examination center) and calculated separately for each career characteristic, adjusted for age, age square, partnership situation and education (complete case analyses). Respondents who retired or had a health-related career interruption prior age 45 are excluded from the analyses. Each outcome was log-transformed in case of skewness (i.e. white blood cell counts, blood sugar levels, ratio of total to HDL cholesterol, triglycerides, and lung function) and standardized to enable comparisons before estimating models. Coefficients estimate the differences on the standardized scale to the reference category. The sample varies according to the outcome, because valid data for some medical examination data (i.e. lung function) is available for a lower proportion of participants than data from blood samples.

SBP: Systolic blood pressure, DBP: Diastolic blood pressure, FEV1/FVC: Ratio of FEV to FVC, WHR: Waist to hip ratio, FG: Fasting glucose, TC/HDL: Total cholesterol to HDL ratio, TG: Triglycerides, LDL: low density lipoproteins, CCR: Creatinine clearance Rate, WBC: White blood cells counts.

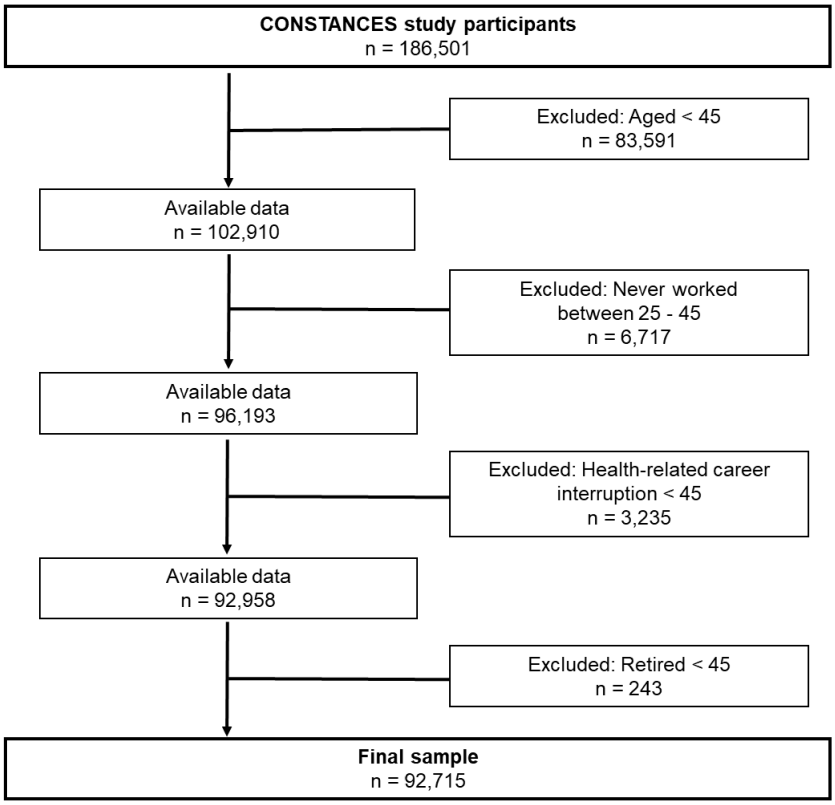
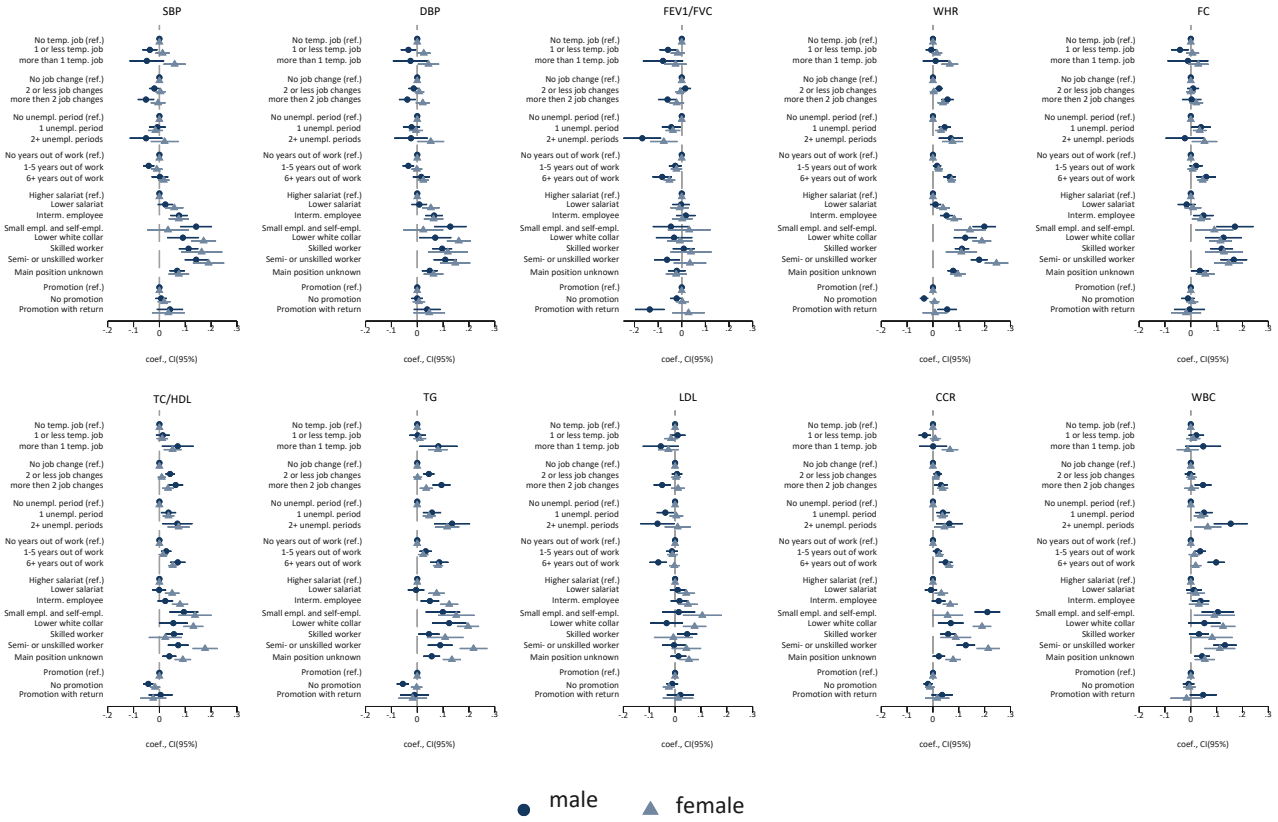


Figure S1: Final Sample Flow Chart.



Note. Models are based on linear multilevel models (individuals nested in health examination center) and calculated separately for each career characteristic, adjusted for age, age square, partnership situation and education (complete case analyses). Respondents who retired or had a health-related career interruption prior age 45 are excluded from the analyses. Each outcome was log-transformed in case of skewness (i.e. white blood cell counts, blood sugar levels, ratio of total to HDL cholesterol, triglycerides, and lung function) and standardized to enable comparisons before estimating models. Coefficients estimate the differences on the standardized scale to the reference category.

SBP: Systolic blood pressure, DBP: Diastolic blood pressure, FEV1/ FVC: Ratio of FEV to FVC, WHR: Waist to hip ratio, FG: Fasting glucose, TC/ HDL: Total cholesterol to HDL ratio, TG: Triglycerides, LDL: low density lipoproteins, CCR: Creatinine clearance Rate, WBC: White blood cells counts.

Figure S2: Association between career characteristics and allostatic load biomarkers for men and women unstandardized regression coefficients (b) and confidence intervals